

ISSN : 2278-232X

JOURNAL OF EDUCATIONAL TECHNOLOGY AND RESEARCH

A Multidisciplinary International
Peer Reviewed/Refereed Journal

Vol. XVI, Number 1

January-December, 2025

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JOURNAL OF EDUCATIONAL TECHNOLOGY AND RESEARCH

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Peer Reviewed/Refereed Journal**

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The subscriber will receive a hard copy of every issue of Journal for the subscribed period.

Printed in India at

Balaji Offset

Navin Shahdara, Delhi-32

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Scenario of Women's Education and Skill Development in India: A Review

Amgoth Veeranna* and T. Srikanth Reddy**

India is among the fastest growing countries of the world today, with a GDP growth rate of 8.6% during 2015-16. This high level of growth can, however, be sustained only when all sections of the society, especially women become equal partners in the development process. It is well recognised that societies which discriminate by gender tend to experience less rapid economic growth and poverty reduction than societies which treat men and women more equally. Empowerment of women is a socio-political ideal, encompassing notions of dignity and equality, envisioned in relation to the wider framework of women's rights. It is a process of gaining control over self, over resources and over existing societal perceptions and attitudes and would be achieved only when an improvement in the condition of women is accompanied by their position by enlarging the educational, economic, social and political freedoms and choices available to them.

Let us have a look over the welfare schemes for women available in our country- Under Article 15(3), the Constitution of India, under Right to Equality, states: —Nothing in this article shall prevent the state for making special provisions for women and children. In addition the Directive Principles of State Policy 39(a) state that: The state shall, in particular, direct its policy towards securing that the citizens, men and women equally, have the right to an adequate means of livelihood.

MORE RECENT PROGRAMMES FOR WOMEN INITIATED BY THE GOVERNMENT OF INDIA INCLUDE

- Rajiv Gandhi Scheme for Empowerment of Adolescent Girls- SABLA Rashtriya MahilaKosh (The National Credit Fund for Women)
- Mother and Child Tracking System (MCTS)
- The Indira Gandhi Matritva SahyogYojana Conditional Maternity Benefit Plan (CMB)
- National Mission for Empowerment of Women (NMEW)

As this work focuses on the study of Gaya district, let's have an overview of bodies, programmes and schemes for women from the state government of Bihar:

- Women Development Corporation
- MukhyamantriNari Shakti Yojana
- MukhyamantriKanya Suraksha Yojana
- MukhyamantriKanyaVivahYojana
- KanyaDhanYojana,
- SABLA

The all-round development of women has been one of the focal point of the planning process in india:

The First Five Year Plan (1955-56) envisaged a number of welfare measures for women. Establishment of Central Social Welfare Board, organization of MahilaMandals and community development programmes were the few steps in this direction.

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In The Second Five Year Plan (1956-61) the empowerment of women was closely linked with the overall approach of intensive development programmes.

The Third and Fourth Five Year Plan (1961-66 and 1969-74) supported female education as a major welfare measure.

The Fifth Five Year Plan (1974-79) emphasised training of women, who were in need of income and protection. This plan coincided with the International Women's Decade and the submission of Report of the Committee on the Status of Women in India. In 1976, Women's Welfare and Development Bureau was set up under the Ministry of Social Welfare.

The Sixth Five Year Plan (1980-85) saw a definite shift from the welfare to development. It recognised women's lack of access to resources as a critical factor impeding their growth.

The seventh Five Year Plan (1985-90) emphasised the need for gender equality and empowerment. For the first time, emphasis was placed upon the qualitative aspect such as inculcation of confidence, generation of awareness with regard to rights and training in skill for better employment.

The Eighth Five Year Plan (1992-97) focused on empowering women, especially at the gross root level, through the Panchayati Raj institutions.

The Ninth Five Year Plan (1997-2002) adopted the strategy of women's component plan, under which not less than 30% of funds/benefits were embarked for women specific programmes.

The Tenth Five Year Plan (2002-2007) aimed at empowering women through translating the National Policy for Empowerment of Women (2001) into action and ensuring Survival, Protection and Development of Women through rights based approach.

The Eleventh Five Year Plan (2007-2012) includes development of women in holistic manner refining vision, mission, objectives and functions for women, augmenting and organising the internal capacities of the ministry.

The Twelfth Five Year Plan (2012-2017) is pushing special dispensation on single women specially those who are single by choice, under various government schemes. In addition to reserving a certain percentage of jobs for them.

Hence, we can women's empowerment very much depends upon educational level, training and skill development. Educating a girl is one of the best investments her family, community, and country can make. We know that a good quality education can be life-changing for girls, boys, young women, and men, helping them develop to their full potential and putting them on a path for success in their life. We also know that educating a girl in particular can kick-start a virtuous circle of development. More educated girls, for example, marry later, have healthier children, earn more money that they invest back into their families and communities, and play more active roles in leading their communities and countries. Highlights globally, there are more girls getting educated than ever before and the gender gap in education has narrowed considerably. The largest gender gaps in enrolment are in the poorest countries. In highly indebted poor countries, the average net enrolment rate at the primary level is 75.6 percent for girls compared with 80.9 percent for boys. There is strong evidence of the positive relationship between teacher's education, experience, and cognitive skills and their student's academic performance. In all regions, but especially in the low-income countries of South Asia and sub-Saharan Africa, the percentage of children who are immunized is larger when mothers have some secondary education than when mothers have only some primary schooling, and much larger when mothers have no schooling. Over the last 25 years, there have been large gains in girls' education, and we as a global community can congratulate ourselves for the real progress that has been made. This demonstrates that with shared goals and collective action—among governments, international organizations, civil society, media, and the private sector—we can change the educational prospects for girls around the world. Despite this progress, our research shows that there are hotspots in the world where girls are not getting a quality education. While there certainly are

places where boys are behind, we have focused on understanding how and where across the world girls are behind. The message is that many countries have work to do to improve girl's education, whether related to the gender gap in primary or secondary enrolment or learning. There are about 80 countries where progress on girl's education has stalled. These countries are not meeting the education Millennium Development Goals. They are stuck in an education bog—still struggling to enrol all girls and boys in primary school and close the gender gaps between boys and girls at both the primary and secondary levels. Quality learning is important for the future lives of girls and boys, but it is also an especially important ingredient in the virtuous circle of development that comes from girl's education. There are an additional 30 countries that have successfully enrolled girls and boys in primary and secondary education but are trapped in low-quality learning. They are struggling to ensure that girls and boys master foundational skills such as basic literacy, numeracy, and science concepts. Quality learning is important for the future lives of girls and boys, but it is also an especially important ingredient in the virtuous circle of development that comes from girls' education. Finally, there are another 30 countries where children are successfully enrolled and learning. However, girls are behind boys in math. In some ways, we can think of girls in these countries bumping up against an educational glass ceiling.

The fact is that women are part and parcel of our society. However the 21st century is an era of knowledge. Today we talk about empowerment of women by educating them. It is an assumed fact that if the women are educated most of the social problems and evils surely disappear and we can transfer our old pattern of society into modern society. Education is a vehicle of social change. Knowledge is a permanent asset of the society. To achieve and sustain the growth rate of our country, it is an urgent need that education should be accessible for all segments of the society. Furthermore, women are the dynamic promoters of social transformation. That is why, most of the social scientists and scholars have laid down stress on the urgency of education for women as it is regarded as must for social change. Mahatma Gandhi has said that if we educate a woman, we educate the whole family.

WOMEN EDUCATION IN VEDIC ERA

In Vedas, it is shown that women had a high social and religious status. Their education was at the peak of the social system. Upanayan, the Vedic initiation for girls was common. They were honoured in the family and society and they were also allowed to study Vedas and the performance of their duty towards society by sacrificing for the welfare of it. It was believed that women are not inferior to men in any way. Atharvaveda has highly appreciated women education. It states that the success of women in her married life depends upon their proper training during the Brahmacharya. Rigveda also indicates some collections of different hymns composed by some poetesses. Apalla, Ghosha, Vishwavara, Lopamudra and Saraswati are the greatest women of that time who composed commentaries on Vedas. Maitreyi was deeply interested in the problems of philosophy and Gargi was famous for both philosophy and religion. In this period, Manu had emphasized that it was parent's duty to give their daughters better education by educating them various arts work. They were also skilled in household activities. They were permitted by society to get education in Ashrams of Kanav and Attrai and also in Ashram of Maharishi Balmiki. However, there was a lack of formal educational institutes for women. That is why they had to learn and teach from their family members. The role of father, husband and Kulgurus was very important to educate women in this period.

BUDDHIST PERIOD AND WOMEN EDUCATION

It is thought the women education in this period was on the lower stage. Lord Buddha regarded women the source of all evils in the society. Therefore, the women were deprived from good education

and they were not allowed to join the Sangh or the congregations. But it is true that this permission lead to the process of women education. However, Buddhists opened separate monasteries for women education. But very strict rules were to be followed by the women who wanted to get education in their monasteries. They were not allowed to talk with male students or monks in loneliness and were also kept on probation for a length of time very temporarily. Thus, the education for woman was not open fully. There were so many restrictions on women education in this era

WOMEN EDUCATION IN MUGHAL PERIOD OR MIDDLE AGES

Mughal emperors were very traditional and of conservative mind. Pardaha system and child marriage are the contribution of Mughal to our society. These evils were prevalent in both Hindu and Muslim communities. That is why the literacy rate among women went down very rapidly. The fact is that except very young girls, a big mass of women was denied of the right of education. Only a small numbers of girls were able to get education. The girls of royal and rich gharanas were able to get education at their respective home. Mughal emperors provided very liberal education to their princesses. Razia Sultan and Zibunmisa Begum were the learned ladies of the royal households in this time. However, Akbar set a separate chamber in Fatehpur Sikri for girl's education. Furthermore, the daughters of Rajput chiefs and Bengali Zamindars were also able to get education. Thus, the status of women in this time deteriorated due to many reasons. Thus, child marriage, practice of Sati, prohibition of widow marriage was considered in a ritualistic way among the Hindus. The status of women among the Muslims was not good. Though, we find some literate woman among Muslim community also. In Rajasthan, the Jauhar was practiced to save the chastity of women. Among the Hindu polygamy was a part of the life and among the Muslims polygamy was accepted in the name of religion. Among the rich Muslims Zenana Mahal was very popular. In some parts of the country the system of Devadashi prevailed and rich people and the temple priests sexually exploited them. This continued till the Vakti Cult movement. One of the woman leaders of this movement was Mirabai. She was a saint, a poet and a singer. After this movement, women felt a relief from the traditional and orthodox society. During this time Guru Nanak tried to speak the message of equality among men and women. This had a great impact on the societies in some parts of the country.

WOMEN EDUCATION IN BRITISH PERIOD

The East India Company came to India in 1600 A.D. to get material gains. That is why, in the beginning, the British were not prepared to provide public education the Indian people, least of all for woman. But in 1813 the Chartered Act entrusted the company to educate the people, but there was no provision of women education in it. The British policy was to educate only a few people of upper castes and the education for women was not a good thing according to Indian masses. Almost complete absence of education of women in the early period of 19 century was reported. During this time only few women were literate in. Things were not better in Bombay. There was no educated woman at that time. There was no girl student during 1823- 25 and 1829 in that part of India.

Further, the education policy laid down by the Woods Despatch of 1854 put stress on female education in India. The report observed that the importance of female education in India cannot be overrated and we have observed with pleasure the evidence which is now afforded of an increased desire on the part of many of the natives of India to give a good education to their daughters. We have already observed that schools for females are included among those to which grant-in-aid may be given and we cannot refrain from expressing our cordial sympathy with the efforts which are being made in this direction. Our Governor General in Council declared that the government ought to give to the native females in India its frank and cordial support and

in this we heartily concur and we especially approve of the bestowal of marks of honour upon such native gentleman as Rao Bahadur Magahunbhai Karamchand who donated Rs.20000 to the foundation of two native female schools in Ahmadabad. But due to the disturbance of revolt of 1857, it was not implemented. Further, the opening of special primary schools for girls between 1870 and 1882 was the result of establishment of municipalities as well as levy of the local funds aiding the primary education. Miss Mary Carpenter, the great social reformer visited India during 1865- 1870. She observed that the main obstacle to the progress of female education was the absence of female teachers. Due to her efforts first training college for women primary teachers was established in 1870.

Further, in 1882 the Indian Education Commission (Hunter Commission) discussed the education of women with special emphasis. The commission recommended the entry of women to the profession of teaching and nursing. Due to its efforts 0.84 per cent female were enrolled in schools for women education.

However, the commission observed that female education in India is still in an extremely backward condition. Now for the first time, an urgent need for the special treatment for the education of girls and women was felt by the commission. It discussed the problems of women education and suggested certain measures for its improvement. Nevertheless, due to child marriage girls were withdrawn from the schools at an early stage and there was a scarcity of female teachers for the schools. The commission suggested:

- Offer of freeships and scholarships. Simple standard of instruction.
- Liberal inducements to the wives of school masters
- Stipends to those widows who enrol themselves for teacher training.
- Award of prizes to girls who agree to become teachers.

Nevertheless, the progress of women education mostly depended on private enterprises. By 1901-02 for 3,982 out of 5,305 primary schools, 356 out of 422 secondary schools, 11 out of 12 women colleges and 32 out of 45 training institutions for women were the result of the previous efforts. A medical college was opened for women and 76 women were studying in these colleges and 166 in medical schools. Then the period of 1920-21 showed better results in this direction. Lord Curzon declared his education policy on 11 March 1904. It recommended some suggestions as:

- The education for girls should be practical based
- It should be free from exams.
- Special attention should be given on hygiene and surroundings of the school life.
- Inspection should be a continuous process.

Then, in 1919 the Government of India enunciated its policy of education in resolution. It stressed more financial assistance of girl's education, free education, more scholarships and studentships and liberal grant- in- aid to girl's schools. By 1921- 22 there were 21,956 primary schools for girls, 675 secondary schools and 19 college for female education. Meanwhile, in 1917 Sadler Commission was also appointed. It recommended many suggestions to improve girl's education. It also recommended starting co-education. Further, the importance of women education was recognized in 1929 and 1937. However, in 1929, Hartog Committee was established which recommended to prepare a plan and program for girls education. It also stressed to start courses related to domestic science, music, etc.

Further, the report on the Post-War Educational Development (1944) was the last important educational document related to female education in India before Independence. However, this was a period of political struggle. In 1946-47, there were 59 arts and science colleges for women, 2,370 secondary and 21,479 primary schools for girls. Now a trend towards co-education was also seen in India.

PROBLEMS IN WOMEN EDUCATION

There are various reasons for lack of education and higher dropout rate among girls are following -

- **Poverty** - This problem is the problem of the whole country. Poverty limits all the growth and development of socio-economic conditions. Affected people's prime concern is to manage food for living. In such case no question of education emerges in their minds. The children are involved in earning livelihood for the family ruining their careers. In addition poverty makes a family socially backward and hence open to all sorts of harassment and exploitation by the dominant ones. In such conditions it is natural for them to be afraid of sending their girl child even to schools that are run free of cost for the poor.
- **Early marriage**- It is one of the most prevalent problems in our society where one hand girls are considered as burden to the family from which the family wants to get rid as soon as possible and on the other hand it is another problem that the boy's family will not approve the girl if she grows older. There are several reasons for this cause that are discussed below.
- **Dowry System**- This is undoubtedly an evil to our society and a curse to the parents for a having a daughter. Under the burden of marrying their daughters to a well to do groom the parents prefer to save their money for giving dowry instead of investing that on their daughter's education. This problem puts a full stop on the dreams and aspirations of girls.
- **Mental and Social backwardness**- It is the effect of the patriarchal society which kills the need and right to education of women. The practice of keeping females under purdah, within the walls of the house, not letting them to go out for any purpose is the effect of this mental and social backwardness. On one hand the society assume the women to be incapable and inefficient and on the other they don't want to lose the male supremacy at any cost.
- **Partial behaviour in boys and girls**- Educating a male will make the family grow rich and developed since he is going to be in the family for all his life, he will lead the generation of the family, he is the ultimate support for the family unlike girls therefore investing on educating a girl is a complete waste'. This notion develops a partial behaviour and acts as a big obstruction in women education, upliftment and emancipation. Reluctance of parents to send females school- This is a complete state of mental illness among some people who are affected by orthodoxy.
- **Have to participate in Domestic Activities**- Women are taken for granted to look after the household activities which sometimes lead to ignorance of their education and personality building. They are taught to become a good housewife, a good mother, a good care taker on the cost of a good personality, self-sufficiency and a better career opportunity.
- **Helping in the Fields**-If a women is considered only as a helping hand she would definitely be unable to get the education she needs and deserves. Our agriculturalist society does have this problem of keeping their girls off from studies and helping in the real extensive work of agriculture which in these days are not proving to be profitable for farmer inspite of all the labour and input.
- **Teacher's unfair behavior**- In rural areas due to lack of awareness and knowledge of guardians some teachers bluff and demand for extra money for distributing documents like admit cards, mark sheets etc. Every family is not in a condition to fulfil such needs all the time. Those who cannot afford have to drop their education till they manage to get the document by some other way. Apart from this the physical and mental harassment done by a teacher is a shameful act that compels a girl student to discontinue her education.

Female feticides is one of the gravest problem of Indian society also serves a great cause for women suppression along with Illness, Inadequate transport facilities, Shortage of colleges and universities in rural areas and the list goes on.

In most of the developing countries today, more and more emphasis is laid on the need for the development of women and their active participation in the mainstream of development process. It is also widely recognized that apart from managing household, bearing children, rural women bring income with productive activities ranging from traditional work in the fields to working in factories and running small and petty business. They have also proved that they can be better entrepreneurs and development managers in any kind of human development activities. Therefore, it is important and utmost necessary to make rural women empowered in taking decisions to enable them to be in the central part of any human development process.

Poverty which is the biggest obstacle in every sphere of life. Those falling under the below poverty level should be made aware of the various governmental schemes for development of weaker section for which there is need for awareness and accessibility to the opportunity. Apart from this there is need to encourage them to send their children to governmental schools that have very less or no fees for students from poor families. In fact, there is no need for further schemes by the government rather there is an utter need to make those schemes available to the needy population for which the government officials would have to play an honest role. Proper teacher training and vigilance is required for the teachers so that they understand the intensity and importance of what they are doing. A teacher has such an influence on the society that he/she is capable to both construct and deconstruct the figure of the society. In the villages people are highly and wholly dependent on the teachers for the educational careers of their children therefore much emphasis should be given on the vigilance for which a vigilance body is required in each and every panchayat.

50% reservation for women in public sectors has already been provided and entrepreneurship is also being encouraged all over the nation therefore all we need is to remove the shyness, family support, guidance and counselling units for women because women living in the rural areas are very much deprived of their legal rights and therefore are helpless in many dimensions. Female foeticide is also a major problem which needs to be managed by the existing bodies of Child Protection Unit, Kanya Suraksha Yojana, State Commission for Protection of the Child Right etc and by the people also. Strong and instant legal action should be taken against child sex determination before birth. Our country needs proper electricity and water facility as well. The rich somehow manage to get electricity by planting solar cells and generators but the poor are dependent on the regular electricity only which effects the day to day life and thus education process of the children.

REFERENCES

1. Women's Education and skill development (2017), IRJMSH, Vol.8, Issue 2.
2. Committee of Donar Agencies for Small Enterprise Development 2001 Business Development services for small enterprises: Guiding principles for donor interventions.
3. Decent Work Agenda in Poverty Reduction Strategy Papers: Recent developments, Committee on Employment and Social Policy, Governing Body 300th Session Geneva, 2007
4. Galihardi, R 2004, Statistics on Investment in Training, Skills Working Paper No.18 Geneva(ILO)
5. Global Employment Trends for Youth,
6. Henry,C2008 Improving Skills Development in Rural Communities, Employment Sector Working Paper
7. International Labour Organisation 2008 "Skills for Improved Productivity, Employment Growth and Development",

Women Rights in India

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ABSTRACT

The Millennium Development Goal is the eight goals set by the United Nations in 2000 which will act as yardstick to determine the advancement in the direction of the obliteration of global poverty. United Nation stated that 'Gender Equality and Women Empowerment' as one of the Millennium Development Goals to be attained by the year 2015. The present paper explores the questions central to women's right in India that is fundamentally patriarchal in nature. The article attempts to grapple with the few challenges faced by the women in India like the dowry, female foeticide, denial of inheritance rights, sale and trafficking of girls etc. The objective of the paper is to evolve strategies to empower women uniformly like the men.

INTRODUCTION

The constitution of India confers special rights upon women. The constitution makers were well aware of the subordinate and backward position of women in the society. They made some efforts for uplift of women in our society. The state is directed to provide for maternity relief to female workers under Article 42 of the Constitution, whereas Article 51-A declares it as a fundamental duty of every Indian citizen to renounce practices to respect the dignity of women. Indian Parliament has passed the Protection of Human Rights Act, 1993 for the proper implementation of Article 51-A. Indian Parliament over the years have taken significant steps for through legislations to achieve the goal of empowering the women in India. The significant among them are the Equal Remuneration Act, the Prevention of Immoral Traffic Act, the Sati (Widow Burning the rights of) Prevention Act, and the Dowry Prohibition Act etc. Apart from these, the 73rd and 74th Constitution (Amendment) Acts 14 provided for 33% reservation for women in both Panchayat and Nagarpalika institutions as well as for the positions of chairpersons of these bodies. These two amendments removed the bottlenecks from the paths of women empowerment at the local level. In fact it has been found that the Karnataka sends maximum number of women to the PRIs followed by Kerala and Manipur. In order to facilitate equal participation of women at the national and state level politics, the bill providing for 33% reservation of seats for women in national and States legislatures has been introduced in Parliament. Besides this, the Government in India has enacted a variety of laws like Dowry Prohibition Act, Sati prevention Act etc to guarantee the rights of the women. Apart from this, in India, National Commission for Women had been established in 1990 to look into the women's problem. NCW have engaged them to deal with the cases relating to the violation of women's rights. They have pressurized the government to pass stricter laws to deal with the rape cases, domestic violence and to create a separate criminal code for the women etc.

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VIOLATION OF WOMEN RIGHTS IN INDIA

This section of the article sets out a range of areas of human rights abuse of women in India.

Child Marriage

In India although there exist a law barring the marriages of children at primitive age, but it is still being practiced in different parts of India. Child Marriage Act 2006 prohibits child marriage and declares 18 years and 21 years as the marriageable age for the girls and boys. According to the National Population Policy, “over 50% of the girls marry below the age of 18, resulting in a typical reproductive pattern of ‘too early, too frequent, too many’, resulting in a high IMR.” Child marriage takes away from a girl child the innocence of her formative years of life necessary for physical, emotional and psychological development. Spousal violence especially sexual violence perpetrated by husbands has severe effect on the innocent mind and body of the child. Even today in India a number of children’s are married off on the auspicious day of Akas Teej in Rajasthan.

Domestic Violence

In spite of the fact that in India we have ‘Protection of Women from Domestic Violence Act 2005’, domestic violence still remains a serious problem. Infact a major scale of violence that a woman is subjected to in India is linked to the domain of domesticity. The reasons for Domestic aggression are primarily ingrained in the patriarchal nature of the Indian society which supports such violence at home. Besides this the problem of alcoholics of husband or desire for endowments or a male child are some of the other factors liable for household brutalities in India. The domestic violence had taken the form of psychological and physical abuse against women like slapping, hitting, public humiliation, etc. In India the ‘Dowry Prohibition Act and the Protection of Women from Domestic Violence Act and cruelty under Section 498 A of the Indian Penal Code in 1983’ declares brutality to a woman in her conjugal house a punishable and non bailable offence that can lead to a sentence of up to three years and fine.

Dowry Deaths

In India the unusual dowry deaths of the women at their matrimonial home has been increasing at a startling rate. Dowry disputes are quite a serious problem. The National Crime Records Bureau in India in its report had disclosed that in 2012 around 823 newly wedded brides were killed for dowry. “The role of husband’s reaction to dowry brought at the time of marriage on subsequent experience of marital violence. The substantially reduced risk of experiencing physical and sexual violence among women whose husbands were satisfied with the dowry reflects the strong influence of dowry in determining women’s position within the household”. In spite of the fact that Section 498A of the Indian Penal code strongly deals with the person responsible for marital cruelty and has declared taking and giving of dowry as a crime it is still been widely practiced in India. Infact ‘The Dowry Prohibition Act’ has not been adequately put into operation in India. It has been discovered that mostly a number of states neither have a Dowry Prohibition Officers nor do they made it obligatory to keep the record of things given and received.

Education

Education is one of the most critical areas of empowerment for women. Although the right to education under Article 21 of the Indian Constitution has made it compulsory for the government

to provide free education to everybody, the high rate of women's education is still a distant dream. In spite of the fact that Sarva Shiksha Abhiyan to an extent has been successful in bringing the girl child back to the schools, yet their retention rate in the school is lower as compared to their male counterpart. In fact it has been found that there is a gradual drop out of the girl students as they move up to the higher classes. This is particularly true in the rural areas in India. The main reasons associated with this is that the parents expects girls to look after the siblings while they are at work, working with the parents as seasonal labour during the cultivation period and managing the household work while the parents are at work, the parents take more interest in boys education as against the girls as they feel that the girls are to be married off, increasing cost of education etc. Thus the universalisation of primary education in India remains a remote daydream for the women.

Female Foeticide

The low status of women goes on with the practice of infanticide, foeticide, sex-selective abortion which has become common due to the amniocentesis technology, and mal-nourishment among girl children⁶. In India it is estimated that around "10 million female foetuses have been aborted in the last 20 years". "The child sex ratio in Punjab declined from 894 in 1961 to 793 in 2001. In Haryana, the child sex ratio plummeted from 910 in 1961 to 820 in 2001." In spite of the fact that the Government of India have declared pre birth sex determination through the use of amniocentesis as unlawful, still illicit termination of female foetuses by untrained nurses and staff is widely prevalent particularly in Northern states of India like Haryana, Rajasthan and Punjab. All these have resulted in the escalation of maternal mortality rate.

Forced Evictions and Exclusion

In India often the widows are evicted from their matrimonial home and are left alone to feed themselves and their children following the demise of their spouses. The UN Special Rapporteur on Adequate Housing argues: "In almost all countries, whether 'developed' or 'developing', legal security of tenure for women is almost entirely dependent on the men they are associated with. Women headed households and women in general are far less secure than men. Very few women own land. A separated or divorced woman with no land and a family to care for often ends up in an urban slum, where her security of tenure is at best questionable". "There is increasing clinching evidence that, in poor households, women spend more on basic family needs, while men spend a significant part on personal goods, such as alcohol, tobacco, etc".

Missing of Girl Child

The idiom "missing women" was for the first time used by Prof. Amartya Sen¹ when he showed that in many developing countries the proportion of women as compared to men in the population is suspiciously low. The lopsided sex ratio in many states in India is one of the main reasons because of which women, and girls, go 'missing'. The girls from the poor families in India are sold off by the brokers to the men's in particularly in Northern India where the problem of imbalanced sex ratio is very much evident. Apart from these there are cases of women going missing from their marital homes.

Preference for a Son

The preference for a son is a phenomenon which is historically rooted in the patriarchal system of the Indian society. The strong preference for having a son emerged with the transition of the

Indian society from primitive stage which used to be primarily a matrilineal to feudal stage where agriculture emerged as the primary established occupation of the people to be controlled by the male. The concept of private property emerged and the land began to be divided among the families. The families having control over the larger part of land were seen with pride. Thus, in such a patriarchal landowning society the sons were seen as the major contributor to the family workforce vis a vis a girl. The desires for a son often have an adverse effect on the health of the mother also. All these issues gradually led to the neglect of the female child who are often relegated to the background even in the present day Indian society.

Rape

In India there has been a significant increase in the numbers of rape cases in the last 10 years. According to National Crime Records Bureau, in 2012, 25000 rape cases were reported. In India in the rural areas, particularly in Northern India, the upper caste people use mass rapes as a strategy to have power over the members of the lower caste groups. The brutal gang rape case in Delhi had led to the passage of a stricter Law i.e. The Criminal Law (Amendment) Act 2013 to deal with the rape cases in India.

Sati

Even though Sati, an action whereupon the exercise of setting widows on the funeral pyres of their spouse, was barred in the pre colonial India by social reformer Raja Rammohan Roy, but this practice continued to prevail in post colonial India. The discourse on sati was invigorated in the post independence India in 1986 when a young bride from Rajasthan named Roop Kanwar was set on the pyre of her husband. As a consequence in 1987, the Sati Prevention Act was passed which declared the practice of sati a crime for which death penalty can also be given to the perpetrators of such crime. The act also declared that the 'glorification' of sati by erecting a temple and worshipping of the deceased women as a god is also prohibited. However certain section of people perceives this law as interference in their right to practice the dictates of their religion

Sexual Harassment at the Workplace

The initiative on a discourse on sexual harassment of women at their workplace in India started with Supreme Court's Vishaka guidelines in 1997. However it was the passage of the 'Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Bill 2013' that helped in translating these guidelines into concrete rules that are to be implemented. But even today "the issue of sexual harassment has largely been swept under the carpet in India. The provisions have never been successfully invoked because of social taboos still associated with sexual harassment". In India the women are discriminated against in terms payment of remuneration for their jobs. This is true for both urban as well as rural areas. Women entrepreneurs often have to deal with more complications in getting credits to start their independent business.

Societal Violence against Women

The communities and societies in India in most of the places are bound up with patriarchal normative universe from which women could hardly get true justice. The religious communities, village communities or the artificial communities like professional bodies are hardly epitome of equality between men and women. Quite often the religious communities have made the life of the women worse by forcing them to adopt conservative practices that are harmful to women.

CONCLUSION

Thus in short, the Millennium Development Goal on gender equality and women's empowerment can be realized in India only when the traditional practices like female infanticide, dowry deaths, honour killings by *Khap Panchayats*, domestic violence, or sexual abuse is eliminated. It is only then that gender equality and women's empowerment can become a reality.

REFERENCES

1. Agarwal Bina, Are We Not Peasants Too? Land Rights and Women's Claims in India, Population Council, 4 (2002)
2. Agnes, Flavia Law and Gender Inequality: The Politics of Women's Rights in India, OUP, New Delhi, 127-128 (1999); www.anna.iwate-pu.ac.jp
3. bonjourplanetearth.blogspot.com.au (2014)
4. Chatterji Angana, Women in search of human equality, Social Action, 40, 46-56 (1990)
5. <http://www.unhabitat.org/tenure>; <http://www.unhabitat.org/gender>; <http://www.unhabitat.org/campaigns>; www.unhabitat.net (2014)
6. Jha P., R. Kumar, P. Vasa and N. Dhingra et al, Low Male to female sex ratio of children born in India: national survey of 1.1 million households, Lancet, 367, 211-18 (2006) www.homeoffice.gov.uk
7. Kishwar Madhu, Off the beaten Track: Rethinking Gender Justice for Indian Women, OUP, New Delhi, 200-205, (1999)
8. Kishwar Madhu, Where daughters are unwanted, Manushi, 86, 15-22 (1995)
9. Menon, Nivedita(ed) Gender and Politics in India, OUP, New Delhi, 455-460, (1999)
10. Mihra Sweta, Women and 73rd Constitutional Amendment Act: A Critical Appraisal, Social Action, 44, 16-30 (1997)
11. Narayan Shashi S., Gender Equality through reservation in decision making bodies, Social Action, 48, 148 (1998)
12. National Commission on Population, National Population Policy 2000-Objectives, National Commission on Population, Government of India (2000) (http://populationcommission.nic.in/npp_obj.htm)
13. [Ncrb.gov.in/CD.../statistics2012.pdf](http://ncrb.gov.in/CD.../statistics2012.pdf) (2014)
14. Sabharwal Sagun, K.G. Santhya and Shireen J Jejeebhoy, Determinants of Marital violence, Economic and Political Weekly, 47, 41-45 (2013)
15. Sarpotdar Anagha, Sexual harassment of Women: Reflections on the Private Sector, Economic and Political Weekly, 47, 18-23 (2013)
16. Sen Amartya, Missing Women, British Medical Journal, 304, 587-588 (1992)
17. Sivaramayya B., Status of Women and Social Change, Journal of Indian Law Institute, 25, 270 (1983).
18. Vishwanath L.S., Female Infanticide: The Colonial Experience, Economic and Political Weekly, 45, 2313-2318 (2004)
19. www.freiheit.org, ielrc.org (2014)
20. www.unhchr.ch (2014)

Leadership Styles in Organizations

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ABSTRACT

A leadership **style** is a leader's style of providing direction, implementing plans, and motivating people. Various authors have proposed identifying many different leadership styles as exhibited by leaders in the political, business or other fields. Studies on leadership style are conducted in the military field, expressing an approach that stresses a holistic view of leadership, including how a leader's physical presence determines how others perceive that leader. The factors of physical presence in this context include military bearing, physical fitness, confidence, and resilience. The leader's intellectual capacity helps to conceptualize solutions and to acquire knowledge to do the job. A leader's conceptual abilities apply agility, judgment, innovation, interpersonal tact, and domain knowledge. Domain knowledge encompasses tactical and technical knowledge as well as cultural and geopolitical awareness. In this global competitive environment, effective leadership style is necessary to reduce the attrition rate. From the effective leadership styles only it is possible to achieve organizational goal productively. Leadership styles affect on the employee performance and productivity. This paper summarizes and analyzes the available literature of leadership styles and effect on different components of Quality of work life

INTRODUCTION

An effective leader influences followers in a desired manner to achieve desired goals. Different leadership styles may affect organizational effectiveness or performance. Transformational leadership is a stronger predictor of both job satisfaction and overall satisfaction. In the study it was concluded that organizational performance is influenced by a competitive and innovative culture. Organizational Culture is influenced by leadership style and consequently, leadership style affects organizational performance.

CONCEPTUAL FRAMEWORK

Leadership is a social influence process in which the leader seeks the voluntary participation of subordinates in an effort to reach organization goals. A leader can be defined as a person who delegates or influencing others to act so as to carry out specified objectives. Today's organizations need effective leaders who understand the complexities of the rapidly changing global environment. If the task is highly structured and the leader has good relationship with the employees, effectiveness will be high on the part of the employees. The study further revealed that democratic leaders take great care to involve all members of the team in discussion and can work with a small but highly motivated team.

Barchiesi et al. (2007) measured the leadership effectiveness and leadership role and its influence on performance, leadership behaviors, attitudes. They found that high leadership indexes

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are not related to past performance records but associated both to higher potentiality of enhanced performance and to higher reputation of organizations, pointing in the direction of a meaningful influence of behavioral complexity and dynamics on the leadership perceived level. A mechanism of leadership styles affecting team innovation in the private research centers investigated the relationship between different leadership styles and team innovation with the mediating effects of knowledge sharing and team communication.

Exploring the Relationship between Organizational Culture and Style of Leadership we used the factors like Organizational Culture, Charismatic Leadership, Transformational Leadership and Transactional Leadership. Voon et al (2011) found out the influence of leadership styles on employees' job satisfaction in public sector organizations in Malaysia. They used the factors like salaries, job autonomy, job security, workplace flexibility. Out of these factors, they found that transformational leadership style has a stronger relationship with job satisfaction.

Chung – Hsiung Fang et al (2009) identified that leadership style can affect organizational commitment and work satisfaction positively and work satisfaction intern can affect organizational commitment and work performance positively. Leadership is largely culturally orientated, embracing traditional beliefs, norms and values and a preoccupation.

According to Goh Yuan et al (2005) study, leadership style is significantly influenced by the leader's immediate and extended family, clan and tribe. This study finds the linkages between organizational leadership and business ethics, thereby making a contribution toward increasing the quality of organizational life which may have a positive influence on both members of the organization and the wider community.

Lu Ye et al (2011) study explained employees' perceptions about transactional or transformational leadership style of executive, both have highly positive correlation with perceptions about executive's encouragement factors of its innovation climate.

Podsakoff et al (1990) said that leadership behavior can affect trust and satisfaction of employees to organization and organizational citizenship behavior further enhances the relationship between leadership style and organizational commitment directly. Transactional leadership is considered as the subordinates' rewards through their efforts and performance.

Guang-yi et al (2008) compared the Transactional leadership. Transformational leadership theory is deemed to improve the subordinates' performance by changing the motives and values of employees.

Bass (1990) divided leadership style into transformational leadership and transactional leadership. Transformational leadership has the characteristics of individual influence, spiritual encouragement and intellectual stimulation. They often take individual into consideration, establish vision and aim inside, create open culture, trust the staff to reach their goals and give full play for staff's potential. Transactional leadership is focused on staff's basic and external demand, the relationship between leaders and subordinates is based on the contract. They tend to attain organizational goal by pacific job roles and mission design, their basic purpose is to maintain a stable organization.

Podsakoff et al (1990) said that leadership behavior can affect trust and satisfaction of employees to organization and organizational citizenship behavior further enhances the relationship between leadership style and organizational commitment directly.

Leadership style is the relatively consistent pattern of behavior that characterizes a leader. Today's organizations need effective leaders who understand the complexities of the rapidly changing global environment. Different leadership styles may affect organizational electiveness or performance. According to the Oladipo et al (2013), the success or failure of proper organizations, nations and other social units has been largely credited to the nature of their leadership style.

Jeremy et al (2012) explained in manufacturing company, leadership is really a process for impacting on others commitment towards recognizing their full potential in achieving goals, vision

with passion and integrity. The study also revealed that the associations between leader and worker give additional factor employees' satisfaction which is considerably affected through the leadership style adopted by the leader. However from the available literature we can summarize the different dimensions of leadership styles and their effect on employee satisfaction, team work, organizational change and employee performance.

AUTHORITARIAN

The authoritarian leadership style keeps main emphasis on the distinction of the authoritarian leader and their followers. These types of leaders make sure to only create a distinct professional relationship. Direct supervision is what they believe to be key in maintaining a successful environment and follower ship. Authoritarian leadership styles often follow the vision of those that are in control, and may not necessarily be compatible with those that are being led. Authoritarian leaders have a focus on efficiency, as other styles, such as a democratic style, may be seen as a hindrance on progress. Examples of authoritarian leadership: a police officer directing traffic, a teacher ordering a student to do his or her assignment, and a supervisor instructing a subordinate to clean a workstation. All of these positions require a distinct set of characteristics that give the leader the position to get things in order or get a point across. Authoritarian Traits: sets goals individually, engages primarily in one-way and downward communication, controls discussion with followers, and dominate interaction. Several studies have confirmed a relationship between bullying, on the one hand, and an autocratic leadership and an authoritarian way of settling conflicts or dealing with disagreements, on the other. An authoritarian style of leadership may create a climate of fear, where there is little or no room for dialogue and where complaining may be considered futile.

PATERNALISTIC

The way a paternalistic leader works is by acting as a parental figure by taking care of their subordinates as a parent would. In this style of leadership the leader supplies complete concern for his followers or workers. In return he receives the complete trust and loyalty of his people. Workers under this style of leader are expected to become totally committed to what the leader believes and will not strive off and work independently. The relationship between these co-workers and leader are extremely solid. The workers are expected to stay with a company for a longer period of time because of the loyalty and trust. Not only do they treat each other like family inside the work force, but outside too. These workers are able to go to each other with any problems they have regarding something because they believe in what they say is going to truly help them. One of the downsides to a paternalistic leader is that the leader could start to play favorites in decisions. This leader would include the workers more apt to follow and start to exclude the ones who were less loyal. In today's market paternalism is more difficult to come by according to Padavic and Earnest who wrote "business dimensional and Organizational Counseling." They believe this because there have become more lay-offs and stronger unionization. This affects paternalistic leaders because the co-workers may not believe that their jobs are 100% ensured. When this happens, workers begin to look for bigger and better job opportunities instead of staying at one company for a longer period of time. Because of this, the leader may be thinking that you could be leaving and not fully believe you when you tell them something about a job opportunity. This could put the workers and leader at risk for a bad situation.

According to Bass (1994) who wrote *Leadership and Performance Beyond Expectations*, workers who follow paternalistic leadership also have better organization skills. The leader encourages organization because they allow the workers to complete tasks so that they can stay on top of their

work. The workers complete tasks this boosts self-confidence and it makes them work harder to reach a goal and exceed the goal to prove to their boss they are working hard. Having this style of leadership can also help implement a reward system. This system will allow their workers to work even better because there is something for them at the end of the tunnel. While doing this they will also be able to accomplish more work in a set time frame.

DEMOCRATIC

The democratic leadership style consists of the leader sharing the decision-making abilities with group members by promoting the interests of the group members and by practicing social equality. The boundaries of democratic participation tend to be circumscribed by the organization or the group needs and the instrumental value of people's attributes (skills, attitudes, etc.). The democratic style encompasses the notion that everyone, by virtue of their human status, should play a part in the group's decisions. However, the democratic style of leadership still requires guidance and control by a specific leader. The democratic style demands the leader to make decisions on who should be called upon within the group and who is given the right to participate in, make and vote on decisions. Research has found that this leadership style is one of the most effective and creates higher productivity, better contributions from group members and increased group morale. Democratic leadership can lead to better ideas and more creative solutions to problems because group members are encouraged to share their thoughts and ideas. While democratic leadership is one of the most effective leadership styles, it does have some potential downsides. In situations where roles are unclear or time is of the essence, democratic leadership can lead to communication failures and uncompleted projects. Democratic leadership works best in situations where group members are skilled and eager to share their knowledge. It is also important to have plenty of time to allow people to contribute, develop a plan and then vote on the best course of action.

LAISSEZ-FAIRE

The laissez-faire leadership style is where all the rights and power to make decisions is fully given to the worker. This was first described by Lewin, Lippitt, and White in 1939, along with the autocratic leadership and the democratic leadership styles. Laissez-faire leaders allow followers to have complete freedom to make decisions concerning the completion of their work. It allows followers a self-rule, while at the same time offering guidance and support when requested. The laissez-faire leader using guided freedom provides the followers with all materials necessary to accomplish their goals, but does not directly participate in decision making unless the followers request their assistance. This is an effective style to use when:

- Followers are highly skilled, experienced, and educated.
- Followers have pride in their work and the drive to do it successfully on their own.
- Outside experts, such as staff specialists or consultants are being used.
- Followers are trustworthy and experienced.

This style should *not* be used when:

- The leader cannot or will not provide regular feedback to their followers

TRANSACTIONAL

Transactional leaders focus their leadership on motivating followers through a system of rewards and punishments. There are two factors which form the basis for this system, Contingent Reward and management-by-exception.

- Contingent reward provides rewards, materialistic or psychological, for effort and recognizes good performance.
- Management-by-exception allows the leader to maintain the status quo. The leader intervenes when subordinates do not meet acceptable performance levels and initiates corrective action to improve performance. Management by exception helps reduce the workload of managers being that they are only called-in when workers deviate from course.

This type of leader identifies the needs of their followers and gives rewards to satisfy those needs in exchange of certain level of performance.

Transactional leaders focus on increasing the efficiency of established routines and procedures. They are more concerned with following existing rules than with making changes to the organization.

A transactional leader establishes and standardizes practices that will help the organization reach:

- Maturity
- Goal-setting
- Efficiency of operation
- Increasing productivity.

EFFECT ON WORK TEAMS

Survey done by Jun Liu, Xiaoyu Liu and Xianju Zeng on the correlation of transactional leadership and how innovations can be affected by team emotions. The research was composed of 90 work teams, with a total of 460 members and 90 team leaders. The study found that there is a relationship between emotions, labor behavior and transactional leadership that affect for the team. Depending on the level of emotions of the team; this can affect the transactional leader in a positive or negative way. Transactional leaders work better in teams where there is a lower level of emotions going into the project. This is because individuals are able to:

- Think freely when setting their emotions aside from their work.
- Have all of their focus on the given task.

A transactional leader is:

1. Negatively affected when the emotional level is high.
2. Positively affected when the emotional level is low.

Transactional leadership presents a form of strategic leadership that is important for the organizations development. Transactional leadership is essential for team innovativeness.

TRANSFORMATIONAL

A transformational leader is a type of person in which the leader is not limited by his or her followers' perception. The main objective is to work to *change* or *transform* his or her followers' *needs* and *redirect* their thinking. Leaders that follow the transformation style of leading, challenge and inspire their followers with a sense of purpose and excitement. Transformational leaders also create a vision of what they aspire to be, and communicate this idea to others (their followers). Schultz and Schultz identify three characteristics of a transformational leader:

- Charismatic leadership has a broad field of knowledge, has a self-promoting personality, high/great energy level, and willing to take risk and use irregular strategies in order to stimulate their followers to think independently
- Individualized consideration
- Intellectual stimulation

CONCLUSION

It is observed that from the available literature, all the studies conducted are related to the large sector which interns reveal that leadership style, organizational commitment and work satisfaction are interrelated. Thus, leadership styles can affect the quality of work life. Since much work has not been carried out with respect to SMEs, there is a need for the study of the effect of Transformational and Transactional leadership styles on the Quality of work life of employees working in the SMEs.

REFERENCES

1. Bass B. M. and Avolio B. J., Developing transformational leadership: 1992 and beyond, *Journal of European Industrial Training*, 14, 21–27 (1990)
2. Bass B. M. and Avolio B. J., Transformational Leadership and Organizational Culture, *Public Administration Quarterly*, 12, 113-121 (1993)
3. Bass B. M., *Leadership and performance beyond expectations*, New York, Free Press, 3-242 (1985)
4. Bass B. M., The ethics of transformational leadership, *KLSP: Transformational Leadership, Working Papers* (1997)
5. Bass Bernard M. and Avolio Bruce J., *Improving organizational effectiveness-Through transformational leadership*, Sage Publications, Thousand Oaks, California (1994)
6. Chung-Hsiung Fang, Sue-Ting Chang and Guan-Li Chen, Applying Structural Equation Model to Study of the Relationship Model among leadership style, satisfaction, Organization commitment and Performance in hospital industry, *IEEE* (2009)
7. Guang-yi Wang Zhi-sheng, The Impact of Transformational Leadership Style on Organizational Performance: The Intermediary Effects of Leader-Member Exchange, *International Conference on Management Science & Engineering*, 15th September (2008)
8. Jeremy M., Melinde C. and Ciller V., Perceived leadership style and employee participation in a manufacturing company in the democratic republic of Congo, *African journal of business management*, 6(15), 5389-5398 (2012)
9. Lu Ye, Deng Junye and Ma Yan, The Relationships between Leadership Styles and Organizational Innovation Climate, *IEEE* (2011)
10. Oladipo K. S., Jamilah O., Abdul daud S., Jeffery L. D. and Salami D. K., Review of leadership theories and Organizational performances, *International Business Management Journal*, 7(1), 50-54 (2013)
11. Podsakoff P. M., MacKenzie S. B., Moorman R. H. and Fetter R., Transformational leader behaviors and their effects on followers' trust in leader, satisfaction and organizational citizenship behaviors, *Leadership Quarterly*, 1, 107-142 (1990)
12. Voon M. C. et al, The influence of leadership styles on employees' job satisfaction in public sector organizations in Malaysia, *International Journal of Business, Management and Social Sciences*, 2(1), 24-32 (2011)

Learning Styles in Higher Education

F. Sathya*

INTRODUCTION

The term learning speaking stands for all those changes and modifications in the behavior of the individual which e undergoes during his life time.

According to Gardhar Marphy (1986), The term learning covers every modification in behavior to meet environmental requirements.

According to Henry P. Smith, (1962), Learning is the acquisition of new behavior or the strengthening or weakening of old behavior as the result of experience.

According to Kimble, (1996), Learning is a relatively permanent change in behavioral potentiality that occurs as a result if reinforced practice.

LEARNING STYLE

Learning styles are simply different approaches or ways of learning. Individuals have unique patterns for learning new and difficult information. Those patterns are so diverse that, without using reliable and valid, instrument, it is predict accurately how to teach anything difficult to people whose abilities to assimilate and retain new and challenging facts and concepts very tremendously.

Some adults can master easy information without using their preferred learning style, but most perform significantly better when the environment, the methods, and the resources are complementary to (i.e., “match”), rather than dissonant form (“mismatch”) how they learn.

Definition of Learning Styles

“Learning style is the way each person begins to concentrate on process, internalize, and retain new and difficult academic information”

- Dunn and Dunn (1992, 1993) and Dunn, Dunn and Perrin (1994)

Elements of Learning Style

According to Dr. Rita Dunn and Dr. Kenneth Dunn (2001),

Sound

You often think best when you work with some kind of sound you probably can do your homes work with the radio or the television. They do not interfere with your learning processes.

Light

You sometimes do home work or study in low light. It isn't absolutely necessary for you to have low light all the time, but you usually feel comfortable with it. You learn better and do a better job on your home work assignments with soft rather than bright light.

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Design

You like to do homework in an informal atmosphere. Study on a pillow, couch, carpet, bed or lounge chair, since you are not comfortable in a conventional classroom setting. You find it difficult to concentrate at a hard desk or chair.

Motivation

Occasionally you enjoy learning difficult information, but not too often! Ask your teacher if you sometimes can do the assignments in a way that interests you. (But find a way that does interest you!) For the required assignments, you might want to construct a tactical resource (see instructions). Or think of a “special” or “extra” project related to your assignment and share it with a classmate or your teacher (Make a game of making dull tasks fun because of how you do them!)

Responsibility

Sometimes you do homework assignments that, at first, you really didn't want to do. You think of the consequences of not doing the assignments. But there's more to it than whether or not to do the homework. You often want to do the opposite of what people tell you to do. When you feel that way, think it through. Maybe it's just the nonconformist in you saying, “I want to do what I want to do—the opposite of what I'm told!” Then think of why you are like that and decide on the best thing for you—regardless of whose idea it was! (Most of the time you'll see that your teachers want you to do well in school and advise you based on their experiences.) Try some things your teachers or parents suggest. You may enjoy the feeling of accomplishment when they're done!)

Learn Alone / Oriented

You usually prefer doing your homework with someone else. You learn and remember well that way.

Authority figures present

You need feedback from your teacher because you want to know whether you are on that right track. The best teacher for you would be one who is specific about assignments, makes you do them, and tells you exactly how well you are doing as you progress.

Learning in several ways

You really like to change the way in which you do homework and other difficult assignments. You get bored doing them in the same way and you often like change. Ask your teacher if you can experiment with doing homework in a different way. Suggest what you'd like to try.

Auditory

You usually find it easy to remember much of what you hear, so you probably pay close attention to your teacher's lectures. You have an auditory strength! You find it easy to learn through audiotapes, videotapes, discussions, records, radio, television and lectures. You should reinforce what you hear by reading and by then making something creative with the new information in the lecture.

Kinesthetic

You have a kinesthetic Strength! You like being active and involved. Build activities into your home work assignments or when studying. Include trips, experiments, skills, role playing, acting floor and action games where you become involved actively. Reinforce through tactile, visual, and then auditory resources.

Intake

You often do not need to eat or drink while you are studying or doing your homework.

Late Morning

You learn nicely in the morning. This is a good time to do homework or study.

Mobility

You find it impossible to remain in the same place for long periods of time. Plan for frequent short “breaks” every 15-20 minutes or so-but be certain to continue you assignment after no more than five minutes.

Teacher Motivated

You usually appreciate your teacher’s approval.

LEARNING STYLES IN HIGHER EDUCATION

Learning styles are simple different approaches or ways of learning. When we look at our subject areas, we realize that different scholars approach our academic fields differently. It is this difference that makes them complex and rich. Scholarship is stronger when it includes intuitive, subjective moments plus creative times plus careful data collection plus systematic analysis as well as reflective evaluation and well-written presentations. Of course, we will be better in some of these abilities and will have colleagues who are better at others. Our work (and our field) will be stronger when we devise ways to bring these multiple orientations to bear on the phenomena we study. The scholarly side of the academy clearly profits when it recognizes multiple points of view.

Compare this rich community to the typical classroom. Here most teachers tend to rely almost exclusively on sequential, verbal presentations, combined with private reading & writing activities. When we may expect the student to think in complex ways before completing a project, in fact they are often exposed to only a narrow approach to our subject matter. The loss of opportunities to engage in our subjects from a variety of orientations becomes an obvious flaw to those who recognize the inevitability of diverse points of view in the world. Even worse, we can trace lack of motivation, resistance, misperceptions, failure, and uninspired intellectual work to the fact that many students cannot learn well within the limited orientation provided them in the classroom.

Underlying learning style research is the belief, verified by some studies, that students learn best when they can address knowledge in ways that they trust. If their orientation to the world draws theory form concrete experience, then they will learn best through doing rather than reflecting. If their personal style is oriented around abstraction, then their best learning will be abstract. In fact, and individual may not ultimately confirm knowledge until they have handled it in modalities they have handled it in modalities they strongly trust.

Auditory learners will learn well in lecture settings; private learners will gain knowledge from quiet reading. However, these are only two out of a broad array of preferences found among intellectually capable people. When learning experiences are limited to these modes, students who rely on other styles are bound to be less successful. Limited classrooms are likely to inhibit one or more clusters of students whose preferred styles are not given the opportunity to be used (a problem that may be wrongly attributed to lower ability or motivation).

Faculty can engage students in more rich learning opportunities by increasing the range of style through which students can engage in studying academic fields. Technology provides new capabilities to reconstruct learning environments around specific learning styles. Below is an outline of some possibilities that emerge when using learning style models to develop technological applications to university / college classrooms.

REFERENCES

- **Carbo, M., Dunn, R. & Dunn, K.** (1986). Teaching Students to read through their individual learning styles. Englewood Cliffs: N.J., Prentice Hall.
- **Dunn, R., Dunn, K. & Pervin, J.** (1994). Teaching Young Children through their individual learning styles. Boston: Allyn and Bacon.
- **Gardner, H.** (1993). Multiple Intelligence: The Theory into practice. New York: Basic Books.
- **Narayan Rao, S.S** (1999). Educational Psychology. Madras : Wiley Eastern Ltd.
- **Panda, B.N.** (1999). Advanced Educational Psychology. New Delhi: Discovery Publishing House.
- **Rita Dunn, Kenneth Dunn** (1999). The complete Guide to the Learning Styles Inservice System. United States of America: Allyn and Bacon.
- **Weinstein, C.E. & Mayer, R.E.** (1986). The Teaching of Learning Strategies. New York: Mc Millan.
- **Witkin, H.A. & Goodenough, D.R.** (1981). Cognitive Styles : Essence and Origins. New York, International Universities, Press.
- **Andrews, R.H.** (1990). The development of a learning styles program in a low socio-economic underachieving North Carolina elementary School, Journal of Reading, Writing and Learning Disabilities.
- **Burnner, R. & Hill, D.** (1992). Using Learning Styles research in Coaching. Journal of Physical Education, Recreation and Dance.
- **Milgram, R.M., Price, G.E. & Dunn, R.** (1995). Learning Styles of Highly creative Israeli adolescents. Journal of National Forum of Special Education.

The Educational, Social and Emotional Adjustments of Girls at High School Level in Government and Private Schools of Jammu

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ABSTRACT

Life is a continuous process of changes and challenges. Every person is facing such situations for his survival or growth which arise as a result of individual's physiological, psychological or social needs. Adjustment, as a process describes and explains the ways and means of an individual's adaptation to his self and his environment without any reference to the quality of such adjustment along with its outcome in terms of success or failure. Girls play a vital role for the betterment of our society. But it is never an easy task for them to make proper adjustments in their education, society and dealing ability with emotions. So this study was much more needed to know how challenging they are as our education system differs in government schools and private schools particularly when students are seen in gender perspective. This study has a key role to play to understand the life of girls in high schools in terms of education provided to them. Through this study every possible measure can be made to enhance their morale and give them a better educated and a social life. The purpose of the present study is to study the totals school adjustment, social adjustment and emotional adjustment of Girls at high level. The objectives of the study were to compare educational, social, emotional and overall adjustment of girls among government and private schools. The study is significant because the outcomes could provide guidelines for teachers, educationist and other policy makers to improve educational, social and emotional adjustment of girls at high school level in government and private schools in Jammu City. In this study, random sampling of 200 IX and X class girls was drawn from ten randomly selected high schools of government and private schools of Jammu City. In the present study, The Adjustment Inventory for School Students (AISS) developed by A.K.P. Sinha and R.P. Singh (2005) was used in the study to collect the data. In order to analyze the data, the statistical techniques namely Mean, Standard Deviation and t-test have been used. The results reveal that there is significant difference between educational, social, emotional and overall adjustment of girls among government and private schools. The girls studying in private schools have high educational, social, emotional and overall adjustment as compare to the girls studying in government schools.

Keywords: Adjustment, Educational, Social and Emotional, School Adjustment, Girls.

INTRODUCTION

Man is a unique product of evolution. In contrast to other forms of animal life one of the unique attributes of man is his self-awareness and capacity to understand him. Social existence has produced physical dangers such as war, there are important psychological problems uniquely associated

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with living in Society. There are also questions of attainment of basic satisfaction from competence in interpersonal relations and through some degree of inner harmony. Thus, as Lazarus has said "man has accordingly become increasingly interested in psychological adjustment and nature of personality". When man has accordingly become increasingly interested in adjustment a separate discipline called by various names as "psychology of adjustment", "Mental Hygiene", "personality adjustment" is developing. Such a discipline takes into account both the personality of the individual and his adjustment. The process of adjustment starts from birth of the child and continues till death. Thus, we see that adjustment means reactions to the demands and Pressures of social environment imposed upon the individual.

Adjustment is the process by which a living organism maintains a balance between its needs and the circumstances that influence the satisfaction of these needs. The process of adjustment has two main elements: One the need of the living organism and second, the conditions or circumstances that influence these needs. These needs can be bio-genic, originating in society, personal or communal, or arising from any other conceivable source. On the other hand, the circumstances influencing these needs also can either be inside the individual or outside him. Factors that influence these needs are his physical and mental states, capacity, attitudes, interests etc. Life may be looked as a long series of adjustment in which the individual is constantly adjusting himself to the demands of external environment as well as both needs of his physiological and mental constitutions. Adjustment is the relationship which comes to be established between the individual and the environment. Every individual plays certain position in his social relations. He is trained to play his role in such a way that his maximum needs will be fulfilled. So, he should play his role properly and get maximum satisfaction. If he does not play his role according to standards and training Home Environment received his needs may not be fulfilled and he may get frustrated. The adjustment that he makes are not always healthy, sound or effective from the point of view of his lifelong welfare, but they are made as they seem at the moment to satisfy some of the needs. Thus the process by which the individual maintains a level of psychological balance between his needs and the circumstances that influence the satisfaction may be termed as adjustment. Adjustment is that variety of behaviour which includes visual exploration, grasping, crawling, walking, attention and perception, language and thought, curiosity and manipulation of the environment. It is a part of the process by means of which a person learns to interact effectively with the environment and develops competence to change or control the environment for his own needs. Adjustment processes concerning human being have hand in glove relationship with human nature. It is adjustment which is responsible for the organization of behaviour to life situations at home, at school and at work.

A well-adjusted person makes good use of his intellectual capacities and powers for handling a situation or accomplishing any task. He has the general mental adaptability to new problems and conditions of life. He has the capacity to think rationally and purposefully. A well-adjusted person has a sound psychological makeup. He does not suffer from excessive worries, frustration, anxieties, tensions, depression, conflicts and complexes. He always possesses a feeling of psychological wellbeing. Well-adjusted people are capable of feeling and showing affection and establish close relationship with others. They accept with grace the realities of the physical world and of society and behave in harmony with them. They take failure realistically become satisfied what they have attained and face the world squarely. A well-adjusted individual acquires more or less effective techniques for dealing with most conflicting situations and resolve them adequately. The apathy, depression, false beliefs, loss of identity and anxiety can make the person maladjusted. Feeling of insecurity, emotionally charged conditions, self-devaluation, inefficient contact with reality, unrealistic life goals, and inability to learn from past experience and inability to bear criticism can easily lead to maladjustment.

REVIEW OF LITRERATURE

Vaghela (2015) conducted a study on "Adjustment among Adolescent Girl Students of Secondary School with Respect to their Type of Family." A sample of 80 adolescent girl students were randomly selected secondary schools out of which 40 from nuclear families and 40 from joint families. The *Adjustment Inventory* by Sinha and Singh was used to measure social, emotional and educational adjustment for the study. The finding shows that there is no significant difference in adjustment ability between adolescent girls from nuclear and joint families.

Khichi (2016) conducted a study on "A Comparative Study of Adjustment Level of Government and Private School Students." The sample for study consisted of 120 students from both private and government school have taken part in the research. Adjustment level was measured with the help of Sinha and Singh's *Adjustment Inventory* (2005) for school students (AISS). The findings of the study indicate that there is no significant difference between the two groups.

Boro (2017) investigated study on "Adjustment Problems of Secondary School Students of Gorkha Community with Respect to Gender – A study." A sample of 60 students was taken from the randomly selected secondary schools, out of which 30 were boys and 30 were girls. The sample was collected by using simple random sampling technique. *Adjustment Inventory* constructed and standardized by A.K.P Sinha and R.P Singh (1971) was used to collect data. The findings revealed that there existed significant differences between the Gorkha Community boys and girls of Secondary School. Girls show better adjustment in emotional, social and educational than boys.

Alam (2017) conducted a "Study of Impact of Family on the Adjustment of Adolescents." The sample comprised of randomly selected 120 adolescents (Nuclear Families: 60 and joint Families: 60) studying in Xth class in Darbhanga town (Bihar). Descriptive survey method of research was used for collecting the data using Personal information schedule developed by investigator and *Adjustment Inventory* developed by Sinha and Singh (1971). There is no significant difference between nuclear and joint families on the measure of emotional, social and educational adjustment.

Einstein (2017) assessed a study on "Social Life Adjustment and Academic Achievement of Adolescents in the North West Region of Cameroon: What Counselors need to know." The sample consisted 480 students were randomly selected from three secondary schools in major urban areas of the region. A *Self-constructed questionnaire* with the *Likert scale* on social life adjustment was used to gather the necessary data. The findings revealed that there exist no significant difference in the effects of social life adjustment on academic performance between boys and girls.

Negi (2017) conducted a study on "A Comparative Study of Adjustment among Secondary School Girls." The sample consisted of 100 girl students of class 10th to 12th, were selected randomly from English and Hindi medium co-educational and girl's schools of Dehradun district. The tool used was *Adjustment Inventory for school students (AISS)* developed by Dr. A.K.P Sinha and Dr. R.P Singh for the study. The finding of the study revealed significant difference between girls studying in co-educational schools and girl's schools of English and Hindi medium. The girls studying in English medium co-educational schools adjustment was better more than girls studying in Hindi medium co-educational schools.

NEEDS AND SINGNIFICANCE OF THE STUDY

The purpose of the present study is to study the totals school adjustment, social adjustment and emotional adjustment of Girls. Life is a continuous process of changes and challenges. In present world revolutionary changes are taking place in different fields and to cope up with such environment adjustment becomes necessary. To keep pace with the changing society, one has to make changes

in one self or his environment. If the individual does not keep pace with the changing time, he is thrown back in the society. So the individual has to constantly make changes in himself to make the adjustment possible. It is an organizational behaviour in life situation at home, at school, at work in growing up and in ageing. It helps one to keep out basic impulses at tolerable levels, to believe in one's own abilities and to achieve desired goals. Girls play a vital role for the betterment of our society. But it is never an easy task for them to make proper adjustments in their education, society and dealing ability with emotions. So this study was much more needed to know how challenging they are as our education system differs in government schools and private schools particularly when students are seen in gender perspective. This study has a key role to play to understand the life of girls in high schools in terms of education provided to them, what difficulties they have to face during schooling and how much emotionally they are attached with teachers, parents and their co-students as well. In order to understand the phenomena of adjustment and responsible factors in adjustment this study is evolved. The results of this study have been of immense use to researcher on which they can base future studies in academic, social and emotional adjustment of girls among government and private schools at high level. The study is significant from the point of view that outcomes could provide guidelines for teachers, educationist, and other policy maker to improve academic, social and emotional adjustment of girls among government and private schools at high level.

OBJECTIVES OF THE STUDY

The objectives of the present study are:

1. To compare educational adjustment of girls among government and private schools of Jammu city.
2. To compare social adjustment of girls among government and private schools.
3. To compare emotional adjustment of girls among government and private schools.
4. To study and compare the overall adjustment of girls among government and private schools.

HYPOTHESES OF THE STUDY

The hypotheses formulated in the present research work:

1. There is no significant difference between educational adjustment of girls in government and private schools of Jammu city.
2. There is no significant difference between social adjustment of girls in government and private schools of Jammu city.
3. There is no significant difference between emotional adjustment of girls in government and private schools of Jammu city.
4. There is no significant difference between total adjustment of girls in government and private schools of Jammu city.

RESEARCH METHODOLOGY

In the present study, Descriptive Survey Method of research was used.

SAMPLE

A sample random sampling technique was employed for the selection of the sample. 10 schools were selected randomly, 5 Government schools and 5 private. From each school 20 girl students were selected randomly. Thus, the total sample comprised 200 girl students, out of which 100 girls were selected from government school and 100 girls were selected from private school.

TOOL EMPLOYED

In the present study the investigator used Adjustment Inventory for School Students (AISS) developed by A.K.P Sinha and R.P. Singh. It has 60 items to measures adjustment in three areas that is emotional, social and educational; the responses to each item of the inventory are in “yes” or “no”. There is no time limit for the completion of the inventory but on an average respondent takes 15-20 minutes to respond to all items of the inventory. The inventory is reliable and valid tool. The indices of reliability as reported by the authors are 0.95 and 0.51 respectively, which are quite satisfactory.

RESULTS AND FINDINGS

- The mean value of girl students belonging to government schools was 4.49 and the mean value of girl students belonging to private schools was 7.49. The private schools mean is higher than the government schools. Thus, it can be said from the results there is significant difference in Educational Adjustment of girls belonging to Government and private high schools. Thus, the null hypothesis “there is no significant difference in educational adjustment of girl students among government and private schools” stands rejected.
- The mean value of girl students belonging to government schools was 4.49 and the mean value of girl students belonging to private schools was 6.12. The private schools mean is higher than the government schools. Thus, it can be said from the results there is significant difference in Social Adjustment of girls belonging to Government and private high schools. Thus, the null hypothesis “there is no significant difference in social adjustment of girl students among government and private schools” stands rejected.
- The mean value of girl students belonging to government schools was 6.67 and the mean value of girl students belonging to private schools was 8.69. The private schools mean is higher than the government schools. Thus, it can be said from the results there is significant difference in Emotional Adjustment of girls belonging to Government and private high schools. Thus, the null hypothesis “there is no significant difference in emotional adjustment of girl students among government and private schools” stands rejected.
- The mean value of girl students belonging to government schools was 15.99 and the mean value of girl students belonging to private schools was 22.58. The private schools mean is higher than the government schools. Thus, it can be said from the results there is significant difference in Overall Adjustment of girls belonging to Government and private high schools. Thus, the null hypothesis “there is no significant difference in overalls adjustment of girl students among government and private schools” stands rejected.

CONCLUSION AND DISCUSSION

The present study revealed that there is significant difference between Government and Private school girls in Educational Adjustment. Girls studying in private schools have high educational adjustment as compared to the girls studying in government schools. Study by Boro (2017) reported similar results as revealed in the present study. The study by Gill (2014) reported results contrary to the present study.

The study further revealed that there is significant difference between Government and Private school girls in Social Adjustment. Girls studying in private schools have high social adjustment as compared to the girls studying in government schools. Studies by Jaikumar and Muthumanickam (2010), Makwana and Kaji (2014), Kales (2014) and Mujiaba (2017) reported similar results as revealed in the present study. The study by Einstein (2017) reported results contrary to the present study.

The present study also revealed that there is significant difference between Government and Private school girls in Emotional Adjustment. Girls studying in private schools have high emotional adjustment as compared to the girls studying in government schools. Studies by Gupta (2013) and Mansingh bhai and Patel (2014) reported similar results as revealed in the present study. The study by Kales (2014) reported results contrary to the present study.

The significant difference between Government and Private school girls in Overall Adjustment has also been revealed in this study. Girls studying in private schools have high overall adjustment as compared to the girls studying in government schools. The Studies by Chauhan (2013), Kaur and Kaur (2016), and Bhagat (2016) reported similar results as revealed in the present study. The studies of Paramanik, Saha and Mondal (2014) reported contrary results to the present study.

EDUCATIONAL IMPLICATIONS OF THE STUDY

- (a) The first responsibility of the parents and teachers should be to know the areas where the students lack adjustment and try to give better conditions for proper adjustment in the sphere.
- (b) Parents should also create such an environment so that adolescent girls can express their feelings/opinions without any hesitation. Girls should be given an opportunity to express their own ideas and discuss their problems with school authorities. It develops self confidence and mental satisfaction among the girls.
- (c) The study revealed that there is significant difference in Educational Adjustment of girl students among Government and Private schools. To maintain the level of academic adjustment it is necessary that home and institution should go hand in hand.
- (d) To maintain the level of social adjustment among higher secondary girl students, schools should organize Social service camps NCC/NSS activities and other outdoor activities. Girls should be given an opportunity to express their ideas and discuss their problems with school authorities. It develops self confidence and mental satisfaction among the girl students.
- (e) Further the study may be helpful to utilize the capacities, capabilities and potentialities of the girl child, it is necessary to change the attitude of parents as well as teachers by training and educating them about each psychological aspect of female child and their adjustment issues.

REFERENCES

- Alam, M. (2017). Study of Impact of family on the Adjustment of Adolescents. *The International Journal of Indian Psychology*, 4(4), 191-200.
- Boro, B. (2017). Adjustment problems of Secondary Schools Students of Gorkha community with respect to gender- A Study. *International Journal of Applied Research*, 3(8), 341- 344.
- Einstein, M. (2017). Social Life Adjustment and Academic Achievement of Adolescents in the Northwest Region of Cameroon: what Counselors Need to Know. *Research Journal of Education*, 3(7), 69-74.
- Khichi, S. (2016). A Comparative Study of Adjustment Level of Government and Private School Students. *The International Journal of Indian Psychology*, 4(1), 160-169.
- Negi, S. (2017). A Comparative Study of Adjustment among Secondary School Girls. *International Refereed & Blind Peer – Reviewed Research Journal*, 6(2), 21-25.
- Vaghela, J. (2015). Adjustment among Adolescent Girl Students of Secondary School with Respect to their type of Family. *International Journal of Applied Research*, 1(8), 781-783.

Environmental Pollution Issues and Acts in India

Dr. Korupolu Srinivasu*

INTRODUCTION

“Environment (Derived from the French word Environment Meaning to Encircle or Surround) can be defined as the physical and biological world where we life”.

The word ecology comes from the Greek word ‘oikos’, meaning house or habitat. Ecology is the study of relations of living organisms to their environment. The ecosystem is a complex web linking animals, plants, air, water and every other life form in the biosphere. The system is in a ‘steady state of dynamic balance, which means that by altering any one part, all the other parts are affected.

Resource deterioration (the dwindling of forest, mineral or soil resources), biological disruption, chemical pollution, and social dislocation were identified as side effects of development. But the point under consideration is that if the objective of development waste improve “the quality of life, then development and environmental protection cannot possibly be mutually exclusive. Three aspects in the field of ecology should be of grave concern to planners, namely,

- Both renewable and non renewable resources are being over exploited.
- Pollution is contaminating the air, the food and the water.
- The diversity of organisms, plants, animals and humans necessary for the continued survival of the ecosystem is being lost.

In order to prevent degradation of land by deforestation. The Forest Act 1927 was enacted. The Act empowers the State Government to notify any forest land or waste land as “reserved forests” and certain forests and trees as “protected”. Felling of trees without a license is liable to be penalized. The Government prohibits the breaking up of land for cultivation, pasturing of cattle or clearing of vegetation. Our National Forest Policy of 1952 laid down that one third of the total geographical area in India should be brought under tree cover. That led the Government to enact the Forest (Conservation) Act, 1980. The Act makes it necessary to seek the prior approval of the Central Government for dereservation of reserved forests and for use of forest land for non-forest purposes. In 1988, pursuant to its participation in the IX World Forestry Conference, the Indian Government amended the Forest (Conservation) Act, 1980 and also formulated a New Forest Policy. The objective of the New Forest Policy is to preserve forests as a national resource and to put them to their best use.

RIVER WATER POLLUTION

Contaminated and polluted water now kills more people in India. Several statutes were enacted to solve the problem of water pollution. The first statute is the Shore Nuisance (Bombay and Kolaba) Act, 1853. This was followed by The Orient Gas Company Act 1857. The Serais Act of 1867, The Indian Penal Code 1872, The Northern Indian Canal and Drainage Act 1873, The Obstruction in Fairways Act 1881, The Indian Ports Act 1908, The Indian Steam Vessels Act 1917, Factories Act 1948, River Boards Act 1956, and The Merchant Shipping Act 1958. These laws were found practically ineffective because they merely touched one or the other aspect of water pollution. Though the

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Water (Prevention and Control of Pollution) Act was passed in 1974, the administrative and practical difficulties in effectively implementing the provisions of the Act led to its amendment in 1978. The Act was once again amended in 1988 to bring its provisions on par with the Environment (Protection) Act, 1986 and the Air Act 1981 as amended by Act 42 of 1987.

AIR POLLUTION

Every day, hundreds of tons of gaseous and particulate pollutants are omitted into the air by natural processes and as a result of human activity. These pollutants are carbon monoxide, carbon dioxide, nitrogen oxides, sulphur oxides, hydrocarbons and particulate matter such as lead and asbestos. Most of these pollutants are vehicular and industrial emissions. The other causes of air pollution are domestic consumption of low grade fuel, refuse and industrial waste incinerations, forest fires, improper land use, fine dust contributed by the deserts and other open dry fields and disposal of solid waste. Air pollution causes bronchitis, pneumonia, asthma, lung cancer, arteriosclerosis, skin disorders and obscurity of vision. It gives rise to acid rains damaging national historical monuments and destroying crops.

The earliest enactments controlling air pollution by smoke are The Bengal Smoke Nuisance Act, 1905. The Bombay Smoke Nuisance Act, 1912 and the Gujarat Smoke Nuisance Act, 1963. These State enactments were enacted to abate the nuisance arising from excessive smoke from furnaces in cities. The Indian Boiler Act, 1923 and The Factories Act, 1948 contains some provisions regulating air pollution within the factory. Then in 1981, closely following on the heels of the Water Act, 1974, came the Air (Prevention and Control of Pollution) Act, In 1987, the Act was amended to bring its provisions on par with the Environment Protection Act, 1986. The provisions of the Air Act as well as the Environment (Protection) Act are similar to the Water Act.

WHO recently announced in 2018 India is facing severe environment disorders they had conducted studied in 108 countries in which 4200 cities were examined, in the cities 15 cities are highly air polluted out of this 14 are in India, list of cities are in below.

Uttar Pradesh, Kanpur is first place, Faridabad, Varanasi, Gaya, Patna, Delhi, Lucknow, Agra, Muzafarpur, Srinagar, Gurgram, Jaipur, Patiyala, Zodhpur, these all cities placed in 1 to 14 places. To reduce more air pollution which is caused by burning of fire wood for cooking which also leads to ill health and pollutes air, they are many reasons which cause air pollution, to reduce the above problems Central Government has introduced Ujjwala program. By this program they give three gas connection and LPG cylinders with highly subsidized rates, after this leads to reduce air pollution in India.

In Delhi air pollution had reached at the rate of 547 micro grams per cubic meters it means smoking of cigarettes per day.

Some important issues identified by WHO:

1. Due to micro dust components Worldwide per year 70 lakh people are dying especially in Asia and Africa.
2. Worldwide for every 10 members 9 members are breathing polluted air.
3. Worldwide 300 cores people are facing air pollution problems. In their homes mainly women and children are affected.
4. In many Countries and Cities the rate of air pollution is 5 times higher than the recommended levels by WHO.

The major forms of pollution are listed below along with the particular contaminant relevant to each of them:

- Air Pollution: The release of chemicals and particulates into the atmosphere. Common gaseous pollutants include carbon monoxide, sulfur dioxide, chlorofluorocarbons (CFCs)

and nitrogen oxides produced by industry and motor vehicles. Photo chemical ozone and smog are created as nitrogen oxides and hydro carbons react to sunlight, particulate matter or fine dust is characterized by their micrometer size PM10 to PM2.5.

- Light Pollution: includes light trespass, over illumination and astronomical interference.
- Littering: the criminal throwing of in appropriate man – made objects, un removed, on to public and private properties.
- Noise Pollution: which encompasses road way noise, aircraft noise, industrial noise as well as high-intensity sonar.
- Soil Contamination occurs when chemicals are released by spill underground leakage. Among the most significant soil contaminants are hydro carbons, heavy metals, MTBE, herbicides, pesticides and chlorinated hydro carbons.
- Radioactive contamination, resulting from 20th century activities in atomic physics such as nuclear power generation and nuclear weapons research manufacture and deployment. (see alpha emitters and actinides in the environment)
- Thermal pollution is a temperature change in natural water bodies caused by human influence, such as use of water as coolant in a power plant.
- Visual Pollution which can refer to the presence of overhead power lines motorway billboards, scarred landforms (as from strip mining) open storage of trash, municipal solid waste or space debris.
- Water Pollution by the discharge of waste water from commercial and industrial waste (intentionally or through spills) into surface waters discharge of untreated domestic sewage and chemical contaminants such as chlorine from treated sewage; release of waste and contaminants into surface runoff flowing to surface waters (including Urban runoff and agricultural runoff, which may contain chemical fertilizers and pesticides waste disposal and leaching into ground water eutrophication and littering.
- Plastic Pollution, involves the accumulation of plastic products in the environment that adversely affects wild life habitat, or humans.

RECENT DEVELOPMENTS

1. Water (Prevention and Control of Pollution) Act of 1974.
2. The Forest (Conservation) Act of 1980.
3. Air (Prevention and Control of pollution Act of 1981.
4. Government of India to enact the Environment Protection Act of 1986.
5. Noise Pollution (Regulation & Control Rules in 2000.

In 1985 Indian Government created.

The Ministry of Environment and Forest this Ministry in the Central administrative organization in India for regulating and ensuring Environmental Protection.

6. National Green Tribunal Act of 2010 passed in Parliament as a Act.

Strategies for Environment Protection:

1. To educate ourselves to educate others.
2. To protect against destruction of Nature
3. People's participation is important.
4. Social advocacy methods of Intervention.
5. Lobbying at various levels.
6. Awareness programs include disunions Audio visuals.
7. Students to be motivated to hold exhibitions.

8. Environment Education – Necessary.
9. School and College Students to understand environment Problems.
10. City Elite to be motivated to action.
11. Media to be integrated to educate masses.
12. Plantation of trees everybody social responsibility and should be protected.
13. In MNREGI programmes: plantation of trees is one of the programmes.
14. Public places, Govt. lands in Primary Schools Tree plantation is Compulsory.

CONCLUSION

There are many Environmental issues in India. Air pollution, water Pollution garbage and pollution of the natural environment are all challenges for India. The situation was worse between 1947- 2015 environment issues are one of the primary causes of disease health issues and long term livelihood impact on Indian Population. Indian environmental Law concerns the Law and Policy of India Concerning the Protection of the Environment measures taken to reverse climate change and achieves a zero carbon economy for this the environment Protection Act – 1986 is enforced by the Central Pollution Control Board and the Numerous State Pollution Control Boards and the National Green Tribunal established under the National Green Tribunal Act of 2010 has Jurisdiction over all environmental cases.

Content Theories of Job Satisfaction

S. Ramesh*

ABSTRACT

Job satisfaction is main aspects of individual factor. Now – a- days most of the organization and Educational institutions are taking care of human resources for the positive ways. In this competition world human factors have great role of job satisfaction. This may be due to the results of many studied that job satisfaction is a significant determinant of organizational commitment. Highly satisfied person put in all aspects high efficiency, high productivity and high efforts in all positive ways of the organization. Job satisfaction will lead to better performance and the employee more involved towards their working organization. Hence, this study is focused to consolidate the content theory of job satisfaction.

Keywords: Job Satisfaction, Content Theory, Employee.

INTRODUCTION

The term job satisfaction was introduced by Hoppock. He focused 32 studies on job satisfaction conducted before to 1933. According to their view, job satisfaction is “the combination of psychological, physiological and environmental circumstances that cause a person to truthfully say” I am satisfied with my job. Job satisfaction is the end feeling of a person after performing a task. To the extent that a person’s job fulfills his dominant needs and in consistent with his expectations and values, the job will be satisfying. The feeling would be positive or negative depending upon whether need is satisfied or not.

Job satisfaction is different from motivation and morale, motivation refers to the willingness to work. Satisfaction on the other hand, implies a positive motional state. Morale implies a general attitude towards work and work environment. It is a group phenomenon whereas job satisfaction is an individual feeling. Job satisfaction may be considered a dimension of morale and morale could also be source of satisfaction.

Attitudes are pre dis – positions that make the individual behave in a particular way. Job satisfaction on the contrary, is the end feeling which may influence subsequent behavior thus, job satisfaction is an employee’s general attitudes his job.

OBJECTIVES

The objectives of the present study is,

1. To study about the content theories of job satisfaction.

Theories of job satisfaction

There are two types of job satisfaction theories are classified, one is content theories and another one is process theories. Content theories focused the specific factors which motivate the individual towards job. Process theories deal only with the dynamics of motivational process.

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List of Content theory

The content theories are concerned with recognized the needs that people have and these needs are practiced.

1. A.Maslow's Need Hierarchy Theory
2. Herzberg's Two Factor Theory
3. Clayton Alderfers Erg Theory
4. Douglas Mcgreger Theory X and Y
5. McClelland's Need Achievement Theory

A. Maslow's Need Hierarchy Theory

Maslow's basically five important aspects focused in human satisfaction needs. Maslow's hierarchy of needs is "the most widely mentioned theory of motivation and satisfaction". He arranged hierarchical order of human needs. Once a given level of needs is satisfied, it no longer helps to motivate. Thus, next higher level of need has to be activated in order to motivate and thereby satisfy the individual. He identified five levels in his need hierarchy are following

1. Physical needs.
2. Safety needs.
3. Social needs.
4. Esteem needs.
5. Self Actualization needs.

Physiological needs

Physiological needs are also known as physical needs. These include all the needs a person needs first to stay alive like, food, water, air, the maintenance of body temperature. It is only when this basic need set is satisfied that the next set of needs will be thought of for satisfaction.

Safety needs

This is physical protection of the human individual of the people. Once physiological needs are fulfilled then safety needs take the precedence. These are the needs to be free from physical danger and the fear of loss of job, property, shelter, etc... Once would like to be free from economic worries like loss of job, sickness, old age pension etc. is also essential. The physical and economic needs act as motivators up to the time they are not properly meet.

Social needs

This is opportunities to develop close associations with other persons. Since people are human beings, they need to belong, to be accepted by others. When social needs become dominant, human being will strike to have meaningful association with others.

Esteem needs

The needs are concerned with self- respect, self – confidence, feeling of being unique, recognition, etc. The satisfaction of these needs brings confidence, power, control and prestige. Some of the social problems have their roots in the unfulfilment of these needs.

Self Actualization Needs

Self actualization is the highest need in Maslow's hierarchy. This refers to the needs which help an individual to develop his potentialities. He tries to do whatever he can and has a sort

of self- development. A person tries to do whatever he is capable of doing. He tries to bring out something hidden in him. The self- actualization needs give satisfaction to the person concerned and are good for the society also.

Herzberg's Two Factor Theory

The priority of needs characterizes the type of behavior. The satisfaction of some needs may not have positive effect on motivation but their non – satisfaction may act as a negative factor. A question arises as to what types of needs are important for improvident motivation. Herzberg and his associates conducted a study of need satisfaction of 200 engineers and accountants employed by firms in and around Pittsburgh. The people were asked to describe a few previous job experiences in which they felt exceptionally good or exceptionally bad about jobs. The influence of these experiences on job was also studied.

Herzberg concluded that there were two sets of conditions. First type of conditions, described as maintenance or hygiene factors, do not motivate employees by their presence but their absence dissatisfies them. The other conditions, called motivational factors, operate to build strong motivation and high job satisfaction, but their absence hardly proves strongly dissatisfying.

Clayton Alderfers Erg Theory

Alderfer modified Maslow's need hierarchy into three basic human needs simplifying it to make it more in tune with data obtained from empirical research. He kept Maslow's hierarchical structure but reduced the levels to three on the basis that a certain overlap existed in the middle layers and call them Existence, Relatedness and Growth, in short ERG Existence is the lowest level need which is concerned with physical survival and includes the obvious needs for food, water and shelter which can be satisfied through salary, fringe benefits, safe working environment and some measures of job security. Relatedness needs involve interaction with other people and the satisfaction they can bring in the form of emotional support, respect, recognition and sense of belonging. These needs can be satisfied on the job through coworkers and off the through friends and family.

Growth need focuses on the self and includes need for personal growth and development which can be satisfied only by using ones capabilities into the fullest. ERG theory sees different needs from different levels existing in a sort of continuum where while there is a hazy precedence for a lower level need, it can still very well exist in the presence of a higher level need.

Douglas Mcgreger Theory X and Y

Theory x and y represents two extremes. No person can belong to these two extreme situations. Each person possesses the traits of theory x and y, though the degrees may be different under different situations. Though, no generalizations can be made, still it appears that theory x is more applicable to unskilled and uneducated lower class workers who work for the satisfaction of their physiological needs only. Theory y appears to be applicable to the educated, skilled and professional employees who understand their responsibilities and do not need any direction and control. However, there can be exceptions. A lower level employee may be more responsible and mature than a well qualified high level employee. Still these theories are very important tolls in understanding the behavior of human beings and in designing the motivational schemes. The management should use a combination of both the theories to motivate different employees.

McClelland's Need Achievement Theory

McClelland and his group associates argued that some people have a compelling drive to succeed. They are striving for personal achievement rather than the rewards of success per se. They have desire to do something better or more efficiently than it has been done before so they prefer challenging work- these are high achievers. Theory emphasizes on the achievement motives thus, also known as 'achievement theory' however model includes three interrelated needs or motives:

1. Achievement: The drive to excel, to achieve in relation to asset of standard, to strive to succeed.
2. Power: the need to make others behave in a way that they would not have behaved otherwise. It refers to the desire to have an impact, to be influential, and to control others.
3. Affiliation: the desire for friendly and close interpersonal relationships. People with high affiliation prefer co operative situations rather than competitive ones.

CONCLUSION

Job satisfaction is an important matter to be addressed to get better result in any management. Different terms are which are needed to be clarified for a research in job satisfaction is presented in brief in this study. Job satisfaction, job attitude and morale are the related terms clarified in detail. Job satisfaction affects productivity, employee turnover, absenteeism, safety, stress, unionization and other issues. There are different measures for job satisfaction. They are rating scales, job descriptive index, Minnesota satisfaction questionnaire, critical incidence, and interview and action tendencies. There are several theories explaining job satisfaction. They are Abraham Maslow's need hierarchy, Clayton Alderfers ERG theory, Herzberg two factor theory, McCreger theory x and y and McClelland's need theory.

REFERENCES

1. Kailasam, S.P., job satisfaction of bank employee – A comparative study of Nationalised and Non – Nationalised commercial bank with special reference to Coimbatore, 2002.
2. Rajeswari, A., "A comparative study on job satisfaction of Women Employees of Public sector Banks and LIC in tirunelveli District", 2000.
3. Thiagaraj, D., and Thangaswamy, Dr. A., " Theoretical concept of job satisfaction – A Study", international journal of research – Granthaalayah, june, 2017, vol.5
4. Abdul sattar Khan, Shadiullah Khan, Allah Nawaz & Qamar Afaq Qureshi, Theories of job – Satisfaction: Global applications & Limitations, Gomul University journal of Research, 26(2), 45-62.
5. Sharma, R.K., and Shashi K. Gupta, Business management, kalyani Publishers.
Chapter 8

Emotional/Behavioural Problems During Puberty Among School Going Adolescent Girls- A Study on Social Work Intervention

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ABSTRACT

Adolescence is a period when physical growth and maturation are accompanied by mental and psychological development. Pubertal timing was associated with different symptoms than pubertal status or age. Puberty seems to affect girls more negatively than boys. Stage of pubertal development rather than chronological age has been reported as a risk factor for eating disorders, depression and anxiety. Many mental disorders such as major depression certain anxiety disorders, eating disorders, and substance use disorders increase in prevalence during adolescence. Puberty includes major hormonal changes that are likely to contribute for example to both depressive affect and aggression. WHO estimate shows that up to 20 per cent adolescent have one or more mental or behavioural problems. Studies conducted in different parts of the world show that prevalence of behavioural and emotional problems in adolescents ranges from 16.5 per cent to 40.8 per cent and in India it is in the range of 13.7 per cent to 50 per cent as adolescents form one fifth of India's population. The study set out to assess the relationship between pubertal timing and emotional and behavioural problems in middle adolescence. Physical as well as psychological changes during adolescence create a state of physiological stress that must be coped with. The study involved a school based survey of health, health behaviour and behaviour in school as well as questions about emotional and behavioural problems, The association between socio-environmental factors was also studied and introducing the social work intervention for outcome of such psychological problems for their academic success.

INTRODUCTION

Adolescence is a period of physical, psychological, emotional and personality change, which can lead to stress, and emotional and behavioral problems. The physical changes that occur during puberty give rise to a variety of social and emotional changes as well. First, the ongoing physical maturation process directly affects body and brain to alter adolescent's needs, interests, and moods. Then, as adolescent start to look and act differently, an array of social influences further accelerate the social and emotional changes adolescent experience.

As adolescent observe that their bodies are changing, they may experience a new and unfamiliar set of social experiences. Reinforced by their first enjoyable experiences of sexual arousal, and by their peers and culture, they become interested in forming what can become intense, romantic, and sometimes sexualized relationships with others. Also, as these bodily changes become visible to others, adolescent may begin to experience being treated differently by others. For example,

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more rapidly maturing youth may experience an increase in their popularity, while their more slowly maturing peers may experience a decline in popularity. Youth may also notice that other people are suddenly paying a great deal more attention to how they look than they are accustomed.

Stressful family circumstances or a lack of care and warmth can affect the rate and course of a child development. Early psychosocial stress can be a cue for environmental risk and trigger earlier reproductive development. From this perspective, emotional and behavioural problems would be expected to occur even before early puberty is evident.

Puberty is a time of increasing stresses and challenges, as adolescent adapt to their changing social roles. For this reason, mental health issues often first emerge in adolescence. Younger adolescent and those with fewer social and emotional resources may find this phase more difficult, which increases their risk of subsequent mental health difficulties.

Social determinants and health-related behaviours are also highly influential. The families, peers and communities adolescent grow up with can provide social scaffold for their mental health. Equally, negative influences in adolescent environments can be risk factors for mental health difficulties in adolescence.

Our research supports a life course hypothesis. This suggests that differences in pubertal timing and childhood adjustment may, in part, result from adversity early in life. In other words, early puberty may be part of an accelerated transition to adult development which begins early in life. This, in turn, heightens the risks for emotional and behavioural problems.

We need to be aware of the social and emotional stresses during puberty, particularly for adolescent who reach puberty earlier than their peers. It is crucial that there are positive frameworks in place to support these adolescent at this phase of their lives. These may include supportive families, peers and communities, as well education, counseling and health services.

The term psychosocial reflects both the under controlled, externalizing or behavioral problems such as conduct disorders, educational difficulties, substance abuse, hyperactivity etc and the over controlled, internalizing or emotional problems like anxiety, depression etc. The emotional problems have been relatively neglected compared with behavioral problems because these are not easy to be detected by the parents or teachers.

The physical changes associated with puberty become the basis for new emotional experiences. It is common for parents to note their adolescent become more moody and irritable during this period of their lives. This moodiness is commonly attributed to the sudden and fluctuating hormonal levels, or “raging hormones”. The sex hormones are powerful chemical agents that can affect mood. During puberty, the body is adjusting to these fluctuating hormone levels and this fluctuation does create mood swings. However, there are several other physical causes accounting for increased moodiness apart from fluctuating hormones.

LACK OF SLEEP

Adolescent’s moodiness can be affected by their lack of sleep. There are both physical and social reasons for why sleep deficits may occur during puberty. First, the body’s sleep-wake cycle is dependent upon a “circadian rhythm” which in turn, is influenced by hormones. During puberty, a natural shift occurs in a teen’s circadian rhythm that causes them to feel more fully alert later at night. Unfortunately, they must still rise early for school and other activities. As a result, they get less sleep than they require. This occurs just as their educational, extracurricular, and social schedules become more demanding. Youth may also develop an irregular sleep pattern, such as a desire to “sleep-in” during the weekends, while simultaneously sleeping less during weeknights. This lack of sleep can increase irritability and decrease concentration ability, and contribute to adolescent suddenly finding it difficult to complete tasks that were once simple. This new struggle only adds to their frustration and moodiness.

MATERIAL AND METHODOLOGY

The study was undertaken to study the puberty as related to psychological problems in adolescence among school going girls. The present study was carried out among school-going adolescent girls in Chittoor district from July 2014 to August 2014. An optimum sample size of 157 school-going adolescent girls of district, aged 10-15 years was selected, and the selected girls were interviewed and examined.

Multi-stage random sampling technique was used to select the requisite number of eligible girls. Data were entered in SPSS and analyzed with SPSS Version 16.0.

Tirupati revenue division was selected for data collection. In Tirupati division three high schools in urban and two from rural area were selected for the study.

At the second stage, students from classes VI to IX of age group 10-15 years were selected. Students within the class were selected through systematic random sampling. A structured interview schedule was developed and interview was conducted on adolescent girls of a school other than the ones selected for the study. A separate room in each school was used for interview. The girls were interviewed separately and privately. The menstrual history was inquired; the exact date of menarche was noted.

RESULT

Socio-economic Characteristics

In table presents emotional/behavioural problems among school girls during puberty. In some questions on related to behaviour of girls routine lifestyle. Such as was categorized as loss of sleep, feeling more sensitively. Majority of the girls 36.3 percent were have sufficient sleep to their body and 29.9 percent of the girls are postponing their sleep to weekends for the lack of sleep most of the girls (56.7 per cent) were facing irritation problems at the time of irritation their behavior was changing in different like breaking things (3.8 per cent) angry (36.9 per cent) beating other (13.4 per cent) cry (per cent) shouting with other (22.7 per cent) sleep (9.6 per cent). Because of these problems they did not concentrate their studies (35.7 per cent) lack of sleep is also one of the reason for their moodiness (24.8 per cent).

Table-1 Socio-economic characteristics of the respondents (N=157)

S.No	Socio-economic characteristics	Frequency	Percent
1	Age		
	12 Yrs	26	16.6
	13 Yrs	56	35.7
	14 Yrs	65	41.4
	15 Yrs	10	6.4
2	Class		
	7 th Class	52	33.1
	8 th Class	55	35
	9 th Class	50	31.8

S.No	Socio-economic characteristics	Frequency	Percent
3	Religion		
	Hindu	145	92.4
	Muslim	6	3.8
	Christian	6	3.8
4	Family income		
	< 50,000	107	68.2
	1,00,000	50	31.8

Behavioural Changes

In the table of Behaviour changes of the adolescents questions were asked on the basis of the knowledge on their physical growth and behavior. Majority (56.1 per cent) of the respondents were reported that they don't feel uncomfortable with their physical growth during the puberty. 32.5 per cent of the respondents were feel sensitive with their physical growth at the time sensitiveness they feel irritation with their physical growth. 38.9 per cent of the respondents were comparing them with others and they feel difference from others.

Table-2: Behavioural Changes Among School Girls (N=157)

S.No	Behavioural changes	Number	Percent
I	Feeling more sensitively		
1	Do you feel uncomfortable with your physical growth		
	Yes	63	40.1
	No	88	56.1
	Don't know	6	3.8
2	Are you feel sensitive about your physical appearance		
	Yes	51	32.5
	No	96	61.1
	Don't know	10	6.4
3	If yes what do you do?		
	feel irritable	110	70.1
	loss temper	36	22.9
	feel depressed	11	7

4	Do you compare with others		
	Yes	61	38.9
	No	96	61.1
5	Did you feel that you are different from others		
	Yes	42	26.8
	No	115	73.2

EMOTIONAL PROBLEMS

Emotional problems were discussed in the table-3 43.9 per cent of the respondents were discussing with their friends about the puberty. Majority 84.1 per cent of the respondents were influenced by the culture, what they are following in their surroundings. The culture was influencing the attitude of the respondents. 31.8 per cent of the respondents were struggling to fit with their friends at the time of adolescents. 47.1 per cent of the respondents were comparing with their friends. 20.4 per cent of the respondents were having conflicting thoughts during puberty

Table-3: Emotional problems among school girls (N=157)

S. No	Emotional Problems	Number	Percent
I	Peer Pressure		
1	Did you discuss about onset of puberty with your friends		
	Yes	69	43.9
	No	76	48.4
	Don't know	12	7.6
2	Did you influenced by what you see around you?		
	Media	20	12.7
	culture	132	84.1
	Both	5	3.2
3	Is it influences on your likes and dislikes?		
	Yes	91	58
	No	66	42
4	Is it influences on your likes and dislikes?		
	Yes	91	58
	No	66	42

5	Do you struggle to fit in with your friends?		
	Yes	50	31.8
	No	102	65
	Don't know	5	3.2
6	Do you compare with your friends?		
	Yes	74	47.1
	No	83	52.9
II	Conflicting Thoughts		
1	Thoughts on independent life		
	Yes	32	20.4
	No	125	79.6

DISCUSSION

With increasing westernization of our culture and living, we are likely to follow the trends of adolescent health issues on a similar track. The mean age at menarche was found to be 12.7 years in the present study, which is a little lower than that reported by earlier studies. It has been observed that the age at menarche has been decreasing generally in many countries with a mean age at menarche ranging from 12 to 13 years in the majority of developed countries.

Many researchers have studied psychosocial and psychiatric problems among adolescents. Mishra et al reported a clinico-social study of psychiatric morbidity among adolescent school going girls aged 12-18 years of Delhi in 2001. They found that 13.76% girls had psychiatric morbidity, the commonest problem being anxiety/depression (10%). They also found that the primary factors associated with psychiatric morbidity were linked to the girls' relationship with parents (relationship with father; perception of mother's love for her), and her perception of self in terms of appearance. It is also observed in another study that adolescents lack awareness and correct information about psychological changes of adolescence.

In the present study, nearly 41% girls reported feeling anxious. Other behavioral aspects of girls in the present study were their feeling emotionally labile and crying easily (47%), irritable (47%), and getting angry often (52%). It is encouraging to note that a good majority of participants (80%) in our study felt that their parents were supportive and most relied on their family members for discussing problems.

More than half (52%) of respondents in our study were not comfortable with the bodily changes of adolescence and 26% reported suffering from low self-esteem. Nearly one third of girls in the present study felt uncomfortable interacting with people. Altintas et al., in 2013 found that body mass index and physical activity play the most important role in body related perception and self-esteem of adolescents. This suggests that besides a need for counseling and preparing adolescents for these changes and transitions, it is equally important to encourage physical activity and maintenance of normal weight

CONCLUSION

Mental health problems are common among the general adolescent population in India. Early detection and effective intervention will result in better wholesome development of the futures citizens of our country. A good proportion of adolescent girls appear to be in need for counseling and support for optimally coping with the bodily as well as psychological changes of adolescence. This preliminary study unveils the need for more widespread and regular Adolescent School health programs for increasing awareness and support services.

REFERENCES

1. AEST Growing up too fast: early puberty and mental illness, The conversation, Academic rigour, journalistic flair, 3 April 2013, 6.31am
2. Ahmad A, Khalique N, Khan Z, Amir A. Prevalence of psychosocial problems among school going male adolescents. *Indian J Community Med* 2007; 32:219-21.
3. Altintas A, Asci FH, Kin-Isler A, Guven-Karahan B, Kelecek S, Yilmaz A, Kara FM. The role of physical activity, body mass index and maturity status in body-related perceptions and self-esteem of adolescents. *Ann Hum Biol.* 2013:1-8.
4. Grover VL. Final report on a study of reproductive health awareness and sexual behaviour among adolescents in Delhi. In: Grover VL, eds. ICMR Report. Delhi: Report submitted to ICMR; 1998.
5. Jain RB, Kumar A, Khanna P. Assessment of self-awareness among rural adolescents: a cross-sectional study. *Indian J Endocrinol Metab.* 2013; 17:S367-72.
6. Mental/Emotional/Social Changes through Puberty Angela Oswalt, MSW, edited by Mark Dombeck, Ph.D.
7. Mishra A, Sharma AK. A clinico-social study of psychiatric morbidity in 12 to 18 years school going girls in urban Delhi. *Indian J Community Med.* 2001; 26:71-5.
8. Nair P, Grover LV. Awareness and practices of menstruation and pubertal changes amongst unmarried female adolescent in a rural area of East Delhi. *Indian J Community Med.* 2007; 32(2):156-7.
9. Padez, Rocha MA. Age at menarche in Coimbra (Portugal) school girls: a note on secular changes. *Ann Hum Biol.* 2003; 30(5):622-32.

Dr Bhimrao Ambedkar and Woman Empowerment in India

Dushyanthumar C. Algotar*

INTRODUCTION

Dr. Babasaheb Ambedkar was among those intelligentsia of 20th century in India. Pole Boren has rightly said for him, “Dr. Ambedkar was an intelligentsia, who had represented for the interest of social classes. He was a determined soldier and humble scholar. He had got higher educational awards from reputed universities. He had tried his best for social leadership on the path of freedom, equality and brotherhood.”

Prof. A. Lalkrishna has said, “Dr. Ambedkar was my father in economics. He is a true winner for deprived classes. He deserves more than he has attained. Such controversial figure in his country were not real. Contribution in the field of economics was wonderful and he will be always remembered for ages. Dr. Ambedkar was not only father of our constitution; he was a great freedom fighter, political leader, philosopher, thinker, economist, editor and social reformer and resurgence of Buddhism. He was the first Indian to stop difficulties on the path of women uplift. According to Dr. Ambedkar, women should be given importance social education and social-cultural rights for their all-round development.”

He had added emphatically, every class of Indian women should be given the proper part and we should protect the women rights to maintain it and to secure its dignity. Dr. Babasaheb Ambedkar had great faith in movements of women leadership. He expressed, if women are provided self-confidence in all the fields of life, they can play an important role in social reforms. He had played active role in uprooting social evils. He appealed that each married woman should become partner in the brisk activities of her husband. She should venture to deny the life as a slave and emphasis on principle of equality. If every woman follows it, she will attain real respect and her identity in society.

OBJECTIVE, METHOD AND TOOLS

The major objective was to expose the aim of Dr. Ambedkar and its relevance in context to problems of Indian women and Indian political and social viewpoint before and after independence.

The information downloaded from internet, government documents, newspapers, published articles, books, lectures delivered by Dr. Ambedkar in the Parliament, various conventions and conferences held before and after independence etc were used as the research tools.

ANALYSIS AND DISCUSSION

Dr. Ambedkar had started the movement in 1920 and said, “We will see better days soon and we will progress more speedily if women are given education along with men education”. He ordered to start propagating in oppose to Hindu sociality and started ‘Muknayak’ in the pamphlet ‘Bahishkrit Bharat’ in 1927 to fulfill this goal. He put each person by presentation of his points and

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indicating reasons for necessity of sex equality and education in India and informed all the problems of women. Ambedkar's demands for women were to accept the demands of right of education, right of partnership in succession and political rights. J. S. Mill expresses about women when any one has unwillingness in case of sex with another, there should be legal law and it should be accepted by principle of equality. They should not have authorized privilege and it should not be dependent on others.

The 'Women Association' was established in Mumbai in January 1928. Its President was Ramabai, the wife of Dr. Ambedkar. In 1930, five hundred women participated in Kalram Temple Entry movement in Nasik, in which many women were arrested. Radhabai Vadale had organized the press conference in 1931 and provided motivation for woman empowerment. She said, "Once death is better than being often insulted. We will sacrifice our lives but we will get victory of our rights".

Dr. Ambedkar played a key role in the process of encouragement of women and social reforms. Along with his male colleagues, 300 women also had participated in historical 'Mahad Movement'. He spoke in a conference of 3000 women, "When any woman marries, she stands behind her husband and claims to become a friend and equivalence to her husband." He added, "If you follow this advice, you can live with self-esteem." Being a Labor Minister of working committee of Governor General in 1942, Dr. Ambedkar addressed as parentage benefit predictive, "Many provisions are made in constitution for welfare of women and protection of rights of citizens". He said, "Hindu Code Bill is presented in the Parliament and threw light on 'right to wealth' for women." He had to face protest of political leaders in that bill. Besides this, he had also focused on point of Muslim women. He presented his points by medium of thoughts such as secular viewpoint, lambrequin tradition, proselytization, legal rights etc.

In short, Dr. Ambedkar had expressed his views for only one aim, which was the freedom of women of depressed class as well as of each class. He had presented many problems of bad domestic behavior and prostitutes and health of women. The most effective example was seen in 'Kamathipura', where David, who was the agent working in a harlot house, had left that work by education and ideology of Dr. Babasaheb. In Hindu Code Bill prepared by Dr. Ambedkar, he had included Act 1956, Hindu Minority and Conservation Act 1956, Hindu Adoption and Maintenance Act 1956.

FINDINGS

At the death of Dr. Ambedkar, Jawaharlal Nehru had said in the Parliament, "Dr. Babasaheb Ambedkar was as a symbol in opposite of oppressive amenities of Hindu society. His dreams are felt based on sex equality in the society, so his thoughts were more important for woman empowerment in social reconstruction. Dr Ambedkar expressed his views on life situation of all women. Equal behavior should be done towards women and same respect should be given to them.

Dr. Ambedkar emphasized on basic reforms and in Hindu Code Bill in Legislative Assembly. His educational thoughts are used by not only women but by all Indians. His deep worries and feelings for all round development of women and respect towards women were felt in his last lecture in Parliament of India.

Dr. Ambedkar had mentioned his thought about Muslim women and their traditions like lambrequin in grief in his book titled 'Partition of India and Pakistan'. Muslim women are suppressed by different religious traditions. Dr. Ambedkar presented aim of humanism about women without worrying about any caste, religion or class. He raised his voice against all type of unjust happened on women.

REFERENCES

1. Ahir, D. C. (1990), "Inheritance of Dr. Ambedkar", B. R. Publication, New Delhi
2. Arya, Sudha (2000), "Woman Sex Equality and State" Deep & Deep Publication, New Delhi
3. Thakor Ravindra (1998), "Partition of India and Pakistan", Dr. Ambedkar Foundation, Ministry of Welfare, New Delhi, Sports, Youth and Cultural Department, Gujarat State, Gandhinagar
4. www.ijhssi.org

Remedial Measures Taken to Improve the Academic Performance of Weak Students in a Government-Aided Polytechnic College

P. Annie Alexandra*

ABSTRACT

The main objective is to prepare an Action Plan for improving the performance of the academically weak students in the First Year Diploma Course. The purpose of this objective is to evolve a solution to the problem of Weak Students Performance. It is also to ensure that the academically weak students perform well in Communication English-I & II (Theory) and achieve their goals, by securing well in Communication English-I & II (Theory) and achieve their goals, by securing good jobs in industries/companies.

The Action Plan aimed to find out whether different age groups, class of study, medium, parental background, peer influence and the college atmosphere show significant difference in the students' academic performance and level of study. The sample taken is the students of the First Year Diploma Course with varied student strength from A.M.K. Technological Polytechnic College, Sembarambakkam, Chennai – 600123.

The remedial measure programme was taken up every year for three consecutive years from July - Nov'2015 / July – Nov'2016 / July – Nov'2017. The teaching-learning method followed developed the ability of the students to concentrate, removing the obstacles, which hindered them from studying. Results revealed that the Academic Performance of the students in Communication English-I & II was excellent and the percentage of pass was maintained at the higher level for the three consecutive years.

INTRODUCTION

'Efficient learning depends upon the learner's reading skills. writing skills, skill to schedule, organize one's own time, good development of clear thinking, concentration, memory, organization of ideas, understanding, outliving and the adequate skills in preparation for the examinations. Efficient learn involves the proper formation of study habits and study skills. The more effort you make, the less effect you produce. Ease and strength, effort and weakness, go to together.' - (Bernard Shaw)

MAIN OBJECTIVE

The study aimed at the following objectives:

1. To find out the influence of students in age, class, medium, parental background and knowledge level.
2. To examine the relationship of students' influence towards Academic Performance among Polytechnic students.

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METHODOLOGY

Categorizing the Academically Weak Students

The academically weak students were segregated as follows:

1. Students who have failed in their Standard X examination and passed in the instant examination of the same year.
2. Students who have failed in Standard XII examination.
3. Students who have discontinued their studies after Standard X due to some personal reasons.
4. Students who have discontinued their studies in Standard XI.
5. Students who have long gap in studies.
6. Students with low marks generally in all the subjects in Standard X
7. Students who have scored low marks in English only.
8. Students who have scored low marks and joined the Diploma Course through reservations or through the management quota.

Psychological Factors

The psychological factors identified regarding academically weak students are divided under the following categories:

The students who lack Self-Confidence and lost interest in studies. Those who were not able to adjust to the college environment. Students who feel shy, as they lacked proper communication skills. Student who cannot participate in the classroom activities. Fear about their knowledge in English and students who cannot understand English when it is spoken by the teacher in class.

Factors Identified and Categorised as Academically Weak Students

1. The students who lacked discipline and distracted with emotional disturbance.
2. Students who mainly attend classes to have fun.
3. The sudden transition from school level to college level.
4. Students who belong to poor and socially backward family background.
5. Those who have financial difficulties at home and live in split families.
6. , Compulsion from parents regarding the branches which they have selected.
7. Inadequate knowledge of English, as their medium of study till Standard X was in 'Tamil' was in 'Tamil'.
8. Lack of interest in particular subject – English.

Strategies for Improvement

The student – centred innovative strategies for improvement which helped to improve the performance of academically weak students was firstly by establishing a cordial relationship with students and secondly being a guide, mentor and a counsellor for the students at all times. Allowing students to ask for help and to share their problems without fear conducted Life Skill seminars and workshops were conducted to boost their morale.

Guidelines Which Improved my Classroom Practices

1. Explaining the importance of the topic being taught with practical examples.
2. Interactive methodology of teaching, by summarizing the main points at the end of every class.
3. Speaking clearly and audibly to draw the attention of the students.
4. Using creative and interesting Teaching Methods with activities.
5. To be open to questions from students and getting feedback from the students about the teaching content and style
6. Being available for formal/informal contact after class hours to motivate them and to help them.

Student Participation in the Classroom

The steps followed to increase student participation in the classroom is by

1. Extending a helping hand and building their confidence.
2. Conducted special classes/tutorial classes and cleared their doubts
3. Peer-Group Learning encouraged the students to understand easily the difficult concepts.
4. Team Assessments were assigned and the best teams were rewarded.
5. Continuous assessments and systematic slip tests were conducted.
6. Bold steps were taken to move 'Back-Benchers' to the 'Front.'
7. Periodic counselling was given to the students about regular attendance.
8. Report Card System was conducted every month for low achievers and it helped for the betterment of the students
9. Phone calls and messages were given to the parents regarding Parent-Teacher meetings and held discussions with the parents about the behaviour/performance of their wards
10. Introduced 'Buddy System' where good and weak students are paired to work together at the end of the semester.
11. Conducted two Model Examinations and reviewed the performance of the students

Result of the Remedial Measures Taken

The result of the remedial measures taken to improve the performance of the academically weak students in Communication English – I & II (Theory) of A.M.K. Technological Polytechnic College are as follows:

The students began their period of study from July '2015 and they faced their First Semester Board Examination in November –'2015, and the same method was followed in the next academic year from July' 2016 and the students took their examination in November' 2016 and also in November –'2017 with small modifications and achieved great success. The training which started in the First Semester extended up to the Second Semester in a lighter vein as the students had already begun to put themselves on the track laid in the First Semester. Hence, the students were able to perform well in Communication English – II in the Second Semester of their First Year Diploma Course.

Tabular Column Showing the Result of the Remedial Measures in Semester - I

S.NO.	CLASS	SEMESTER	BRANCH	NO.OF STUDENTS	SUBJECT	NOV- 2015
1.	I Year	I	MTMR(SW)	53	COMMUNICATION ENGLISH - I	92.45%
2	I year	I	EEE (REG)	27	COMMUNICATION ENGLISH - I	85.18%
3	Iyear	I	CIVIL (SW)	07	COMMUNICATION ENGLISH - I	100%

Tabular Column Showing the Result of the Remedial Measures In Semester – II

S.NO.	CLASS	SEMESTER	BRANCH	NO.OF STUDENTS	SUBJECT	APRIL- 2016
1.	I Year	II	MTMR(SW)	37	COMMUNICATION ENGLISH – II	97%
2	I year	II	EEE (REG)	25	COMMUNICATION ENGLISH - II	96%
3.	Iyear	II	CIVIL (SW)	06	COMMUNICATION ENGLISH - II	100%

Tabular Column Showing the Result of the Remedial Measures in Semester - I

S.NO.	CLASS	SEMESTER	BRANCH	NO.OF STUDENTS	SUBJECT	NOV- 2016
1.	I Year	I	MTMR(SW)	53	COMMUNICATION ENGLISH -I	94.33%
2	I year	I	EEE (REG)	24	COMMUNICATION ENGLISH - I	91.66%
3	I year	I	CIVIL (SW)	09	COMMUNICATION ENGLISH - I	100%

Tabular Column Showing the Result of the Remedial Measures in Semester – II

S.NO.	CLASS	SEMESTER	BRANCH	NO.OF STUDENTS	SUBJECT	APRIL- 2017
1.	I Year	II	MTMR(SW)	56	COMMUNICATION ENGLISH – II	80.35%
2	I year	II	EEE (REG)	19	COMMUNICATION ENGLISH - II	84.21%
3.	I year	II	CIVIL (SW)	08	COMMUNICATION ENGLISH - II	100%

Tabular Column Showing the Result of the Remedial Measures in Semester - I

S.NO.	CLASS	SEMESTER	BRANCH	NO.OF STUDENTS	SUBJECT	NOV- 2017
1.	I Year	I	MTMR(SW)	54	COMMUNICATION ENGLISH - I	72.22%
2	I year	I	EEE (REG)	26	COMMUNICATION ENGLISH - I	76.92%
3	Iyear	I	CIVIL (SW)	13	COMMUNICATION ENGLISH - I	100%

Tabular Column Showing the Result of the Remedial Measures in Semester – I I

S.NO.	CLASS	SEMESTER	BRANCH	NO.OF STUDENTS	SUBJECT	APRIL- 2018
1.	I Year	I I	MTMR(SW)	40	COMMUNICATION ENGLISH – I I	87.50%
2	I year	I I	EEE (REG)	19	COMMUNICATION ENGLISH – I I	84.21%
3	I year	I I	CIVIL (SW)	08	COMMUNICATION ENGLISH – I I	100%

CONCLUSION

The Remedial Measures taken for the improvement of the academically weak students especially in Communication English – I & I I of A.M.K. Technological Polytechnic College were very promising. The performance of the students was very encouraging, enterprising and motivating to introduce more of innovative methods and help these type students. I ensure that henceforth they will not be called as ‘Academically Weak Students’ – in the forth coming semesters and they will prove and set themselves for ‘Success in Learning’ and become employable Diploma Holders.

REFERENCES

- National conference on English teaching0-learning in rural areas and English as Medium of Instruction March 20 – 23, 2017. Room No. 202 CIET, (Chacha Nehru Bhavan) NCERT, NEW Delhi – 16
- Kun-hyei Wu English Department, aletheia University, Taiwan. – Teaching and Learning English at Tertiary Level: Revisiting Communicative Approach.
- Article – The differences between high school and tertiary Education
- Technical Education quality Improvement Programme (TEQUIP) PHASE_II Guidance Brief – Improving the Academic Performance of weak students through the Equity Action Plan1
- Article – The psychology of learning and the Art of teaching – Columbia University, Graduate school of arts & Sciences Teaching Center
- Regina A. Garcia and Lilac A. Al-Safadi- Intervention Strategies for the Improvement of Students Academic Performance in Data Structure course.
- Article – Teacher Can Help a Weak student to Improve Academically

English Language Skills – A Tool for Employability for Polytechnic Students

P. Annie Alexandra*

ABSTRACT

As the private sector companies are gaining ground and becoming more competitive due to changed world economy, the employees are always kept on their toes. It is like either you work hard and show your performance or perish for not taking care of your professional growth. What is employability: it is the ability to remain employable as a result of the relevant skills one possesses.

Communication Skills are very much essential for one's professional growth. The ability to express fluently in both written as well as oral form of language is very much essential for the career growth.

(Better English for Better Employment Opportunities –

Communication is an integral feature of human activities. It is a strong pillar of peaceful co-existence and mutual understanding. There is no life without communication. It can also be termed as process of sharing information. It can be spoken, written, gestures, signs and symbols.

English Language Skills is associated with communication. It adds greater value in students' personal, social and academic contexts. To make India a developed country, communication in English needs to be developed.

Firstly, to improve communicative ability, it is necessary to know the goals for learning English Language skills. It paves way for establishing clear steps for reaching those goals. Communicative activities should be attractive and interesting. It will facilitate better communication among students.

Polytechnic students are highly knowledgeable as far as their technical subjects are concerned. They are highly skilled in their work atmosphere and technically sound. Yet they fail in communicating their expertise in their profession.

The polytechnic students, who show disinterest, indifference and hesitation in acquiring English Language Skills, prove to be futile in facing interviews and in their workplace. The originality or the real potentiality is not revealed due to their lack of English Language Skills. They were shy to communicate in English. This brings a great downfall in their career. Therefore, they should refine their English Skills for the profession to be complete.

Nicholas D. Sylvester in his book Engineering Education has given data under the title - "Engineering Education must improve the communication skills of its Graduates."

From the data, it is observed: "75% of engineering undergraduates takes job in industry where at least 25% of an engineer's time is spent in the reporting process.

As the engineer moves to higher position in his profession, this time could increase to as much as 80%."

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Good communication skill in the English Language would lead to a promising career for a diploma holder. So, enhancing one's English language skills is considered as one of the skills for success. Communicating in English Language is not only to practise to speaking in English but also listening to audio files, present seminars and practise report writing. It also means about developing the related skills like presentation skills, convincing and negotiation skills and interpersonal skills by using the language. It helps them to use their creativity, innovativeness, logical thinking and critical analysis. The mastery of the language skill solely depend on theory and skill practice regularly.

According to Multi-National recruitment from Antal's International's Antal Global Snapshot Survey, "Employment trend has found that the professional job market in India as well as globally has improved since the start of 2013."

THEY ARE IN NEED OF PROFESSIONALS LIKE

- Technical knowledge related to the job
- Proficiency with computer software
- Ability to create and / or edit written reports
- Ability to sell or influence others
- Personal branding
- Flexibility
- Productivity Improvement

Mastering the language skills caters to the need of employability. As our country is witnessing a third industrial revolution, it is not enough if the polytechnic students possess expertise in their respective fields. It should be complemented with English Communication Skills.

Dr.Meena Pandey & Dr. Prabhat Pandey
ISSN NO:2348 – 537X)

Globally English is inevitable. It is the need of the hour. We should provide mandatory training in Communicative English. It also plays a vital role in shaping one's personality, starting from academia to the job scenario. It helps the diploma holders to be gainfully employed. Due to this the ultimate beneficiaries are the stakeholders, industries and the government sectors. On the other hand, it helps to increase the productivity of our nation. It results in higher GDP of the nation.

It has become crucial to develop the efficacy of the communication skills of the polytechnic students as it determines the chances for employment. It will also enable them to perform effectively at workplace. The important skill the polytechnic students have to build within themselves is to be marketable once they complete their studies.

Communication skills help the students to secure a good job and to build a good relationship with people in their work place. They will have a good career development in their lives. Therefore, it is necessary that the students need to be taught of how to communicate effectively in their related areas of work environment.

Mehta & Mehta (2007) argue that to be successful in any field one needs to know and understand how to communicate effectively. According to them, professionals who have a stronghold on communication skills are considered asset for any business organization.

A student who is not successful in his/her job interviews and who do not get placed in the industrial sector after the completion of their diploma course is due to their lack of proper communication skills. They are unable to advance themselves due to lack of proper communication skills.

A study by Porter (2000) reports that employers argue that college students conducting job search processes do not possess the skills they seek including oral communication skills. Employers believe that students lack the basic skills of speaking and listening.

(Porter, 2000)

Hang (1990) noted that the majority of the language learners are capable of learning to read the target language with varying degrees of success, but when it comes to oral communication, most of them become hopelessly dysfunctional.

The polytechnic students should understand that language learning is an active development process. They should take initiative and be active in the language learning process, which will help them to scale newer heights.

REFERENCES

- Mehta, D & Mehta, N.K. (2007). Communication Skill for Engineering Professionals, Adit Journal.,4,1,pg.89-95
- Porter, R. (2000) Levels of effectiveness of communication skills used by college students during the job search process. (Unpublished Masters of arts in Education Thesis, Virginia Polytechnic Institute and State University).
- Woods, D.R.Felder, R.M., Rugarcia, A. & Stice, J. E. (2000), the future of engineering Education III
- Zaharatul Akmer Ahmad Zainuddin and Suzanah Selamat. (Universiti Teknologi MARA, shah Alam, Malaysia) doi: 10.7575/aiac.v.3n.2p.76. Efficacy of Polytechnic Students' Intepersonal Communication Skills
- Vinitha.V, the ELT Practitioner. Enhancing the English Language skills of Polytechnic students in Andhra Pradesh – P.
- Dr.Meenu Pandey & Dr.Prabhat Pandey. (ISSN NO: 2348 – 537x) Better English for Better employment Opportunities
- Abdul Rasheed. P Dept of English,EMEA College Kondotty,. Hurdles and solutionin English Language acquisition: a Study on Undergraduate and Higher secondary school Students from Educationally backward Eranad Taluk of Mallappuram District.

A Study of Educational Growth of Scheduled Caste Primary School Students in Reference to Universal Elementary Education Programme

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ABSTRACT

The present study has been conducted on a purposive sample of 150 private and 150 public school going scheduled caste primary school students in universal elementary education programme. Scale developed by collect the data, which was selected by stratified random sampling technique. The data has been collected through field survey. The results deals with the analysis and interpretation of the collected data. The study was to know the educational growth of the SC children of elementary school under UEEP. To meet the purpose SC children of Govt. schools were compared with their counterpart BC and FC children on their scores on reading writing and math skills. Further to see the impact of UEEP upon educational growth SC, BC, and FC children Govt. School children (under UEEP) were compared with SC, BC and FC children of private schools.

Keywords: *Scheduled caste primary school.*

INTRODUCTION

The present century we are living in is characterized by complexities and order lessens. The world seems to have been passing through a transitory stage. Uncertainties amidst opposite force of materialism and spiritualism have added to the feelings of anxieties in man. The student community is passing through crisis which is more and more aggravated by their maladaptive behavior and psychological problems. In accordance to the Constitutional commitment to ensure free and compulsory education for all children up to the age of 14 years, provision of universal elementary education has been a, salient feature of national policy since independence. This chapter aims to introduce the topic and to indicate the relevance of this study. It includes an overview of revolution of education in India as well as in Bihar with special reference to tribal education. However, the present study aims to examine whether the tribal parents, today, exhibit a positive and favorable attitude towards their children's education as a result of increasing awareness of value of education through Government Endeavour and initiatives. The program of universal elementary education aims at bringing every child into school and to see that he or she remains at school till he or she completes the elementary education by age 14. Previously, we insisted on single point, entry in class 1. As a result of which during enrolment drive children were brought in and only a few continue to acquire an effective literacy.

COGNITIVE APPROACHES

Cognitive approaches to reading emphasize decoding and comprehending words, constructing meaning, and developing expert reader strategies. The cognitive approach emphasizes the cognitive

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processes involved in decoding and comprehending words. Important in this regard are certain meta cognitive skills and a general automaticity of information's processing.

WHOLE-LANGUAGE APPROACH

The whole-language approach implies that all words are essentially "sight" words, which the child recognizes as a whole without detecting how the individual letters contribute to sounds. In the whole-language approach, reading should be connected with writing and listening skills. Also in this approach, reading is often integrated with other skills and subjects such as science and social studies. In most whole-language approaches students read real-world and relevant materials.

TECHNOLOGY AND READING SKILLS

Two resources that can be used to improve students' phonological awareness and decoding skills are Read-Along Books and Word Picker (Cognition and Technology Group at Vanderbilt, 1997).

Read-Along Books are easy-to-read books written with short, decodable words that combine with rhythm and rhyme patterns to improve students' skills in associating sounds with letters. Computer versions of the books included tools that pronounce sentences and words as needed. After students become competent in these skills, they can record the stories in their own voice. Word Picker is a software tool that helps students build on for words that they want to write. As the children work on creating their own books in a multimedia format, they can click on Word Picker. Scrolling through a list of words, they search for words that start with the same letter as the word they want to write. Then they click on different words to hear them pronounced and to observe how they are divided into syllables. When they find the word they want, they type it out. After students write their own books, they can read the printed versions of their books in class to others. Read-Along Project at Vanderbilt University. The current versions are most appropriate for grade 1. Future projects are planned for preschool to grade 3. Reading and writing also are combined in IBM's Writing to Read program for kindergarten and first grade students. Five learning stations are coordinated to provide an active learning environment: computer, work journal, writing/ typing, listening library, and making words. These students are participating in IBM's writing to Read program, which uses a variety of learning stations to improve students' literacy.

REVIEW OF LITERATURE

Elementary education besides being a basic human need is vital for raising the standard of life, providing gainful employment, removal of regional backwardness, thereby ensuring overall development and wellbeing of a country. It is therefore the need of the hour to review the literature carried out by different academicians, educational thinkers, researchers, policymakers and educational reformers in the field of education in India.

I have examined the relevant published literature related to my study of research with a view to find out further scope of my objective of the research. The crux of the various studies, views and comments on the aforesaid topics is as follows:

DAS, R.C. (1979) "Administration of Elementary Education in relation to the Programme of Universalisation, SIE, Assam". The main aim of the research was to study the position of administration of elementary education in relation to the programme of universalization in Assam. Data were collected from the field as well as concerned agencies. The position of administration of elementary education at higher levels was also studied and its functioning at these levels was observed. The secondary data

collected at these levels were analysed opinions, remarks and reactions of various functionaries at higher levels of the administrative machinery were noted. On the basis of such experience as well as study of primary and secondary data, finding on the present position of administration of elementary education in relation to universalization from village level to the state level in Assam were drawn. The study mainly revealed that the area of administration of education at the elementary level was full of problems. The Directorate of Elementary Education was a newly created department and was yet to be fully strengthened. In comparison with the tremendous expansion of elementary education, the expansion of the machinery relating to administration, inspection, supervision and management was inadequate. The state had 21559 primary schools, 3816 middle level schools, 45387 primary school teachers, 20296 middle-level teachers for more than 22 lakh school children for them, 25 deputy inspectors, 16 additional deputy inspectors and 219 sub-inspectors and 62 assistant sub-inspectors are there as the current status of elementary education, let alone the expansion during the Sixth Five year plan for universalization. Recommendations indicates the suggested additional machinery needed for achieving universalisation. From all points of view, new recruitment of administrative personnel should be made from professional institutions.

PURPOSE OF THE STUDY

This chapter aims to introduce the topic and to indicate the relevance of this study. It includes an overview of revolution of education in India as well as in Chatra with special reference to tribal education.

However, the present study aims to examine whether the tribal parents, today, exhibit a positive and favorable attitude towards their children's education as a result of increasing awareness of values of education through Government Endeavour's and initiatives. The program of universal elementary education aims at bringing every child into school and to see that he or she remains at school till he or she completes the elementary education on age 14. Previously, we insisted on single point, entry in class 1. As a result of which during enrolment drive children were brought in and only a few continue to acquire an effective literacy.

In accordance with the Constitutional commitment to ensure free and compulsory education for all children up to the age of 14 years, provision of universal elementary education has been a salient feature of national policy since independence.

Chatra district is one of the twenty-four districts of Jharkhand state, India, and Chatra is the administrative headquarters of this district. The district covers an area of 3706 km². It has a population of 790,680 (Census 2001). This is the district where many person got National Awards from President of India. Deocharan Dangi got National Award in field of Teaching and Prashant got award in field of Social Work. They are very known because they are in Father- Son in relation.

The territory covered by the present district was earlier known as Chatra sub-division of Hazaribagh district. This district came into existence in 1991. In 2006, the Indian government named Chatra one of the country's 250 most backward districts (out of a total of 640). It is one of the 21 districts in Jharkhand currently receiving funds from the Backward Regions Grant Fund Programme (BRGF).

RESULTS AND DISCUSSIONS

The present chapter deals with the analysis and interpretation of the collected data. The study was to know the educational growth of the SC children of elementary school under UEEP. To meet the purpose SC children of Govt. schools were compared with their counterpart BC and FC children on their scores on Reading writing and Math skills. Further to see the impact of UEEP upon educational growth SC, BC, and FC children Govt. school children (under UEEP) were compared

with SC, BC and FC children of private schools. To meet the above objectives the hypotheses as discussed in chapter IV were formulated. To verify this hypothesis the Reading writing skill test and Math skill test were administered upon the sample of 300 children of which 150 were from Govt. school and 150 were from private schools. Statistical techniques like percentage, mean, median, mode, standard deviation, skewness, kurtosis, t- test, ANOVA, product moment correlations were used to analyze the data.

Results have been given variable wise under different tables followed by graphical representation of scores and discussion. As said in chapter-III the purpose of the study was to know the educational growth of the SC children of elementary school under UEEP. To meet the purpose SC children of Govt. schools were compared with their counterpart BC and FC children on their scores on Reading writing and Math skills. Further to see the impact of UEEP upon educational growth SC, BC, and FC children Govt. school children (under UEEP) were compared with SC, BC and FC children of private schools. To meet the above objectives the hypotheses as discussed in chapter IV were formulated. To verify this hypothesis the Reading writing skill test and Math skill test were administered upon the sample of 300 children of which 150 were from Govt. school and 150 were from private schools.

Further the sample children were distributed in their caste categories scheduled caste (SC), backward caste (BC) and Upper caste (FC). The data obtained on reading writing skill test and Math score were analyzed by using t-ratio statistical test. The reading writing skill test had four sub-test.- 1. Vocabulary test, 2. Visual perception test, 3. Auditory Discriminating Test (ADT) and 4. Copying test (CIT) Test on Math as simple addition, subtraction, Multiplication and division was conducted to obtain total score on Math skill. The results obtained are discussed in the line of hypothesis formulated.

SUMMARY AND CONCLUSIONS

The present research is concerned with a Study of Scheduled Caste Primary School Students in Reference to Universal Elementary Education Programme in Bihar. The importance of the present research is felt for various reasons. The present century we are living in is characterized by complexities and orderlessness. The world seems to have passing through a transitory stage. Uncertainties amidst opposite force of materialism and spiritualism have added to the feelings of anxieties in man. The student's community is passing through crisis which is more and more aggravated by their maladaptive behavior and psychological problems.

In accordance with the Constitutional commitment to ensure free and compulsory education for all children up to the age of 14 years, provision of universal elementary education has been a salient feature of national policy since independence. The program of universal elementary education aims at bringing every child into school and to see that he or she remains at school till he or she completes the elementary education on age 14. Previously, we insisted on single point, entry in class 1. As a result of which during enrolment drive children were brought in and only a few continue to acquire an effective literacy.

This chapter aims to introduce the topic and to indicate the relevance of this study. It includes an overview of revolution of education in India as well as in Bihar with special reference to tribal education.

REFERENCES

- **Afridi, F. (2005)** *Child Welfare programs and Child Nutrition: Evidence from a Mandated School Meal Program*. University of Michigan, USA, 53.
- **Baddeley, A. (2001)** *Is working memory still working? Paper presented at the meeting of the American Psychological Association, San Francisco.*

- **Bandyopadhyay, M. and Subrahmanjan, R. (2007)** *Gender Equity in Elementary education: A Review of Trends and Factors*. Create-Nuepa, New Delhi, Mimeo.
- **Bartlett, E.J. (1982)**, *Learning to revise: Some component processes*. In M. Nystrand (Ed.), *What writers know*. New York: Academic Press.
- **Batchelder, W. (2000)**. *Mathematical Psychology*. In A. Kazdin (Ed.), *Encyclopedia of psychology*. Washington, DC, and New York: American Psychological Association and Oxford University Press.
- **Baumrind, D. (1971)**. *Current patterns of parental authority*. *Developmental Psychology Monographs*, 4 (1, and 2).
- **Baumrind, D. (1996, April)**. *Unpublished review of J.W. Santrock's Children, 5th ed.* New York: McGraw-Hill.
- **Benveniste, L., Carnoy, M., & Rothstein, R. (2003)**. *All else equal*. New York: Routledge-Farmer.
- **Blue, J. (2005)** *The Government Primary School Mid-Day Meals Scheme: An Assessment of program Implementation and impact in Udaipur District*. Seva Mandir, Udaipur.
- **Blumenfeld, P., Modell, J., Bartko, T., Secade, J., Fredricks, J., Friedel, J., & Paris, A. (2005)**. *School engagement of inner city students during middle childhood*. In C.R. Cooper, Coll, C.T.G., Bartko, W.T., Davis, H.M., & Chatman, C. (Eds). *Developmental pathways through middle childhood*. Mahwah, NJ: Erlbaum.
- **Bo, I. (1994)**. *The sociocultural environment as a source of support*. In F. Nestmann & K. Hurrelmann (Eds), *Social networks and social support in childhood and adolescence*. New Walter de Gruyter.
- **Books, S. (2004)**. *Poverty and schooling in the U.S.* Mahwah, NJ: Erlbaum.
- **Boud, D. Keogh, R. Walker, D. (1985)**. *Reflection: Turning experience into learning*. London: Kogan Page.
- **Broad foot, P. (1992)** "A question of quality" ACSA Publication, pp.1-2.
- **Bruning, R., & Horn, C. (2001)**. *Developing motivation to write*. *Educational Psychologist*, 35, 25-37.
- **Carpenter, T.P., Lindquist M.M., Matthews, W., & Silver, E.A. (1983)**. *Results of the third NAEP Mathematics Assessment: Secondary school*. *Mathematics Teachers*, 76 (9), 652-659.
- **Chall, J.S. (1979)**. *The great debate: Ten years later with a modest proposal for reading stages*. In L.B. Resnick & P.A. Weaver (Eds.), *Theory and practice of early reading*. Mahwah, NJ: Erlbaum.
- **Cochran-Smith, M., & Lytle, S. (1990 March)**. *Research on teaching and teacher research: The issue that divides*. *Educational Researcher*, pp. 2-11.
- **Cognition and Technology Group at Vanderbilt. (1997a)**. *Designing environments to reveal, support, and expand our children's potentials*. Paper presented at the meeting of the society for research in child development Washington, DC.
- **Cooper, C.R., Coll, C.T.G., Bartko, W.T., Davis, H.M., & Chatman, C. (Eds). (2005)**. *Developmental pathways through middle childhood*. Mahwah, NJ: Erlbaum.
- **Cox and Davidson W. "A meta-analytic assessment of delinquency – related outcomes of Alternative Education Programs"** *Crime & Delinquency* 41 : 219-235.
- **Cunningham, P.M. (2004)**. *Phonics they use (4th ed.)* Boston: Allyn & Bacon.
- **DAS, R.C., (1979)** "Administration of Elementary Education in relation to the Programme of Universalisation, SIE, Assam".
- **Dewey, J. (1933)** *How We Think*. A restatement of the relation of reflective <http://www.ncte-india.org/pub/curr/curr.htm#26> retrieved on 12.8.2011.
- **Dhongade, U.D., (1986)** "A Critical study of Non-enrolment, Wastage and Stagnation during the First two years of Primary Education of Scheduled Caste Boys and Girls in Soygaon Taluka, Dist., Aurangabad, Maharashtra State, IIE, Pune"
- **Dubey R.R (2004)**, "Implementation of SSA", *Daily Excelsior* March, 17.
- **Dunningham, P.M. (2004)** *Gender, Intra family Allocation of resources and child schooling in Tamil Nadu, India*. *Journal of Educational planning & Administration* 23 (4), pp 489-506.
- **Dwivedi R.S & Sharma J.P (1997)** "An evaluative study of the alternative schooling programme in M.P" Report, State Council of Educational Research and Training Bhopal.
- **Edwards, P.A. (1989)**. *Supporting lower SES mother's attempts to provide scaffolding for book reading*. In J. Allen & takers: *Readucing the risks for young literacy learners*. Portsmouth, NH: Heinemann Educational Books.

Development, Tribal Women and Environment

Gita Kumari*

ABSTRACT

Tribal Women in Ecological Development Environment and sustainable development are firmly on the global agenda. Eco-feminism is to be viewed in this context. The movement began in the U.S., and Sherry Ortner was among the first to point out that women's interests coincide with nature while man's with culture. Eco-feminism considers that: There is a distinct relationship between women and the environment, Women have certain responsibilities which make them dependent on nature and Women have an extensive knowledge of natural resources. Eco-feminism points to the need for an integrated view of nature, culture and gender issues. An appropriate strategy of development would be one which is not only ecologically sustainable but takes the interests of women into consideration. The problems of ecological distress and climatic changes require immediate attention with a specific formula to achieve ecological safety. All the initiatives taken under UNEP, biosphere programmes, and various governmental and non-governmental actions lag behind since none was specifically empowered to achieve eco-equilibrium and ecological security. Women provide sustenance to the family and community by their judicious use and management of natural resources. Women are consumers, producers, educators and caretakers of their families, playing an important role for a sustainable eco-system in the present and future. However, environmental deterioration has a negative effect on the health and quality of life especially of girls and women. A policy of conservation of natural resources will be successful only if women are integrated into all programmes and policy making.

Tribal habitations are facing environmental hazards everywhere due to careless, unplanned and faulty development policies followed by government's skipping the necessary environmental safeguards in development projects. Most development activities impinge upon the environment and adversely affect the ecological balance. The large scale cutting of forest trees in tribal habitats has led to a shortage of fuel, fodder; foliage and forest produce which form the economy of tribals.

INTRODUCTION

The state is basically tribal dominated having nearly 27 per cent scheduled tribes and 11 per cent scheduled castes (Dalit) population. There are 30 tribal groups in Jharkhand. The Government of India has identified total 75 tribal communities as Primitive Tribal Groups (PTGs) and Jharkhand is inhabited by nine PTGs (Asur, Birhor, Birjia, Hill Kharia, Korwa, Mal Paharia, Sauria Paharia, Parahiya, and Savar). As the PTGs live in more interior pockets which are generally inaccessible and with declining sources of sustenance, they become more vulnerable to hunger/ starvation, malnutrition and ill-health. Some of them are even on the verge of extinction. Among all states and UTs, Jharkhand holds 6th and 10th rank in terms of the ST population and the per centage share

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of the ST population to the total population of the State, respectively. In the state, the literacy rate improved from about 54 per cent in 2001 to about 68 per cent as per census 2011.

The tribal groups in Jharkhand have the highest poverty intensity in India, which is higher than the ST groups in other Indian states. As per Planning Commission (Govt. of India) estimate, the newly formed state Jharkhand has 40.3 per cent population below poverty line in 2004-05 (Sharma, 2012).

EMPOWERMENT OF INDIAN WOMEN

Women's empowerment is a new phrase in the vocabulary of gender literature. The phrase is used in two broad senses i.e. general and specific. In a general sense, it refers to empowering women to be self-dependent by providing them access to all the freedoms and opportunities, which they were denied in the past only because of their being women. In a specific sense, women empowerment refers to enhancing their position in the power structure of the society.

The word women empowerment essentially means that the women have the power or capacity to regulate their day-to-day lives in the social, political and economic terms - a power which enables them to move from the periphery to the centre stage.

WOMEN EMPOWERMENT- STILL AN ILLUSION OF REALITY

Notwithstanding the remarkable changes in the position of women in free India, there is still a great divergence between the constitutional position and stark reality of deprivation and degradation. Whatever whiff of emancipation has blown in Indian society, has been inhaled and enjoyed by the urban women, their population belonging to the rural areas are still totally untouched by the wind of changes. They still have been living in miserable conditions, steeped in poverty, ignorance, superstition and slavery. There still exists a wide gulf between the goals enunciated in the Constitution, legislations, policies, plans, programmes and related mechanisms on the one hand and the situational reality on the status of women in India, on the other.

In these days of scam-ridden politics, the increasing role of money and mafia in elections keeps most of the women away from politics.

Increasing violence and vulgarity against them intimates women and consequently they prefer to stay out of politics.

What are the reasons for this sorry state of affairs? Issues may be various and varied, however a few basic issues deserve specific mention:

- Lack of awareness.
- Lack of social and economic empowerment.
- Lack of political will.
- Feebleness of accountability mechanisms.
- Lack of enforcement by the police force.
- Lack of gender culture.

WOMEN IN DEVELOPMENT

Women in Development (WID), entered into the development lexicon after the Nairobi Conference on Women in 1985 and the subsequent production of a WID strategy in 1988, by the Department for International Development (DFID), which stressed the importance of integrating gender in all aid activities. This policy thrust has helped to put gender near the top of the development agenda for many international agencies and governments.

The need to include women as partners in development has necessitated the introduction of terms such as “gender sensitivity” in which some public offices and assignments are allocated to women and the greater the number of women in such positions the greater the gender sensitivity the leadership is deemed to express.

The initial understanding of such development is that it is still the men who decide what positions and assignments to be handed over to the women but a closer examination will show that such women as appointed to exalted positions had excelled in their various fields of specialization and their achievement were what attracted them to the attention of their new bosses or sponsors. Both locally and internationally women are found in almost all areas of Endeavour like Medicine, Engineering, Law, Education, Pharmacy, Journalism, Police Force, (Ekiti State Police Commissioner) Entrepreneurship, Stock Exchange, Finance, Banking, Administration and Management, Politics.

The list is by no means exhaustive since there is hardly any area of development in which a woman or two cannot be found.

Most state governors and the president of the Federation have been gracious in appointing women to positions of great responsibility ranging from Transition Committee Chairmen and members, Permanent secretaries, Commissioners, directors to Ministers and Directors general of important and sensitivity parastatals. While this is commendable and really tends to change the trend, this development by no means addresses effectively the problem of marginalisation of women in development programmes. The percentage of women who are in development is like a drop of water in the ocean with regard to the population of women who actually should be involved whether in the private sector or in the public sector. The need to get more women has forced out a call or an appeal to allocate a certain percentage of public offices to women. Thirty percentage (30%) of the positions if allocated to women is regarded as acceptable.

According to the Ministry of National Planning (1980:20-21), sees development as the development of man in which he is able to improve his material conditions and living through the resources available to him, **Weidner (1970)**, believes that, development is the process of growth in the direction of nation – building and socio-economic progress a process of acquiring sustained growth of systems capabilities to cope with new and continuous change towards the achievement of progressive political, economic and social objective.

Torado (1981:56), therefore, concludes that, development should be perceived as multidimensional that would involve institutional, social and attitudinal change. In view of these perceptions of development, to be able to make a significant impact, the women must understand the dynamics of the existing structures and appreciate the need for change and the direction and special technical skills that are necessary tools of action.

Generally, the access of women to education is very low and this is attributed to the concept of women especially, in developing countries as chattels to be owned by men, socio-cultural beliefs and practices like early marriage and early pregnancy, imitations into adulthood of teenagers (where they obtain) and male preference which is common among most African countries, poverty which forces girls already in school out of school and into teenage marriage. These factors have helped to increase the population of illiterate women in society because these teenagers who drop out of school or not allowed to go to school at all eventually grow into women on whom demands towards development would be made. Furthermore, the policy document guiding women Education in Nigeria remain flimsy (**FRN, 2004**), and the policy makers are predominantly men (**Aderigbagbe, 2004: 98**), and so the women populace has remained largely illiterate. **Babangida (1986)** noted that, a nation cannot truly develop if her women remain illiterate, unskilled and unable to harness resources in their environment and actually operating below their potential. It is the ability to harness the resources in the environment and improve on such environment that is the hallmark of development and most

women cannot contribute effectively to development with the limited or basic education they acquire. Of course, high-powered education is available for the women but how many of them have access to it. In poor families, priority will be given to boys, education at the expense of the girls and socio – cultural fixations discourage them from pursuing disciplines that will enable the benefit from the education they have acquired but simply queue up in the unemployment line. The resultant effect is what has been called “genderization of poverty” (Suara, 1996). The society also fails to get their contributions in the dimensions required for sustainable development. Research has shown that, the level of women’s education affect economic productivity, child health and welfare, family size and agricultural productivity in the rural areas which factors are indicators of development and when the human component of development which is usually acquired through education is poor, then development level can hardly be satisfactory. It really seems as if women are deliberately excluded from participating in development.

EQUALITY AND WOMEN EMPOWERMENT

Equality is a concept usually for granted especially in traditional communities when dealing with issues like age grade or other socio-cultural activities where equals are grouped together. In a democracy, one of the cardinal principles is equality before the law which interpreted means that if A received a particular treatment before the law on a particular matter, B must receive the same treatment. Equality can also mean sameness, that is, one thing is the same as the other.

Akinkpelu (1981) noted that, if $3 + 3 = 6$, the sign of equity in the expression indicates that, the figure on the right is perfectly the same as those on the left of the equation when put together. It is very doubtful whether this is applicable in human affairs especially when dealing with gender issues in which roles and expectations are assigned.

In fact, such accidents of birth as sex, location, religion, culture etc already constitute social disparities, which we know, will influence access to education and other social benefit (Agu, 1994).

In terms of education therefore, there will always be inequality between the sexes. However, in order to attain a level of equality, there could be positive discrimination in favour of the group that is socio-cultural disadvantaged in order to be at par with its counterpart.

TRIBAL WOMEN IN AGRICULTURE

Over 80% of tribals work in the primary sector against 53% of the general population. About 45% are cultivators against 32.5% of the general population.

According to available data, the number of tribal who were cultivators, declined from over 68% to 45% in 2001, whereas agricultural laborers increased from about 20% to 37%, an indication that tribals are steadily losing their lands. Unlike other communities, among tribals there are no restrictions on women’s participation in the cultivation process. A tribal woman can participate actively in all agricultural operations including, ploughing, digging, sowing, maturing, transplanting, weeding, harvesting, preparing the granary, threshing, winnowing and storing food grains. In agriculturally backward areas, tribal women are forbidden to touch a plough and cannot dig the ground but in all other agricultural operations, women participate actively and traditionally these are a female’s job. Processing of food grain is exclusively a woman’s job. Every morning tribal women dehusk millet and paddy in husking levers and then clean the grains and cook them. They not only save money, but also earn it, unlike females of other communities.

Tribal women work as men’s partners in agriculture, yet their status remains the same. Tribal women work very hard for the livelihood of the family but live a poor life, in spite of their many contributions in the house and on the farm. Tribal women are important for the improvement and

progress of tribals. They are the pivot of tribal agriculture, performing many household and agricultural jobs. Without them, tribal welfare in agriculture is meaningless.

TRIBAL WOMEN IN ECOLOGICAL

Development

Environment and sustainable development are firmly on the global agenda. Eco feminism is to be viewed in this context.

Tribal habitations are facing environmental hazards everywhere due to careless, unplanned and faulty development policies followed by government's skipping the necessary environmental safeguards in development projects. Most development activities impinge upon the environment and adversely affect the ecological balance. The large scale cutting of forest trees in tribal habitats has led to a shortage of fuel, fodder; foliage and forest produce which form the economy of tribals. In the changed context of development, environment protection and sustainable development with a human centered approach must be ensured. Since tribal women are engaged in ecological movements, environmental protection and conservation, their role may be enhanced through capacity building and empowerment in the context of ecological development.

Tribal Women and Forests

Tribals have been residing in forest areas for generations, cultivating land and collecting non-timber forest produce. As per the Forest Survey of India Report, 2003, 60.04% of the 63% forest covers of the country and 63% of dense forests lie in 187 tribal districts, though the geographical area of these districts is just 33.6% of the country's geographical area. Out of 58 districts, which have more than 67% of their area under forest cover, 51 are tribal districts. A comparison of the 2001 and 2003 assessments of forest cover in tribal districts shows a net increase of 321,100 hectares underscoring a very strong symbiotic relationship between tribals and forests and of tribals being at the forefront of conservation regimes.

While tribal women have more say in family decisions than their non-tribal counterparts, they also share more responsibilities. Preparing food and providing for drinking water is solely their responsibility so they operate closely with the forests from where they get water, fuel and minor products including edible fruits, tubers, flowers, vegetables and berries.

Tribal Women in Education

Tribal women play a significant role in the economic development of tribals as they contribute in various economic activities and education is one of the them. Education is a crucial requirement for the sustained growth of a developing society and lack of it is largely responsible for the exploitation and pitiable plight of the tribals. The literacy rate of tribals was 8.53 in 1961 and steadily increased to 47.10 in 2001, yet it is far below the national rate of 64.84 (2001 census).

There has been an overall increase in the enrolment of children belonging to STs. At the primary stage, against an overall increase of 15%, ST enrolment increased by 25%, whereas that of ST girls increased by 36% against overall increases of 23% from 2000 to 2004.

Health

Tribal people have over the centuries developed their own medicinal system based on herbs and other items collected from nature and processed locally. They have their own system of diagnosis and cure. But the skills and natural resources are fast disappearing.

Moreover, the traditional systems can not treat or prevent many diseases that modern medicine can. Some health indicators of tribals, SCs and others (per thousand persons) are given below to establish their poor state of health:

Money Lending and Indebtedness

Despite legal and protective measures to curb money lending in scheduled areas and provisions for debt relief, enforcement has been weak and ineffective. The no recognition of the consumption needs of tribals and the non-availability of institutional consumption credit makes tribal people fall easy victim to money lenders and leads to dependence on them.

Traditional Knowledge and Intellectual

Property Rights

Dwelling amidst hills, forests, coastal areas and deserts, tribals have gained vast experience in combating environmental hardships and leading sustainable livelihoods. Their wisdom is reflected in their water harvesting techniques, agricultural practices, irrigation systems, construction of cane bridges, adaptation to desert life, utilization of forest species like herbs and plants for medicinal purposes and meteorological assessment. This invaluable knowledge needs to be properly documented and preserved to prevent it getting lost as a result of modernization and the passage of time.

Information and Communication

Technology

Tribal's live in far-flung areas often outside the reach of modern means of information and communication technology. They are thus deprived of crucial information regarding development initiatives, employment programmes etc. Use of IT could help women to improve agricultural productivity and become entrepreneurs and information intermediaries. It could provide tribal women with farm-related information such as best package of practices, weather forecasting, access to credit, price and availability of farm inputs, market information etc.

RECOMMENDATIONS

The role of tribal women is important but their socio-economic development is poor.

More needs to be done. The problems of tribal women and tribals are largely common. Suggestions and recommendations to strengthen and empower tribals as well as tribal women are:

- Increase agricultural production through conservation to settled agriculture, where possible, with linkage to easy credit and markets and assured irrigation.
- Undertake a comprehensive survey of water resources, including surface water and groundwater, in tribal areas with the help of remote sensing to prepare land use maps. Where water levels have gone down, an integrated watershed management approach must be adopted. Ponds and tanks should be increased and renovated for optimum use.
- Promote the diversification of agriculture and non-farm sectors to create job opportunities. Train tribal women in kitchen gardening, childcare, food preservation, handicrafts and other housebased activities. Form and stabilize tribal women's co-operatives to take up dairy, sericulture, fisheries, handicrafts, horticulture agri-food processing and post harvest technologies
- Impart practical knowledge and training in modern techniques to all tribal women regularly so that their work becomes easier and crop production increases.
- Low literacy especially among tribal girls and high dropout rates at elementary and higher levels are areas of serious concern. Focus on girls' education, inclusive of context-specific

traditional and innovative interventions. Launch special and sustained education initiatives/drives in low female literacy tribal pockets.

- Teach tribal children in their mother tongue at least at primary level. Prepare textbooks in tribal languages.
- Promote the synthesis of Indian systems of medicine like Ayurveda, Sidha and Unani with the tribal system.
- Provide good drinking water facilities in tribal areas.
- Discourage the migration of tribal women to urban areas, to take low paid, domestic and mental work by providing an enabling regulatory framework.
- Train tribal women to take up their responsibilities and sensitize the Gram Sabha about the new provisions.
- Inform all Gram Sabha members, including tribal women, of the functions, responsibilities and powers of Gram Sabhas.
- Encourage women's organizations working among tribals and ensure the formation, stabilization and bank linkages of SHGs to promote viable micro-economic activities with substantial support in terms of credit and market.

These strategies would empower tribal women and bring them into mainstream development.

CONCLUSION

At the end, I must say that while the recommendations of the Sachar Committee are important for the community's development and empowerment given the overwhelming percentage, most backward communities amongst the tribal population of the state are covered by the recommendations of the Commission and Report which are more important and need urgent implementation.

REFERENCES

- **Adenigbagbe, O. G. (2004).** Gender Disparity in Nigeria Educational System: Focus on Teacher Education. *In Nigeria Journal of Research and Production*. Vol. 5 (3) October.
- **Agu, S. O. (1994).** Equality and Inequality of Educational opportunities: The Nigerian Case. In Ozuz, C. N. and Okonkwo, C. E. (Ed.), *Sociology of Education*. Owerri: Klet – Ken Publishers.
- **Akinkpelu, J.A. (1981).** *An Introduction to Philosophy of Education*. London: Macmillin Press.
- **ATRCW UPDATE (1989).** Economic Commission for Africa (Africa Training and Research center for Women).
- **Babangida, M. (1989).** A Welcome Address by First Lady at the opening ceremony of a 4-day workshop to prepare a Blueprint on women Education. September 23 – 26.
- **Fafunwa, A. B. (1974).** *History of Education in Nigeria*. London: George Allen & Union.
- **Graham-Brown, S. (1991).** *Education in developing world: Conflict and Crises*. London: Longman.
- **Nwaubani, O. O. (2000).** Women Education and National Development in Nigeria. In *Emergent Issues in Nigeria Education*. Lagos: Mukugamu Press.
- **Rodney, W. (1972).** *How Europe Underdeveloped Africa*. London: = Bogle–L Quveture publications.
- **Suara, J.S.O. (1996).** Gender Issues: Towards a philosophy of women Education for Nigeria. In Lassa, P.N.; Anikweze, C. C.; and Mauyang, B. (Eds.), *Teacher Education: An Imperative for National Development*.
- **Torado, M. P. (1981).** *Economic Development in the third World*. New York: Longman.
- **United Nations Development Fund for Women (2001).** *Women Empowerment Administration in Asia*. Durham: Duke University Press.
- **Ugwuanyi, C. and Olokun, M. (2000).** Gender Imbalance in Teacher production in College of Education: The Need for Redress. In *Teacher production, Utilization and Turnover Patterns in Nigeria*. Kaduna: NCC Publication.
- **United Nations Development Fund for Women (2001).** *Women Empowerment*. New York: UNIFEM.
- **Weidner, E. W. (1970).** *Development Administration in Asia*. Durham: Duke University Press.

The Melghat Syndrome – A Need of Integrated Remedial Measures

Dr. K.B. Nayak*

ABSTRACT

Like old Kalahandi, Bolangir and Koraput (KBK) districts of Orissa, in the Melghat area of Maharashtra, a large number of tribal women and children, due to acute poverty and underdevelopment, have been suffering from endemic hunger and malnutrition. Maximum of them are deprived from “basic needs of life” i.e food, clothing and shelter, forget about their health and education. In this empirical research, various causal factors i.e economic, political, social and cultural factors are found as inherently and deeply integrated as well as interlinked with each other for giving rise to the problem of poverty and starvation deaths in the Melghat area. Thus, the paper is entitled as the “Melghat Syndrome”. This research paper suggests that there is a need of an integrated approach to resolve various problems in Melghat and to bring about “all-round” tribal development in this area.

INTRODUCTION

Though the state of Maharashtra is one of the developed states in India, yet there are some regions within the state like the Vidarbha region which continues to be backward and underdeveloped and where the marginalized SCs and the STs are the most deprived sections. Recently, the media has given a serious look at this region. Every day, the media highlights one or more issues of Human Rights related to either peasants’ suicide or malnutrition and starvation deaths or consequences of Naxalism in the region. The issues of poverty, malnutrition and starvation deaths in both Eastern and Western Vidarbha region of Maharashtra are also highlighted mostly in local news papers. Since 1995, the problems of poverty, malnutrition and starvation deaths in the Melghat area of Western Vidarbha region have been prominently figured in the media which has brought a serious attention of the state government towards “public criticism”.

Like old Kalahandi, Bolangir and Koraput (KBK) districts of Orissa, in the Melghat area of Maharashtra, a large number of tribal women and children, due to acute poverty and underdevelopment, have been suffering from endemic hunger and malnutrition. Maximum of them are deprived from “basic needs of life” i.e food, clothing and shelter, forget about their health and education. Since 1990s till today, the issues of malnutrition, infant mortality, starvation deaths, poverty, underemployment, ignorance and other facets of tribal underdevelopment have been most prominently highlighted in media According to a recent study (Umberkar 2007:2), in the last 12 years since 1993 till 2006, more than 10618 tribal children including infants in the Melghat area have died of hunger and malnutrition. In an average, more than 625 children including infants die of hunger and malnutrition every year. This figure is in only two Blocks of Melghat area i.e Dharani and Chikhaldara. A number of diseases have taken a heavy toll of infants suffering from Malaria,

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Nimoniya, Diaheria, TB, Gowar etc. On the contrary to these figures based on government data or records, some social activists of NGOs and local media claim that far more number of deaths of infants/children have taken place in the interior villages of Melghat which have not been taken account of mainly due to lack of proper transport and communication facilities or indifference of bureaucracy (Nayak 2014 Volume-2:446).

It might be true if one thinks logically. The Melghat consists of two blocks – Chikhaldara and Dharni. As compared to the Dharni block, the Chikhaldara block is much more backward and underdeveloped in terms of different factors/indicators of development i.e geographical location, density of population, poverty, literacy, available educational and medical facilities, transport and communication facilities etc. But our survey data based on government record of infant/child mortality during two years (2007-2009) indicate that (See Table No-1) less number of infants and children had died in Chikhaldara Block (397=166 Female + 231 Male) as compared to that in Dharni Block (772=360 Female + 412 Male).

Table-1: Age-Sex and Communitywise Infant Mortality in Melghat During 2007-2009

Community	Age-Group	Age 0 to1	Age 1-2	Age 2-3	Age 3-4	Age 4-5	Age 5-6	T=Total
Category	Sex	M---F	M---F	M---F	M---F	M---F	M---F	M + F =T
Korku (ST)	Dharni	239---199	51---46	25---33	12---12	12---13	05---03	344+306=650
Korku (ST)	Chikhaldara	147---99	20---21	11---10	05---01	07---05	03---04	193+140=333
Total	Melghat	386---298	71---67	36---43	17---13	19---18	08---07	537+446=983
Others (ST)	Dharni	07---08	03---02	01---00	00---01	01---01	00---02	12+14=26
Others (ST)	Chikhaldara	08---07	02---03	01---00	01---01	00---00	00---00	12+11=23
Total	Melghat	15---15	05---05	02---00	01---02	01---01	00---02	24+25=49
NT	Dharni	10---04	00---00	01---01	01---01	01---00	00---00	13+06=19
NT	Chikhaldara	04---04	01---00	00---00	00---00	02---00	00---00	07+04=11
Total	Melghat	14---08	01---00	01---01	01---01	03---00	00---00	20+10=30
SC	Dharni	14---13	02---03	01---01	01---00	00---00	01---00	18+18=36
SC	Chikhaldara	08---07	01---01	00---00	00---00	01---00	00---00	10+08=18
Total	Melghat	22---20	03---04	01---01	01---00	01---00	01---00	28+26=54
OBC	Dharni	09---08	00---01	00---00	01---00	00---01	00---00	11+09=20
OBC	Chikhaldara	05---03	00---01	00---00	00---00	00---00	00---00	05+03=08
Total	Melghat	14---11	00---02	00---00	01---00	00---01	00---00	16+12=28
Open	Dharni	10---05	01---00	02---00	01---00	00---02	00---00	14+07=21

Community	Age-Group	Age 0 to1	Age 1-2	Age 2-3	Age 3-4	Age 4-5	Age 5-6	T=Total
Open	Chikhaldara	03----00	00----00	01----00	00----00	00----00	00----00	04+00=04
Total	Melghat	13----05	01----00	03----00	01----00	00----02	00----00	18+07=25
TOTAL	MELGHAT	464+357= 821(70.23)	81+78= 159(13.60)	43+45= 88	22+16= 38	24+22= 46	09+09= 18	643+526= 1169
Female				Male				Total M+F
526(Chikhaldara -166 + Dharani 360)=44.99%				643 (Chikhaldara 231 + Dharani 412) = 55.01%				1169(643+526)

Reference : The data are in the above table are based on the Infant Mortality File of the Department of Health, Chikhaldara & Dharni, 2007-2009.

In fact, many remote villages in the Chikhaldara Block are found in drenched forest and hill ranges cut off from each other during rainy season. The poor inhabitants who are mostly tribals reeling under acute poverty, are often deprived of their basic needs of life i.e food, clothing, shelter, health and education. When the percentage of tribal population in both blocks is same and the percentage of BPL families in Chikhaldara block is more than that of Dharni block, as per government records, more cases of infant/child deaths would have been recorded. Then, how come such less number of infants'/children's deaths in the Chikhaldara block is officially recorded? Due to remoteness of the villages and underdevelopment of the poor tribal inhabitants, a large number of infants and children might have died but could not be recorded. A larger Census Study can reveal the actual number of infants and children who had died during the period. It gives rise to a number of questions. Whether the ignorant inhabitants of remote villages consciously avoided to inform for records or they simply suppressed the fact themselves? Whether the government machinery was indifferent towards recording such facts?

The Melghat area is a tribal populated area, in Maharashtra. About 76% of it's total population are tribals in both the blocks. The percentage of SC and ST population in Dharani Block was 4% and 75.6 respectively and that in Chikhaldara block was 7% and 75.4% respectively in 2002. The density of population in two blocks of Melghat was 101 and 38 in Dharani and Chikhaldara with 1463 sq.km and 2512 sq.km respectively. The literacy rate of Dharani was 62.20(Male-74.60 and female 49.30) while that of Chikhaldara was 65.80(Male-78.40 and Female-52.50). The literacy rate of the Scheduled Tribes in both blocks of Melghat was also same 75.60 and 75.40 respectively. We think these figures regarding literacy rate among the STs is doubtful or it might be the case that once the tribal children were admitted into the school and the census data were collected on the basis of their admission only(Amravati District Socio-Economic Profile 2009-10 : 165-169). These figures do not match the reality and dignity of literacy. Thus, it questions the authenticity and validity of the census data.

Same is the case with regard to the account of poverty as measured in terms of BPL families in Melghat. In fact, poverty is very acute in the whole Melghat area. As per the official record of Amravati District (Amravati District Socio-economic Profile-2010:207), there were 69.92% families in Dharani Block and 81.61 % of families in Chikhaldara block as found as below the poverty line. Whereas only 49.57% of families in the whole Amravati district were found below the poverty line. It

shows that poverty is much more acute and pervasive in Chikhaldara block than in Dharni block of Melghat area (See Table No-2). It might be mainly due geographical and climatic differences as well as socio-economic structures and infrastructure. For instance, the Dharni block is much advanced in terms of agricultural productivity and infrastructure. In this context, enumeration of the BPL families does not seem to be accurate because whenever and wherever we visited the tribal villages and families in Melghat, we observed almost all the tribal families are staggering in absolutely acute poverty who do not have bare necessities of life including food, clothing and shelter. Actually, more than 90 % of the tribals in Melghat area are reeling under acute poverty.

Table-2: BPL Families in Melghat (2002)

Block	Family	SC Peas-ants	SC Agri. Labor	SC Other	ST Peas-ants	ST Agri, Labors	ST Other	Other Peas-ant	Others Agri Labor	Others Other	Peas-ants	Labors	Others	BPL	%
Dharni	29846	195	656	40	7234	9408	246	757	2207	126	8186	12271	412	20869	69.92
Chikhaldara	19588	591	1066	48	5175	6566	449	638	1321	131	6404	8953	628	15985	81.61
Total	49434	786	1722	88	12409	15974	695	1395	3528	257	14590	21224	1040	36854	75.76
Amravati	419807	6217	45476	932	14313	30480	970	18193	88900	2617	38723	164856	4519	208098	49.57

Source : Socio-Economic Profile of Amravati District 2009, in website.

The Sinha Report refers to a 1992-93 BPL survey without giving any relevant essential information on the survey quoting him sources, and records that 9316 families out of a population of 142336 tribal families in Melghat are BPL, which would mean 71% tribal families, are below the poverty line. On the other hand, the Nalinakshan report asserts that 90% of Melghat tribal families are below the poverty line. A comparison with the National average of BPL families and of BPL tribal families shows the desperate situation of the Korku that 90% of them have been living below the poverty line for at least two decades. Since 1977, 90 percent of Korkus and other tribes in Melghat region were below poverty, which is far below the national average (around 40 percent) and national tribal average (around 60 percent) (See 7th Five-Year Plan for 1992-1997, Government of India). People in this area have been deprived of their right to development; with barely any development plans being implemented, rather lots of restrictions are being imposed on the local tribal people. The right to life is devalued that there is virtually no population growth and their existence is threatened (Khandare 2009).

The tribal children are often found roaming in their villages or accompanied by their parents to the fields and most of them look like African children as reeling under hunger and malnutrition. When do they go to their school and study for how long? If their enrolment into the schools is counted only, then what kind of education they have been imparted?. Very often their schools are found deserted. Even then, the literacy rate in Melghat has been well recorded as very impressive. Thus, it seems that there is some kind of distortions of facts or suppression of facts in the government records. Even if, the government records are taken into consideration, the problems of illiteracy, ignorance, underemployment, poverty, hunger, malnutrition and infant/child mortality are too grave in Melghat area of Maharashtra.

CAUSAL FACTORS OF TRIBAL UNDERDEVELOPMENT IN MELGHAT

Tribal underdevelopment in Melghat is the result of a complex and various inter-related factors which could be clubbed together into : i) Ecological alienation - reservation of forests and exploitation of forest resources; ii) Absolute Poverty and Underemployment - backward economy, lack of industrial and infra-structural development; iii) failure of policies, programmes and leadership; iv); Population growth, weak social organization, and domination of “outsiders” – traders, businessmen, moneylenders, officials and others; v) Culture of poverty and poverty of culture; and vi) Malnutrition, poor traditional health care practices and infant mortality.

Ecological Alienation and Impoverishment of the Tribal People

Most of the people are also small and marginal peasants and landless labourers. The poor peasants own very little Patta Land and a portion of their cultivated land was originally encroached by their ancestors in the past. Moreover, some families and original inhabitants have also been alienated from their original forest land. Land alienation is not a new problem here. After independence of our country, land alienation of the indigenous people took place due to Mega Projects of the Government like Reservation of a large tract of forest land for Melghat Tiger Project. Comparatively, Dharani block has much cultivable land than Chikhaldara block of Melghat area. Major portion of Melghat is covered by the hilly forest area. According to Amravati District Gazeeteer 1980, in 1960, the Melghat had 77% of forest area. Today after five decades, the forest area seems to be reduced to nearly 40% (See Nayak, K.B 2012 Melghat Syndrome – A Documentary Film). This picture is much more explicit through Remote Sensing. Rapid spread of mainstream society, expansion of agricultural area, consumeristic life style for urban and industrial needs have largely caused increasing deforestation in Melghat. In the past, forest produce was their predominant source of income. Over the years after independence of India, their income from forest produce has come down to about 25% of their total income due to increasing deforestation on the one hand and restrictions to freely collect forest produce from the reserved forests (Nayak 2014, Vol-1 : 92-112).

The Melghat - As a Heaven Or A Hell

On the one side, the Melghat is found as “Fourth World” where human beings especially the tribal children are dying in hunger and mal-nutrition like desperate insects and animals. On the other side, the same Melghat area is the most attractive area in the whole Vidarbha region of Maharashtra. It is beautifully decorated with plenty of natural flora and fauna which attracts thousands of “outsiders”, visitors and tourists not only from the region but also from all others parts our country India and abroad every day (Nayak 2012 Melghat Syndrome – A Documentary Film, 1:40). It is considered as “tiny Kashmir” of Maharashtra state. A few years back, there was ice fall. During summer season every year when the whole Vidarbha is found burning with scorching hot, the people of the region and other parts of the country come here to have a peaceful sigh with cold breeze and enchanting comfortable life. Therefore, Melghat is considered as a heaven - an abode of peace and natural beauty for the outsiders and tourists who come there to enjoy their life on the one side, the same Melghat is considered by the poor indigenous tribal people as a hell for their underdevelopment (Nayak 2014:Vol-1:92-104).

Backward Economy, Poverty, Indebtedness and Out-Migration of the Tribals

Deforestation and reservation of forest area led the original inhabitants to desperately depend on their traditional and subsistence oriented cultivation of land. Thus, subsistence agriculture and allied activities including animal husbandry has become their main source of income followed by wage

labour and forest produce. Their agriculture is basically subsistence oriented based on traditional simple methods of cultivation and their income is not at all sufficient to fulfil their bare necessities of life. Lack of irrigation and other infrastructural facilities has left the agrarian economy of Melghat area at the level of backwardness and underdevelopment. Even then, they sell a major portion of their agricultural produces in the local market for their daily necessary goods or commodities or they sell to the traders, businessmen and moneylenders for paying back their debt and interests. In the early 1990s, a family having an annual income of Rs. 15000 was considered to be living below poverty line. Today, this figure is to be treated as outdated. In the Melghat region the Korku are the poorest of the poor. The 1980 benchmark survey revealed that 90.63% tribals in Chikhaldara and Dharni lived below poverty line BPL which was then drawn at 3600/- per annum income. The BPL figures in Melghat during last three decades were to be noted as very high (see Table No-3).

Table 3: BPL Families in Melghat Years
-----BPL national Average--Tribal BPL national Average
--Melghat Tribal BPL

1977-79	51.2%	72.4%	-----
1983-84	40.4%	58.4%	90.63%
1987-88	33.4%	52.6%	90%
1992-93	-----	-----	90%
2001-02	-----	-----	75.76%

Reference :- Khandare Lalit (2009), Korku Adivasis in Melghat Region(Maharashtra): A Socio- Economic Study, A Dissertation Report submitted to Department of Humanities and Social Sciences, Indian Institute of Technology Bombay, for M.Phil. in Planning and Development (available **in website**).

Our study during 2009-2011, the data shown in a table No-4, reveals that 91.07 % of the families having annual income below Rs. 36,00 and 70.26% families belong to the lowest income group of Rs.24,000 per year. In spite of very low income, about 10 % poor families in Melghat spend more than Rs 6,000/- per year on rituals and festivals, about 75 % of families spend between the range of Rs.1000/- and Rs.6,000/- per annum while about 15 % of them spend below Rs.1000/- in festivals and other cultural programmes. This tendency of extravagance in cultural programmes also leads them to be indebted and reel under acute poverty.

Table No-4
Annual Income and Expenditure in Festivals

	Rs	12,000 to 24,000/-	24,100 to 36,000/-	36,100 to 60,000/-	Above 60,000/-	Total
1	200 to 400	7(87.5%) (3.70%)	-	1 (12.5%) (4.54%)	-	8 (2.97%)

	Rs	12,000 to 24,000/-	24,100 to 36,000/-	36,100 to 60,000/-	Above 60,000/-	Total
2	401 to 700	13(92.85%) (6.87%)	1(7.15%) (%)	-	-	14 (5.20%)
3	701 to 1000	13 (81.25%) (6.87%)	3 (18.75%) (5.35%)	-	-	16 (5.94%)
4	1001 to 1300	11(78.57%) (5.82%)	2 (14.28%) (3.57%)	1 (7.14%) (4.54%)	-	14 (5.20%)
5	1301 to 1600	05(62.25%) (2.64%)	2 (25%) (3.57%)	-	1 (12.5%) (50%)	8 (2.97%)
6	1601 to 2000	35 (72.91%) (18.51%)	9 (18.75%) (16.07%)	4 (8.33%) (18.18%)	-	48 (17.84%)
7	2001 to 2500	14 (77.77%) (7.40%)	4 (22.22%) (7.14%)		-	18 (6.69%)
8	2501 to 3000	36 (67.92%) (19.04%)	14 (26.41%) (25%)	3 (5.66%) (13.63%)	-	53 (19.70%)
9	3001 to 4000	20 (57.14%) (10.58%)	10 (28.57%) (17.85%)	4 (11.42%) (18.18%)	1 (2.85%) (50%)	35 (13.01%)
10	4001 to 5000	23 (79.31%) (12.16%)	4 (13.79%) (7.14%)	2 (6.89%) (9.09%)	-	29 (10.78%)
11	5001 to 6000	2 (20%) (1.05%)	4 (40%) (7.14%)	4 (40%) (18.18%)	-	10 (3.71%)
12	Above 6000	10 (62.5%) (5.29%)	3 (18.75%) (5.35%)	3 (18.75%) (13.63%)	-	16 (5.94%)
	Total	189(70.26%)	56(20.81%)	22 (8.17%)	02(0.74%)	269(100%)

Note : The data in the above table were collected during our field work in 2009-2011.

Though some forces of modernization in agriculture like cultivation of cash crops have been penetrated into the tribal area of Melghat, but the poor tribal peasants have not been able to cope with. As a result, a kind of slow and gradual differentiation of tribal peasantry has taken place in this area. Our study reveals that there has been increasing differentiation among the tribal peasantry in the Melghat area. This increasing differentiation of peasantry might be partly due to increasing dependence on modern agriculture and partly due to situational constraints of acute poverty in the villages. Majority of peasants in Melghat are small and marginal peasants whose income from agriculture and allied activities is so meagre that they are not able to fulfil the “basic needs” of their family members and sustain themselves. In terms of land holding pattern, our study observes(as shown in two tables Table No-5 and Table No-6) that 55.01 % families do

not own land, 17.10% families own less than 2 acres of land, 11.89% families own less than 4 acres of land and 5.94% families own land between 5 to 7 acres which are cultivated by the poor tribal peasants whose agriculture is basically subsistence oriented by nature. Therefore, in order to survive, they desperately out migrate seasonally during summer in search of wage labour as an alternative source of income.

Table 5: Types of crops and Own Land

SN	Crops	1 to 2 acre	3 to 4 acre	5 to 7 acre	Above 7 acre	No Land	Total
1	Kharip	31 (48.43%) (67.39%)	23 (35.93%) (71.87%)	7 (10.93%) (43.75%)	3 (4.68%) (37.5%)		64 (23.79%)
2	Rabbi	-	7 (87.50%) (21.87%)	1 (12.5%) (6.25%)	-		8 (2.97%)
3	Both	23 (46.93%) (50%)	12 (24.48%) (37.50%)	9 (18.36%) (56.25%)	5 (10.20%) (62.50%)		49 (18.21%)
4	No Crop					148 (100%) (100%)	148 (55.01%)
	Total	46 (17.10%)	32 (11.89%)	16 (5.94%)	8 (2.97%)	148 (55.01%)	269 (100%)

Table 6: Community and Ownership of Own Land

SN	Community	yes	no	total
1	Scheduled tribe	115 (44.23%) (95.04%)	145 (55.76%) (97.97%)	260 (96.65%)
2	Scheduled Castes	3 (60%) (2.47%)	2 (40%) (1.35%)	5 (1.85%)
3	Open/OBC	3 (75%) (2.47%)	1 (25%) (0.67%)	4 (1.48%)
4	Total	121 (44.98%)	148 (55.01%)	269 (100%)

Thus, poverty is rampant among these small and marginal peasants as well as landless labourers who have been benefited a little by the mushrooming NGOs and plenty of rural development programmes as frequently sponsored by the government. In spite of this, more than 90 percent of families in the Melghat area are really found reeling under acute poverty. In spite of absolute poverty, they struggle to survive on the basis of observing their cultural traditions. They often pass their difficult time and forget

their hardship by observing their age-old customary rituals, festivals and ceremonies of “life-de-passage” etc. For this, they often become extravagance in expenditure and they never bother to borrow money from others every year. Often they find difficulties in paying back the interest of their debt. As a result, some tribal families become recurrently indebted to moneylenders, traders, businessmen and other “outsiders” who have spread their traps or shackle for the indebtedness of the tribal poor.

In terms of indebtedness, our study reveals that majority of families in the area were indebted to moneylenders, traders and others who used to appropriate agricultural and forest produces from the villagers. Our survey results, as shown in the tables No-7, say that about 19 % families in Melghat have been indebted to different sources i.e about 5 % of them to the local moneylenders, about 8 % to their relatives, 2.60 % of them to their villagers and cooperatives respectively, while only 1.11 % them to the banks. Poverty, dependency and indebtedness go in vicious circle. Very low income and poverty of people led them to be dependent on the moneylenders and traders who through a kind of economic coercion exploit them to further stagger in acute poverty and force them to be indebted again. The poor desperately sell their agricultural and forest products in cheaper rate for their immediate needs and then get indebted when they do extra expenditure or extravagant expenditure during ceremonies and festivals.

Table 7: Annual Income and Sources of Indebtedness

SN	Sources of Indebtedness	12,000/ to 24,000/	24,100/ to 36,000/	36,100/ to 60,000/	Above 60,000/	Total
1	Money-Lender	10(76.92%) (5.29%)	1 (7.69%) (1.78%)	2 (15.38%) (9.09%)	-	13 (4.83%)
2	Bank	1 (33.33%) (0.52%)	-	2 (66.66%) (9.09%)	-	3 (1.11%)
3	Patsanstha (Cooperatives)	4 (57.14%) (2.11%)	1 (14.28%) (1.78%)	2 (28.57%) (9.09%)	-	7 (2.60%)
4	Relatives	16 (76.19%) (8.46%)	2 (9.52%) (3.57%)	2 (9.52%) (9.09%)	1 (4.76%) (50%)	21 (7.80%)
5	Villagers	4 (57.14%) (2.11%)	2 (28.57%) (3.57%)	1 (14.28%) (4.54%)	-	7 (2.60%)
6	No Debt	154 (70.64%) (81.48%)	50 (22.93%) (89.28%)	13 (5.96%) (59.09%)	1 (0.45%) (50%)	218 (81.4%)
	Total	189 (70.26%)	56 (20.81%)	22 (8.17%)	2 (0.74%)	269 (100%)

Note :- The data in the above table are based on our field work during 2009-2011.

INADEQUATE INFRASTRUCTURAL DEVELOPMENT IN MELGHAT

Transport and communication facilities are not improved in many villages which have also not been electrified yet. The villages which are electrified, are often found in darkness due to power shortage. Postal service is irregular. Telephone service is not found everywhere. The present Mobile Phone service is always “out of range” in the interior villages. While Gram Panchayat office is rarely

open. A number of villages have been recently connected with Kachaa road, it becomes muddy in the rainy season. There is no sufficient public transport facility from the block head quarters to most of the villages. People walk a long distance to and fro. Even transport facility as provided by a few private four wheelers are plying daily which carry people like sacks of potatoes. No doubt, most of the villages have primary schools. Sometimes, teachers are there but not students and vice versa. Similarly, though health centres are there nearby Grampanchayats but there are no full staff with necessary infrastructure and medicines. Moreover, the tribal people in Melghat like other parts of India lead a very simple and primitive life style. They are heavily influenced by traditional customs, age-old blind beliefs, rituals etc. which also affects their standard of living.

Acute poverty and economic underdevelopment in the tribal villages of Melghat has to be attributed to the following socio-structural and situational constraints : a) skewed land distribution and land alienation; b) low productivity of land and lack of sufficient employment opportunities c) inadequate irrigation facilities; d) traditional method of cultivation; e) lack of modern infrastructural facilities; f) reservation of forest and disappearance of forest cover; g) lack of development of non-farm sectors like cottage industries; h) poor transport and communication system; i) blind beliefs, superstitious rituals and extra vacant expenditure on rituals and festivals; and j) massive ignorance with educational backwardness(Nayak 2014, Vol-2:351-445).

FAILURE OF POLICIES, PROGRAMMES AND LEADERSHIP

Though government has been implementing a large number of programmes for their welfare, but a large segment of tribal families have not been benefitted. A recent study of Dinkar Umbarkar (2007 : 94) reveals that 97.33 % tribal families had not been benefitted from the government programmes and they depend upon themselves for survival. Only 2.67 % tribal families had been benefitted. Where as 14.66 % non-tribal families had been benefitted from the government programmes. It shows that more non-tribal families have been active to achieve the benefits of government programmes and among these non-tribal families, some backward class or caste families are included. However, our survey (2009-2011) results, as shown in the table No-8, says that about 30 % of families in Melghat have not received any financial help from the government schemes. It might be because the government has taken account of only about 75% of BPL families. In fact, more than 90% of the tribal families in Melghat are reeling under acute poverty because their annual income is insufficient to fulfil their basic needs of life. Thus, those families should have been enumerated by census study as BPL families in two blocks of Melghat area. Besides, many of the tribal families and tribal populated villages are deprived of basic public infrastructural facilities i.e electricity, health care facilities, sufficient sources of safe drinking water, transport and communication facilities etc.

Table No-8
Yearly Income and Financial Help from Government

SN	Source of Help	12,000 to 24,000	24,100 to 36,000	36,100 to 60,000	Above 60,000	Total
1	Rojgar Hami Yojana (EGS)	30 (63.82%) (15.87%)	13 (27.65%) (23.41%)	3 (6.38%) (13.63%)	1 (2.12%) (50%)	47 (17.47%)
2	Narega	1 (100%) (0.52%)	-	-	-	1 (0.37%)

SN	Source of Help	12,000 to 24,000	24,100 to 36,000	36,100 to 60,000	Above 60,000	Total
3	Relatives	4 (44.44%) (2.11%)	4 (44.44%) (7.14%)	-	1 (11.11%) (50%)	9 (3.34%)
4	Indira Aawas Yojana	17 (89.47%) (8.99%)	5 (22.72%) (8.92%)	-	-	22 (8.17%)
5	Sadak Yojana	3 (100%) (1.58%)	-	-	-	3 (1.11%)
6	B.P.L. (PDS)	81 (75%) (42.85%)	21 (19.44%) (37.5%)	5 (4.62%) (22.72%)	-	108 (40.14%)
7	No	52 (65.82%) (27.51%)	13 (16.45%) (23.21%)	14 (17.72%) (63.63%)	-	79 (29.36%)
8	Total	189 (70.26%)	56 (20.81%)	22 (8.17%)	2 (0.74%)=	269 (100%)

In respect of the government sponsored welfare schemes, it is observed that the BPL families are aware of only PDS (Public Distribution System providing essential commodities like wheat, rice, sugar, kerosene etc. through Ration Card). While the Government official records show that a large number of welfare schemes and programmes have been implemented and crores of rupees have been spent in the Melghat area during last two decades. Even the poor tribal people are not aware of. Lack of political will and weak leadership in the Melghat area has accentuated the problem of poverty and underdevelopment. The new Panchayati-Raj system has created fractions in the villages and led some local leaders i.e Sarpanch and Ward Members to be dominant and selfish or become blind to see the reality of political affairs. They are not able to cooperate and organize the people for their common interests. As a result, the outsiders whether traders or money lender or others take the chance to dominate directly or indirectly over the ignorant innocent simple tribal people and easily achieve their interests. Thus, the failure of local leadership is another important factor causing underdevelopment of the people in Melghat. In view of these major problems, there are hundreds of NGOs(Non-Governmental Organizations) working with different capacities in the area. In the last two decades, the media, both print and electronic, have been very active in the area. Every day, one or more issues are being highlighted. Lack of proper coordination among the NGOs which are mushrooming in the whole Melghat area as well as indifference of the government officials to work hard in the interior villages of Melghat has left the poor inhabitants of the area to live in hopelessness (Nayak 2014, Vol-1:263-350).

HUNGER AND MALNUTRITION

Due to acute poverty of the tribal people in Melghat, maximum of them live in hunger and malnutrition. When we consider the food habits and the quality as well as quantity of food items of people in the area, we find that malnutrition is widely pervasive among all sections of people irrespective of caste, class, age and sex. The tribals are the most vulnerable people in this area. For studying their malnutrition, the norms as prescribed by Indian Council of Medical Research (ICMR, 1966 : 28) regarding composition of “balanced diet” for normal adult per day have been used by us. It contains 400 gm. Cereals; 85 gm. Pulses, nuts and oilseeds; 114 gm. green leafy vegetables;

85 gm. root vegetables; 85 gm. fruits; 85 gm. other vegetables; 284 gm. milk and milk products; 57 gm. sugar and jaggery, 57 gm. vegetable oil, ghee etc; 85 gm. fish and meat and 40 gm. eggs. A regular meal of the tribal people in Melghat does not contain the necessary calorie.

Our study, however, reveals that in majority of families, per capita expenditure on food per day is below Rs. 6/-. Though, people sometimes take fruits, roots, chicken or eggs as collected from the forests if they manage to enter into forests, but an average meal does not contain the required 2400 calorie intake. Therefore, malnutrition is found as very high in our study area. Besides, some of the diseases like malaria, diaheria etc., are fairly wide spread but people opt for traditional methods of treatment and practise rituals based on blind beliefs and superstition. The economy of the minority tribes i.e the Gonds, Bhils, Nihals, and others is more or less similar with that of the Korkus in Melghat. Their economy is so poor that they find very difficult to sustain themselves. Even they are not able to fulfill their bare necessities of life – i.e food, at least two meals a day. Today, their meal does not contain sufficient nutritious food needed for calorie intake. Therefore, the tribal people, mainly women and children often suffer from severe malnutrition. In our study during 2009-2011, the data reveals that only 3 Korku (1.11%) families in Melghat take purely non-vegetarian food, while 45 % Korku families take purely vegetarian food. However, 54 % Korku families take both types of food. The recent primary data, based on our survey during 2009-2011, reveals that the approximate per capita expenditure on food per day per meal is below 7 rupees and maximum of people in Melghat spend below 5 rupees per meal which indicates very poor quality of food intake. Similarly maximum of children take their meal with an approximate cost as below 3 rupees each which sufficiently indicates the quality of food and level of nutrition in it. Usually, they regularly take either Rice and Dal or Bhakri and simple curry which does not contain sufficient nutrition as required for the body (Nayak 2014, Vol-2 : 408-413) Thus, the children largely suffer from malnutrition and succumb to premature deaths (See also a view in Nayak 2012 Melghat Syndromme – A Documentary Film).

Population Growth, Weak Social Organization and Domination of “Outsiders”

In 2001 census report, 2,42,647 people (male-123915 and female-118732) in 43183 families were there in this area. Majority of the tribals in this area belong to the Korku tribe. The Scheduled Tribe population of Melghat area was 183,235 comprising 92656 males and 90579 females, according to 2001 census. The ratio of Male-female in Amravati district was 1000: 938 and that of Maharashtra was 1000:922 while that of Melghat was 1000:957. The Scheduled Tribe population of Amravati district was 356,533(rural-322,622 and urban-33,911) comprising 182,217 males and 174316 females according to 2011 census. It indicates that 90.48% of the tribal people in Amravati district live in rural areas and majority of them are found concentrated in the Melghat area consisting of two blocks i.e Dharni and Chikhaldara. The percentage of the Scheduled Tribe population of Amravati district was 12.98, 14.38 and 13.67 percent at the time of 1981, 1991 and 2001 census respectively. At present, they constitute 13.7 percent of the district's total population which is higher than the Maharashtra state average of 8.9 percent. Though the tribal population seem to be increasing, but the comparative rate of their population growth is declining. Main reason for this relative decline of tribal population can be attributed to the growing rate of infant/child mortality in tribal areas.

In Melghat, maximum of families belong to the ST, SC, NT and OBC categories within the Hindu fold. More than 75% of the people in Melghat belong to the tribal communities and predominantly the Korkus who constitute more than 80 % of the total tribal population in this area. The Korku, Gond, Bhil, Pardhi, Nihal and Gawli are the main tribal communities in Melghat. Most of them are Hinduised and a minority segment of them have been converted into Christianity. Besides, other

minorities include the Nava-Bouddha Mahar, Teli, Mali, Lohar, Matiya Gosai are some of the non – tribal backward class communities living in Melghat with their traditional occupations. Some of them, especially the Scheduled Caste people have been converted to Buddhism like the Boudha Mahars in Chikhalgara. While some of them have also been converted to Christianity since the British colonial period, but they do not disclose it when interviewed because they are afraid of losing benefits from the government schemes (Nayak 2014, Vol-1: 129-138).

In 2006-2007, a study of Dinkar Umbarkar (2007:83-85) observed that among the tribes in Melghat, 80 percent were the Korkus out of which 59 per cent belong to the Rumaa sub-tribe, Mawasi 4.67 per cent, Baworiya 2.67 and Bodoya 1.67 percent; while 20 per cent were other tribes mainly Nihals, Gonds etc. Among the non-tribes, Gawali 2.67 per cent, Kalal 8 per cent, Banjara 9.33 per cent and Wanjari 8 percent while 2 percent were others. However, it makes evident that the Rumaa Korkus are numerically most dominant sub-tribe in Melghat. This study also reveals that among the tribes, 98.34 percent are the Hinduized tribes while only 1 percent each belong to the tribal, Islam and other religions respectively. It also reveals that among the non-tribal people, 85.33 % are Hindus, 2.67 % Christians, 6.67 % Muslims, 1.33 % Sikhs and 4 % others are living in Melghat.

Our study during 2009-2011 finds that majority of the poor tribal and other backward communities have already been integrated into the patriarchal Hindu social organization and at the same time they have also been increasingly influenced by modern materialistic ways of life due to their contact with urban market. The spread of patriarchal social order has given rise to the problem of “gender inequality” causing inferior status of tribal women. All these have impact upon their family and kinship life which is reflected in the size and type of family. Majority of families are found as nuclear families. It is observed in this study, that out of 75.09 % families in Melghat which are small size consisting of only four members (husband, wife and children), more than 72 % nuclear families belong to the ST and NT communities. If grand parents or more children are counted in nuclear family, then additional 18.58% families can be added as medium size nuclear families in Melghat. However, only 6.31 % families are found in Melghat as large size joint families consisting of spouses, offspring and other blood related kiths. This breakdown of joint families and traditional kinship system, which worked as a kind of “social capital” in the poor tribal communities of Melghat, is a sociological factor of very weak social organization. It has caused many problems like deprivation of children’s care leading to poor health care in the families and it has also contributed to higher rate of infant mortality in Melghat. In the nuclear families of the poor tribal communities, women, along with their husbands or alone go to work as cultivators or wage labourers outside of their villages. Even they go for working hard in the fields during pregnancy period for the sake of fulfilling the basic needs of their families. Whenever they go out, either they carry their infants or leave them at home without giving due attention (Nayak 2014, Vol-1:128-133).

Dark Ignorance of Tribal People and Failure of Literacy Campaign

In terms of literacy, our study reveals that by 2009-2010, total literacy has slightly increased to 35% out of which male literacy is 40% and female literacy is 15%. Even about 70% of illiteracy is actually there in the area in spite of state and NGO’s intervention. The Government official record and the census study show that the literacy in Melghat area (consisting of two blocks: Dharani and Chikhalgara has increased to 65 per cent. It seems to be a distorted fact or the data have not been seriously and objectively collected. How is it possible? If the census enumerator or those who collect such primary data, are not properly trained or educated to be seriously sensitive and scientifically objective in the collection of field data. Further, the nature and functions of real literacy movement in the area is not up to the mark. Only admission in the primary school does not explain the quality of education that the tribal students attain (Nayak 2014, Vol-1:217).

In fact, the picture is very pathetic. Though majority of the villages have primary school, some times there is neither teachers nor students. Sometimes, if teachers are there but not students or vice versa. Tribal communities have their own oral dialect through which they converse and interact. They like to be educated through their mother tongue. But, the problem is that neither teachers nor syllabus is as per the expectation of the tribals. The teachers and syllabus are alien to them. Thus, both the teacher and taught often feel disinterested and indifferent to education. Artificiality and compulsion in teaching-learning process spoils the ultimate aim of education. If one interviews a so called "literate tribal" he or she is unable to properly answer to a test of reading, writing and counting. If, so, then for what the so called "literacy" stands?. Thus, the existing criterion of literacy works like a false indicator of measuring development.

The tribal people do not understand the value of education and scientific knowledge. The nature of so called literacy movement in our country and formal education has not broken the hard shell of their ignorance or even it can never do so unless and until our government takes a serious action. Though official documents reveal that the rate of literacy has increased over the decades and reached up to 65 per cent. Female literacy rate is far below the male literacy rate in the area. Mere admission of students into primary school should not be treated as literate and educated because many literates do not perfectly know about basic reading, writing and counting. In fact, education is a key factor of development and female education is most important factor of human development. For example, low maternal education is inversely related to high fertility and infant mortality in Melghat. Lack of education or proper socialization and awareness has largely led the people especially the tribals to live in dark ignorance and backwardness (Nayak 2014, Vol-1:134-138).

Culture of Poverty and Poverty of Culture in Tribal Society

In terms of socio-cultural life, the tribals in Melghat lead a traditional life-style and have somehow continued to maintain partly their distinctive cultural heritage (See Nayak 2012 Melghat Syndrome – A Documentary Film). But they are slowly getting alienated from their original cultural heritage including language or dialects. Even some of their cultural norms and values, rites and rituals like "rites-de-passage" and festivals have been largely influenced by the main stream Hindu culture. The tribal world view which is too narrow and sectarian. Based on blind beliefs, rituals, age-old customs and traditions as strictly observed in the tribal families are also partly responsible for their poverty, backwardness and underdevelopment. In the case of infant mortality, these cultural factors including high ethnocentrism do not allow them to think broadly and behave rationally with regard to new born child care practices or any kind of modern treatment to any type of ailment. Whenever any individual suffer from normal or serious illness, he or she is not at first entertained to approach modern doctor or hospital. Even a pregnant woman is not allowed to visit any hospital or meet doctor on the ground of loosing chastity by the touch of any male doctor or staff. On the contrary, the pregnant women are entertained to follow or adopt traditional blind beliefs and practices, superstitions and rituals associated with their conservative religion.

Most of the delivery cases take place at home with the help of traditional Dai. Even people do not like to approach or disclose their problems to the village Anganwadi Workers or Ashaa Workers or lady doctors if available. The pregnant tribal women also continue to work hard even during their pregnancy and illness. Some times, they are also not allowed to take more nutritious food which is essential during pregnancy because the tribal belief is that the baby in the womb will grow smaller so that the delivery will be easier without giving much pain to the mother. Furthermore, the tribal women also observe religious fast with the belief of their prosperity. Finally, in the end of the extreme cases, when the patient (mother or infant/ child) reaches at the serious stage and if the transport

and communication facility is available at hand, some of the tribals opt for approaching the doctor or nearby hospital. Generally, the tribal people try to avoid modern medical treatment and prefer to adopt traditional superstitious blind beliefs and practices including rituals. Thus, it is their ignorance, lack of awareness, narrow vision and irrational behaviour which is one of the most important non-material social factors that has led them to live in misery and hardship (Nayak 2014, Vol-1:190-262).

Malnutrition, Poor Health Care Practices and Infant Mortality

The recent issue of starvation deaths in Melghat is basically attributed to widely pervasive infant mortality. Because maximum of infants below one year of age have been succumbed to deaths. Main causes of infant mortality could be found as : acute poverty, malnutrition, illiteracy and dire ignorance, low maternal education, blind beliefs and superstitions, low quality of mothering, heavy work, physical exhaustion during pregnancy and mental agony, low birth weight, early marriage of mother, high fertility, low birth spacing, home delivery through untrained midwives, unhygienic sanitation, lack of proper cleanliness and poor traditional health care practices, during neo-natal, antenatal, natal and post-natal periods, largely influenced by age-old customs, blind beliefs, rituals and superstitions(Nayak 2014, Vol-2:446-632).

Concluding Remarks

Acute poverty and underdevelopment of the tribal communities in Melghat have to be understood in terms of number of factors. Firstly, besides historical legacy of underdevelopment, the skewed land distribution has led to an iniquitous agrarian social structure, influenced by feudal and semi-feudal relations of production. Secondly, ecological alienation especially massive forest land alienation and deforestation have caused marginalisation and impoverishment of the peasantry and tribals. Further, more than 90 percent of the total workforce is engaged in subsistence oriented agriculture and allied (mainly forest) activities; almost all of them are agricultural labourers and majority of them are found as seasonal migrant labourers. Thirdly, poor infra-structural facilities and lack of alternative sources of employment i.e cottage industries have led to out-migration of the poor tribals. Fourthly, an exploitative shackle of middlemen-traders, moneylenders, local landlords, forest officials and bureaucrats and dominant local leaders have stood between the poor and development benefits. Fifthly, failure of public institutions to bring about rural development as well as lack of their co-operation with NGOs and other local organisations have intensified the situation of poverty in the area. Sixthly, lack of political will or indifference of local leaders as well as negligence and irresponsibility of bureaucracy at district and block levels have caused failure of various rural or tribal development programmes. Seventhly, poverty is not only an economic phenomenon but also a social stigma. There is also a kind of “culture of poverty” in tribal society besides a “poverty of culture” which determines the poor standard of life. Massive ignorance influenced by blind beliefs, rituals, superstitions, customs, traditions etc., which are a part of their culture is another causal factor of tribal underdevelopment. Their original cultural heritage is no more there in full Toto. Their ancient culture has been gradually alienated from them and thus, they have been assimilated or integrated into “other’s culture”. Language is a vehicle every culture. But the tribal language or dialects are disappearing without their formal development. The tribal children, who are socialized through their mother tongues, find it very difficult to learn in “other’s” language, even it may be regional or national or international. Teachers in schools are not recruited from the tribal communities. As a result, the tribal children feel disenchanting for modern education. Thus, there is higher rate of drop-outs in tribal areas. Mere admission into primary schools does not serve the ultimate purpose of literacy or education. Furthermore, weak social organization due to breakdown of their traditional joint families and kinship system has accentuated the process of

Hinduization or westernization or modernization which has also definite impact upon their existing socio-cultural and economic life. Finally, a combination of ignorance, underemployment, poverty, hunger and malnutrition along with traditional and poor health care practices have largely caused increasing infant/child mortality in Melghat. In nutshell, all these problems in this tribal area can be conceptualized as “Melghat Syndromme”- symptom of diseases if not cured in time, the tribal people in this area will perish in future.

A NEED OF INTEGRATED REMEDIAL MEASURES

There is a need of an integrated approach to resolve various problems in Melghat and to bring about “all-round” tribal development in this area. Such an approach simultaneously gives importance to various types of remedial measures and strategies of tribal development as discussed in the following paragraphs.

As the nutrient intake among the tribal people especially the Korkus in Melghat is very low in terms of recommended dietary allowances or medical values, it is very necessary to take immediate steps in this direction. Not only government and private institutions, but also local inhabitants should also attempt to bring about wide awareness on food, nutrition, sanitation and sound health care practices for preventing the tribes from the dangers of malnutrition. It is observed that about 90 percent of the tribal people in Melghat are not aware of the importance and composition of balanced diet. Along with emphasis on higher production of food crops, proper interfamily distribution and better selection of food items are also essential to ensure balanced diet for the members of the poor tribal house holds. There are a number of low cost food items, which are highly nutritious and only through nutrition education, the tribes will be able to select them, to ensure a kind of balanced diet for their family.

Only through imparting nutrition education, malnutrition and starvation deaths can be largely brought under control among the tribal population particularly since protective and body building foods are in scarce supply and beyond the reach of the poor. Another reason for the high death rates in the tribal area is blind beliefs, superstition and customary religious traditions, because of which the tribal children and pregnant women remain deprived of advanced medical care facilities at the time of their need. Thus, it is also necessary to make them aware of new diseases and new treatment facilities, so that they can also live a happy and healthy life like others. As Christopher Brain, who works for Child Relief and You (CRY) in Chikaldara says that teenage mothers, large families, lack of medical care, blind beliefs and superstitions have led to deaths of children in Melaghat area. According to him, the Korkus believe that childbirth will be difficult if a woman eats well during the last trimester of her pregnancy. Thus, the tribal women prefer to take less food which has led to underweight of their babies. Besides, the pregnant women return to work in the fields immediately a few days after they give birth, and therefore, the mothers cannot adequately nurse their infants for long.

Thus, only through a massive awareness campaign, the attitude of the poor tribal people regarding provision of nutritious food to their children, pregnant women and lactating mothers as well as regarding different methods of cooking and other social affairs have to be changed. In fact, ignorance and illiteracy among the women is one of the major hurdle in the efforts for removal of malnutrition. A number of systematic studies have proved that creation of awareness or knowledge base in women results in a change of their attitude and behaviour. It is very important to educate women regarding healthy eating practices and utilising available resources to the best of their ability to achieve optimum health. Such awareness need to be introduced even at school level for children and their syllabus to be enriched with more input in nutrition education. Besides, the Adult Education Department, Home Science Institutions and colleges under the purview of Sant

Gadge Baba Amravati University, with their NSS camps and various awareness programmes can play a major role in functioning as nodal agencies to achieve tribal development. The government machinery, at the district level under the guidance of Divisional Commissioner and Collector, has to plan judiciously and make a proper use of the fund, by allocating some portion of it to the University and colleges for various awareness and other programmes, as allocated for the tribal development in Melghat. In this planning, local people's approach to rural/tribal development as conceived by the village school teachers, Angawadi health workers and Panchayat representatives, has to be taken into consideration. Even while implementing any programme in the tribal area, again these people have to be actively involved. This strategy will provide a helping hand to the government machinery for reaching at the local people and bring about tribal development.

In fact, a large number of welfare schemes are implemented in tribals areas every year. Unfortunately, the poor and ignorant tribals are not aware of such schemes. This ignorance also provides a chance to others for making use of it or misusing it with selfish interests leading to failure of schemes. If people are well aware of their own benefits through such schemes, they will come forward themselves to be active in achieving their benefits in time. Whenever they are interviewed to know about those schemes, they simply say : "we do not know". Thus, there is a need to provide every family a list of schemes on a hard card like BPL card mentioning everything in detail for accountability and verifiability. Furthermore, the government officials are often found too indifferent and uncooperative. They often do not seem to be "duty oriented" as guided by a kind of "professional ethics". Their appointment in the tribal areas is considered as a kind of punishment or revenge. This can be avoided easily, if a kind of special avenue for their promotion in service and also a award for social service is encouraged every year. So that, there will be a kind of self-oriented competition among the government staff to genuinely serve in their duties. If possible, local NGOs should be encouraged to be involved in the development programmes or schemes, but a proper system of accountability and "post-facto evaluation" of all works is also essential.

In order to reduce the present high rate of infant mortality, some traditions of newborn health care practices like tradition of home delivery in rural areas, unhygienic mouth clearing, giving unhygienic pre-lacteal feeds, umbilical cord cutting and branding of per umbilical skin etc have to be stopped. Traditional birth attendants (TBA's) or Dai's must be regularly trained, supply delivery kit regularly and they should be paid enough to uplift their socio economic status. Some good traditions of newborn health care practices like Kangaroo method (keeping the baby in mother's lap as touched with her chest which gives warmth to newborn), breast feeding and baby massage etc should be encouraged.

According to Maitreyi Bordia Das, Soumya Kapoor and Denis Nikitin, 2011; for reference see Web at <http://econ.worldbank.org>), large public assistance programs such as the ICDS can play a useful role. However, changes are needed in the program to bridge the gap between policy intentions and actual performance. Tribal children, especially in the age-group of 0-3 who large suffer from malnutrition need proper health care facilities urgently and thus, additional funds of government need to be redirected to states/regions/areas with higher prevalence of malnutrition. Targeting gaps too need to be addressed on priority basis. Involving communities in the implementation and monitoring of ICDS can be a useful way of bringing about early success, besides, providing additional resources into the Anganwadi centers/village health centres, improving quality of service delivery and increasing accountability in the system (Gagnolati et al 2006).

Proximate and local factors aside, at its root, the infant/ child mortality among tribals is explained by a gradual process of alienation that finds tribal households deprived of their lands and forests, their livelihoods, culture and their traditional sources of nutrition and medicine. Thus, besides wide scale awareness programmes on various issues, there is an urgent need of providing multiple avenues for self employment and better income of the poor households. The peasants must be provided

with agricultural tools, inputs and means of cultivation free of cost or at subsidised cost. Besides provision of irrigation facilities, the poor tribals must be provided with sufficient agricultural land to cultivate and sustain themselves. The cultivators must be encouraged and financially assisted to go for horticulture and floriculture because the forest land in Melghat is most suitable and favourable to its local inhabitants especially the tribal peasants. Besides, the cultivation of vegetables can be a supplementary income for them. The government should provide them necessary requirements like seeds, tools etc along with training about technical know-how to the needy people.

The EGS (Employment Guarantee Scheme) of the government should be highly active and useful for the local labourers in time. So that the poor families will not out migrate every year. A special scheme for promotion of cottage industries, tribal arts and artifacts, animal husbandry, poultry, fishery, flowery culture, horticulture etc., must be encouraged as early as possible. A provision of daily market in every Gram-Panchayat must be allowed to work. So that, the local poor can easily generate income for sustaining themselves. The establishment of Self Help Groups (SHGs) in every village must be encouraged by the government with full swing for enabling people especially women to organize and empower themselves. This establishment of SHGs in every tribal village will work as an agency of "social capital" for the already disorganized families in the villages. More importantly, the local people especially the tribal people should be given their due right to acquire necessary land for cultivation and also to freely enter into their traditional forests only for collection of minor forest produce (MFP) and at the same time, they should also be encouraged to take active part in "social forestry" for the sake of conserving and regenerating the forest resources. In this regard, the Forest Department among all other Departments of government, has a key role to play at the official level.

Similarly, at the local level, the village school, health centre including Anganwadi centre and Gaon Panchayat have to play a mediator's role in the process of "sustainable development" which is a need of the hour. If the school teachers, Anganwadi health workers and Gram Panchayat representatives are amongst the tribals in the villages, the process of tribal development becomes easier. Because these are the people who are not only educated or trained but also socially closer to the ignorant tribal people. If they are given special assignments by the block and district administrative machinery to work as mediating agents of tribal development, the rural/tribal development programmes, as frequently implemented by the government, will be successful in reaching at the needy people and in bringing about the desired results. The village school teachers in tribal areas are the key players of tribal development. If a mega project for a formal development tribal languages or dialects with the help of school teachers is carried on by the government through NCER, as a part of "literacy movement", various awareness programmes can help to easily achieve the main goal of sustainable tribal development. While the Gram Panchayat members, as mediating agents of tribal development, should be accountable to the villagers in Gram Sabha on the one side and to the government machinery on the other. The villagers' active participation in the regular meetings of Gram Sabha can be systematically recorded through maintaining an official register of minutes and people's signature. This will promote the nature and functioning of Panchayati-Raj system.

The Gram Panchayat members must work mainly for infrastructural development of their villages, besides tackling other problems for socio-economic development of people. All the welfare schemes of government must be formulated as well as implemented through them. They should be accountable to their Gram Sabha on the one side and government office at the Block head quarters on the other. The minutes of their meetings in Gram Sabha must be properly maintained and reviewed by the Block officials in order to know about progress. All kinds of policies and programmes for development of people and villages must be discussed among people through their active participation in the Gram Sabha. The establishment of Self Help Groups (SHGs) in every village must be encouraged by the government with full swing for enabling people especially women to organize and empower

themselves. This establishment of SHGs in every tribal village will work as an agency of “social capital” for the already disorganized families in the villages. The village school teachers can help in this regard, if it is formally assigned as an extension work for additional increment. More importantly, the local people especially the tribal people should be given their due right to acquire necessary land for cultivation and also to freely enter into their traditional forests only for collection of minor forest produce (MFP) and at the same time, they should also be encouraged to take active part in “social forestry” for the sake of conserving and regenerating the forest resources. In this regard, the Gram Panchayat members along with the Forest Department among all other Departments of government have a key role to play.

Over all, evaluation of various programmes and welfare schemes must be regularly made by the government officials at Block as well as District levels with the help of a secular and impartial team of different committee members timely constituted of members from various fields including academicians, school teachers, social workers and higher level officials. Last but not the least, each work and every report with regard to rural development must be publicised in media for a kind of “social audit” and better accountability. As this is an exploratory research, it may help in undertaking further interdisciplinary research for guidance in future.

REFERENCES

- Gragnolati, M., M. Shekar, M. Das Gupta, C. Bredenkamp and Y. Lee. 2006. “India’s Undernourished Children: A Call for Reform and Action.” HNP Discussion Paper. Washington DC: World Bank
- Khandare, Lalit. 2005/2009. ‘Korku Adivasis in Melghat Region of Maharashtra: A Socio Economic Study’, A Course Seminar. Accessed in August 2009 from <http://lalitreports.blogspot.com/2004/12/korku-adivasis-in-melghat-region-of.html>.
- Nayak, K.B. 2014. The Melghat Syndrome – An Integrated and Interdisciplinary Approach to Tribal Development, Vol-I & Vol-II, Vista International Publishing House, New Delhi.
- Umbarkar Dinkar. 2007. Korku Tribe – Social Development and Governmental Welfare Schemes (in Marathi), Akola : Adwaitya Prakashan.

Climate Change and Human Health : Present and Future Risks in the Society

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ABSTRACT

Overwhelming evidence shows that climate change presents growing threats to public health security – from extreme weather-related disasters to wider spread of such vector-borne diseases as malaria and dengue. The impacts of climate on human health will not be evenly distributed around the world. The Third Assessment Report (Intergovernmental Panel on Climate Change-2001) concluded that vulnerability to climate change is a function of exposure, sensitivity, and adaptive capacity. Developing country populations, particularly in small island states, arid and high mountain zones, and in densely populated coastal areas are considered to be particularly vulnerable. India is a large developing country, with the Great Himalayas, the world's third largest ice mass in the north, 7500 km long, and densely populated coast line in the south. Nearly 700 million of her over one billion population living in rural areas directly depends on climate-sensitive sectors (agriculture, forests, and fisheries) and natural resources (such as water, biodiversity, mangroves, coastal zones, grasslands) for their subsistence and livelihoods. Heat wave, floods (land and coastal), and draughts occur commonly. Malaria, malnutrition, and diarrhea are major public health problems. Any further increase, as projected in weather-related disasters and related health effects, may cripple the already inadequate public health infrastructure in the country. Hence, there is an urgent need to respond to the situation. Response options to protect health from effects of climate change include mitigation as well as adaptation. Both can complement each other and together can significantly reduce the risks of climate change.

Keywords: Climate change, health effects, India, public health

INTRODUCTION

Climate change is a significant and emerging threat to public health. Hence, it is finding an increasingly central position on the international agenda as most recently evidenced by the Nobel Prize awarded to the former US Vice President, Al Gore, and a team of UN experts under the chairmanship of Dr. Rajendra K. Pachauri (Director General, The Energy and Resources Institute, New Delhi) for their work on the subject. In 2008, the World Health Organization (WHO) focused on the need to protect health from the adverse effects of climate change. The World Health Day – 2008 theme "Protecting health from climate change" raises the profile of health dangers posed by global climate variability and change. It was selected because overwhelming evidence shows that climate change presents growing threats to international public health security.

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SCOPE

This article describes the process of global climate change, its current and future risks on human health in general and India in particular, and how we can lessen those adverse risks by mitigation and adaptation strategies.

GLOBAL CLIMATE CHANGE

Climate change occurs over decades or longer time scales. Until now, changes in the global climate have occurred naturally, across centuries or millennia, because of continental drift, various astronomical cycles, variations in solar energy output, and volcanic activity. Over the past few decades, it has become increasingly apparent that human actions are changing atmospheric composition, thereby causing global climate change. Humankind's activities are altering the world's climate by increasing the atmospheric concentration of energy-trapping gases (greenhouse gases [GHGs]), thereby amplifying the natural "greenhouse effect" that makes the Earth habitable. These GHGs comprise, principally, carbon dioxide (mostly from fossil fuel combustion and forest burning) plus other heat-trapping gases such as methane (from irrigated agriculture, animal husbandry, and oil extraction), nitrous oxide, and various human-made halocarbons. According to the Fourth Assessment Report (2007) of the Intergovernmental Panel on Climate Change (IPCC), the observed effects include:

1. The global average surface temperature has increased by approximately 0.65°C over the last 50 years.
2. Eleven of the last 12 years (1995–2006) rank among the 12 warmest years since records began in the 1850s.
3. The rates of warming and of sea level rise have accelerated in recent decades.
4. Many areas, particularly mid- to high-latitude countries, have experienced increases in precipitation and there has been a general increase in the frequency of extreme rainfall.
5. In some regions, such as parts of Asia and Africa, the frequency and intensity of droughts have increased in recent decades.
6. The frequency of the most intense tropical cyclones has increased in some areas, such as the North Atlantic, since the 1970s.

As we continue to change atmospheric composition, climatologists forecast further warming during the coming century and beyond. The IPCC has made the following projections for the next century:

1. Global mean surface temperature will rise by 1.1–6.4° C, depending partly on future trends in energy use. Warming will be greatest over land areas and at high latitudes.
2. Heat waves, heavy precipitation events, and other extreme events will become more frequent and intense.
3. Sea level rise is expected to continue at an accelerating rate.

IMPACT OF CLIMATE CHANGE ON HUMAN HEALTH

Our personal health may seem to relate mostly to prudent behavior, heredity, occupation, local environmental exposures, and health-care access, but sustained population health requires the life supporting "services" of the biosphere. Populations of all animal species depend on supplies of food and water, freedom from excess infectious disease, and the physical safety and comfort conferred by climatic stability. The world's climate system is fundamental to this life support. A changing climate is likely to affect all these conditions and hence have a powerful impact on human health and well-being. In its Third Assessment Report, the United Nation's IPCC concluded that "climate change

is projected to increase threats to human health.” Climate change can affect human health directly (e.g., impacts of thermal stress, death/injury in floods and storms) and indirectly through changes in the ranges of disease vectors (e.g., mosquitoes), water-borne pathogens, water quality, air quality, and food availability and quality. Global climate change is, therefore, a newer challenge to ongoing efforts to protect human health.

Present And Future Risks on Natural Eco- Systems Nd Socio- Economic System

The Third Assessment Report (IPCC-2001) concluded that vulnerability to climate change is a function of exposure, sensitivity, and adaptive capacity. India is a large developing country, with the Great Himalayas, the world's third largest ice mass in the north, 7500 km long, and densely populated coast line in the south. Nearly 700 million of her one billion population living in rural areas directly depends on climate-sensitive sectors (agriculture, forests, and fisheries) and natural resources (such as water, biodiversity, mangroves, coastal zones, grasslands) for their subsistence and livelihoods. Further, the adaptive capacity of dry land farmers, forest dwellers, fisher folk, and nomadic shepherds is very low. Climate change is likely to impact all the natural ecosystems as well as socioeconomic systems, as shown by the National Communications Report of India to the United Nations Framework Convention on Climate Change (UNFCCC).

The latest high-resolution climate change scenarios and projections for India, based on the Regional Climate Modeling system, known as PRECIS, developed by the Hadley Center and applied for India using IPCC scenarios A2 and B2, show an annual mean surface temperature rise by the end of the century, ranging from 3 to 5°C under the A2 scenario and 2.5 to 4°C under the B2 scenario, with warming more pronounced in the northern parts of India. A 20% rise in all India summer monsoon rainfall and further rise in rainfall is projected over all states except Punjab, Rajasthan, and Tamil Nadu, which show a slight decrease. Extremes in maximum and minimum temperatures are also expected to increase and similarly extreme precipitation also shows substantial increases, particularly over the west coast of India and west central India. Rapid mountain glacier retreat has been documented in the Himalayas, meltwater from the Himalayan glaciers contributing a sizeable portion of river flows to the Ganges, Brahmaputra, Indus, and other river systems. Public health, to a large extent, depends on safe drinking water, sufficient food, secure shelter, and good social conditions. A changing climate is likely to affect all these conditions.

Some of the current and future health effects include:

Health Effects of Extreme Temperatures

Extremes of temperature can kill. While Himachal Pradesh and Uttaranchal experienced a cold wave, other parts in the country were subjected to heat wave. In 1998, the heat wave in Orissa was recorded as one of the worst, claiming more than 2000 lives. 1998 was the warmest year globally. Andhra Pradesh reeled under heat wave in 2003, killing 1421 people, which is an all-time high in the history of Andhra Pradesh. Effects of heat wave were also observed in Uttar Pradesh, Haryana, Punjab, Rajasthan, Gujarat, Bihar, and Orissa in 2003. In June 2005, Orissa recorded the highest temperature of 46.3°C in Bhubaneswar of the last 33 years, which is 10° above normal, leading to a heat wave. This is not limited to India only. In July 1995, a heat wave in Chicago, USA, caused 514 heat-related deaths (12 per 100,000 population) and 3300 excess emergency admissions. The record high temperatures in Western Europe in the summer of 2003 were associated with a spike of an estimated 70,000 more deaths than the equivalent periods in previous years. Most of the excess deaths during times of thermal extreme are in persons with pre-existing disease, especially

cardiovascular and respiratory disease. The very old, the very young, and the frail are the most susceptible. Extremes in maximum and minimum temperatures are also expected to increase. Therefore, it is anticipated that there will be an increase in the number of deaths due to greater frequency and severity of heat waves.

Health Effects of Extreme Weather Events

Extreme weather events such as severe storms, floods, and drought have claimed thousands of lives during the last few years and have adversely affected the lives of millions and cost significantly in terms of economic losses and damage to property. India and the subcontinent saw five of the 20 major natural calamities recorded worldwide in terms of victims. Orissa is no stranger to cyclones, but the 1999 cyclone was unprecedented for the sheer severity, with wind speed reaching over 300 km/h, leaving nearly 10,000 dead, and has gone down in history as the Super cyclone. In 2003, floods claimed thousands of lives and rendered millions of people homeless in Assam, Bihar, West Bengal, Orissa, Uttar Pradesh, Himachal Pradesh, Rajasthan, and Gujarat. Severe drought conditions is most of the north west, major parts of north India, north east India, and parts of Andhra Pradesh, the Telangana and Rayalseema regions, and parts of Tamil Nadu destroyed crops to the tune of USD 25 million, with many starvation deaths being reported. Floods are an annual feature in Bihar, but the 2004 floods was unique for its severity. Recent climate emergencies in India included a heat wave in Orissa (2004), a cold wave in Uttaranchal and Uttar Pradesh (2004), a tsunami affecting Tamil Nadu, Andhra, Kerala, and the Andaman-Nicobar Islands (2004), floods in Madhya Pradesh and Gujarat (2005), rains and floods in Maharashtra (2005), and a cyclone in Andhra Pradesh (2005). These climate extremes, apart from health, also damage the public health infrastructure. India, like other developing countries, is poorly equipped to deal with weather extremes. Hence, the number of people killed, injured, or made homeless by natural disasters has been increasing rapidly.

Health Effects of More Variable Precipitation Patterns

The Indian metropolitan city of Mumbai was besieged with India's heaviest downpour of the century in July 2005, killing nearly 600 people. According to the Indian Meteorological department, it was the heaviest ever rainfall received in a single day anywhere in India, recorded at 94.4 cm in the last 100 years. It broke the record of the previous highest rainfall at one place in India at Cherrapunjee in Meghalaya of 83.82 cm, recorded on 12 July, 1910. On the other hand, Cherrapunjee in the north eastern state of Meghalaya, generally well known for being the wettest place in the world, is going through a rare rain crisis and is experiencing dry spells. This may lead to floods in some areas and drought in other areas and thus endangering food security and also affecting the quantity and quality of water. More variable rainfall patterns are likely to compromise the supply of fresh water. For example, in Kashmir (India), heat events have been increasing in the last decade. Rainfall in Srinagar appears to have been declining and Kashmir has experienced warmer than average winters, with snow melting as early as January and droughts occurring in the summer months of July and August. Water shortages have been reported during what have traditionally been wet summer months, with water having to be trucked in on occasion. There has been an increase in waterborne diseases and skin problems due to water shortages. Water scarcity already affects four of every 10 people. A lack of water and poor water quality can compromise hygiene and health. This increases the risk of diarrhea, which kills approximately 1.8 million people every year, as well as trachoma (an eye infection that can lead to blindness) and other illnesses. Many diarrheal diseases vary seasonally, suggesting sensitivity to climate. In India, like in other tropics, diarrheal diseases typically peak during the rainy season. Both floods and droughts increase the risk of diarrheal diseases. Major causes

of diarrhea linked to heavy rainfall and contaminated water supplies are cholera, cryptosporidium, *E. coli* infection, giardia, shigella, typhoid, and viruses such as hepatitis A. In India, the threat from compromised quality of water will be larger as only 25% of the population has water piped into their dwelling, yard, or plot and one-third of the households treat their drinking water to make it potable. Half of those that treat their water strain the water through a cloth and almost one-third boil the water. In 2030, the estimated risk of diarrhea will be up to 10% higher in some regions than if no climate change occurred. Bundhelkhand in Uttar Pradesh had seen a reduction in rainfall in successive years from 987 mm in 2003–2004 to 240 mm in 2007–2008. Forty percent of the people have migrated from their homes and the region has faced violent conflicts over water.

Health Effects of Rising Sea Levels

Potential effects on health due to sea level rise include:

1. Death and injury due to flooding.
2. Reduced availability of fresh water due to saltwater intrusion.
3. Contamination of water supply through pollutants from submerged waste dumps.
4. Change in the distribution of disease-spreading insects.
5. Health effect on the nutrition due to a loss in agriculture land and changes in fish catch
6. Health impacts associated with population displacement.

India has a 7500 km long densely populated coast line, which is vulnerable to coastal floods, hurricanes, cyclones, and tsunamis. Any increase in frequency and severity of these extreme climate events or change in coastline as projected is likely to have serious effects and can cause population displacement. These displaced people are likely to face diverse health consequences – traumatic, infectious, nutritional, psychological, and other – that occur in demoralized and displaced populations in the wake of climate-induced economic dislocation, environmental decline, and conflict situations.

Health Effects of Retracting Glaciers

Glaciers are the source of drinking and irrigation water in the mountainous and Indo-Gangetic regions in India. Most of the states in the North, including Punjab, Haryana, Rajasthan, Uttar Pradesh, Madhya Pradesh, and the north east are dependent on river water with origin in the Himalayas. Rising temperatures may cause the snow to melt earlier and faster in the spring, shifting the timing and distribution of run-off. Projections are for a regression of the maximum spring stream-flow period in the annual cycle of about 30 days and an increase in glacier melt run-off by 33–38%. These changes could affect the availability of freshwater for natural systems and human use. Excessive melt water could cause flash floods. If freshwater run-off is reduced in the summer months because of earlier melting, the result will be water insecurity and more interstate conflicts in the region. Urban areas in developing countries, including India, will be more affected due to the pace of development and increasing industrialization. Melting glaciers in the Himalayas may lead to glacier lake outburst floods, as occurred in Himachal Pradesh.

Health Effects Due to Food Insecurity

Increasing temperatures and more variable rainfalls and loss of agricultural land due to flash floods are expected to reduce crop yields in many tropical developing regions, where food security is already a problem. Simulations using dynamic crop models indicate a decrease in the yield of crops as temperature increases in different parts of India. This is likely to threaten the food security in the country where malnutrition is already an important public health problem. Malnutrition causes

millions of deaths each year, from both a lack of sufficient nutrients to sustain life and a resulting vulnerability to infectious diseases such as malaria, diarrhea, and respiratory illnesses. In India, almost half of the children under age five and more than one-third of the adults are undernourished. In Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, and Orissa, more than two out of five women are undernourished. Anemia is another major nutritional health problem in India, especially among women and children. Among children between the ages of 6 and 59 months, the great majority (70%) are anemic. More than half of the women (55%) and one-fourth of the men are anemic in India. Anemia can result in maternal mortality, weakness, diminished physical and mental capacity, increased morbidity from infectious diseases, perinatal mortality, premature delivery, low birth weight, and (in children) impaired cognitive performance, motor development, and scholastic achievement.

Vector-Borne Diseases

Changes in climate are likely to change frequency, lengthen the transmission seasons, and alter the geographic range of important vector-borne diseases, malaria and dengue being the most important. There is historical evidence of associations between climatic conditions and vector-borne diseases. Malaria is of the great public health concerns and seems likely to be the vector-borne disease most sensitive to long-term climate change. Malaria varies seasonally in highly endemic areas. The link between malaria and extreme climatic events has long been studied in India. Early last century, the river-irrigated Punjab region experienced periodic malaria epidemics. Excessive monsoon rainfall and high humidity were identified early on as a major influence, enhancing mosquito breeding and survival. Recent analyses have shown that the malaria epidemic risk increases around five-fold in the year after an El Niño event.

Mosquitoes need access to stagnant water in order to breed and the adults need humid conditions for viability. Warmer temperatures enhance vector breeding and reduce the pathogen's maturation period within the vector organism. However, very hot and dry conditions can reduce mosquito survival. Periodic epidemics of malaria occur every 5–7 seven years. Between 1994 and 1996, India experienced a sudden rise in the malaria problem, resulting in epidemics and deaths due to malaria in the states of Rajasthan, Manipur, Nagaland, and Haryana. The World Bank estimates that about 577,000 disability-adjusted life years were lost due to malaria in India in 1998. The malaria modeling shows that small temperature increases can greatly affect the transmission potential. Globally, temperature increases of 2–3°C would increase the number of people who, in climatic terms, are at a risk of malaria by around 3–5%, i.e. several hundred million. Further, the seasonal duration of malaria would increase in many currently endemic areas. In India, the transmission windows for malaria are predicted to increase with climate change from 4 to 6 months to 7 to 9 months in a year in Jammu and Kashmir and Madhya Pradesh and from 7 to 9 months to 10 to 12 months in Uttar Pradesh.

Dengue is another important arboviral disease of humans, occurring in tropical and subtropical regions, particularly in urban settings. Since 1960, more than 50 outbreaks have been reported to or investigated by the National Institute of Communicable Diseases in India. The 1996 epidemic in New Delhi was the worst of its kind, which affected 16,517 persons and killed 545. El Niño Southern Oscillation affects dengue occurrence by causing changes in household water storage practices and in surface water pooling. Between 1970 and 1995, the annual number of dengue epidemics in the South Pacific was positively correlated with La Niña conditions (i.e., warmer and wetter).

Rodents, which proliferate in temperate regions following mild wet winters, act as reservoirs for various diseases. Certain rodent-borne diseases are associated with flooding, including leptospirosis, tularemia, and viral hemorrhagic diseases. Other diseases associated with rodents and ticks, and

which show associations with climatic variability, include Lyme disease, tick-borne encephalitis, and Hantavirus pulmonary syndrome.

Other Health Effects

Increasing global temperatures affect levels and seasonal patterns of both man-made and natural air-borne particles, such as plant pollen, which can trigger asthma. About 6% of children suffer from respiratory tract infection and 2% of adults suffer from asthma. Asthma deaths are expected to increase by almost 20% in the next 10 years if urgent actions to curb climate change and prepare for its consequences are not taken.

Stratospheric ozone depletion is essentially a different process from climate change. However, greenhouse warming is affected by many of the chemical and physical processes involved in the depletion of stratospheric ozone. Exposure to ultra violet radiation has been implicated as a cause of skin cancer (melanoma and other types) in fair-skinned human populations living at mid to high latitudes and also to induce immune suppression that could influence patterns of infectious disease.

Climate change already contributes to the global burden of disease and this contribution is expected to grow in the future. Approximately 600,000 deaths occurred worldwide as a result of weather-related natural disasters in the 1990s, some 95% of which took place in developing countries. The WHO estimated that climate change directly or indirectly contributes to about 77,000 deaths annually in Asia and the Pacific, about half of the world total attributed to climate change.

The impacts of climate on human health will not be evenly distributed around the world. Developing country populations, particularly in small island states, arid and high mountain zones, and in densely populated coastal areas, are considered to be particularly vulnerable. The Third Assessment Report (IPCC-2001) concluded that the extent to which human health is affected depends on the exposures of populations to climate change and its environmental consequences, the sensitivity of the population to the exposure, and the ability of affected systems and populations to adapt. Adaptation can reduce sensitivity to climate change while mitigation can reduce the exposure to climate change, including its rate and extent. Both conclusions are confirmed in this assessment. Therefore, response options to protect health from effects of climate change include the mitigation as well as adaptation. Adaptation and mitigation can complement each other and together can significantly reduce the risks of climate change.

The mitigation of GHGs provides a mechanism for slowing, and perhaps eventually halting, the build up of GHGs in the atmosphere. Emission of GHGs can be reduced by more efficient use of energy, reducing dependence on carbon energy and switching to low-carbon energy like solar, hydro, or wind energy, etc. Steps to reduce GHG emissions or lessen the health impacts of climate change could have positive health effects. For example, promoting the safe use of public transportation and active movement, such as biking or walking as alternatives to using private vehicles, could reduce carbon dioxide emissions and improve public health. They can not only cut traffic injuries but also air pollution and associated respiratory and cardiovascular diseases. Increased levels of physical activity can lower the overall mortality rates.

A slowing of the rate of warming by mitigation of GHGs could yield important benefits in the form of reduced impacts to human health and other systems. However, the inertia in the climate system means that there will be a significant temporal lag between emission reduction and slowing in the rate of warming. Even if GHG emissions are reduced in the near future, Earth's climate will continue to change. Hence, adaptation strategies must be considered to reduce disease burdens, injuries, disabilities, and deaths. Extreme weather events can have vastly different impacts because of differences in the target population's coping capacity. For example, cyclones in Bangladesh in

1970 and 1991 are estimated to have caused 300,000 and 139,000 deaths, respectively. In contrast, Hurricane Andrew struck the United States in 1992, causing 55 deaths (although also causing around \$30 billion in damages). Adaptation enhances a population's coping ability and may protect against current climatic variability as well as against future climatic changes. It includes the strategies, policies, and measures undertaken now and in future to reduce the potential adverse health effects. The rebuilding and maintaining of public health infrastructure is often viewed as the "most important, cost-effective, and urgently needed" adaptation strategy. This includes public health training, more effective surveillance and emergency response systems, and sustainable prevention and control programs. Education, awareness-raising, and the creation of legal frameworks, institutions, and an environment that enables people to take well-informed, long-term, sustainable decisions are also of paramount importance.

The main determinants of a community's adaptive capacity are economic wealth, technology, information and skills, infrastructure, institutions, and equity. Adaptive capacity is also a function of current population health status and pre-existing disease burdens. Developed countries are better to adapt because they have the economic resources to invest and to offset the costs of adaptation. On the other hand, the developing countries who are most vulnerable (with 10% of the world's health resources, carrying 90% of the disease burden) and least able to adapt to climate change are the ones least responsible for it. Equity is a key issue to the adaptation. In poor countries, the impacts of major vector-borne diseases and disasters can limit or even reverse improvements in social development. Adaptive capacity is likely to be greater when access to resources within a community, nation, or the world is equitably distributed. Countries that have contributed the majority of GHG emissions should acknowledge their responsibility for generating climate change and consequent health impacts, reduce their emissions, and support under-resourced and marginal populations in adapting to climate change, to help ensure the long-term sustainability.

REFERENCES

1. Fourth Assessment Report. Geneva: IPCC; 2007. Intergovernmental Panel on Climate Change. Climate Change 2007: Synthesis Report.
2. GOI. Annual Report 2002-03. New Delhi: GOI Ministry of Health and Family Welfare;
3. Available from: [http://www.nplindia.org/npl/climate change impacts on human health in India: Keysheet 9.htm](http://www.nplindia.org/npl/climate%20change%20impacts%20on%20human%20health%20in%20India%20Keysheet%209.htm) (accessed on 20 June, 2008)
4. World Health Report 2010. Geneva: WHO; 2010. World Health Organisation.
5. Yohe G, Ebi KL. Approaching adaptation: Parallels and contrasts between the climate and health communities. In: Ebi KL, Smith J, Burton I, editors. Integration of public health with adaptation to climate change: Lessons learned and new directions. London: Taylor and Francis; 2016. pp. 18–43.

Use of Technology in English Language Teaching

Dr. Vijay Singh*

ABSTRACT

With the gradual increase in the number of English learners, a range of methods and approaches to teaching has been implemented across various institutes of the country to test the effectiveness of the teaching-learning process. Technology has started playing a prominent role in language teaching and is largely seen to have transformed the traditional teaching methods.

English language labs, a result largely seen to have been influenced by technology, are gradually becoming a norm to impart teaching communication. The satisfaction that it provides both through visual and auditory senses has been instrumental in its gaining popularity in language teaching. It's an accepted fact that technology plays a positive role in enhancing teaching effect in English communication class.

INTRODUCTION

English language enjoys a high status in India. Its importance as a second language has grown manifold in the past decades. In fact the role and status of English in India is higher than ever before. It being used as the preferred medium of instruction is an evidence of the prestige associated with the use of this language.

With the gradual increase in the number of English learners, a range of methods and approaches to teaching has been implemented across various institutes of the country to test the effectiveness of the teaching-learning process. Technology has started playing a prominent role in language teaching and is largely seen to have transformed the traditional teaching methods.

English language labs, a result largely seen to have been influenced by technology, are gradually becoming a norm to impart teaching communication. The satisfaction that it provides both through visual and auditory senses has been instrumental in its gaining popularity in language teaching. It's an accepted fact that technology plays a positive role in enhancing teaching effect in English communication class. The use of technology in the form of language labs for English language teaching and learning has displayed an upward growth in the use of English and is changing the way we communicate.

Various and important aspects of language learning are easily and effectively catered to with the help of technology in use. Accurate pronunciation for example, which is generally seen as a great challenge for non-native speakers becomes very easy to learn and use through digital language labs.

The stimulations provided for accurate and relevant language context assists both the teachers and the learners to have fun-filled, yet effective teaching-learning opportunities.

The use of multimedia technology in creating language teaching software has allowed for better and more appealing teaching models to reach the classrooms. The teacher uses these as tools for teaching concepts and ensuring long term retention in the learners.

H/she is thus able to utilise her classroom time more efficiently to ensure the transference of learning from the content software to the learners. The role of teachers with the introduction of English language labs has thus shifted from being agents of passing off of information to being facilitators of actual language learning.

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VIDEO GAMES AND MODDING

For over twenty years there have been many attempts at designing educational software with all of them resulting in failure and thus a sense of hopelessness prevailed through much of the educational software community. Fortunately, the emergence of new models have made education and entertainment games stop competing with one another. If we look at today's entertainment video games, many will be nothing like the games prevalent in the late 90's when educators and game developers first teamed up in an attempt to insert artificial learning moments inside games. Back then, in-game worlds were relatively fixed and did not have much depth whatsoever, enabling the player only to play out the action of a pre-programmed story.

Today, nonetheless, according to Hansson (2005) games are presumably more open-ended, with many of them encouraging players to take an active role in the construction of the game itself through the use of various 'mod' tools. The term 'mod' means modification, in videogame terms 'mod' refers to a user made add-on to an already existing game.

However, mod tools provide full access to all the language data used in all the different international versions of a game. This allows curriculum designers to easily manipulate popular video games to create opportunities for foreign language learning. Most people play video games nowadays and everyone seems to work on a computer, so learning a foreign language through video games can be as viable as learning it through traditional classroom instruction.

Modding in ESL

There has been a recent increase in the number of game environments or engines that allow users to customize their gaming experiences by building and expanding game behavior. What is described here is the use of modifying, or modding, existing games as a means to learn English. A case of game modding in classroom settings is described to illustrate skills learned by students as a result of modding existing games, in this case the game which was modded is "The Sims 2".

Below are some examples of how you can mod a videogame to suit your needs as a teacher as well as your students'. These are two sample activities that have been put into practice by teachers. Simply by playing the modded version of the game (The Sims 2), students are gradually exposed to heavy amounts of reading practice in the foreign language. However, designing specific reading comprehension tasks helps the teacher assess learning better. Next, I describe an activity which can be performed using the previously mentioned game:

Step 1.

Students write a description of their favorite imaginary landscape in the foreign language including any number of specific details ("There is a pristine water creek, there are many leafy trees in which birds gather to chirp", "There is a family having a picnic nestled under the trees", etc).

Step 1.5.

The teacher helps correct any mistakes in the students' descriptions.

Step 2.

Students randomly exchange their descriptions with one another via the game.

Step 3.

Use the cheat mode to give students unlimited money.

Step 4.

Students avail themselves of a mod tool given by the teacher and create the landscape outlined in their description.

Step 4.5.

The teacher assesses how many of the specific details students correctly incorporated into their creations.

Step 5.

Students once again exchange their finished descriptions.

Step 6.

Students verbally describe to one another their creation. Students try to discern which landscape is the one they originally designed.

REFERENCES

- Butler-Pascoe, Mary Ellen. (1997). Technology and Second Language Learners. American Language Review, Volume 1, No. 3.
- Brett, Paul (2001) "Too many media in the multimedia? A study of the effects of combinations of media on a recall task," CALL in the 21st Century CD-ROM: IATEFL.
- Crawford, C. (2003). Interactive storytelling. In M.Wolf (Editor.) The video game theory reader New York, NY: Routledge.
- Din, F. (February, 2002). Playing Computer Games versus Better Learning. Paper presented at the Annual Conference of Eastern Educational Research Association, Retrieved on November 3rd, 2007, from the Eric Database. Reference number: ED 438 905
- Dornyei, Zoltan and Clement, Richard (2001) "Motivational Characteristics of Learning Different Target Languages: Results of a Nationwide Survey," in Motivation and Second Language Acquisition, ed. Zoltan Dornyei and Richard Schmidt (Honolulu: U Hawaii Press.)
- Gee, J.P (2005). What video games have to teach us about learning and literacy 1st Ed. New York, NY: Palgrave Macmillan.
- Gee, J.P (2007). Good videogames + good learning: Collected essays on videogames, learning and literacy. New York: Peter Lang Publishing
- Li, L. (1999). The delivery of foreign language instruction via the Internet. Published master's thesis, Sonoma State University, Windsor, CA.
- Prensky, M (2006) Don't Bother Me, Mom – I'm Learning: Minnesota: Paragon house publishers.
- Prensky, M (2004) Digital game-based learning. New York: McGraw Hill
- Reid, D. (2006, December). PS3 and XBOX360: The Last Great Consoles? Game Informer Magazine - p 78.

Enhancing the Scientific Temper Among Eighth Standard Students

Mr. K. Ramesh Kumar*

INTRODUCTION

“The aim of education should be to teach us rather how to think, than what to think—rather to improve our minds, so as to enable us to think for ourselves, than to load the memory with the thoughts of other men.”

~John Dewey

Science is perhaps unique as a subject in the curriculum of schools all over the world. This uniqueness results from the variety of materials and experiments necessary for its effective teaching. Most other subjects can be learned if ordinary tools are available, such as pencil, paper, blackboard, textbooks and a few supplementary aids.

These are also essential for the teaching of science but, if they are the only tools, science becomes a dull and uninteresting subject. If it is to be learned effectively science must be experienced. It must be learned and not learned about. Science is so close to the life of every individual that there is no need to confine its study to the reading of textbooks or listening to lectures. Wherever you may go in the world, science is an intimate part of the environment—living things, the earth, the sky, air and water, heat and light and forces such as gravity.

No teacher need ever be without first-hand materials for the study of science. Good science teaching must be based on observation and experiment. There can be no substitute for these. But performing experiments and learning to make close observations require special facilities these are lacking in many parts of the world, especially at the elementary and early secondary levels.

According to NCERT At the primary stage the child should be engaged in joyfully exploring the world around and harmonizing with it. The objectives at this stage are to nurture the curiosity of the child about the world (natural environment, artifacts and people), to have the child engage in exploratory and hands on activities to acquire the basic cognitive and psychomotor skills through observation, classification, inference, etc.; to emphasize design and fabrication, estimation and measurement as a prelude to development of technological and quantitative skills of later stages; and to develop the basic language skills: speaking, reading and writing not only for science but also through science. Science and social science should be integrated as ‘Environmental Studies’ as at present, with health as an important component. Throughout the primary stage, there should be no formal periodic tests, no awarding of grades or marks, and no detention.

At the upper primary stage the child should be engaged in learning principles of science through familiar experiences, working with hands to design simple technological units and modules (e.g. designing and making a working model of a windmill to lift weights) and continuing to learn more on environment and health through activities and surveys. Scientific concepts are to be arrived at mainly from activities and experiments. Science content at this stage is not to be regarded as a diluted version of secondary school science. Group activity, discussions with peers and teachers, surveys, organization of data and their display through exhibitions, etc. in schools and neighborhood are to be an important component of pedagogy. There should be continuous as well as periodic assessment

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(unit tests, term end tests). The system of 'direct' grades should be adopted. There should be no detention. Every child who attends eight years of school should be eligible to enter Class IX.

LEARNING BY DOING

Learning by Doing works by it striking at the heart of the basic memory processes upon which humans rely. Human memory is based in scripts and the generalization of scripts. We learn how to do things and then learn how what we have learned is wrong and right. We learn when our rules apply and when they must be modified. We learn when our rules can be generalized and when to make note of exceptions. We learn when our rules are domain bound or when they can be used independent of domain.

We learn all this by doing, by constantly having new experiences and attempting to integrate those experiences, or more accurately the memory of those experiences, into our existing memory structures. This integration process relies upon new data provided by experience. When new data is simply told to us, we don't know where in memory to put it because we don't really understand the use of that data. When we experience the data ourselves, we also experience, at the same time, other sights, sensations, feelings, remembrances of goals achieved and goals hoped for and so on. In other words, we have enough context to help us to know how to characterize what we have learned well enough to find a place for it in memory and to begin the generalization and exception process.

It follows, then, that what we learn when we Learn by Doing will be details of how to accomplish something in a particular domain, strategies that are independent of domain (process participation strategies); and the cases that stand alone as exceptions awaiting possible future integration into the memory system. Learning by Doing works because it impacts all these important memory issues.

SCIENCE TEACHING AND LABORATORY

A hallmark of science is that it generates theories and laws that must be consistent with observations. Much of the evidence from these observations is collected during laboratory investigations. The laboratory has been given a central and distinctive role in science education, and science educators have suggested that there are rich benefits in learning from using laboratory activities. A school laboratory investigation is defined as an experience in the laboratory, classroom, or the field that provides students with opportunities to interact directly with natural phenomena or with data collected by others using tools, materials, data collection techniques, and models. Throughout the process, students should have opportunities to design investigations, engage in scientific reasoning, manipulate equipment, record data, analyze results, and discuss their findings. These skills and knowledge, fostered by laboratory investigations, are an important part of inquiry—the process of asking questions and conducting experiments as a way to understand the natural world. For science to be taught properly and effectively, labs must be an integral part of the science curriculum.

NEED FOR THE STUDY

District Institute of Education and Training in all districts functioning under State Council of Education and Training plays vital role in improving quality of school education. In connection with that all the faculties from DIET had a visit to schools to give academic support. During those school visits investigator find student have only theoretical knowledge in science subject. They are unable to apply science concepts in their daily life. They were not familiar with even simple scientific laboratory equipments. They were even struggling to name simple laboratory equipments. So it is necessary to do a research to overcome the difficulties using suitable innovative methods to motivate students towards understanding scientific concepts through practical learning.

IDENTIFICATION OF THE PROBLEM

The problem was identified during school visit by the investigator during the observation. From the informal talk with students and teachers the researcher observed and identified that most of the students

- Doesn't have long term memory
- Having only theoretical knowledge
- Doesn't have practical knowledge
- Having phobia towards experiments
- They find difficulty in using lab materials.
- Doesn't understand the concepts and its application.
- Unable to recognize laboratory equipments and their usage.
- Not familiar with does and don'ts of laboratory.

DEFINITION OF THE PROBLEM

Most of the students in class eight were memorizing science concepts without proper understanding. During teaching teacher demonstrates some experiments but they do not have scope for practical experience. Even though children are more interested in doing experiments, unavailability of suitable laboratory materials they are unable to have do experiments in the classroom. Since science practical knowledge useful for the students to understand the concepts elaborately and deeply this helps the students to improve their long term memory. Whereas learning through rote memory leads to short term memory which affects the achievement of children. They are struggling to answer application oriented questions in science.

PROBABLE CAUSES

1. Student might not have proper laboratory facility.
2. Teachers might not have time to give practical experience.
3. They may not have separate laboratory manual.
4. Sufficient simplified experiments might not be provided to the students.
5. They may not be encouraged to do learning by doing.

OBJECTIVES

Following are the objectives of this study. This study aimed

- (i) To find out laboratory skill of eighth standard students.
- (ii) To find out the factors that hinders the long term memory.
- (iii) To prepare specialised laboratory manual for the students of eighth standard.
- (iv) To give hands on practical experience in simplified laboratory.
- (v) To suggest various strategies for improving practical experience of students.

LIMITATION

Following are the limitations of this study

- (i) This study is limited to eighth standard students only.
- (ii) This study is limited to P.U.M.S Kondappanaikanpatti School in Rural block of Salem district only.
- (iii) This study is limited to science subject only.

HYPOTHESIS

Following are the hypothesis formulated for this research

1. There is no difference in pre test and post test scores.
2. There is no difference in pre test and post test scores of boys and girls students.

SAMPLE

Students of eighth standard from P.U.M.S Kondappanaikanpatti school of Rural block in Salem District have been selected as sample.

SAMPLE SELECTION

All the students including sixteen boys and six girls of eighth standard were selected from P.U.M.S Kondappanaikanpatti School in Rural block Salem for the study.

TOOL

To obtain required information needed for this study Pre test and Post test has been conducted by using following tool.

Pre test – Treatment - Post test.

METHODOLOGY

Pre Test

Pre test were conducted before the treatment. All the students in eighth standard were examined with pre test. Pre- test questionnaire was used which consists of twenty multiple choice questions. Students were properly instructed and made to sit in rows. They wrote the test under proper invigilation by the researcher and co-researcher.



Treatment

After pre test all the students were selected for treatment. The treatment consists of following aspects

- Conducting workshop for Preparing Specialized Lab manual.
- Introducing laboratory articles to students.
- Explaining the usage of lab equipments.
- Educating Lab Safety measures – Dos and Don'ts
- Demonstrating experiments to students.
- Hands on practice – Doing experiments in groups.

Conducting workshop for Preparing Specialized Lab manual

For eighth standard science there is no separate laboratory manual available. So the researcher organized a workshop for preparing specialized lab manual for eighth standard science. The manual was prepared by keeping following points in mind.

The manual should

- be simple to do experiments.
- contain limited number of experiments.
- cover Physics, Chemistry, Botany and Zoology.
- be applicable for first and second term syllabus of eighth standard science.
- be practically possible to do in classroom.
- be in Tamil and should have scope to record the observations.

Introducing laboratory equipments to students

Among the great ironies of our culture is that science, a fundamentally open-ended and exploratory activity, is frequently taught so much as a body of “facts” that many students become estranged from science, and most are deprived of an opportunity to have experiences which strengthen and reinforce their own inclination to experiment, question, and explore. .. both the world outside and themselves. Materials presented explained were aimed at finding ways to make science education, and education in general, more exploratory, and more fun. So it is necessary to familiarize the students towards laboratory equipments.

There are many laboratory equipments available for science teaching. All of them are not needed in eighth standard level. So equipments like test tube, test tube holder, test tube stand, beaker, glass rod, spirit lamp, battery, connecting wire, thermo meter, magnifying lenses were selected. First the researcher explains every laboratory article with its name and their usage in laboratory. Then students were given chance to touch, handle and use those articles. Students with interest and enthusiasm visualised, touched and became familiar with them by utilizing it.

For example Battery and connecting wire were introduced to them by explaining its property. Then students were allowed made a simple circuit with them.



Lab Safety – An important aspect

Experimenting in the science lab is safe if we are careful. Each student must assume responsibility for the safety of themselves and those around them. The following safety rules should help guide the students in keeping their lab a safe place to work. So students were educated with following instructions.

- The science lab is used for serious work only. No horseplay will be permitted.
- Do not perform unauthorized experiments. Always obtain your teacher's permission before doing any experiments.
- Study your lab experiment carefully. If you are in doubt about any procedure, ask your teacher.
- Report all accidents, injuries or incorrect procedures to your teacher at once.
- If you spill acid or other chemical, wash with water or ask your teacher for help.
- Never taste any chemical or transfer chemicals by mouth pipette.
- Never eat or drink in the lab.
- Never inhale chemicals.
- Keep combustible materials away from open flames.
- If glass is broken, call your teacher for help. Do not handle broken glass with your hands.
- Always listen carefully and follow teacher's instruction.

DEMONSTRATION

Demonstrations are used to offer effective hands-on, inquiry-based learning opportunities in laboratory. When we are using the demonstration in the classroom, the teacher being taught, performs the tasks step-by-step so that the learner will eventually be able to complete the same task independently. The eventual goal is for learners to not only duplicate the task, but to recognize how to problem-solve when unexpected obstacles or problems arise. After performing the demonstration, the teacher's role becomes supporting students in their attempts, providing guidance and feedback, and offering suggestions for alternative approaches.

3-Step Demonstration Technique

This is the heart of effective demonstrations for student achievement of a task or skill.

(1) *Researcher does and tells.*

The researcher performed the experiment with needed skill while verbalizing the steps and key points. For example the researcher demonstrated Electroplating experiment. First he explained the principle of the experiment then he list out material needed and displayed them in the table for that experiment. Then he performed the experiment with proper explanation before students. Students were instructed to observe carefully.



(2) Student does and the Researcher tells.

During the second step, student volunteers forward to repeat the skill. The student was instructed to verbalize the steps as he performs the skill. If the student was uncomfortable with talking, the researcher assists while they perform the steps. The remaining students had the chance to observe the experiment once again so they were familiar with experiments. For example Student S.Yoga Shree Vignesh repeated the electroplating experiment which was demonstrated by the researcher.

**(3) All students do (practice) under teacher supervision.**

During the third step, all the students were allowed to work on the task while the researcher closely monitors their progress. This provides the opportunity to see if students can replicate the process of performing the task. At the end of this step students were evaluated by asking question to know their understanding and to correct, clarify them if they have doubt. After completing Researcher demonstration and Student demonstration of the experiment electroplating students were allowed to ask their doubts. Finally they were examined with oral questions.

**OBSERVATION AND RECORDING**

Observation consists of receiving knowledge of the outside world through our senses, or recording information using scientific tools and instruments. Any data recorded during an experiment can be called an observation. Observation and recording are most important aspects for every laboratory work. Students were trained to perform keen observation and they were given practice to record their observation.

Students were provided with Lab Manual which gives proper direction to perform experiment and it also guides the students what should be observed and how it should be recorded in the manual. Even though the researcher demonstrates the method of observation and recording procedure for each experiment. For example students performed keen observation while demonstrating the experiment Electro Plating by following researchers instruction. Then they recorded their observation in the Blackboard.



HANDS ON PRACTICE – DOING EXPERIMENTS IN GROUPS

Students were provided with Lab manual and they were instructed to read the experiments carefully. They were asked to clarify their doubts with the researcher.



Then students were grouped in to five Group A, B, C, D and E. In each Group there were four students except D and E in which there were six students. Every day one period was allotted to do practical. The practical experiments were conducted in two cycles. Each cycle was planned to complete in five days and in each cycle students will complete five experiments.

Cycle I

In this cycle each group were allotted with an experiment and by rotation students completed all the five experiments in five days..

- Group A Electro plating
- Group B Conducting power of Liquids
- Group C Differentiating Monocot and Dicot Plants
- Group D Endocrine Glands
- Group E Types of Joints



Cycle II

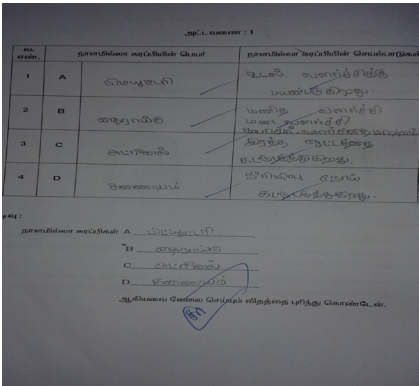
As in the Cycle I, students were allotted to perform remaining five experiments and they completed them in five days in rotation.

- Group A Fungal Bread – Structure of Fungi
- Group B Measurement of Temperature and its Conversion
- Group C Properties of Compounds
- Group D Preparation of Compounds
- Group E Dicot Stem Cross-section



RECORDING THE OBSERVATION

Recording is the most important aspect in every practical experiment. Students were made to record their observations then and there immediately completing each experiment. the researcher corrected their observation every day after completing practical class.



Post Test

After the treatment in order to evaluate the effectiveness of the methodology adopted post test were conducted. The same procedure which was followed in the pre test was repeated in the post test. All the students in eighth standard were examined. Students were instructed properly and arranged in rows to write the Post test under the supervision of Researcher and the co-researcher. The scores were taken for analysis.



Pre Test and Post Test Scores

Sample no	Pre Test	Post Test
1	7	20
2	9	19
3	8	18
4	5	20

Sample no	Pre Test	Post Test
5	12	20
6	10	19
7	5	18
8	7	20
9	6	19
10	9	19
11	4	20
12	8	19
13	8	19
14	5	18
15	8	19
16	3	19
17	10	20
18	7	20
19	6	20
20	7	19
21	6	20
22	6	20

DATA ANALYSIS AND INTERPRETATION

The test scores collected from the Pre test and Post test were tabulated and it was taken for analyzing the hypothesis.

Hypothesis 1

There is no difference in pre test and post test scores.

To evaluate this hypothesis Pre test scores and Post test scores tabulated in annexure were analyzed. Average Mean scores for Pre test and Post test were calculated and tabulated as follows.

Table-1: Comparison of Pre Test and Post Test scores

	Pre Test	Post Test
Average Mean Score	7.09	19.32

The above table reveals that Average mean scores of post test are higher than pre test scores. So the hypothesis is rejected and there is a difference in the pre and post test scores. The result concluded that student improved in their achievement and in their laboratory skill after the treatment.

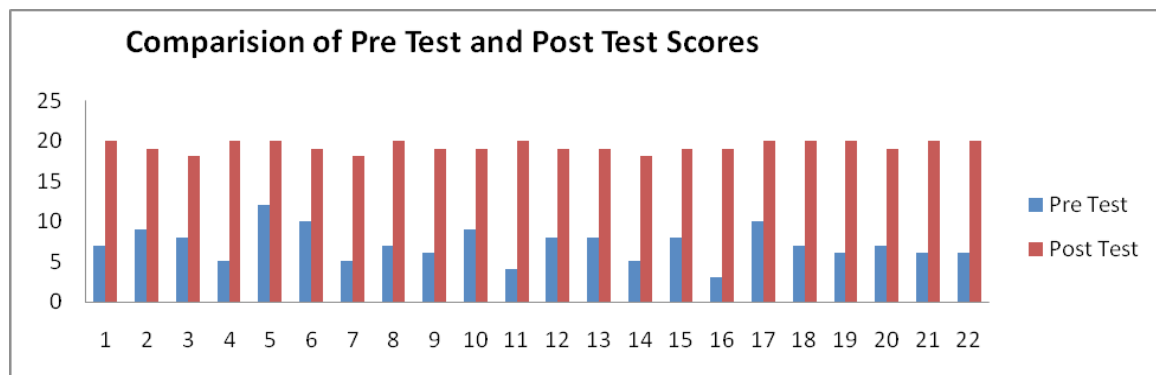


Figure 1: Comparison of Pre Test and Post Test scores

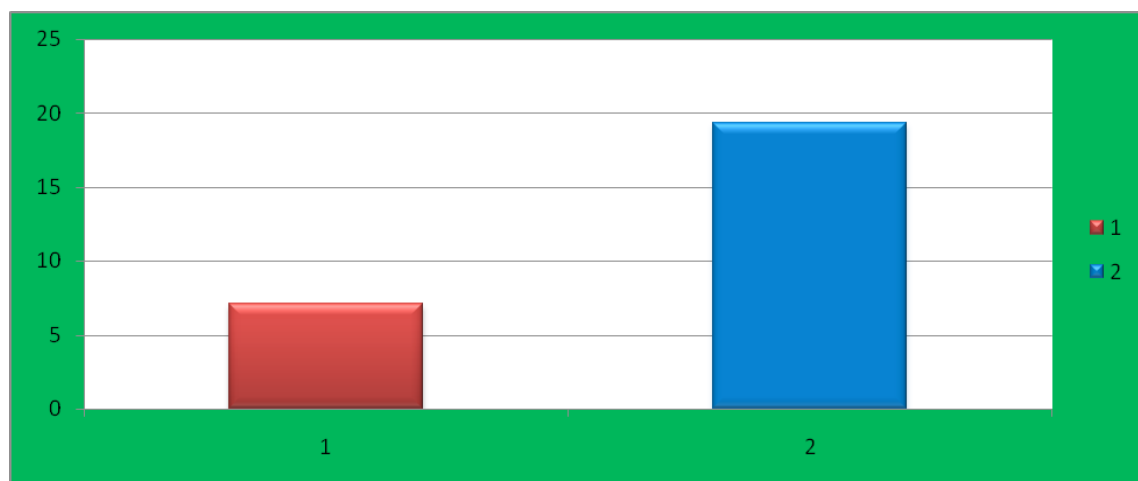


Figure 2: Comparison of Pre Test and Post Test Mean scores.

Hypothesis 2

There is no difference in pre test and post test scores of boys and girls students.

This hypothesis was tested with the Boys and Girls Post test Scores. Average Mean scores of Boys and Girls were calculated separately for post test and it was compared and tabulated as follows.

Table-2: Comparison of Boys and Girls Post Test Mean scores.

	Boys	Girls
Post Test Mean Score	19.125	19.833

The above table reveals that Girls percentage scores are higher than Boys average mean score. Girls average mean score (19.833) is higher than Boys average mean score (19.125) by 0.708. So the hypothesis is rejected and there is a difference in the Boys and Girls scores.

The result reveals that Girls gained more achievement than Boys after the treatment.

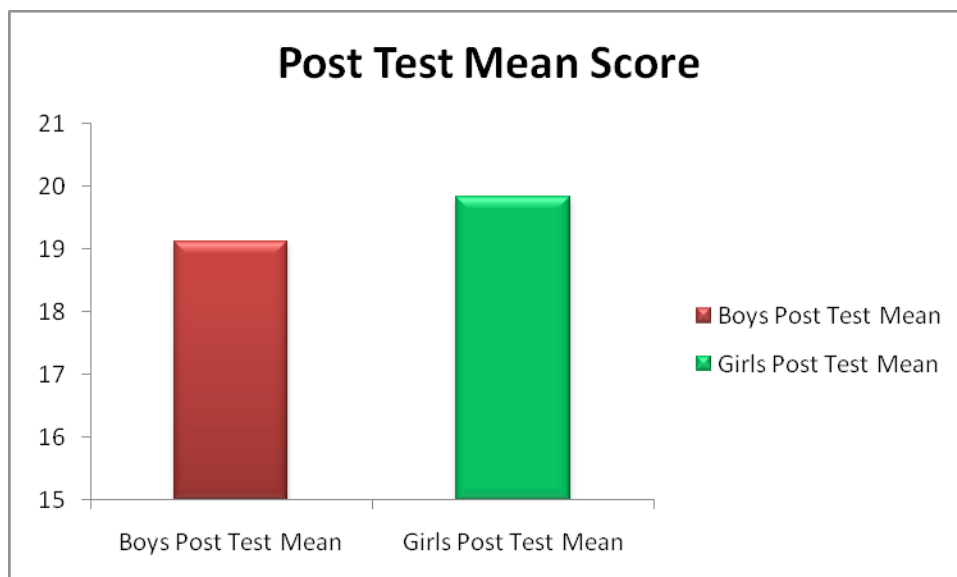


Figure 3: Comparison of Boys and Girls Post Test Mean scores.

RESULTS AND FINDINGS

The researcher finds out following results from the study

1. Students were eagerly involved in doing experiments.
2. Students were not aware of basic laboratory equipments.
3. The phobia towards handling science equipments were removed by motivation and practice.
4. Students unaware of Laboratory safety which is essential for doing science experiments.
5. No separate science Laboratory Manual was available for eighth standard. newly developed Laboratory Manual is very useful for doing experiments.
6. There is no separate period for doing science experiments at upper primary stage.
7. Demonstration was essential for making experiments familiar to students.
8. Students were motivated through the three stage Demonstration method.
9. Doing experiments in group increase students social behavior.
10. Hands on practice also improve manipulation skill and observation skill.
11. Recording in Laboratory Manual enhance recording ability of observed thinks.
12. Students were able to construct their own simplified experiments after actively involving in experiments.
13. Average mean scores of post test are higher than pre test scores. This reveals that students improved in their achievement and in their laboratory skill after the treatment.
14. The Girls percentage scores are higher than Boys percentage scores in post test. This reflects that Girls gained more achievement than Boys after the treatment.
15. Learning by doing enhances student's long term memory.
16. As a whole providing opportunity to do experiments at eighth standard level improves the overall development of personality among students.

EDUCATIONAL IMPLICATIONS

Learning by doing is the base for the academic achievement. So it will be improved among the students by adopting following strategies:

1. Ample scope should be given to Learning by Doing in science subject.
2. Every Upper Primary School should be provided with Laboratory facility.
3. Separate Laboratory Manual for eighth standard should be prepared.
4. Doing Experiments should be incorrigible among students by allocating separate period for performing experiments in Laboratory for science subject.
5. Upper Primary curriculum can be restructured with inclusion of Laboratory Work in it.

Enhancing the Effectiveness of Teaching Among Primary School Teachers Using Innovative Teaching Methods

Dr. E. Maanhvizhi*

“A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame.”

–Tagore

Learning is a life-long process. There is more and more of advancements that is taking place in each and every field. Updating of the content and methodology is foremost important task of a teacher. Hence, teacher should decide not to teach unless he or she is determined to learn, because a true teacher is a student all through his life. In-service training is most essential for the professional growth of the teacher. He needs to renovate his experience, refresh his knowledge, develop a wider outlook, benefit by the experiences of others, acquire new information and hence reoriented himself periodically. The hall mark of a good teacher is that he is himself always learning and always developing his knowledge and understanding of his children. In short, a teacher-should be a person who, because of his attitude to knowledge, to ideas, to his fellows and to life generally is better educated today than he was yesterday and will; tomorrow better educated than he is today.

IN-SERVICE TEACHER EDUCATION: CONCEPT AND NEED

There is a need of some sort of provision which may make the teachers up-to-date with respect to the knowledge of his subject of teaching, methods and techniques and innovative ideas in each sphere of his academic life. For the sake of this reason, the idea of in-service education has emerged. In-service education may be defined as continuing education of teachers and other educators which commences after initial professional education is over, and which lead to the improvement of professional competence of education all throughout their careers. In other words, in-service education is designed to promote the continuous development of profession by providing of the teacher after he enters the teaching profession by providing planned and systematic instruction within an educational setting. The term in-service education is commonly used to denote planned efforts to promote the professional growth and development of teachers. In-service education includes all those courses and activities in which a serving teacher may participate for the purpose of extending his professional knowledge, interest or skill.

DEFINITION OF IN-SERVICE TEACHER EDUCATION

In-service teacher education has variously been defined by different Educational Theoreticians. According to Buch (1968), “In-service education is a programme of activities aiming at the continuing growth of teachers and educational personnel in-service”. It may be regarded as the sponsoring and pursuing of activities which will bring new insight, growth, understanding, and co-operative practices to the members of teaching profession and arouse them to take action to improve themselves’ in

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every possible manner. In other words, it may be regarded as including all activities and experiences participated by the educational personnel in education during their services. These activities are planned and organized by various agencies to help the educators to improve as persons and to mature as professionals.

Siddiqui (1991) defined In-service Teacher Education as “all those activities and courses which aim at enhancing and strengthening the professional knowledge, interest and skills of serving teachers.”

NEED FOR THE STUDY

The present era is changing into new era very rapidly. Telecommunication, computer and other kinds of information technology have turned the whole world into a global village. Information about each and every event taking place in any part of country reaches other parts of that country and the rest of the world in a short time. Scientific and technological influences have brought about many significant changes in the society as well as in the world. Today, one must also think in terms of changes in values, perception, political interference in educational planning, changes in educational needs, cultural changes, and changes in teachers' role expectation by the society. All these changes require more and more knowledge to be imparted effectively to more and more people in less and less time. The sole responsibility lies on the shoulders of teachers. It is only teachers who can mould the character of society according to the societal needs of the day.

In the view of the above, the teachers must have desired theoretical knowledge, skill orientation, linguistic ability, pedagogical skills, management skill, accountability, impressive personality etc. For this, teachers have to be trained and their preparation depends on the teacher education curriculum. The imparting of knowledge for the teachers is to be done in an innovative method which will make the teacher not to miss his valuable teaching learning time. The innovative teaching training method should be a self pacing one and one that will not disturb the classroom time of the teachers. Hence training through an innovative teaching method, which is a online virtual classroom has been designed.

During the school visit by the investigator, the teachers handling English medium were not able to converse with the students in English. The untrained teachers who are working in private schools are able to talk to their students in English without hesitation even when they not right. Hence the investigator has chosen to expose the teachers with more English conversations in an innovative approach.

STATEMENT OF THE PROBLEM

The present action research is titled as “**ENHANCING THE EFFECTIVENESS OF TEACHING AMONG PRIMARY SCHOOL TEACHERS USING INNOVATIVE TEACHING METHODS.**”

It is hoped that this study will analyse all the methods to rectify the difficulties experienced by the teachers in attending the in-service training programmes.

OBJECTIVES OF THE STUDY

Following are the prime objectives of the study :

1. To empower the teachers with new technology of teaching learning process.
2. To help the teachers experience the activity designed by the investigator and get hands on experience through online mode in self paced manner.
3. To encourage the teachers to reflect the experiences got from the activities in their classroom.
4. To assist teachers apply what was learnt to similar or new situations.

PROBABLE CAUSES OF THE PROBLEM

Following are the probable causes for the problem.

1. Teachers might have not been exposed to situations where they can listen and talk in English.
2. Teachers might have not shown interest in speaking in English.
3. Teachers might have not got sufficient training in speaking in English.

HYPOTHESIS

1. There is a significant difference between the pre-test scores and post test scores of the sample.

METHOD'S CHOICE FOR TREATMENT

There are several innovative methods available. Different exponents have used different methods to improve the status of education in an innovative method. No particular method is superior to other methods. The method adopted by a teacher depends on his / her interest, experience, ability to gain co-operation of the learners, intellectual capacity of learners. Hence, it remains for the teacher to choose one or more effective methods for a particular group of the learner in a particular situation. But whatever procedure he adopts, must encourage activate participation of the learner.

INNOVATIVE METHODOLOGY ADOPTED FOR TREATMENT

Methodology is the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of the methods and principles associated with a branch of knowledge. A teaching method comprises the principles and methods used for instruction to be implemented by the teachers to achieve the desired learning in students. These strategies are determined partly on subject matter to be taught and partly by the nature of learner. For a particular teaching method to be appropriate and efficient it has to be in relation with the characteristic of the learner and the type of learning it is supposed to bring about. There are various innovative methods in for giving training like video conferencing, smart virtual classes and soon. More over nature of the content determines the method of procedure to be following for the problem chosen for this study 'CLASSROOM – ONLINE TRAINING', is used to expose and train the teachers in an innovative method.

ADVANTAGE OF ONLINE TRAINING

Online training mode can be adopted for teachers to give various kind of professional development programmes for following reasons:

1. **Flexibility:** The training process that is given for the teachers through virtual mode should be flexible for the teachers. Online learning encourages this by offering a variety of schedules and times for asynchronous and synchronous learning. Courses can be taken from the comfort of one's own home, or during time off from work in a self paced manner.
2. **Continuous Reinforcement of Content and Skills:** Unlike one-day workshops, online courses offer on-going opportunities to learn new content and skills, thus providing the time for educators to receive continuous support to help master specific skills.

3. **Real World Application of Theory:** Through the use of multimedia - including chat rooms, video, and interactivity – educators can begin to see how particular educational theories can come to life in the classroom. By demonstrating specific practices through the use of video, theory can come to life.
4. **Save Time:** Learners can spend more time on learning concepts than traveling to class when they are given opportunity to learn from their own place.

METHODOLOGY

The methodology adopted for this study is **Experimental method**. A pre test was conducted after which treatment was given and post test was conducted.

SAMPLE

15 teachers working in primary schools namely PUPS, Cinthamaniur, Aranganoor, Chinna Aranganoor of Mechari block which has English medium was taken as sample of this study.

TOOL USED

To obtain the required information needed for the study a questionnaire form of research tool has been used.

DESCRIPTION OF THE QUESTIONNAIRE

To find out the difficulties faced by the teachers in handling English medium classes a questionnaire has been developed.

The questionnaire is simple one, which aimed to find the difficulties faced by the teachers in handling English medium classes. The questionnaire consists of 15 questions. The responses are to be given in three point scale many times, some times and never. The questionnaire consists of both positive and negative statements. The positive statements are scored

The questionnaire has helped the investigator to find out actual level of teachers based on the response. The investigator was able to plan the methodology for training and exposing the teachers with more English speaking situations.

The same questionnaire was used in both the pre-test and post-test to find out the difference in the achievement level of teachers in to converse freely in the classroom.

COLLECTION OF DATA

The data were collected by conducting the pre-test and post test from the teachers of the select teachers working in. The questionnaire developed by the investigator was used as a tool to find out their responses. The investigator had personally visited the school under the study and made observation. The questionnaire was administered to test the hypothesis.

TREATMENT

Pre-test scores reveal that teachers have problem in fluently speaking in English to the students. To overcome that problem following activities had been given for the teachers through GOOGLE CLASSROOM application.

Intervention was given for 5 days through GOOGLE CLASSROOM and also the teachers were supplemented with modules for further reading and practice.

The sample of the study were exposed to repeated files in the form of audio, video and documents that would help them to practice English speaking at self paced manner.

Post-Test

After the treatment was given to the samples, their achievement level was tested with the help of post-test. For the post-test the same questionnaire, which was used for the pre-test was used. Post test was administered to the teachers personally by the investigator and the scores were used for the data analysis.

Following tables-1 and 2 shows the pretest and post test scores of the sample.

TABLE – 1		TABLE – 2	
PRE – TEST SCORES		POST–TEST SCORES	
S.No	Sample Marks	S.No	Sample Marks
1	32	1	94
2	28	2	88
3	36	3	92
4	24	4	90
5	40	5	86
6	26	6	96
7	34	7	90
8	46	8	84
9	24	9	92
10	40	10	98
11	30	11	86
12	27	12	92
13	33	13	90
14	29	14	88
15	41	15	98
TOTAL : 490		Total : 1364	
Mean : 32.67		Mean : 90.93	

The data collected through the pre-test and post test for 15 teachers working in Mechari block of Salem district had been analyzed and interpreted

The mean scores obtained by the teachers in the pre-test and post test was calculated. Standard deviation and 't' test were calculated so as to test the hypothesis to find out significance of difference between the mean scores of teachers in pre-test and post test, which is the aim of the study.

HYPOTHESIS TESTING

The significance of mean difference between group were computed using critical ratios for mean score of different variables

Hypotheses framed were tested in the section by applying appropriate statistical technique. To test whether two groups differ significantly in mean difference, the following formula was followed.

$$t = \frac{\text{Difference between the means}}{\sqrt{(\sigma_1^2 / N_1) + (\sigma_2^2 / N_2)}}$$

Where σ_1 and σ_2 are the standard deviations of the two samples N_1 and N_2 are the sizes of two samples. The 't' was studied for its significance at various levels. The degrees of freedom were total number of cases minus two.

TESTING OF HYPOTHESIS

Hypothesis: 1

There is significant difference between the pre-test scores and post-test scores.

To test the above said hypothesis Pre-test (32.67) and Post-test (90.93) mean scores were calculated. By Calculating standard deviation value of t is arrived which is 2.0612. Table 3 shows these values.

Table-3: Difference between the pre-test scores and post test scores

VARIABLES	N	MEAN	S.D	t	Significant difference at 0.05 and 0.01 level
PRE TEST	15	32.67	6.747	28.281	
POST TEST	15	90.93	4.267		

The pre-test and post test scores are compared. The 't' value is greater than the table values at 0.05 and 0.01 level respectively. The result shows that there exists significant difference in the pre-test and post-test scores.

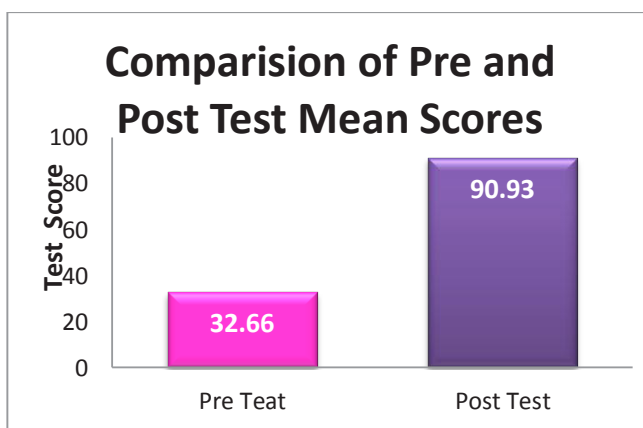


FIGURE-4: Bar diagram showing the difference between the pre-test and post-test mean scores

There exists significant in the pre-test and post test scores, in which samples scored more marks in post test than the pre test.

FINDINGS AND RESULTS

The investigator found the following results from the study:

1. Samples have very low achievement in the pre-test.
2. Various methods adopted created interest among samples.
3. Samples have good achievement in the post test.
4. Samples got exposure to English speaking.
5. Peer group discussion in online mode is very useful to attain proficiency over the language.
6. The activities designed in online mode helps and motivates the teachers to get mastery.
7. There is a significant difference between the mean scores of pre-test and post test.
8. All the samples have shown the expected improvement in usage of English language with the students which shows that the training that was given in the online mode is effective.
9. The mean scores of the students in post test (90.63) is comparatively higher than pre-test (32.67). It is concluded that the sample acquired the desired exposure over speaking English. The online mode of training created good results among the teachers.

SUGGESTIONS AND RECOMMENDATIONS

Online training when given in online mode will help the teachers to improve their efficiency in a self paced manner. When the teachers are given training in online mode there is reduction in the time, cost and man power along with the devotion of the entire time of the teachers to teaching learning process.

The teachers can spend all the time for the students effectively. The materials provided to the teachers will be permanently stored in the cloud storage which will help the teachers to retrieve and use it when needed.

This type of training can also be given to various other topics for the teachers which will improve the efficiency of the teachers.

This training can be taken to all the schools of Salem district which will benefit the teachers of the district in large.

REFERENCES

1. Aktaar Siddiqui, In service Teacher Education, Ashish Publishing House, New Delhi, 1991.
2. M. B. Buch, M. N. Palsane, In-service Education Issue 1 of M. B. Patel publication series, National Publishing House, 1968.
3. Bart Rienties, Natasa Brouwer and Simon Lygo-Baker (2013), The effects of online professional development on higher education teachers' beliefs and intentions towards learning facilitation and technology, *Teaching and Teacher Education*, vol-29. <https://doi.org/10.1016/j.tate.2012.09.002>.
4. Theodore J. Kopcha (2012), Teachers' perceptions of the barriers to technology integration and practices with technology under situated professional development, *Computers & Education*, Vol-59,4, Pg. 1109-1121. <https://doi.org/10.1016/j.compedu.2012.05.014>.
5. Tuan Nguyen (2015) The Effectiveness of Online Learning: Beyond No Significant Difference and Future Horizons, *MERLOT Journal of Online Learning and Teaching*, Vol. 11-2, Pg 309-3019.
6. Bartley, S. J., & Golek, J. H. (2004). Evaluating the Cost Effectiveness of Online and Face-to-Face Instruction. *Educational Technology & Society*, 7(4), 167–175.

Impact of Socio-Economic Conditions of Khasi Tribals on Information & Communication Technology (ICT) Usage in Changing Lives in Meghalaya

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ABSTRACT

Technology and skills play critical and complementary roles in increasing economic growth and productivity. Since the last decades of the 21st Century, technological change has increased both in pace and skill. From the dawn of Globalization, the ICT revolution are rapidly raising the demand for, and changing the lives of the people by its usage. The integration of ICT in everyday life has been fuelled by technological advances, economic investment, social and cultural changes. The study is of significance as it is first of its kind in Meghalaya. The usage of ICT by tribal women groups need to be studied as it is an indicator of empowerment of women in Meghalaya context. The present Indian government is presently taking policy measures for digital India. The findings of the study will enable the policy makers to see how digital communication can penetrate in the rural masses residing in hilly areas and to enhance their quality of life. The main objective of the study is to understand the socio-economic background of Tribal Women living in West Khasi Hills and South West Khasi Hills Districts of Meghalaya. The present study is based on a total of 760 respondents (workers and non-workers tribal women) distributed equally among the three tribal sub-groups i.e Maram, Lyngam and Garo living in West Khasi and South West Khasi Hills District of Meghalaya on the basis of multi stage sampling.

Keywords: Information and Communication Technology, Non-workers, Cultivator, Agricultural Labourer, Household Industry Worker, Marginal Workers:

INTRODUCTION

Technology and skills play critical and complementary roles in increasing economic growth and productivity. Since the last decades of the 21st Century, technological change has increased both in pace and skill. From the dawn of Globalization, the ICT revolution are rapidly raising the demand for, and changing the lives of the people by its usage. However new competencies are required for participating in the information society and knowledge economy includes e-literacy, technological literacy, communication skills, problem solving, critical thinking, self-learning, team work, creativity and initiative. With accelerated technological change, new channels for knowledge and learning has come into foreplay as a result of which learning has become a lifelong imperative. A culture of openness and continuous learning is necessary for an inclusive information society and a sustainable knowledge economy. A lifelong learning system covers learning from formal as well as informal sources. Much of the learning has to occur through networks that cut across academic, business, local and global communities. Digital communication and the recent tools of social networking and collaboration technologies further enable the creation and dynamism of these learning systems.

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Researchers suggest that ICT has the potential to fundamentally transform how and what people learn throughout their lives. Learning is an active process in which people construct new understandings of the world around them through exploration, experimentation and discussion. ICT is more than a tool to access and transmit information but more broadly, a new medium through which people can simulate, create, express, and interact. In this case computers can be seen as a universal construction material, greatly expanding what people can create and what they can learn in the process (Shirali & Shahreza, 2007). In today's world, the most prevalent ICT device is the mobile phone, with almost 3.5 billion users around the world (Melhem and Tandon, 2009). Further it is estimated that there are 4.6 million Indian internet users are availing internet banking services as of 2007 (Kothari, 2007). In India, slowly but steadily, the Indian customer is moving towards Internet banking. But they are very concern about security and privacy of internet banking (Malhotra and Singh, 2009).

The diffusion of ICT (Information and Communication Technology) has seen a remarkable growth in the past decade across the globe. The integration of ICT in everyday life has been fuelled by technological advances, economic investment, social and cultural changes. Based on the most recent research and international observations, ICT can bring huge benefits to healthcare delivery by improving access, bringing efficiency, widening reach and reducing cost (Bhattacharyya, et al, 2010). In today's fast-paced high-tech age, the people are exposed to a variety of information and communication technology (ICT) based on various sources and networks for related information. Many studies found that despite the growth of internet usage among young consumers, still television is the advertising medium with most exposure compared to other traditional and non-conventional mediums (Soofi, 2012).

Studies show that the women's participation in economic development through microloans to build small and medium enterprises has been well documented and publicized. Women's business incubators are emerging through the developing world in recognition of the need to provide business opportunities for women as well as men to enhance, to grow and to quicken the pace of economic development. The full scale and power of many of these small and medium enterprises are yet to be fully realized, but there is a growing awareness of women's ability to use ICTs to expand their work across regions and around the world (Melhem and Tandon, 2009).

Traditional and modern ICTs can be used concurrently to speed up the circulation of information. It can be tools that assist them to optimize their production and marketing plans. Use of ICTs enables to promote the expansion of local markets, and provide direct access for women producers to international markets and productive resources. It provides access to a range of information on likely markets planning, management techniques. Thus, It is a powerful tool in production and marketing system. ICT affords inexpensive access to vast amount of information and networks, access to market information and the ability to directly access lucrative markets. Tele centres have been established in villages where appropriate rural female farmers can tap these resources and access information using new ICTs, such as e-mail, the World Wide Web, electronic networks, teleconferencing, and distance-learning tools. The internet, email and wireless mobile phone empower these women by offering access to services unavailable to them because of high cost in the rural areas (Agu, 2013).

The array of ICT-enabled options for poverty reduction is growing fast. As a communication and delivery infrastructure, ICT can assist the government to provide effective health and education services, facilitate citizen to government transactions, and promote participation and accountability. As a sector, ICT can create employment opportunities and improve incomes for the poor by targeted programs to support the activities of the poor and increase their productivity, improve their access to market and technical information, and lower the transaction costs of small farmers and traders. ICT can play a major role in helping to monitor food security related issues (weather, droughts, crop

failures, etc.) as well as alerting on natural disasters. As a tool for empowerment, ICT can support democracy, participation, mobilization, and civil values. Electronic interaction between government and citizens can provide citizens with access to the information and knowledge, consultancy, and online voting opportunities, among others.

ICT may be also used to empower women, as both producers and consumers. For example, in the Philippines women account for about 65% of total workers in IT services. They account for 30% in India—a much higher rate of female participation in services than in the general economy. Given the higher wages in IT services, this participation may contribute to improving the status of women. The potential to access relevant public services, at less cost and time, at home or at a local center can be also a source of empowerment. Having access to relevant information such as rights, benefits, inheritance laws, health care, and education should enable women and marginalized groups to access services and make informed decisions to meet their basic needs.

Making ICT work for the poor will require new conceptions of development, a new view of the world's poor, and a new approach to innovation with ICT. Rural tele-centers and shared access have been the focus of much of ICT for development programs targeted to poor and rural communities. But these programs have raised issues of sustainability and scalability and the search is on to address these issues. We still confront the challenge of how to connect the remaining people who still lack access to the Internet. Low-cost terminals will remain central to ICT for poverty reduction. Wireless technologies such as Wi-Max offer also major promises to connect poor communities. Deploying ICT for poverty reduction will inevitably require engaging poor communities in grassroots innovation and in coproducing relevant content and applications. A major challenge for using ICT for poverty reduction will continue to be the development of relevant content, services, and applications on increasingly affordable platforms. Different countries are experimenting with new approaches and mechanisms for developing relevant content for poverty reduction and innovating applications for community empowerment.

NEED AND JUSTIFICATION OF THE STUDY

ICT can be leveraged as a networking infrastructure to connect government agencies, NGOs, and even the poor to participate in development. Many NGOs in Latin America, for example, are assisting micro enterprises such as artisans to integrate into the global economy by using web sites for retail and wholesale buyers in industrialized countries, providing timely information on markets and buyers, and delivering a variety of training and business support services. Access to information and communication is central to empowerment and to building human capabilities. Accordingly, this new infrastructure would enable local economic and social agents to network, mobilize, and share local information, access global knowledge and markets, coordinate local action, share local experiences and innovations, and accelerate social learning. It enables real-time information sharing among change agents, communities of practice, and otherwise isolated communities. No wonder that the Internet has powered global civil society movements for causes such as debt relief, banning land mines, and providing HIV drugs in poor countries. The Internet was just as powerful in mobilizing people locally in campaigns against corruption (Korea), for democracy (the Philippines), and to protect the environment (Brazil).

A number of factors point to the threat of exclusion of the poor in the current information revolution. With the exception of mobile phones, the gap in the provision of new ICTs is much larger within and among countries than income disparities. Benefiting from ICT requires complementary investments and skills, including literacy. Threshold effects are also at work: network externalities, scale economies, lack of local content in local languages, fragmented markets for software applications, and high cost of access for remote areas—factors that lead to or reinforce poverty traps and economic isolation

for poor communities and poor countries. Poor and disadvantaged groups, particularly women, often face special constraints in accessing ICT and using them for their specific needs. The risks of economic exclusion suggest that countries should be concerned with the level of connectivity and ICT provision—and with enabling access and deploying ICT and content in ways that expand relevant information for the poor, increase their voice in decision making, and address bottlenecks to their trade. Thus the researcher intends to study on the usage of ICT in changing lives of Tribal women living in hilly areas in Meghalaya.

There are gender issues as well in the applicability of ICT protocols in developing countries. Most women's use of ICT has been limited to radio programmes and phone-ins, private phone calls, emails and sometimes to list serves, and some networking activities. Relatively few women have used it for business, formal and non-formal education, or for purposes of livelihood and wellbeing for themselves and their families, such as accessing health and nutrition education. The availability of ICT enables women to acquire knowledge that can be used to increase their social and economic standing in society, as they are able to use the knowledge to tap various income-generating opportunities and to influence the services they require from government. There are growing numbers of cellular and mobile telephone networks, mobile radio communication, paging services, private radio and television stations, and multipurpose community tele-centres providing communication services of fax, telephone, email and Internet, media services, and computer services that are targeted at women (Kwapong et al. 2009).

STATEMENT OF THE PROBLEM

On the basis of the above justification, the study is entitled as “**Information & Communication Technology (ICT) Usage in Changing Lives of Tribal Women of Hilly Areas in Meghalaya**”.

DELIMITATION OF THE STUDY

1. The study will be delimited to the three major tribal communities (Maram, Lyngam and Garo women) in the age group of 18-45 years of age.
2. The study will be delimited to female workers and female non-workers residing in West Khasi Hills District and South West Khasi Hills District.

OBJECTIVES

1. To study the socio-economic background of Tribal Women living in West Khasi Hills and South West Khasi Hills Districts of Meghalaya.

RESEARCH QUESTIONS

1. What is the socio-economic status of Tribal women living in West Khasi Hills and South West Khasi Hills Districts of Meghalaya?

HYPOTHESIS

1. There exist no significant differences in the level of access, availability and usage of ICT by different groups for agriculture.

SIGNIFICANCE OF THE STUDY

According to the Indian Census of 2011, 69 percent of the total Indian population lives in rural areas. People in these areas face several developmental challenges, such as low literacy, poor

healthcare facilities, low per capita income, a high degree of poverty and poor infrastructure. In recent years, the mobile phone has emerged as an important development tool (Islam 2011). It is seen as a device that has the potential to break the rural–urban developmental gap by delivering information on a variety of economic and social issues (Aker and Mbiti 2010). Mobile phones can facilitate need-based and user-centric information and services at an affordable cost to India's rural population, which was hitherto unreachable (Balwant Singh Mehta, 2013).

In rural areas, usage of mobile phones can be divided broadly into two categories: social and economic purposes. Mobile phone usage can help improve the economic status of the rural populace by providing timely information on farming, jobs or the labour market, trading and credit. In addition, usage of mobile phones can help improve life skills and social capital by providing timely information on healthcare, education, government schemes, family and friends.

The study is of significance as it is first of its kind in Meghalaya. The usage of ICT by tribal women groups need to be studied as it is an indicator of empowerment of women in Meghalaya context. The present Indian government is presently taking policy measures for digital India. The findings of the study will enable the policy makers to see how digital communication can penetrate in the rural masses residing in hilly areas and to enhance their quality of life.

RESEARCH DESIGN

The present study based on a total of 760 respondents (workers and non-workers tribal women) distributed equally among the three tribal sub-groups i.e Maram, Lyngam and Garo living in West Khasi and South West Khasi Hills District of Meghalaya. The total number of female workers and female non-workers in the Districts as per Census Report 2011 were 1, 67,976. The total female workers were 67,439 and the total female non-workers were 100537. The total numbers of female cultivators were 39,669, female agricultural labourers were 16,503, Household Industry workers were 1,353 and other workers were 9,914. For the purpose of the study, all the female workers were categorized as cultivators, agricultural labourers, household industry workers, other workers and non-workers comprise the universe of the study.

Multistage random sampling method was adopted by the investigator for drawing sample from the universe. In the first stage, out of four blocks of West Khasi Hills District, two block at random and out of two blocks of South West Khasi Hills District, one block at random was drawn by the investigator. In the second stage, approximately 10% of the villages would be drawn from the selected blocks using proportionate sampling method. In the third stage from each village, 10 respondents shall be drawn at random having equal representation from female workers and female non workers. Thus the total number of female workers and female non workers would be 760. The female workers include the cultivators, agricultural labourers, household industry workers and other workers.

MAIN FINDINGS

The socio-economic condition is one of the major determinants of assessing the tribal women's conditions living in West and South West Khasi Hills District. It includes age, educational status, income, occupation gender, marital status, size of family, place of living, computer literacy, availability bank system etc. (Hasan et al, 2008; Wims, Pádraig, 2011, Priya, 2013; Singh, 2013; Bohara, 2014; Kaur, et al. 2015; Syiem & Raj, 2015). Age is one of the important criteria for socio-economic study of the respondents. It was found from the data that 40.66 percent of the respondents are in the age group of 18 to 25. With regard to place of living, most of the people are living in rural areas. It was found also that 55.92 percent of the respondents are joint family

whereas 44.08 percent are nuclear family. Similarly, it was found that 15 percent are of family size of 2 members and 29.74 percent are of family size of 2 to 4 members. Further it was found that around 41 percent having an average income of 3000 to 8000 and 6.58 percent have income of more than 8000. With regard to occupational status of the respondents, 28.16 percent are engaged in agriculture sectors, 33.95 percent are domestic workers, 30.53 are household workers, 3.16 percent are government servants, and 4.21 percent are engaged in private organization. It was found from the data that 73 percent have qualifications of Class I to Class X and 20 percent are having qualifications of above Class XII.

Again it was found that 21.44 percent of the respondents delivered their first child in Civil Hospital, 29.50 percent delivered in Primary Health Centre, 20.07 delivered in Community Health Centre, and 28.99 percent delivered at their home. With regard to assistance during delivery, 7.55 percent assist by Doctors, 65.01 percent assist by Nurses and 27.44 percent assist by Dai. It was found that 27.62 percent of the respondents use contraceptive for family planning whereas 72.38 percent did not used contraceptive for family planning. It was also found that distance to the nearest health facility centre 5 percent were within 3KM, 10.00 percent were between 3 KM to 5 KM, 49.74 percent were between 5KM to 9KM, and 17.37 percent were more than 10KM. It was found from the data that 18.16 percent of the respondents consume food twice daily, 36.71 percent consumed food thrice daily, and 45.13 percent consumed food more than three times daily. With regard to calories (2400 calories) intake, 22.5 percent are in normal level, 40.00% are in below normal level and 37.5 percent are above normal level.

It was found from the data that 56.45 percent live in Tina house and 20.92 percent live in RCC House. With regard to source of drinking water, 12.24 percent of the respondents have tap inside the house, 45.39 percent have tap shared by public, 10.00 percent have hand pump, 10.92 percent have covered well and 21.45 percent have uncovered well. Similarly, sanitation facilities of the respondents, 10.00 percent have own flush toilet, 60.53 percent have own pit toilet, 21.97 percent have latrine septic tank, whereas 7.50 percent have no toilet facilities. With regard to electric connection 85.26 percent have electricity connection at home whereas 14.74 percent have no electric connection at their home. With regard to main type of fuel used for cooking, 6.05 percent used liquid petroleum gas, 77.24 percent used wood and 12.11 percent used charcoal for cooking. It was found from the data that 13.16 percent of the respondents were living in wetland area, 18.68 percent in dry land and 68.16 percent in hilly slope. It was found also that 98.68 percent of the respondents grown rice, 9.47 percent grown wheat, 51.45 percent grown maize, and 84.47 percent grown other types such as ginger etc. Again it was found from the data that 91.18 percent of the respondents grown potatoes, 88.42 percent grown sweet potatoes, 90.66 percent grown bean, 83.55 percent grown cabbage, 63.82 percent grown pumpkin and 75.13 percent grown other types of vegetables such as cucumber, salad etc. It was found from the data that 46.05 percent of the respondents have radio, 65.26 percent have Television set, 0.26 percent has Personal Computer, 0.39 percent has Laptop, 20.53 percent have Bicycle, 15.66 percent have Motor cycle and 0.39 percent have car at their home.

CONCLUSION

Thus ICT is an umbrella term that generally covers the harnessing of electronic technology for the information needs of the people to secure productive gains for the country. It can be deployed across the board in all sectors of the economy, and the gains are enormous in terms of economic growth. Today India has the comparative advantage of having the largest youth power in the world. They can be involved in the growing share of knowledge based production

by development of appropriate skills and there by generating positive linkages in the larger macro economy. The use of ICTs in the larger socio-economic dynamic is therefore critical from India point of view in order to induce rapid social transformation and change. What is needed is to bring ICT that can have substantial effect upon work employment. China has demonstrated how ICT learning acquired through production for the domestic market can be leveraged to compete globally. ICTs are fast flowing phenomenon, with rapid and successively waves of technical advancements of market information. However dilemmas are associated with increasing diffusion of ICTs in India, namely, the growing inequities in access to the enabling benefits of ICTs. The gender-based disparities, huge gap between different regions (particularly between rural and urban areas), difference due to educational attainment and income levels of the people are hindrances in the usage of ICTs. This digital divide characterizes the patterns of diffusion of ICTs between the rich and the poor. The issues pertaining to the downstream use of ICTs in government and provision of social services or in enabling knowledge dissemination and related empowerment are the discourses in social science research today. Information and Communication Technologies, a development in technological advancements, have accelerated the socio-economic and cultural revolution throughout the world. They have become significant building blocks of the post-modern society and are applied in diverse fields such as agriculture, banking, business, health, leisure and the like.

REFERENCES

- Adeleke, I. T. et al. (2014). ICT knowledge, utilization and perception among healthcare providers at National Hospital Abuja, Nigeria". *American Journal of Health Research*, 2015; 3(1-1). 47-53. Retrieved from <http://www.sciencepublishinggroup.com/j/ajhr>.
- Anwar, S. (2012). Young Consumers' Attitude towards Television Advertisements in the Internet Age. *International Journal of Multidisciplinary Research*, (2) 4, 200 –208.
- Bhattacharyya et al., (2009). Biometric Authentication - A Review. *International Journal of u- and e- Service, Science and Technology*, (2) 3.
- Bhavna, S. (2016). Popular FM Radio station and listening habits in Greater Noida. *Imperial Journal of Interdisciplinary Research (IJIR)*, (2)1, 45–52.
- Bohara, A. (2014). Strategic implementation of ICT in Agriculture information dissemination. A case of Gulmi District. *Institute of Engineering, Tribhuvan University*, 61 – 75.
- Churi, A. J. et al. (2012). Understanding Farmers Information Communication Strategies for Managing Climate Risks in Rural Semi-Arid Areas, Tanzania. *International Journal of Information and Communication Technology Research*, (2)11, 838 - 845.
- Datt, G and Ravallion, M. (1996). How important to India's Poor is the sectoral composition of growth?. *World Bank Economic Review*, (10)1, 1–26.
- Edegoh, L. et al. (2013). Radio Listening Habit of Rural Women in Idemili South Local Government Area of Anambra State, Nigeria. *IOSR Journal Of Humanities And Social Science*, (15) 5 21-26, Retrieved from www.iosrjournals.org.
- Elavarasi, R. et al. (2014). Customer Awareness and Preference towards E-Banking Services of Banks (A Study of SBI). *International Research Journal of Business and Management – IRJBM*, (4), 59 – 67.
- Fuller, B.R. (1981). Critical Path. *St. Martin's Press, New York*, 139.
- Gapsiso, N. D. et al. (2014). Study of the Effects of ICT on News Processing in Borno Radio Television (BRTV) Maiduguri-Nigeria. *New Media and Mass Communication*. (27), 31 – 40.
- Gendron, Robert P. (1977). Habitat Selection and Migratory Behaviour of the Intertidal Gastropod *Littorina littorea*. *Journal of Animal Ecology* (46), 79-92.
- Government of India (2011). Faster, Sustainable and More Inclusive Growth: An Approach to the 12th Five Year Plan (Draft). *Planning Commission, Government of India, New Delhi*.

- Greenridge, C. (2003). Welcome Address: ICTs Transforming Agricultural Extension? Presentation to CTA's Sixth Consultative Expert Meeting of its Observatory on ICTs. *Wageningen, the Netherlands*. Retrived from www.cta.int/observatory2003/keynote_papers/Welcome.pdf.
- Gupta, K. K. et al. (2012). Development of an instrument to measure Internet banking service quality in India. *Journal of Arts, Science & Commerce*, (3)2, 11 – 25.
- Hameed, A. et al. (2014). Impact of TV Advertisement on Children Buying Behavior. *International Journal of Humanities and Social Science*. (4) 2, 246 – 261.
- Hamelink, C. (1998). Cyberspace as the Public Domain: the Role of Civil Society. In *Infoethics*.
- Hasan, I. (2002). Do Internet Activities Add Value? The Italian Bank Experience. *Working Paper, Federal Reserve Bank of Atlanta, New York University*.
- Hasan, R. et al. (2009). Farmers access to information for Agricultural Development in Bangladesh. *Bangladesh Research Publications Journal*, (2) 1, 319-331.
- Hassan, Md. S. et al. (2012). Use of Information and Communication Technology (ICT) among Agriculture based Entrepreneurs in Malaysia. *World Conference on Agricultural Information*, 753 – 762.
- Irabatti, P. A. (2013). Customer Satisfaction of Online Banking in SBI and ICICI-A Comparative Study in Pune City. *International Journal of Techno-Management Research*, (01) 01, 1–13.
- Jahangir, S. F. et al. (2014). Effects of Media (Television) on Mental Health. *FWU Journal of Social Sciences*, (8) 1, 97-107.
- Joseph et al. (1999). Service quality in the banking sector: The impact of technology on service delivery. *International Journal of Bank Marketing*, (17) 4, 182-191.
- Jun, M. and Cai, S. (2001). The key determinants of Internet banking service quality: A content analysis. *International Journal of bank Marketing*, (19) 7, 276-291.
- Juni, M. S. et al. (2014). Impact of TV Advertisement on Children Buying Behavior. *International Journal of Multidisciplinary Academic Research*, (2) 4, 13.
- Kaur, N. et al. (2015). Online Banking on E-Commerce in India. *International Journal of Engineering Research and Applications*, (5) 4, 39-49.
- Khatun, F. et al. (2015). Impact of ICT on Health Services in Bangladesh: A study on Hobiganj Adhunik Zila Sadar Hospital. *Bangladesh Development Research Center*, 1–14.
- Kumar et al. (2017). Availability of Information and Communication Technologies (ICTs) tools usages by Farmers in Haryana. *Int. J. Pure App. Biosci.* 5(3): 648-653. Retrieved online from <http://dx.doi.org/10.18782/2320-7051.2946>.
- Luo, N. et al. (2009). Acceptance of Information and Communication Technologies for Healthcare Delivery: A Singh Health Polyclinics Study. *Annals of Academy in Medicine*, (38) 6, 529 – 536.
- Mabe L.K and Oladele O. I, (2012). Use of Information Communication Technologies tools
- MacKenzie and Wajcman D. (1985). Social Shaping of Technology. *Open University Press, Milton Keynes and Philadelphia*.
- Maroor, J. P. (2015). Awareness and Perception of Rural Women towards Advertisement. *Pacific Business Review International*, (8) 5, 78 – 90.
- McDermott, J. J. (1981). The philosophy of John Dewey. *Chicago. University of Chicago Press*.
- Mesthene, E.G (1981). The role of Technology in Society. *Technology and man future*, New York St. Martin Press, 99 – 130.
- Mookerji, N. (1998). Internet Banking Still in Evolutionary Stage. Retrieved from www.financialexpress.com/fe/daily/19980714/19555264.html.
- Narasimhamurthy, N. (2014). Television as a Dominant Source of Infotainment among Youths in Bangalore City. *IOSR Journal of Research & Method in Education*, (4) 5, 21-28.
- Narayana et al. (2012). "A Critical Analysis of Socio-Cultural Impact of New Media on Users in India". 1 – 18.
- Njoroge, T. et al. (2014). Using ICT to attract Kenyan youth into Agriculture: E-gardens. *International Journal of Computer Science and Information Technology & Security (IJCSITS)*, (4) 4, 96 – 102.
- Ojuondo, G. et al. (2014). The Role of ICTs in Health Communication in Slums in Kenya. *International Research Journal of Social Sciences*, (3)10, 28 – 34.

- Opata, P. I. et al. (2011). The place of information and communication technology in promoting agro-based enterprises in third world countries. *Journal of Agricultural Technology*, (7) 2, 207-214.
- Parmar, B. J. et al. (2013). Rural banking through internet: A study on use of internet banking among rural consumers. *Asian Journal of Management Research*, (3) 2, 325–335.
- Priya, M (2014). A study on internet banking and online shopping awareness among public in Coimbatore City. *Nehru E- Journal A Journal of Nehru Arts and Science College (NASC)*, (2) 32- 37.
- Rose, M. and J. Smith. (1986). The Organisational challenge of new engineering systems: Some themes for a research agenda. In C. A. Voss (ed.). *Managing advanced manufacturing technology Bedford*, 393- 406.
- Samansiri, B.A.D et al. (2014). Use of Information and Communication Technology (ICT) by Extension Officers of the Tea Small Holdings Development Authority of Sri Lanka. *Tropical Agricultural Research*, (25) 4, 460–475.
- Saravanan R. (2012). ICTs for Agricultural Extension in India: Policy Implications for Developing Countries. *School of Social Sciences College of Post Graduate Studies Central Agricultural University (CAU)*.

Concept Mapping and Drawing in Science Education and Psychology

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INTRODUCTION

Concepts are a perceived regularity(or pattern) in events, or objects, or records of events or object, a perceived whole of events that may be labeled as a single or group of units.For example, use of language. Concepts are mental categories for objects, events, or ideas that have a common set of features. Concepts provide for identification, classification and relating objects or events. The concept map helps in providing a definite figure to the concept by fixing its boundaries and limits in ensuring a meaning for a concept.Most of the nouns in our vocabulary are names of concepts.

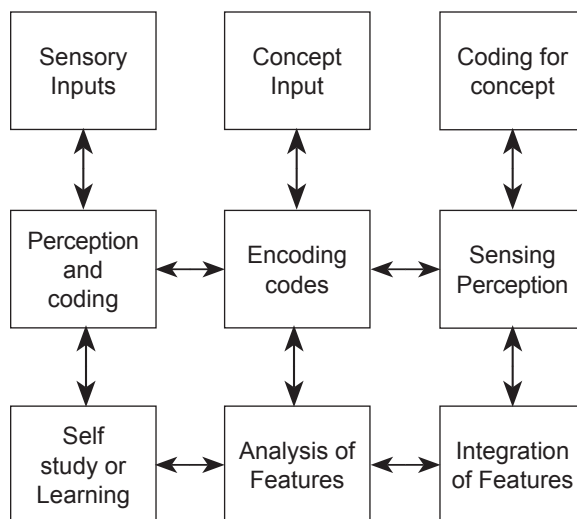


Figure- 1 Diagram showing the Concept formation in Human being

In the Figure No.1 The diagram shows the sensory inputs in the environment are many and the person draws many sensory inputs and selects the inputs to form the concept input. The features(characteristics) in the concept are coded for its unity, congruity, relevance and composition and value. This constitutes concept input. The concept input is further processed for screening and scanning for the matching with the criteria for the concept. Once this process is completed the concept coding is generally considered as complete. The examples(one or two) of the concept are also coded for reference. Perception for Coding involves the identification of the concept in all its features. It is more relational and the related experiences also get coded. This leads to on analysis encoding. This

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is more a scientific process of committing it into memory. The perceptual experience is examined for its relevance, compatibility, suitability and use. Sensing perception is equally perception and selective perception. The experience that is most useful, relevance and meaningful to the individual is coded for the experience. Sensing perception is a fully conscious process. Self study, or learning leads to further criteria for motivation to learn concepts on analysis of the situation, and environment, goals. This may come through self experience or sometimes through teaching, exposure to enriched environment. The Integration of features is the last stage of concept formation where in the learner has mastered the concept and accepted all the features and integrated into his/her scheme of studies. The resultant behavior is increased perception, increasing the depth of meaning and more refined behavior towards the objects (for example, learning, instruction, teachers, institution).

One may observe the changed habits, attitude, knowledge for thinking. Concepts are always congruent with our personal experience, and try to represent human experience in a systematic way to lead into an organization. Concepts are set of information as well as knowledge as fundamental units of organization. The concept has various features such as a place, space, time, colour, texture, shape, size and relation.

CONCEPT FORMATION

Concept in chemistry is a description of a matter with its physical and/or chemical properties. Concepts in chemistry are located, characterized and named by International Union for Pure and Applied Chemistry (IUPAC). It is universal in character in terms of description and specific in its applications. Concept could get represented in chemistry as a unit of knowledge, an attitude, or a skill for an application. The concept formation is a form of thinking that helps in better understanding of the world in which we live and the organization of life styles. The concept formation or concept learning, refers to the development of the ability to respond to common features of categories of objects or events. In learning a concept, the relevant features may be distinguished from the irrelevant using a criterion for example, diamond and graphite are allotropes of the carbon. However, there are significant differences in structure and properties that need careful study. The study of organic substance is different from that of the inorganic substance for example coal, carbon monoxide, carbon dioxide are different from carbon represented in organic forms in structure and properties for example, Carbon tetrachloride (CCl_4).

The learning of concepts are described by several theories in Psychology. According to stimulus-response association theory as proposed by Clark Hull (1920) the learner learns to associate the particular property with a substance for example acid/s are corrosive in nature. The hypothesis testing theory proposed by Jerome Bruner and his colleagues (1956), believed that the learner develops concept by making guesses about the attributes (properties) that are essential for defining the concept. Eleanor Rosch (1978) suggested that the natural concepts in everyday life are learned through examples rather than abstract rules. The experiences accumulated over years will help in sorting, classifying and organizing concepts. This essentially depends upon the interests (such as alchemy to deep sense) beliefs (for example, matter is dynamic), rational and secular values and experiences with the environment (the current idea of Chemistry for Sustainable development). The learner in chemistry tries to develop concepts through concept maps, by drawing, sorting, classifying, organizing, labeling, and grouping reactions and properties in some definite order that becomes more meaningful for example, the classification of molecules by Cotton and Wilkinson and Gauss.

Types of Concepts: Identification of common attributes or features is the essential step in the test of concept formation. An attribute is a distinctive feature of a concept that distinguishes one concept from the other. For example, the buckminsterfullerene with C_{60} configuration is the big

size carbon that finds meaning. There are set of Fullerenes identified and used for various purposes. The carbon particle in Bitumen is a small particle as well as the coal finds meaning in combustion.

The second important feature that needs attention is the specificity. The specificities are the variations an attribute undergoes under certain conditions for example Iron is participating in a reaction as ferrous form and in another reaction in a ferric form (exothermic reaction). Attributes combine in three different ways to produce three types of concepts, conjunctive concepts, disjunctive concepts, and relational concepts. Children develop different concepts at different stages of experience and concepts multiply with increase in experience. The IUPAC tries to specify the concepts and attributes of concepts in chemistry.

1. **Conjunctive concepts:** In a conjunctive concept the appropriate specificities of attributes should be jointly present and the set of conditions that constitutes the concept. For example, selecting a vegetarian food in a food carnival involves identification of pure food of vegetable origin-lattice, grass, grain, etc, from that of meat and its products such as beef, chicken, pork.
2. **Disjunctive concepts:** It involves the presence of several attributes on either or basis. In a cumulative record card one focuses on scholastic achievement than the non-scholastic achievement.
3. **Relational concepts:** It evolves based on the common relation among the various elements. The various objects are used for common purposes with their properties of the same function namely instruction. The blackboard(wood) was used for a long time, in the recent decades glass boards(green) are replacing the black board.

The white boards are used for writing with stylus and projection of material from the LCD projector. These changes shows an evolution in time, interest and specificities of qualities of instruction. Similarly, the input devices have become varied-joy stick, mouse, key board, etc,. Bruner's theory on concept formation: Bruner considered learner as an autonomous being who discovers knowledge, solves problems and finds relation between various categories of characteristics. Bruner represents structure of knowledge in three forms. They are:

1. **Enactive form:** In this the learner tries to present activities to learn a task for example, dancing, singing, driving an automobile, swimming, doing an experiment, drawing, painting, use of computer, software etc,.
2. **Ikonik form:** It focuses on the imagery of the learner on an object or event and its organization. In the recent periods, the ikonik representation is given more importance in software learning. The ikonik representation has the ideation(thinking), nd representation in dimensionalities^A space and time with direction in drawing, photographic or other forms).
3. **Symbolic form:** The symbolic form has more complexities, organization and meaning. It involves use of verbal and /or non verbal language to represent a concept or relation. It is always value loaded, mostly meaningful and more organized experience for example, Use of chemical language to describe an experiment.

Bruner gave importance to structure and parsimony. He also emphasized the role of teacher as a facilitator in knowledge organization in relating factual knowledge and techniques. The learner has to grasp the information and form a concept map. The fundamental principles are learnt through discovery, experience and experimentation. The fundamental principles or patterns that find transfer to other situations or find application depended upon the similarity of the properties, conditions of transfer and the kind of energy changes involved in a given chemical reaction. The knowledge in the beginning and at the end of a course learning may be significant due to continuous interaction, understanding and involvement in experimentation or application of knowledge into other situations. The structure of substance and its orientation also plays a role in the chemical transformation. The

learner distinguishing an ionic reaction with the covalent bonding seems to be simple. However, further differentiation of co-valent bond, into the hydrogen bond, metallic bond, molecular bonding(network bonding) is a clear demonstration of understanding of some basic principles of chemistry.

On learning chemical bonding and structure, according to Valence Shell Electron Pair Repulsion (VSEPR), the direction of bonds around an atom in a molecule depends on the number of both bonding and non-bonding electron pairs in the valence shell of the atom. Generally, the geometric shape that places the electron pairs as far as possible is favoured (Rao, C.N.R 1999).

Books such as General Chemistry by Linus Pauling, Introduction to Quantum Mechanics with Applications to Chemistry gives a graphic account of energy levels, orbitals and shapes of molecules. Recently, the concept of frontier orbital is introduced in chemistry. The bonding pair and non bonding pair of electrons together interact in the outermost orbital in the chemical transformation. This is called the frontier orbital.

According to the VSEPR theory, the shapes of molecules are determined by the repulsion between the electron pairs.

- The electron pairs arrange themselves with minimum repulsion between them.
- The molecules that are small acquire minimum energy and maximum stability.
- The lone pairs also participate in determining the shapes of molecules.
- The repulsion of the other pairs is stronger than that of a bonding pair.

The strength of repulsion between electron pairs is as follows:
Lone pair-Lone pair > lone pair-bonding pair > bonding pair-bonding pair.

In the recent period, a concept of energy into electrons as HOMO-LOMO continuum is introduced. This determines the site, extent and thermochemical transformations at the frontier electrons in the frontier orbitals.

Bruner believed in categorization as the process of thinking. It involved cognitive processes such as perception, conceptualization, learning, decision making and making inferences. Bruner presents two types of categories: Equivalent categories (Positive attributes), and Related categories.

Equivalent categories: This type provides the rules for combining categories. The electron pairs of equivalent energy are combined and observed as a unit for example in metal complexes in 'd' orbital electrons- the first five electrons are observed as the set.

The equivalent categories may be determined by affective/emotional reactions and functional criteria; for example input devices in instruction or learning.

Related categories: In the related categories the coding system applied serves to recognize related categories in the sensory input. There are major organizational variables in higher cognitive functioning. Coding goes to beyond the immediate sensory data to form a coding system that elicits inferences for inclusion on the basis of relevance and relations that each one of the variables shares, for example, fruits are categorized as citrus fruits, fleshy fruits, multiple fruit, etc.,

STEPS IN THE CONSTRUCTION OF CONCEPT MAP

Step-1: The concept mapping starts with a familiar concept as the key concept. Since concept map structures are dependent on the context in which they will be used. It is better to identify, content analyze the text into meaningful segment, a laboratory procedure, procedure of an experiment, or a particular problem or question that one is trying to understand. This creates a context that will help to determine the hierarchical structure of the concept map. It is also helpful to select a limited domain of knowledge for the first few concept maps.

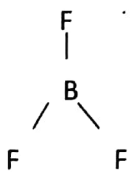
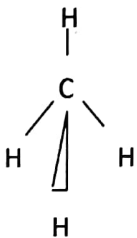
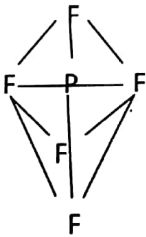
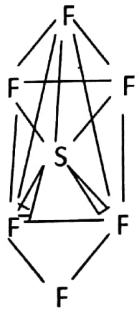
No. of Electron Pairs	Arrangement of Electron Pairs	Shape	Examples
2	Linear	Cl-Hg-Cl	Be Cl ₂ , Hg Cl ₂
3	Trigonal Planar		BF ₃ , B Cl ₃ , CO ₃ ²⁻ , NO ₃ ⁻
4	Tetrahedral		SiF ₄ , CH ₄ , NH ₄ ⁺ , PO ₄ ³⁻
5	Trigonal Bipyramidal		PCl ₅
6	Octahedral		SF ₆ , [PF ₆] ⁻

Figure- 2 Showing Shapes of single molecules and ions (Rao,C.N.R.1999)

Step-2: Construct a focus question or the main statement to define the context for a concept map. A question that clearly specifies the problem or issue the concept map should solve or help to resolve the issue. Every concept map responds to a focus question, and a good focus question acts as a lead question to form the concept map. When learning to construct a concept maps learners tend to deviate from the focus question and build a concept may that may be related to the domain, but which does not answer the question. It is very essential to ask the relevant and right question/s.

Step-3 identify the key concepts that apply to the domain of choice. The larger the elements more is the confusion. Parsimony will benefit the learner. However, 15 to 25 concepts may be relating to understand a broader area of knowledge for example, In organic chemistry. These concepts could be listed, rank order the list according to hierarchy for example based on ionization potential or electronegativity as most inclusive concept. The concept map in the beginning is an approximation of the reality. It may be improved on finer study.

Step-4: Construct a preliminary concept map by arranging the key concepts in a good hierarchical organization. The computer software helps in manipulating concepts or links. The general, simple concept comes at the bottom of concept map.

Step-5: After a preliminary map is constructed, it is always necessary to revise this map. Other concepts can be added. Good maps get generated with two to many revisions. In this computer software is helpful.

Step-6: The completion of preliminary map, the cross links should be introduced meaningfully considering the properties of the substance. These are links between concepts in different segments or domains of knowledge on the map that help to illustrate how those domains are related to one another. Cross-links are key to show that the learner understands the relationships between the sub-domains in the map. It is important to help students recognize that all concepts are in some way related to one another. Therefore, it is necessary to be selective in identifying cross links, and to be as precise as possible in identifying linking words that connect concepts.

Step-7: Finally, the map should be revised, concepts repositioned in ways that lend to clarify and better overall structure, and a 'final' map prepared. When computer software is used, one can go back, change the size and font style, and add colours to shape the concept map. The concept maps are thinking tool for capturing, representing and achieving knowledge of individuals, and it is a powerful tool to create new knowledge by student/s or teacher or students and teacher together as a project.

Memory is one of the most important concepts in learning. Behaviourists such as Thorndike, Guthrie, Hull proposed that the developing of bond between stimulus and response is learning. Reinforcement strengthens the bond.

The contiguity helps in sensory memory. Cognitive theorist Tolman meaning (i.e., semantic factors) played an important role in remembering. Miller suggested that information was organized into 'Chunks' according to some commonality. The idea that active information is restructured on finding an order was proposed by Bruner.

Ausubel and Schank agreed with Bruner that active learning is processed into memory. Individual differences in memory abilities are discussed by Eysenck (1977) and Guilford. Memory also is an important factor of intelligence.

Memory Process: The first process of memory is sensation that is represented from sensory organs on stimulation. This information to which one attends becomes attention. At any point of time, many things may be attended (for example multi tasking). However, the general perception involves attention on one of the aspects. The selective attention leads to encoding of information. More detailed information may be obtained from the studies of Asthana. Encoding, storage, and retrieval are the major events associated with the process of memory.

Encoding: Encoding refers to translating incoming information into a mental representation that can be stored in memory. We can encode information according to its sound(acoustic code),what it looks like(visual code), or what it means(Semantic code).

How does encoding apply to memory?

The way information is encoded may affect what one remembers and how the information is recalled little later. The visual codes are properly registered and it may be retrieved faster through its drawing. The encoding process takes place simultaneously of all the stimuli on reaching a pattern of the image. The bits of information are independently processed resulting in a one to one relation between the information and the encoded product.

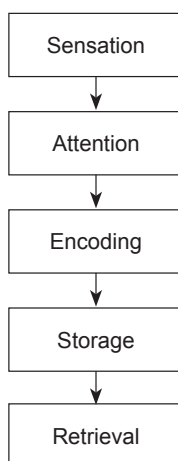


Figure No.3 Diagram showing the memory process

Storage: Storage is the process of building information in memory. The short term memory is brief and transient. In order to remember for a longer period of time rehearsal is needed. This rehearsal takes place in two ways:

Maintenance rehearsal: Simply repeating, the information can ensure effective storing, if it's repeated many times, the information for example phone number is remembered.

Elaborate rehearsal: Another strategy for transferring information is to think about it deeply. In this, the information is elaborated by drawing connections between what you are trying to remember and the other things with which you are already familiar. The linking of dates(specific) with events such as birth day, marriage day, world environment day.

Retrieval: Retrieval is the process of conscious remembering of information at will. This may happen by visualizing an event for example, on viewing garba you may tend to remember the garba played at school. Thinking about meaning or imagining the sound etc. The more ways information has been encoded, the more ways there are for retrieving it. You may remember the topic or theory in Chemistry but you may not be able to remember a formula or an equation related to it. Sensation, attention, encoding, storage, and retrieval are the steps of memory.

Types of Memory: Memories are classified into four types. They are: Sensory memory, Working memory, Short term memory, and Long term memory.

Sensory memory: Sensory memory is registered for a fraction of a second, retaining receding impression of a stimulus from the environment. Sensory memory(200-500 milli seconds) that follow the initial perception of an object. You tend to look at a still picture or moving picture, that goes

to the sensory memory. George Sperling(1960) point out that most humans can process atleast twelve items with sensory memories, and the details will degrade at quite a rapid pace. The sensory memories act as buffers for stimuli received through the senses.

A sensory memory exists for each sensory channel: iconic memory for visual stimuli,echoic memory for aural stimuli and haptic memory for touch.

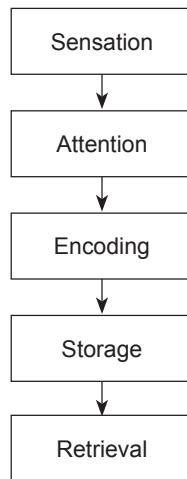


Figure No. 4 Diagram showing the memory process

Information is passed from sensory memory to short term memory by attention, thereby filtering the stimuli to only those which are of interest at a given time.

Short-term Memory: Short term memory functions for a little longer than sensory system to retain the impression of a stimulus from the environment. Some information that is in the sensory memory considered important may subsequently be transferred to a short-term memory.

Short term memory decays rapidly (200 milli seconds) and it has also a limited capacity without rehearsal. The estimates of the capacity of short term memory are lower, typically on the order of 5-7 items, however, the memory capacity can be increased. Herbert Simon showed that the ideal size for chunking letters and numbers, meaningful or not was three. The successful formation of a chunk is known as closure (Nirmal, J. 2014). Interference often causes disturbance in short term memory retention. This accounts for the desire to complete the tasks held in short-term memory as soon as possible. Short-term memory is believed to rely mostly on an acoustic code for storing information, and to a lesser extent a visual code. Conrad (1964) found that test subjects had more difficulty recalling collections of words that were acoustically similar (e.g. dog, hog, fog, bog, log) or Methane, Ethane, Propane, Butane. However, some individuals have been reported to be able to remember large amounts of information, quickly and be able to recall that information in seconds. The short term memory is seen as short term potentiation.

Working memory: This is an active system of memory that assembles information, organizes it prior to recall. Working memory can be viewed as a form of short term memory, in that it refers to the limited store that is needed in order for certain mental tasks to be performed. Short term memory is rooted in duration in comparison, working memory is defined by- purpose. Baddeley's Model of working memory includes four components-the verbal store, the visuo-spatial sketchpad, the episodic buffer and the central executive, which determines control and rehearsal.

The first relates to language, the second relates to images and the third relates to the multidimensional representations.

Long term memory: It is intended to store information over a longer time. Information from the working memory is transferred to it after a few seconds. In comparison to working memory/short term memory, the long term memory has little decay and longer duration storage. Long term memory can store much larger quantities of information for longer time (it may cover life span also). This in recent period is seen as long term potentiation. For example, some important telephone numbers are remembered for many years.

There are two types of long term memory. They are: 1. Declarative memory and 2. Procedural memory.

1. **Declarative memory:** It represents the conscious efforts involved in the process of retention and recall of information regarding facts, knowledge and events. It is also called as explicit memory. It is stored consciously and retrieved. Declarative memory can be further subdivided into semantic memory and episodic memory (Figure No. 5).
2. **Procedural Memory:** It is a memory process employed primarily in learning motor skills. It should be considered as a subset of implicit memory. This type of memory is useful in experimentation. It is used frequently in the chemistry laboratory and referred to while teaching theory of chemistry. This memory depends on the number of rehearsals of the activity (experimentation). Procedural memory involved in motor learning depends on the cerebellum and basal ganglia. Procedural memory is more comparative, contextual, and specific.

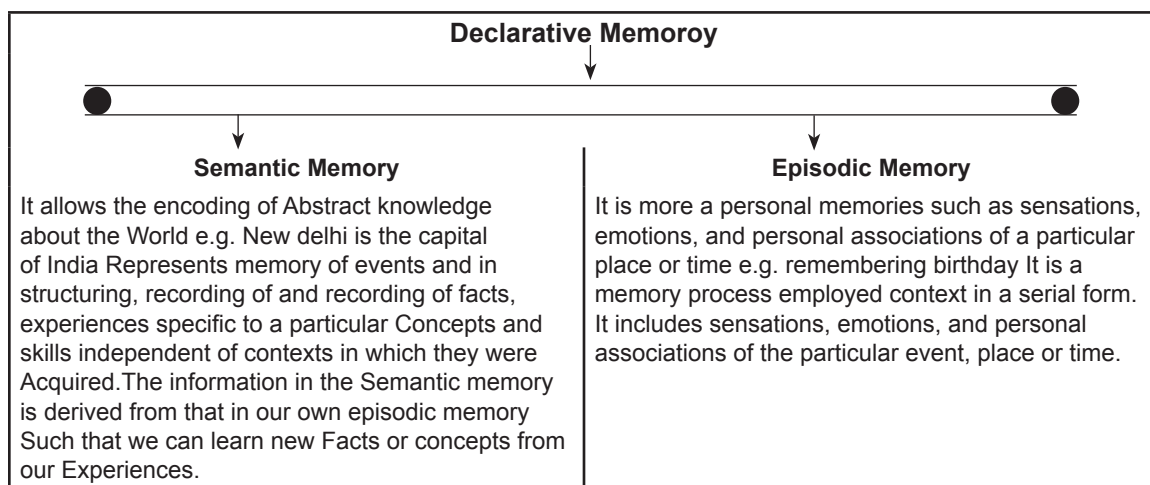


Figure- 5: Showing the semantic memory and episodic memory as Declarative memory

The skills involved in each of the experiment may vary and the level of representation also could go higher as the thinking, reflection and experimentation continuously take place along with the continuous internalization of the experience.

Autobiographical Memory: When a student studies the autobiography of a important scientist for example Linus Pauling, the learner gets highly motivated to learn more about the discoveries of the scientist.

Visual memory: It preserves the visual experience. It enables one to remember objects, places, animals or people as images. Visual memory can result in priming and it is assumed some kind of perceptual representational system that underlies this phenomenon. Child upto the age of 2 years is not very clear with regard to visual memory. The optic nerves, Optic chiasma becomes more prominent and better functional from the age of 3 years. Child learns more from visual stimulation (see for example, the English movie Baby's day out).

Topographic memory: It is the ability to orient oneself in space, to recognize and follow an itinerary, or to recognize familiar places. Child may forget the right path to home and on discovering the new path and enquiry child reaches home. Dementia of elderly- a memory disorder caused by multiple impairments, including difficulties with perception, orientation and memory.

Explicit Memory: It falls into the category of declarative memory. It refers to situations in which a person is aware of using cognitive processes in an effort to retrieve something, or is otherwise conscious of being reminded. Such use of memory can be thought of as a controlled memory process for example, in an experiment subjects were given list of objects and after sometime they were asked to remember the objects.

This is an example of explicit memory. This memory may develop through semantic or episodic memory of experience. It is a conscious process.

Short Term Memory	Long Term Memory
1. It has limited capacity And duration	It has more storage capacity for more information and for Longer duration (Whole life Span).
2. It incodes information Acoustically.	It encodes information Semantically.
3. It is supported by Transient patterns Of neural Communication, Dependent on Regions of the Frontal lobe (especially Dorso lateral Prefrontal cortex) And the parietal lobe.	It is maintained by more stable and per- manent changes in neural connection widely spread throughout the brain.

Figure -6 Showing difference between long term and short Term memory

Implicit Memory: it is mostly procedural memory it refers to the phenomena in which our cognitive and neural systems retrieve information even though we are not aware of using our memories; such memories seem much like automatic memory processing. The things taught to the children is remembered and when the test is given on the same topic, the child remembers and able to answer the questions properly.

Implicit memories are associated with habits, skills, emotional reactions, reflexes, conditioning, stimulus-response mechanisms, associatively learned memories, and hardwired behaviours that we can demonstrate easily without much conscious awareness. These are also called as non-declarative memories as they are intimately connected to the abilities that reside at a subconscious level. Implicit memories are thoughts that not only stay in the brain, but thoughts that stay in the body as well as in the brain. Implicit memories abound in our brain; they are the automatic neural nets that we have developed merely through physical repetition. Brushing our teeth, typing, dancing are all examples of implicit procedural memories.

Chemical Nomenclature as a concept is presented for discussion. A chemical nomenclature is a concept that provides a set of rules to generate systematic names for chemical compounds. The nomenclature used most frequently worldwide is the one created and developed by the International Union of Pure and Applied Chemistry (IUPAC). Aims of chemical nomenclature: The primary function of chemical nomenclature is to ensure that a spoken or written chemical name has clarity for chemical name and refers to the specific, single substance. Most of the substances have single name. The name conveys some information about the structure or chemistry of a compound. The IUPAC has developed a system called CAS system that provides the standard names in iteration. Another system familiar to most readers, and gaining popularity is the International Chemical Identifier (InChI). The InChI is mostly machine readable.

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Table No. 1 Showing the Chemical nomenclature of IUPAC

Name of the Book	Colour of Book
1. Nomenclature of Organic Chemistry, Advanced Chemistry Development Inc., ACD Website: http://acdlabs.com/iupac nomenclature. Royal Society of Chemistry, Dec 2013	Blue Book
2. Nomenclature of In Organic Chemistry, Connolly, N.G., Damhus, T., Hartsham, R.M. and Hutton, A.T. 2005 ISBN No. 0854044388	Red Book
4. Compendium of Polymer Chemistry Terminology and Nomenclature, 2nd ed., IUPAC Recommendations 2008	Purple book
5. Analytical Terminology	Orange book
6. Bio-Chemical Terminology IUPAC, iubmb (International Union of Biochemistry and Molecular Biology) 1992. C. Lie'bee (Eds). 1992 BioChem nomenclature And related documents, 2nd ed. Portland press, ISBN No. 1-85578-005-4	White book

Table No.2 Showing recent release of Chemical nomenclature IUPAC

Recent release of the books and documents of IUPAC
1. Nomenclature of Fused and Bridged Fused Rings systems, Pure And Applied Chemistry, 7091), 143-216, 1998 2. Extension and Revision of the nomenclature for Spiro compounds, Pure and Applied Chemistry, 71(3), 531-558, 1999 3. Extension and Revision of the Von Baeyer System for naming Polycyclic compounds (including in bicyclic compounds), Pure and Applied Chemistry, 71(3), 513-529, 1999. 4. https://www.Chem.Qmul.ac.uk/iupac provides the bibliography of the various new concepts and approaches in different areas of chemistry. 5. Panico, R; Powell, W.H., Richer, J.C. eds (1993) A guide to IUPAC nomenclature of organic compounds IUPAC Blackwell Science, ISBN No. 0-632-03488-2 IUPAC Chemical Nomenclature and Structural Division (Oct 27, 2004), Revised edition.

Chemical nomenclature are rather more restrictive. It aims to standardize communication and practice such that a chemical name or term is used with a fixed meaning relating to its chemical structure. It gives insights into chemical properties and derived molecular functions. These aims have profound effects on the valid understanding in chemistry, especially with regard to chemical classes that have achieved mass attention, for example, the finding of rare earth elements in Korea in recent years has led to finer micro electronics equipment preparation. The elements being Hafnium, Zirconium etc.,.

RULES OF CATEGORIZATION IN CONCEPT FORMING

- Identification of criterion attributes : In the concept formation the first level is to recall, identify and include all essential characteristics of the object/event in a category.
- Verification of the organization of attributes (sequence), and the criterion of organization. The organization involves a task, schedule, a sequence of operation and an criterion of functioning in order for obtaining systematic output.
- Determination of critical attribute and assignment of weightage.
- Setting up of acceptance limits on attributes. Some attributes may vary widely such as colour. others are relatively stable.

REFERENCES

- https://en.wikipedia.org/wiki/iupac_nomenclature retrieved on 7/20/2013
- Mani, R.S. IUPAC Nomenclature, Journal of Science, Issue 13, Aug-Oct 2017, 1-3, Gandhinagan Knowledge Consortium of Gujarat, Department of Higher Education
- Mudaliar, R.S. 2013 Vygotsky's Social Interaction Theory for Cognitive growth: A descriptive analysis, EDUSEARCH, 4(1), April 2013, ISSN No. 0976-1160
- Nirmal, J. 2014 Psychology of Learning and Human development, Hyderabad: Neelkamal Publications Pvt. Limited, ISBN No. 978-81-8316-343-9
- Rao, C.N.R. 1999 Understanding Chemistry, Hyderabad: Universities Press (India) Limited, ISBN No. 81-7371-250-6

Multiple Attribute Decision Making Approaches: A Critical Literature Survey with Fuzzy-Topsis Methodology

Amit Kumar*

ABSTRACT

In the present scenario, there are various approaches to find out the best alternative or optimal decision among the various feasible alternatives. The MADM techniques provide solutions to the problems involving conflicting and multiple objectives. Several methods based on weighted averages, priority setting, outranking, fuzzy principles and their combinations are employed for plant site selection problem, product design problem and in ranking problem. This study reviewed a total of 54 papers published from 1990-2016 in more than 15 high-ranking journals, most related to sustainable and renewable energy which is extracted from the Web of Science database. The review serves as a guide to those interested in how to use a particular MADM approaches.

Nomenclature

MADM: Multiple Attribute Decision Making

MDL: Modified Digital Logic

AHP: Analytic Hierarchy Process

VIKOR: VlseKriterijumska Optimizacija I Kompromisno Resenje

TOPSIS: Technique for Order Preference by Similarity to Ideal Solution

MODM: Multiple Objective Decision Making

WPM: Weighted Property Method

TFN: Trapezoidal Fuzzy Numbers

GTM: Graph Theoretical Methodology

SWOT: Strengths, Weaknesses, Opportunities and Threats

GIS: Geographic Information System

Keywords: Fuzzy Logic, Plant Site Selection, Methodology, Hydro Energy, Project

INTRODUCTION

Multiple Attribute Decision Making

Multi attribute decision making (MADM) approach has been used for decision making problems. It helps in making preference decisions over the available set of alternatives that are characterised by multiple, typically conflicting attributes [1]. It works on a set of theories,

methods & procedures. In the first step of MADM approach, alternatives & related attributes are determined. Secondly, the alternatives & corresponding attributes are attached with numerical measures followed by their relative interest. The decision problem is formulated in matrix form, where rows show the alternatives & the columns denote the relative attributes and cross field shows the numerical values for each pair of alternative and attribute. In the last step, the problem is examined or solved by one of the

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many available methods that lead us to the final ranking [2] These methods include fuzzy logic, analytic hierarchy process (AHP) [3], simple additive weighting (SAW), technique for order preference by similarity to ideal solution (TOPSIS) [4], VlseKriterijumskaOptimizacijal KompromisnoResenje (VIKOR) [5], graph theory and matrix approach (GTMA) [6] and many more. These methods have been successfully applied to solve various problems in fields such as site selection, supply chain management, social science decisions, manufacturing & material selection. This problem is also found to be suitable for our study in finding out the ranking of various Indian states with regards to their wind energy potential. Each decision table (also called decision matrix) in MADM methods has four main parts, namely: (a) alternatives, (b) attributes, (c) weight or relative importance of each attribute, and (d) measures of performance of alternatives with respect to the attributes. The decision table is shown in Table 1. The decision table shows alternatives, A_i (for $i = 1, 2, \dots, N$), attributes, B_j (for $j = 1, 2, \dots, M$), weights of attributes, w_j (for $j=1, 2, \dots, M$) and the measures of performance of alternatives, m_{ij} (for $i= 1, 2, \dots, N; j=1, 2, \dots, M$). Given the decision table d a decision-making method, the task of the decision maker is to find the best alternative and/or to rank the entire set of alternatives. It may be added here that all the elements in the decision table must be normalized to the same units, so that all possible attributes in the decision problem can be considered.

Table: Decision table in MADM methods

Alternatives	Attribute					
	B_1	B_2	B_3	$(-)$	$(-)$	B_M
	(w_1)	(w_2)	(w_3)	$(-)$	$(-)$	(w_M)
A_1	m_{11}	m_{12}	m_{13}	-	-	m_{1M}
A_2	m_{21}	m_{22}	m_{23}	-	-	m_{2M}
A_3	m_{31}	m_{32}	m_{33}	-	-	m_{3M}
-	-	-	-	-	-	-
-	-	-	-	-	-	-
A_N	m_{N1}	m_{N2}	m_{N3}	-	-	m_{NM}

Of the many MADM methods reported in the literature (Saaty, 1980, 2000;Hwang and Yoon, 1981, Chen and Hwang, 1992; Yoon and Hwang 1995; Olson,1996; Triantaphyllou and Sanchez, 1997; Zanakis *et al.*, 1998; Gal *et al.*, 1999;Triantaphyllou, 2000; Figueira *et al.*, 2004), few important methods that have a higher potential to solve decision-making problems in the manufacturing environment are presented in this paper.

Multiple Attribute Decision-Making Methods

Fuzzy Logic

Introduced by Lotfi A. Zadeh in 1965 to solve the problems where there are no clear boundaries between the two or more parameters, Fuzzy logic, is also a great help with problems where it is difficult to distinguish between member and non-member objects of a problem. Fuzzy logic provides a natural framework for the management of uncertainty in expert systems to provide a systematic

basis for representing and inferring inexplicit knowledge [7]. It was used for multiple criteria decision making where the emphasis is on possibility rather than probability [8]. Fuzzy logic is based on a set theory. It comprises of a membership function within the interval [0, 1], which describes the extent of relevance of an element for being the member of the set. Linguistic variables are used for all the comparisons, which are assigned numerical values without any enigma. A linguistic variable is a variable whose value are words or sentences in a natural or artificial language [9]. For instance, quality is a linguistic variable if its values are assumed to be **the fuzzy variables labelled as “good”, “bad”, “worst” rather than the actual numbers. The main** application of the linguistic approach lies in the realm of humanistic system especially in the fields of artificial intelligence, linguistics, human decision processes, pattern recognition, psychology, economics and related areas [10].

In the present study, we use trapezoidal fuzzy numbers (TFN). Figure 3.2 shows a typical TFN (b_1, b_2, b_3, b_4) for $\{b_1, b_2, b_3, b_4 \in \mathbb{R}; b_1 \leq b_2 \leq b_3 \leq b_4\}$ [11]. It is sometimes convenient to work with TFN because of the ease and ability to process information in a fuzzy environment.

The membership function $\mu_b(x)$ of trapezoidal fuzzy number is defined as:
(Eq.1)

$$\mu_b(x) = \begin{cases} \frac{x - b_1}{b_2 - b_1}, & x \in [b_1, b_2] \\ 1, & x \in [b_2, b_3] \\ \frac{b_4 - x}{b_4 - b_3}, & x \in [b_3, b_4] \\ 0, & \text{otherwise} \end{cases}$$

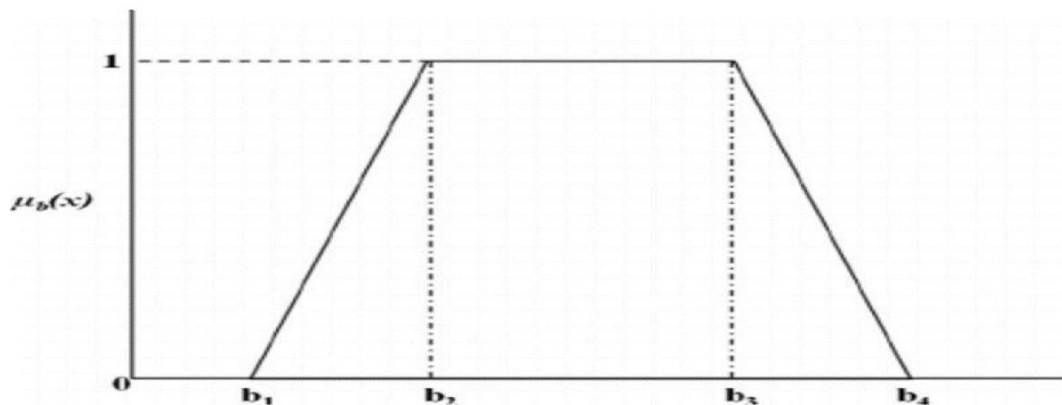


Figure-1: Trapezoidal Fuzzy Numbers

TOPSIS

Technique for order preference by similarity to ideal solution (TOPSIS), first suggested by Hwang and Yoon in 1981 [7,8], is a well-known MADM approach. It is a perfect logic based computation method that can be simply executed, which represents sensible human preferences and provides a value that all together accounts for the most excellent and poor alternatives [9]. In TOPSIS the selected alternative should have the shortest distance from the positive ideal solution, and also have the longest distance from the negative ideal solution, to resolve the MADM problems [12].

The positive ideal solution enhance the profit criteria and lowers down the cost criteria, where the negative ideal solution enhance the cost criteria and lowers the profit criteria [13]. **In TOPSIS, it is assumed that we have „s“ number of alternatives and „c“ number of selection criteria** and also, we have the rank of each alternative with respect to each criterion [14].

Fuzzy-TOPSIS Methodology

The step-by-step procedure involved in the fuzzy-TOPSIS approach for ranking the various Indian states for the effective utilization of wind energy resources. The approach incorporates MDL weights for pair wise comparison among all considered criteria followed by fuzzy logic approach with TOPSIS method to obtain optimum results. Following steps are used for this purpose:

Step 1: Calculation of MDL weights

MDL weights (W_j) are calculated for all selection criterion. This gives the weights of different criteria which helps us to know the relative impact of each criteria on the rankings of the states.

Step 2: Describe linguistic variables

A set of fuzzy rates is required to compare all the alternatives for each criterion. These fuzzy terms are assigned by the decision makers and responsible for intra criterion comparisons of the alternatives.

Step 3: Construction of Decision matrix

Let p be the parameters and q be the alternatives for k number of decision makers in the suggested model. The aggregated fuzzy rating for C_j criterion is represented as $x_{ijk} = \{x_{ijkl}, x_{ijk2}, x_{ijk3}, x_{ijk4}\}$. For $i = 1, 2, \dots, p$; $j = 1, 2, \dots, q$ and $k = 1, 2, \dots, k$, x_{ijk} is calculated as [12,13].

(Eq.2)

$$\begin{cases} x_{ij1} = \min_k \{b_{ijk1}\} \\ x_{ij2} = \frac{1}{k} \sum b_{ijk2} \\ x_{ij3} = \frac{1}{k} \sum b_{ijk3} \\ x_{ij4} = \max_k \{b_{ijk4}\} \end{cases}$$

Thus the obtained decision matrix ((M) is shown as:

$$M = \begin{bmatrix} x_{11} & x_{12} & \dots & x_{1p} \\ x_{21} & x_{22} & \dots & x_{2p} \\ \vdots & \vdots & \ddots & \vdots \\ \vdots & \vdots & \ddots & \vdots \\ x_{q1} & x_{q2} & \dots & x_{qp} \end{bmatrix}$$

Step 4: Defuzzification

A method to convert fuzzy output to crisp value (quantified result) in fuzzy logic by real valued functions is known as Defuzzification. It is performed to obtain the crisp values for each criterion corresponding to each Indian state (alternative). This provides a quantitative value for the linguistic variables and fuzzy numbers assigned based on the verbal reasoning of the decision makers. We obtain the crisp values by the following equation:

(Eq.3)

$$f_{ij} = \text{Defuzz}(x_{ij}) = \frac{\int \mu(x) \cdot x dx}{\int \mu(x) \cdot dx} = \frac{\int_{x_{ij1}}^{x_{ij2}} \left\{ \frac{(x - x_{ij1})}{(x_{ij2} - x_{ij1})} \right\} \cdot x dx + \int_{x_{ij2}}^{x_{ij3}} x dx + \int_{x_{ij3}}^{x_{ij4}} \left\{ \frac{(x_{ij4} - x)}{(x_{ij4} - x_{ij3})} \right\} \cdot x dx}{\int_{x_{ij1}}^{x_{ij2}} \left\{ \frac{(x - x_{ij1})}{(x_{ij2} - x_{ij1})} \right\} dx + \int_{x_{ij2}}^{x_{ij3}} dx + \int_{x_{ij3}}^{x_{ij4}} \left\{ \frac{(x_{ij4} - x)}{(x_{ij4} - x_{ij3})} \right\} dx}$$

$$= \frac{-x_{ij1}x_{ij2} + x_{ij3}x_{ij4} + (1/3)(x_{ij4} - x_{ij3})^2 + (1/3)(x_{ij2} - x_{ij1})^2}{-x_{ij1} - x_{ij2} - x_{ij3} + x_{ij4}}$$

On integrating the crisp values, thus obtained, with MDL weights, we get the final ranking using TOPSIS approach as discussed below.

TOPSIS Approach Steps

Step 5: Normalized the matrix as given below

(Eq.4)

$$r_{ij} = \frac{f_{ij}}{\sqrt{\sum_{i=1}^m (f_{ij})^2}}; \forall_j$$

Step 6: Calculate the weighted normalized decision matrix as given

(Eq.5)

$$V_{ij} = [r_{ij}]_{m \times n} \times [W_j]_{n \times m}^{\text{diagonal}}$$

Step 7: Calculate the positive ideal and negative ideal solution

The positive ideal solution V_j^+ and negative ideal solution V_j^- are as given below:

(Eq.6)

$$V_j^+ = \{(\max V_{ij}, j \in J_1), (\min V_{ij}, j \in J_2), i = 1, 2, 3, \dots, m\}, \forall j$$

$$V_j^- = \{(\min V_{ij}, j \in J_1), (\max V_{ij}, j \in J_2), i = 1, 2, 3, \dots, m\}, \forall j$$

Where, J1 and J2 represents higher best and lower best criteria respectively.

Step 8: Calculate the distance d_i^+ and d_i^- from the positive ideal solution and negative ideal solution respectively as follows:

(Eq.7)

$$d_i^+ = \left[\sum_{j=1}^n (V_{ij} - V_j^+)^2 \right]^{0.5}, i = 1, 2, 3, \dots, m$$

$$d_i^- = \left[\sum_{j=1}^n (V_{ij} - V_j^-)^2 \right]^{0.5}, i = 1, 2, 3, \dots, m$$

Step 9: Calculation of TOPSIS rank index:

(Eq.8)

$$C_i^+ = \frac{d_i^-}{d_i^- + d_i^+}$$

Project which has the highest rank index C_i^+ are preferred.

LITERATURE REVIEW

Raoot and Rakshit(1991) proposed a construction- type layout design heuristic based on fuzzy set theory. A linguistic variable was used to model the qualitative design criteria, and then to determine the closeness relationship matrix, which was used to construct a layout design. This approach provided for a systematic treatment of uncertainty due to fuzziness [15].

Pan et al. (2000) used MADM method extensively for the strategic planning of electric utilities for choosing the best resource policy. In most of the MADM problems, the evidence available to the decision-maker is often imprecise due to imprecise attribute quantities and inconsistent urgency rules. This paper showcases an interval-based MADM approach to support the decision making process with inexact information. It contribute to help the decision maker gain in understanding how the rough data may affect the choice toward the best resolution and how a set of acceptable substitutes may be identified with certain sureness [16].

Karray et al. (2000) proposed an integrated methodology using the fuzzy set theory and genetic algorithms to investigate the layout of temporary facilities in relation to the planned buildings in a construction site. Fuzzy linguistic representation was used to identify the closeness relationship values between each pair of facilities in a construction site [17].

Fan et al. (2002) investigates the MADM problems with liking information on changes. A new approach was proposed to solve the MADM problem, where the decision maker gives his preference **on alternatives in a fuzzy relation. To consider the decision maker's preference** information, an optimization model was assembled to assess the quality weights and then to select the most required alternatives [18].

Garg et al. (2006) proposed a deterministic quantitative model based on graph theoretical methodology (GTM) to compare various technical and economical features of wind, hydro and thermal power plants. It was used to evaluate and rank the power plants in ascending or descending order in accordance with the value of their suitability index. This suitability index is the permanent value of the plant attribute matrix, which is a combination of attribute rating matrix and attribute relative importance matrix. The plant with rank 1 is the optimized selection for the customer's/user's desires on the particular application under consideration [19].

Lee et al. (2008) developed an innovative analytical approach to evaluate the forms of buyer-supplier relationship between a manufacturer and its supplier. A fuzzy-AHP model which incorporates the benefits, opportunities, costs & risks concepts is constructed to deal with supplier's election problem [20].

Yonca (2009) in the thesis created a Geographic Information System (GIS)-based methodology for evaluating alternative locations for wind, solar and hybrid power plants by using fuzzy multi-criteria decision making. Individual satisfaction degrees for each alternative location with respect to the identified environmental objectives and economic feasibility criteria are calculated using fuzzy set theory tools. Then these individual satisfaction degrees are aggregated into overall performance indexes which are used to determine priority maps for wind and solar energy generation facilities [21].

Amin et al. (2011) applied quantified SWOT (strengths, weaknesses, opportunities and threats) in the context of supplier selection for the first time, which can consider both qualitative & quantitative criteria. Also, fuzzy logic and triangular fuzzy numbers are integrated with it [22].

Bhutia and Phipon (2012) also used AHP and TOPSIS method for supplier selection problem. In this study, some important parameters were considered which affect the process of supplier selection and then using MADM method, a ranking of various suppliers is prepared [23].

Chauhan & Vaish (2012) have done a comparative study on material selection for micro electro-mechanical systems. In this study, MADM approaches have been explored and compared with other approaches. This study establishes that MADM approaches are also efficient and easy to apply without any prior mathematical calculations [24].

Lanjewar et al. (2014) showed the combined graph theory (GTM) and analytical hierarchy process (AHP) approach for the evaluation and selection of hydrogen energy systems.

Rathi et al. (2015) deliberates on an approach for right Six Sigma project selection at an automotive industry using fuzzy logic based TOPSIS method. For this purpose, evaluation criteria have been designed for selection of best alternative, which are then given a specific weightage by using modified digital logic (MDL), and the final ranking is obtained by the priority index obtained from fuzzy-TOPSIS approach. It was found in the study that this method for project selection helps to improve the overall productivity for the industry [25].

Saket et al. (2015) illustrated fuzzy VIKOR analysis for customer performance index (CPI) of civil domestic airline industry in India. CPI consists of various parameters, which are difficult to

measure. In this particular study, prime factors crucial for evaluation of performances of various airlines in India, are identified [26]

Ebrahimi et al. (2016) conducted a study to select the best zones to add new emergency services in the non-disaster case or earthquake disaster based on a combination of fuzzy decision making techniques including TOPSIS and AHP methods. A novel algorithm for the optimum location of EMS is proposed to optimize service response time to the people, to fulfil the needs of victims and rescue teams in non-disaster case or after a possible disaster. Two new MADM models with different crisp and fuzzy criteria are introduced for ranking the 22 zones of Tehran city in these cases. The results show that the proposed fuzzy decision making system successfully determines the best locations [27].

CONCLUSION AND REMARK

This Critical Literature Survey paper reveals the research work carried out in the field of optimal decision making approach techniques. It offers various advantages like plant site selection, product design selection, layout design selection, ranking crucial parameters among the various conflicting parameters etc.

MADM Approach techniques is the crucial tool for setting up new plant like hydropower plant, wind energy plant, plant layout design and any type of plant. With the help of MADM approaches we find appropriate alternatives to take optimal decision to set up any kind of plant for effective and efficient utilization of available resource.

Energy sector is highly cost intensive and includes other sectors like tidal energy, solar energy, geo thermal energy etc. where an can use MADM technique like MDL, fuzzy- TOPSIS, VIKOR and AHP to explore energy potential on various factors on different sites and choose best of them.

The MADM Approaches Technique method is applicable in almost every field for making optimal decision.

REFERENCES

1. Yoon KP, Hwang CL. Multiple Attribute decision making: an introduction: Sage Publications, 1995.
2. **Bernroider EW, Stix V. „On the applicability of Data envelopment analysis for MADM in the context of information systems appraisal”, Communication of the IIMA, 2006, volume 6, issue 2, article 13.**
3. Saaty TL, the Analytic Hierarchy Process. McGraw-Hill, New York (1980).
4. **Saaty R.W. „THE ANALYTIC HIERARCHY PROCESS-WHAT IT IS AND HOW IT IS USED”, Math Modelling, Vol. 9, No. 3-5, pp. 161-176, 1987.**
5. **Chen C.T. „Extensions of the TOPSIS for group decision-making under fuzzy environment”, Fuzzy Sets and Systems 114, pp. 1–9, 2000.**
6. **Dehghan- Manshadi B, Mahmudi H, Abedian A, Mahmudi R. „A novel method for materials selection in mechanical design: combination of non-linear normalization and a modified digital logic method”, materials & design, 2007; 28:8-15.**
7. Zadeh, L. A. (1983).The role of fuzzy logic in the management of uncertainty in expert **systems”, Fuzzy Sets and Systems, 11(1–3), 197-198.**
8. **Ribeiro, R. A (1996). „Fuzzy multiple attribute decision making: a review and new preference elicitation techniques”, Fuzzy sets and systems, 78(2), 155-181**
9. Hwang CL, Paidy SR, Yoon k, Masud ASM. Mathematical programming with multiple objectives: a tutorial, Computers & Operations research, 1980; 7:5-31.
10. **Zadeh, L. A. (1975) „The concept of a linguistic variable and its application to approximate reasoning”. Information sciences, 8(3), 199-249**

11. Bevilacqua, M. Ciarapica, F. & Giacchetta, G. (2006), „**A fuzzy-QFD approach to supplier selection**“, **Journal of Purchasing and Supply Management**, 12(1), 14-27.
12. Laukkanen S, Kangas A. „**Applying voting theory in natural resource management: a case of multiple-criteria group decision support**“, **Journal of Environmental Management**, 2002; 64(2):127- 37.
13. Belton V, Stewart T. „**multiple criteria decision analysis: an integrated approach**“ (2002), ISBN: 978-1-4613-5582-3 (Print) 978-1-4615-1495-4
14. Opricovic S, Tzeng GH. „**Compromise solutions by MCDM methods: a comparative analysis of VIKOR & TOPSIS**“, **European Journal of Operational Research** 156 (2004) 445–455
15. Belton V, Stewart T. „**multiple criteria decision analysis: an integrated approach**“ (2002),
16. Opricovic S, Tzeng GH. „**Compromise solutions by MCDM methods: a comparative analysis of VIKOR & TOPSIS**“, **European Journal of Operational Research** 156 (2004) 445–455
17. Opricovic S, Tzeng GH. „**Extended VIKOR Method in Comparison with Outranking Methods**“, **European Journal of Operational Research**, 2007; 32:721-735
18. Raoot AD, Rakshit A. „**A Fuzzy Approach to Facilities Layout Planning**“, **International Journal of Production Research**, 1991; 29:835-57.
19. Pan J, Teklu Y, Rahman S. „**An Interval-Based MADM Approach to the Identification of Candidate Alternatives in Strategic Resource Planning**“, **IEEE TRANSACTIONS ON POWER SYSTEMS**, VOL. 15, NO. 4, NOVEMBER 2000, pp.1441-1446
20. Bhutia P.W, Phipon R. „**Application of AHP and TOPSIS Method for Supplier Selection Problem**“, **IOSR Journal of Engineering**, 2012; 2:43-50
21. Raoot AD, Rakshit A. „**A Fuzzy Approach to Facilities Layout Planning**“, **International Journal of Production Research**, 1991; 29:835-57.
22. Karray F, Maalej A, Alimi A.M. „**The Design of Beta Basis Function Neural Network and Beta Fuzzy Systems by A Hierarchical Genetic Algorithm**“, **Fuzzy Sets and Systems**, 2005; 154:251-74.
23. Evans, G. W., Wilhelm, M. R. and Karwowski, W. (1987) A layout design heuristic employing the theory of fuzzy sets, **International Journal of Production Research**, 25(10), 1431-1450.
24. Fan ZP, Ma J, Zhang Q. „**An Approach To Multiple Attribute Decision Making Based On Fuzzy Preference Information On Alternatives**“, **Fuzzy Sets And Systems**, 2002; 131:101-6.
25. Pan J, Teklu Y, Rahman S. „**An Interval-Based MADM Approach to the Identification of Candidate Alternatives in Strategic Resource Planning**“, **IEEE TRANSACTIONS ON POWER SYSTEMS**, VOL. 15, NO. 4, NOVEMBER 2000, pp.1441-1446
26. Karray F, Maalej A, Alimi A.M. „**The Design of Beta Basis Function Neural Network and Beta Fuzzy Systems by A Hierarchical Genetic Algorithm**“, **Fuzzy Sets and Systems**, 2005; 154:251-74.
27. Ebrahimi M, Mirzayi M. „**Selecting the best zones to add new emergency services based on a hybrid fuzzy MADM method: A case study for Tehran**“, **Safety Science**, Volume 85, June 2016, Pages 67–76.

A Critical Literature Survey with Fuzzy-Topsis Methodology : Job Satisfaction in India

Amit Kumar*

ABSTRACT

Job satisfaction or employee satisfaction is a measure of workers' contentedness with their job, whether or not they like the job or individual aspects or facets of jobs, such as nature of work or supervision [1]. Job satisfaction can be measured in cognitive (evaluative), affective (or emotional), and behavioural components [2]. Excessive pressure leads to stress. Many of the stressful life events are related to the workplace. Employees who start to feel the pressure to perform are likely to get caught in a downward spiral of increasing effort in order to meet rising expectations but no increase in job satisfaction. Many organisations in Delhi are trying to promote Work Life Balance (WLB) through initiatives which include flex times, part time work, provision of child care facilities etc. The paper is an extension of the FUZZY-TOPSIS Approach and an attempt is made in order to provide solution for problem of job satisfaction in India. Various factors which are involved in job satisfaction are considered and thereafter the problem is related with this FUZZY-TOPSIS Approach in order to get the best favourable factor responsible for job satisfaction.

Keywords: FUZZY Logic, TOPSIS, Work Life Balance (WLB)

INTRODUCTION

Researchers have noted that job satisfaction measures vary in the extent to which they measure feelings about the job (affective job satisfaction). or cognitions about the job (cognitive job satisfaction). Employers have been providing various welfare measures such as good working conditions, health, safety, and security provisions to employees since industrialization. The conventional wisdom indicates that a happy worker is a better worker. But it seems that the employers find it difficult to understand this fact. We all experience pressure on a daily basis. We need it to motivate us and enable us to perform at our best. Although this is a sound argument in the wake of our developing economy struggling to sustain and expand economic growth, yet it needs to be checked whether the burden is not being borne by the industry's labour force. Job satisfaction is a big factor in employee engagement and the level of discretionary effort team members are likely to make. No doubt, people's work performance suffers when they don't feel satisfied with their jobs, not to mention their quality of life. When it comes to job satisfaction factors, the conversation usually revolves around onsite perks and wellness programs initiatives such as flexible working hours, alternative work arrangements, leave policies and benefits in lieu of family care responsibilities and employee assistance programmes have become a significant part of most of the company benefit programmes and compensation packages.

FACTORS AFFECTING JOB SATISFACTION

Understanding the psychological factors of job satisfaction will give you the ability to offer to your team things that are truly important to them.

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Achievement

Sometimes, it can be hard for team members to understand what they're contributing to the big picture. People feel more satisfied when they feel they are achieving something. Your team members need to feel that they are part of something. Even 'small wins' count. Prof. Teresa Amabile has found that 28% of minor work events have a major impact on work life.

Feed back

Not receiving feedback on their work can be quite discouraging for most people. Effective feedback will help your team members know where they are and how they can improve. You also need to know what kind of feedback your team members respond to best. Research shows that novices seek and respond to positive feedback, while experts respond to negative feedback. In the case of negative feedback, it's not enough to simply point out what is wrong. Explain why something they did isn't working, and how it might be corrected.

Control

Pointing out to your team members where you want them to go is great. Mapping out the exact route they need to get there is not. Autonomy and control are necessary for people to feel satisfied with their work. In fact, psychologists have found that the less control people have over their jobs, the more stressful and unsatisfying they find it.

Small Daily Hassles

Workers' job satisfaction is quite sensitive to daily hassles such as unnecessary busy work, or senseless administrative tasks. Although they might not seem like much, day-to-day irritations can really affect job satisfaction. The good news is, this is one of the easiest things to change, and it's a big hit in boosting employee satisfaction. Take a look at your current processes and see if they can be simplified. Ask your people what their daily hassles are, and address them. They will be grateful for it!

Organizational Support

Organizational support people perceive the higher job satisfaction they experience. People want to know that their workplace cares about them. This can be expressed through a multitude of messages, from how superiors treat them, to the benefits they receive and other, more subtle, messages. Even if you can't offer your staff all the benefits and perks you'd like, the important thing is that they perceive their organization supports them.

Recognition

If you don't recognize the accomplishments of your team, you might as well tell your staff that you don't care about the work they do. And if you only communicate negative outcomes but don't recognize accomplishments enough, you might discourage your team from taking risks. You should definitely focus on the challenges your team is facing, but you should also spend some time reflecting on how much has already been achieved. If your team feels that their achievements matter, they will feel motivated to continue pursuing your company's goals.

Physical work Environment

Because teams will spend so much of their time in the office, the physical work environment can really make a difference in job satisfaction. But don't think you need to plop a slide in the middle of your office. A good desk, a little privacy, and separating the social and quiet areas will do to start with. Add in good lighting and some plants, and your office space is already better than many. Take some inspiration from these amazing office layouts.

Flexibility

Offering flexibility is a great way to show your team members that you trust them. What's more the gift of time is one of the most appreciated workplace perks. Smart people work best when they can choose their own schedule. Flexible hours can increase engagement and productivity. But keep in mind that they may decrease collaboration. Finding a balance will depend on what your team is looking to achieve, but you can start with 1-2 days of remote work per week.

Relationship to Immediate Supervisor

Great team leaders know that their staff need both praise for their accomplishments and recognition for their efforts. At the same time, team members should feel that they can always approach their immediate supervisors with any questions or concerns that are

affecting their performance. Effective communication in the relationship between team members and the immediate supervisor is crucial, and can make or break job satisfaction.

Work-life Balance

Work-life balance has become a crucial element in workplace satisfaction. Although problems at home can impact work performance, it turns out that trouble at the office is more likely to affect personal life. Another important factor in well-being and work engagement is your team members' ability to detach themselves from work during off-job time. A longitudinal study showed that high job demands lead to emotional exhaustion, psychosomatic complaints and lowered work engagement. But detachment from work during off hours buffers the impact of job stressors on personal life. Allow your team members to distance themselves from their work when they're off. A no-after-hours-communication policy, except for in cases of extreme emergency, might work to start with. If you're looking to improve satisfaction at your workplace, try by starting with the easiest thing on this list to implement in your company. Whichever one you choose, even if it might not seem like much, know that it will be appreciated by your team members.

MULTIPLE ATTRIBUTE DECISION MAKING

Multi attribute decision making (MADM) approach has been used for decision making problems. It helps in making preference decisions over the available set of alternatives that are characterised by multiple, typically conflicting attributes [3]. It works on a set of theories methods & procedures. In the first step of MADM approach, alternatives & related attributes are determined. Secondly, the alternatives & corresponding attributes are attached with numerical measures followed by their relative interest. The decision problem is formulated in matrix form, where rows show the alternatives & the columns denote the relative attributes and cross field shows the numerical values for each pair of alternative and attribute. In the last step, the problem is examined or solved by one of the many available methods that lead us to the final ranking [4] of the factors that are affecting the job satisfaction.

Multiple Attribute Decision-Making Methods

Fuzzy Logic

Introduced by Lotfi A. Zadeh in 1965 to solve the problems where there are no clear boundaries between the two or more parameters, Fuzzy logic, is also a great help with problems where it is difficult to distinguish between member and non-member objects of a problem. Fuzzy logic provides a natural framework for the management of uncertainty in expert systems to provide a systematic basis for representing and inferring inexplicit knowledge [5]. It was used for multiple criteria decision making where the emphasis is on possibility rather than probability [6]. Fuzzy logic is based on a set theory. It comprises of a membership function within the interval $[0, 1]$, which describes the extent of relevance of an element for being the member of the set. Linguistic variables are used for all the comparisons, which are assigned numerical values without any enigma. A linguistic variable is a variable whose value are words or sentences in a natural or artificial language [7]. For instance, quality is a linguistic variable if its values are assumed to be **the fuzzy variables labelled as “good”, “bad”, “worst” rather than the actual numbers. The main** application of the linguistic approach lies in the realm of humanistic system especially in the fields of artificial intelligence, linguistics, human decision processes, pattern recognition, psychology, economics and related areas [8].

In the present study, we use trapezoidal fuzzy numbers (TFN). Figure 3.2 shows a typical TFN (b_1, b_2, b_3, b_4) for $\{b_1, b_2, b_3, b_4 \in \mathbb{R}; b_1 \leq b_2 \leq b_3 \leq b_4\}$ [11]. It is sometimes convenient to work with TFN because of the ease and ability to process information in a fuzzy environment.

The membership function $\mu_b(x)$ of trapezoidal fuzzy number is defined as:

(Eq.1)

$$\mu_b(x) = \begin{cases} \frac{x - b_1}{b_2 - b_1}, & x \in [b_1, b_2] \\ 1, & x \in [b_2, b_3] \\ \frac{b_4 - x}{b_4 - b_3}, & x \in [b_3, b_4] \\ 0, & \text{otherwise} \end{cases}$$

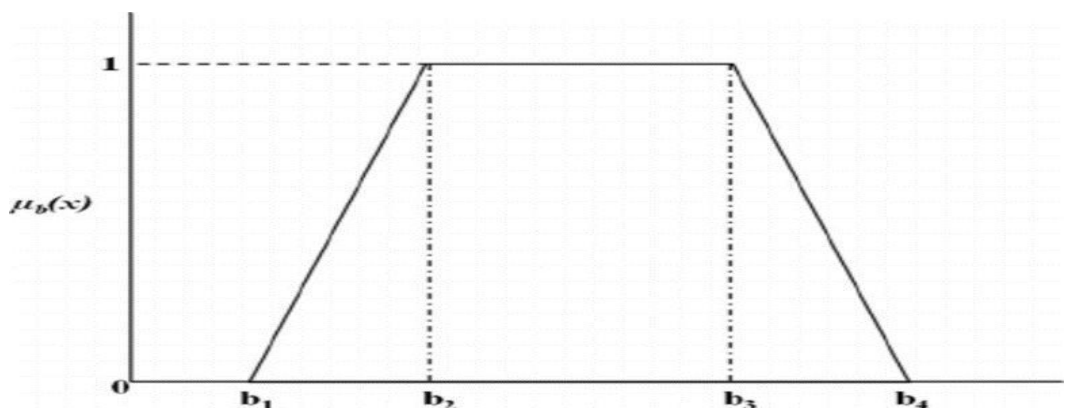


Figure-1: Trapezoidal Fuzzy Number

TOPSIS

Technique for order preference by similarity to ideal solution (TOPSIS), first suggested by Hwang and Yoon in 1981, is a well-known MADM approach. It is a perfect logic based computation method that can be simply executed, which represents sensible human preferences and provides a value that all together accounts for the most excellent and poor alternatives [7]. In TOPSIS the selected alternative should have the shortest distance from the positive ideal solution, and also have the longest distance from the negative ideal solution, to resolve the MADM problems [9]. The positive ideal solution enhance the profit criteria and lowers down the cost criteria, where the negative ideal solution enhance the cost criteria and lowers the profit criteria [10]. In TOPSIS, it is assumed that we have 's' number of alternatives and 'c' number of selection criteria and also, we have the rank of each alternative with respect to each criterion [11].

FUZZY-TOPSIS METHODOLOGY

The step-by-step procedure involved in the fuzzy-TOPSIS approach for ranking the various Indian states for the effective utilization of wind energy resources. The approach incorporates MDL weights for pair wise comparison among all considered criteria followed by fuzzy logic approach with TOPSIS method to obtain optimum results. Following steps are used for this purpose:

Step 1: Calculation of MDL Weights

MDL weights (W_j) are calculated for all selection criterion. This gives the weights of different criteria which helps us to know the relative impact of each criteria on the rankings of the Factors.

Step 2: Describe Linguistic Variables

A set of fuzzy rates is required to compare all the alternatives for each criterion. These fuzzy terms are assigned by the decision makers and responsible for intra criterion comparisons of the alternatives.

Step 3: Construction of Decision matrix:

Let p be the parameters and q be the alternatives for k number of decision makers in the suggested model. The aggregated fuzzy rating for C_j criterion is represented as $x_{ijk} = \{x_{ijkl}, x_{ijk2}, x_{ijk3}, x_{ijk4}\}$. For $i=1, 2, \dots, p$; $j=1, 2, \dots, q$ and $k=1, 2, \dots, k$, x_{ijk} is calculated as [12,13].

(Eq.2)

$$\begin{cases} x_{ij1} = \min_k \{b_{ijk1}\} \\ x_{ij2} = \frac{1}{k} \sum b_{ijk2} \\ x_{ij3} = \frac{1}{k} \sum b_{ijk3} \\ x_{ij4} = \max_k \{b_{ijk4}\} \end{cases}$$

Thus the obtained decision matrix ((M) is shown as:

$$M = \begin{bmatrix} x_{11} & x_{12} & \dots & x_{1p} \\ x_{21} & x_{22} & \dots & x_{2p} \\ \vdots & \vdots & \ddots & \vdots \\ \vdots & \vdots & \ddots & \vdots \\ x_{q1} & x_{q2} & \dots & x_{qp} \end{bmatrix}$$

Step 4: Defuzzification

A method to convert fuzzy output to crisp value (quantified result) in fuzzy logic by real valued functions is known as Defuzzification. It is performed to obtain the crisp values for each criterion corresponding to each Factor (alternative). This provides a quantitative value for the linguistic variables and fuzzy numbers assigned based on the verbal reasoning of the decision makers. We obtain the crisp values by the following equation:

(Eq.3)

$$f_{ij} = \text{Defuzz}(x_{ij}) = \frac{\int \mu(x) \cdot x dx}{\int \mu(x) \cdot dx} = \frac{\int_{x_{y1}}^{x_{y2}} \left\{ (x - x_{y1}) / (x_{y2} - x_{y1}) \right\} \cdot x dx + \int_{x_{y2}}^{x_{y3}} x dx + \int_{x_{y3}}^{x_{y4}} \left\{ (x_{y4} - x) / (x_{y4} - x_{y3}) \right\} \cdot x dx}{\int_{x_{y1}}^{x_{y2}} \left\{ (x - x_{y1}) / (x_{y2} - x_{y1}) \right\} dx + \int_{x_{y2}}^{x_{y3}} dx + \int_{x_{y3}}^{x_{y4}} \left\{ (x_{y4} - x) / (x_{y4} - x_{y3}) \right\} \cdot x dx}$$

$$= \frac{-x_{y1}x_{y2} + x_{y3}x_{y4} + (1/3)(x_{y4} - x_{y3})^2 + (1/3)(x_{y2} - x_{y1})^2}{-x_{y1} - x_{y2} - x_{y3} + x_{y4}}$$

On integrating the crisp values, thus obtained, with MDL weights, we get the final ranking using TOPSIS approach as discussed below.

TOPSIS APPROACH STEPS

Step 5: Normalized the matrix as given below

(Eq.4)

$$r_{ij} = \frac{f_{ij}}{\sqrt{\sum_{i=1}^m (f_{ij})^2}}; \forall_j$$

Step 6: Calculate the weighted normalized decision matrix as given:

(Eq.5)

$$V_{ij} = [r_{ij}]_{m \times n} \times [W_j]_{n \times m}^{\text{diagonal}}$$

Step 7: Calculate the positive ideal and negative ideal solution:

The positive ideal solution V_j^+ and negative ideal solution V_j^- are as given below:
(Eq.6)

$$V_j^+ = \{(\max V_{ij}, j \in J_1), (\min V_{ij}, j \in J_2), i = 1, 2, 3, \dots, m\}, \forall j$$

$$V_j^- = \{(\min V_{ij}, j \in J_1), (\max V_{ij}, j \in J_2), i = 1, 2, 3, \dots, m\}, \forall j$$

Where, J_1 and J_2 represents higher best and lower best criteria respectively.

Step 8: Calculate the distance d_i^+ and d_i^- from the positive ideal solution and negative ideal solution respectively as follows:
(Eq.7)

$$d_i^+ = \left[\sum_{j=1}^n (V_{ij} - V_j^+)^2 \right]^{0.5}, i = 1, 2, 3, \dots, m$$

$$d_i^- = \left[\sum_{j=1}^n (V_{ij} - V_j^-)^2 \right]^{0.5}, i = 1, 2, 3, \dots, m$$

Step 9: Calculation of TOPSIS rank index:
(Eq.8)

$$C_i^+ = \frac{d_i^-}{d_i^- + d_i^+}$$

Project which has the highest rank index C_i^+ are preferred.

LITERATURE REVIEW

Raoot and Rakshit(1991) proposed a construction- type layout design heuristic based on fuzzy set theory. A linguistic variable was used to model the qualitative design criteria, and then to determine the closeness relationship matrix, which was used to construct a layout design. This approach provided for a systematic treatment of uncertainty due to fuzziness [12].

Pan et al. (2000) used MADM method extensively for the strategic planning of electric utilities for choosing the best resource policy. In most of the MADM problems, the evidence available to the decision-maker is often imprecise due to imprecise attribute quantities and inconsistent urgency rules. This paper showcases an interval-based MADM approach to support the decision making process with inexact information. It contribute to help the decision maker gain in understanding how the rough data may affect the choice toward the best resolution and how a set of acceptable substitutes may be identified with certain sureness [13].

Karray et al. (2000) proposed an integrated methodology using the fuzzy set theory and genetic algorithms to investigate the layout of temporary facilities in relation to the planned buildings in a

construction site. Fuzzy linguistic representation was used to identify the closeness relationship values between each pair of facilities in a construction site [14].

Fan et al. (2002) investigates the MADM problems with liking information on changes. A new approach was proposed to solve the MADM problem, where the decision maker gives his preference on alternatives in a fuzzy relation. To consider the decision maker's preference information, an optimization model was assembled to assess the quality weights and then to select the most required alternatives [15].

Garg et al. (2006) proposed a deterministic quantitative model based on graph theoretical methodology (GTM) to compare various technical and economical features of wind, hydro and thermal power plants. It was used to evaluate and rank the power plants in ascending or descending order in accordance with the value of their suitability index. This suitability index is the permanent value of the plant attribute matrix, which is a combination of attribute rating matrix and attribute relative importance matrix. The plant with rank 1 is the optimized selection for the customer's/user's desires on the particular application under consideration [16].

Lee et al. (2008) developed an innovative analytical approach to evaluate the forms of buyer-supplier relationship between a manufacturer and its supplier. A fuzzy-AHP model which incorporates the benefits, opportunities, costs & risks concepts is constructed to deal with supplier's election problem [17].

Yonca (2009) in the thesis created a Geographic Information System (GIS)-based methodology for evaluating alternative locations for wind, solar and hybrid power plants by using fuzzy multi-criteria decision making. Individual satisfaction degrees for each alternative location with respect to the identified environmental objectives and economic feasibility criteria are calculated using fuzzy set theory tools. Then these individual satisfaction degrees are aggregated into overall performance indexes which are used to determine priority maps for wind and solar energy generation facilities [18].

Amin et al. (2011) applied quantified SWOT (strengths, weaknesses, opportunities and threats) in the context of supplier selection for the first time, which can consider both qualitative & quantitative criteria. Also, fuzzy logic and triangular fuzzy numbers are integrated with it [19].

Bhutia and Phipon (2012) also used AHP and TOPSIS method for supplier selection problem. In this study, some important parameters were considered which affect the process of supplier selection and then using MADM method, a ranking of various suppliers is prepared [20].

Chauhan & Vaish (2012) have done a comparative study on material selection for micro electro-mechanical systems. In this study, MADM approaches have been explored and compared with other approaches. This study establishes that MADM approaches are also efficient and easy to apply without any prior mathematical calculations [21].

Lanjewar et al. (2014) showed the combined graph theory (GTM) and analytical hierarchy process (AHP) approach for the evaluation and selection of hydrogen energy systems.

Rathi et al. (2015) deliberates on an approach for right Six Sigma project selection at an automotive industry using fuzzy logic based TOPSIS method. For this purpose, evaluation criteria have been designed for selection of best alternative, which are then given a specific weightage by using modified digital logic (MDL), and the final ranking is obtained by the priority index obtained from fuzzy-TOPSIS approach. It was found in the study that this method for project selection helps to improve the overall productivity for the industry [22].

Saket et al. (2015) illustrated fuzzy VIKOR analysis for customer performance index (CPI) of civil domestic airline industry in India. CPI consists of various parameters, which are difficult to measure. In this particular study, prime factors crucial for evaluation of performances of various airlines in India, are identified [23].

Ebrahimi et al. (2016) conducted a study to select the best zones to add new emergency services in the non-disaster case or earthquake disaster based on a combination of fuzzy decision making techniques including TOPSIS and AHP methods. A novel algorithm for the optimum location of EMS is proposed to optimize service response time to the people, to fulfil the needs of victims and rescue teams in non-disaster case or after a possible disaster. Two new MADM models with different crisp and fuzzy criteria are introduced for ranking the 22 zones of Tehran city in these cases. The results show that the proposed fuzzy decision making system successfully determines the best locations [24].

CONCLUSION AND REMARK

This Critical Literature Survey paper reveals the research work carried out in the field of optimal decision making approach techniques. It offers various advantages like plant site selection, product design selection, layout design selection, ranking crucial parameters among the various conflicting parameters etc.

MADM Approach techniques is the crucial tool for setting up new plant like hydropower plant, wind energy plant, plant layout design and any type of plant. With the help of MADM approaches we find appropriate alternatives to take optimal decision to set up any kind of plant for effective and efficient utilization of available resource which also includes Human Resource.

This effort is one of its first kind in which FUZZY-TOPSIS approach is been extended to this field. Through this study we will come to know about the hierarchy of factors which leads to the optimum Work-Life Balance which will be beneficial to both the employees and employers.

The MADM Approaches Technique method is applicable in almost every field for making optimal decision.

REFERENCES

1. Spector, P.E. (1997). Job satisfaction: Application, assessment, causes and consequences. Thousand Oaks, CA: SAGE
2. Thompson, E.R.; Phua F.T.T. (2012). "A Brief Index of Affective Job Satisfaction". *Group & Organization Management*. 37(3):275–30
3. Yoon KP, Hwang CL. Multiple Attribute decision making: an introduction: Sage Publications, 1995.
4. Bernroder EW, Stix V. 'On the applicability of Data envelopment analysis for MADM in the context of information systems appraisal', *Communication of the IIMA*, 2006, volume 6, issue 2, article 13.
5. Zadeh, L. A. (1983). 'The role of fuzzy logic in the management of uncertainty in expert systems', *Fuzzy Sets and Systems*, 11(1–3), 197–198.
6. Ribeiro, R. A (1996). 'Fuzzy multiple attribute decision making: a review and new preference elicitation techniques', *Fuzzy sets and systems*, 78(2), 155–181
7. Hwang CL, Paidy SR, Yoon K, Masud ASM. Mathematical programming with multiple objectives: a tutorial, *Computers & Operations research*, 1980; 7:5–31.
8. Zadeh, L. A. (1975) 'The concept of a linguistic variable and its application to approximate reasoning', *Information sciences*, 8(3), 199–249
9. Laukkanen S, Kangas A. 'Applying voting theory in natural resource management: a case of multiple-criteria group decision support', *Journal of Environmental Management*, 2002; 64(2):127–37.
10. Belton V, Stewart T. 'multiple criteria decision analysis: an integrated approach' (2002), ISBN: 978-1-4613-5582-3 (Print) 978-1-4615-1495-4
11. Opricovic S, Tzeng GH. 'Compromise solutions by MCDM methods: a comparative analysis of VIKOR & TOPSIS', *European Journal of Operational Research* 156 (2004) 445–455
12. Belton V, Stewart T. 'multiple criteria decision analysis: an integrated approach' (2002),

13. Opricovic S, Tzeng GH. 'Compromise solutions by MCDM methods: a comparative analysis of VIKOR & TOPSIS', *European Journal of Operational Research* 156 (2004) 445–455
14. Opricovic S, Tzeng GH. 'Extended VIKOR Method in Comparison with Outranking Methods', *European Journal of Operational Research*, 2007; 32:721-735
15. Raoot AD, Rakshit A. 'A Fuzzy Approach to Facilities Layout Planning', *International Journal of Production Research*, 1991; 29:835-57.
16. JPan J, Teklu Y, Rahman S. 'An Interval-Based MADMA Approach to the Identification of Candidate Alternatives in Strategic Resource Planning', *IEEE TRANSACTIONS ON POWER SYSTEMS*, VOL. 15, NO. 4, NOVEMBER 2000, pp.1441-1446
17. Bhutia P.W, Phipon R. 'Application of AHP and TOPSIS Method for Supplier Selection Problem', *IOSR Journal of Engineering*, 2012; 2:43-50
18. Bhutia P.W, Phipon R. 'Application of AHP and TOPSIS Method for Supplier Selection Problem', *IOSR Journal of Engineering*, 2012; 2:43-50
19. Raoot AD, Rakshit A. 'A Fuzzy Approach to Facilities Layout Planning', *International Journal of Production Research*, 1991; 29:835-57.
20. Karray F, Maalej A, Alimi A.M. 'The Design of Beta Basis Function Neural Network and Beta Fuzzy Systems by A Hierarchical Genetic Algorithm', *Fuzzy Sets and Systems*, **2005**;154:251-74.
21. Fan ZP, Ma J, Zhang Q. 'An Approach To Multiple Attribute Decision Making Based On Fuzzy Preference Information On Alternatives', *Fuzzy Sets And Systems*, 2002; 131:101-6.
22. Pan J, Teklu Y, Rahman S. 'An Interval-Based MADMA Approach to the Identification of Candidate Alternatives in Strategic Resource Planning', *IEEE TRANSACTIONS ON POWER SYSTEMS*, VOL. 15, NO. 4, NOVEMBER 2000, pp.1441-1446
23. Karray F, Maalej A, Alimi A.M. 'The Design of Beta Basis Function Neural Network and Beta Fuzzy Systems by A Hierarchical Genetic Algorithm', *Fuzzy Sets and Systems*, 2005;154:251-74.
24. Ebrahimi M, Mirzayi M. 'Selecting the best zones to add new emergency services based on a hybrid fuzzy MADM method: A case study for Tehran', *Safety Science*, Volume 85, June2016, Pages 67–76.

A Study on Emotional Intelligence and Emotional Maturity Among B.Ed. Trainees

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ABSTRACT

One of the more interesting things about emotional intelligence is that a key to developing it is good self-insight. This is not surprising really; in order for us to be able to read other people, we must first be able to read ourselves accurately. Emotional intelligence is not about letting yourself being ruled by your emotions. Quite to the contrary, it is about using emotions smartly. People, who seem to fly off the handle, and have very little control over their own emotions, also have very little emotional intelligence. Emotional maturity allows you to take charge of your life. You have your own vision for your life and your own ambition for success. Focusing on realizing your vision, you can create a happy, healthy life where you respect yourself and others.

Keywords: Accurately, Smartly, Maturity, Healthy, Maturity, Clearly.

INTRODUCTION

The most emotionally intelligence people are excellent at regulating their own emotions. They are precise and deliberate, they don't 'lose the plot' and they handle interactions in an authentic way. Every emotion is followed by physiological change such as rapid heartbeat, change in the pulse rate, change in blood pressure, and change in the facial expression, voice and body movements. Emotions are subjective and purely individual. The same situation may evoke different emotions in different individuals.

EMOTIONAL INTELLIGENCE

Emotional intelligence (EI) refers to the ability to perceive, control and evaluate emotions. Some researchers suggest that emotional intelligence can be learned and strengthened, while others claim it is an inborn characteristic.

Goleman argued that it was not cognitive intelligence that guaranteed business success but emotional intelligence. He described emotionally intelligent people as those with four characteristics:

- They were good at understanding their own emotions (self-awareness)
- They were good at managing their emotions (self-management)
- They were empathetic to the emotional drives of other people (social awareness)
- They were good at handling other people's emotions (social)

HISTORY OF EMOTIONAL INTELLIGENCE

Peter Salovey and John D. Mayer coined the term 'Emotional Intelligence' in 1990 describing it as "a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action".

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Salovey and Mayer also initiated a research program intended to develop valid measures of emotional intelligence and to explore its significance. For instance, they found in one study that when a group of people saw an upsetting film, those who scored high on emotional clarity recovered more quickly. In another study, individuals who scored higher in the ability to perceive accurately, understand, and appraise others' emotions were better able to respond flexibly to changes in their social environments and build supportive social networks.

MATURITY

An emotionally mature person has experienced the spectrum of emotions, understands the consequences of each, and knows the benefits of being in control of them. Most importantly, an emotionally mature person knows what kinds of things sets of different emotions in them, and they know how to identify each emotion, clearly. They don't fall into a panic trying to determine what they feel, and how they should react. They know, and they manage themselves accordingly. One of the things that stand in most people's way from reaching emotional maturity is learning how to deal with stress.

STATEMENT OF THE PROBLEM

The title of the problem is, "*A Study on Emotional Intelligence and Emotional Maturity among B.Ed., Trainees in Namakkal District*".

OBJECTIVES OF THE STUDY

1. To find out the significant difference in the emotional intelligence of B.Ed. trainees based on their gender.
2. To find out the significant difference between in the emotional maturity of B.Ed. trainees based on their gender.
3. To find out the significant difference in the emotional intelligence of B.Ed. trainees based on their locality.
4. To find out the significant difference in the emotional maturity of B.Ed. trainees based on their locality.
5. To find out the significant difference in the emotional intelligence of B.Ed. trainees based on their medium.
6. To find out the significant difference in the emotional maturity of B.Ed. trainees based on their medium.
7. To find out the significant difference in the emotional intelligence of B.Ed. trainees based on their qualification.
8. To find out the significant difference in the emotional maturity of B.Ed. trainees based on their qualification.

LIMITATIONS OF TH STUDY

1. Emotional Intelligence Rating Scale was distributed only to the B.Ed. teacher trainees.
2. In the present study data was collected form only 5 collage of education.
3. The sample of only 250 teacher trainees were selected due to constraints of the cost and time factors.

METHODOLOGY

Methodology is a process, which reveals that all those methods and techniques used by the researcher during the course of studying her research problem. The success of any research mainly depends on the tool and proper methods adopted in the research process.

HYPOTHESES OF THE STUDY

1. There is no significant difference in the emotional intelligence of B.Ed. trainees based on their gender.
2. There is no significant difference between in the emotional maturity of B.Ed. trainees based on their gender.
3. There is no significant difference in the emotional intelligence of B.Ed. trainees based on their locality.
4. There is no significant difference in the emotional maturity of B.Ed. trainees based on their locality.
5. There is no significant difference in the emotional intelligence of B.Ed. trainees based on their medium.
6. There is no significant difference in the emotional maturity of B.Ed. trainees based on their medium.
7. There is no significant difference in the emotional intelligence of B.Ed. trainees based on their qualification.
8. There is no significant difference in the emotional maturity of B.Ed. trainees based on their qualification.
9. There is no significant difference in the emotional intelligence of B.Ed. trainees based on their marital status.
10. There is no significant difference in the emotional maturity of B.Ed. trainees based on their marital status.
11. There is no significant difference in the emotional intelligence of B.Ed. trainees based on the nature of college.
12. There is no significant difference in the emotional maturity of B.Ed. trainees based on the nature of college.
13. There is no significant difference in the emotional intelligence of B.Ed. trainees based on their parent's occupation.
14. There is no significant difference in the emotional maturity of B.Ed. trainees based on their parent's occupation.
15. There is no significant relationship between emotional intelligence and emotional maturity of B.Ed. trainees.

TOOL USED IN THE PRESENT STUDY

In the present study, the investigator used the Emotional intelligence scale by Dr.K.D.Brooto (1989) and Emotional maturity scale by Dr.Yashvir Singh and Dr.Mahesh Bargava(1991).

DESCRIPTION OF THE TOOL

This test consists of 20 items. This tool is meant for college students. In this scale against each statement five alternatives namely 'always', 'usually', 'sometimes', 'rarely' and 'never' are given. The subjects have to indicate their choice by putting a tick mark in one of the five columns against

each statement. Thus they are required to respond for all the statements in the scale. The reliability of emotional intelligence was found to be 0.817 by using split half method and the content validity ensured as the tool was developed on the basis of Gardner's emotional Intelligence Theory.

ADMINISTRATION

The investigator established rapport with the teacher trainees and explained the purpose of the investigation. The investigator made the arrangements for investigation and informed to the teacher trainees that they were not being tested, and their responses would be kept confidential in the strict sense. Then the inventory was distributed to the teacher trainees and was asked to record their responses by putting a (✓) mark against every statement on the answer sheet.

SCORING

Scoring of the response sheets was done as per the scoring scheme. The total score of all 20 items yield the total emotional intelligence score of a student as per the responses given by the sample. The responses given by the samples were calculated as per the table.

EMOTIONAL MATURITY SCALE DESCRIPTION

This scale is assessed by evaluating the following five aspects of an individual namely,

- (a) Emotional instability
- (b) Emotional regression
- (c) Social maladjustment
- (d) Personality disintegration
- (e) Lack of independence

There are 35 positive statements in the emotional maturity scale, of these, statements 1-7 measure emotional instability, statements 8-14 evaluate emotional regression statements 15-21 evaluate social maladjustment, statements 22-28 evaluate personality disintegration, statements 29-35 determines lack of independence. The total score of items 1-35 attribute to the total emotional maturity of an individual. The higher score of the emotional maturity scale lower is the emotional maturity and vice - versa. The reliability of emotional maturity was found to be 0.71 by using split half method and the content validity ensured as the tool was developed on the basis of Gardner's emotional Theory.

SCORING

The net score of an individual with respect to emotional maturity is the sum of all scores in each of the 35 items as shown in table.

COLLECTION OF DATA

The investigator herself visited the B.Ed colleges situated in Namakkal District and met the principal of the respective colleges and got permission to administer the emotional intelligence, emotional maturity scale and Personal Information Blank. At first, the investigator explained the aims and purpose of the study and then administered the tool to two hundred and seventy five B.Ed trainees. Among them only two hundred and fifty B.Ed. trainees responded for each and every item of the statement that are given in the emotional intelligence and emotional maturity Inventory.

STATISTICAL TECHNIQUES USED

For the analysis of the data, the following statistical techniques have been used. Descriptive analysis [mean and S.D], Differential analysis ['t' test], Correlation analysis ['r' test].

ANALYSIS AND INTERPRETATION OF THE DATA

Hypothesis: 1

There is no significant difference in the emotional intelligence B.Ed., trainees based on their gender.

Table-1: Test for Significant Difference Between Male and Female B.Ed Trainees with Respect to their Emotional Intelligence.

Gender	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Male	40	70.18	8.995	---	No
Female	210	70.77	7.888		Significant

As shown in the above table 1, male B.Ed trainees have a mean score of 70.18 with standard deviation 8.995. Female B.Ed trainees have a mean score of 70.77 with standard deviation 7.888. The 't' value obtained for difference between the mean scores of male and female B.Ed trainees is 0.428. This 't' value is less than the table value for critical ratio to be not significant even at 0.05 level. Hence, the framed null hypothesis 1 is accepted. It is inferred that, the male and female B.Ed. trainees do not differ significantly in their emotional intelligence.

Hypothesis: 2

There is no significant difference in the emotional maturity B.Ed. trainees based on their gender.

Table-2: Test for Significant Difference Between Male and Female B.Ed Trainees with Respect to their Emotional Maturity

Gender	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Male	40	92.15	19.875	1.348	No Significant
Female	210	95.74	14.480		

As shown in the above table 2, male B.Ed trainees have a mean score of 92.15 with standard deviation 19.875. Female B.Ed. trainees have a mean score of 95.74 with standard deviation 14.480. The 't' value obtained for difference between the mean scores of male and female B.Ed trainees is 1.348. This 't' value is less than the table value for critical ratio to be not significant even at 0.05 level. Hence, the framed null hypothesis 2 is accepted. It is inferred that, the male and female B.Ed. trainees do not differ significantly in their emotional maturity.

Hypothesis: 3

There is no significant difference in the emotional intelligence B.Ed. trainees based on their locality.

Table-3: Test for Significant Difference Between Rural and Urban Environment B.Ed. Trainees with Respect to their Emotional Intelligence

Locality	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Rural	170	71.38	8.177	2.016	Significant
Urban	80	69.19	7.641		

As shown in the above table 3, rural area B.Ed. trainees have a mean score of 71.38 with standard deviation 8.177. Urban area B.Ed. trainees have a mean score of 69.19 with standard deviation 7.641. The 't' value obtained for difference between the mean scores of rural and urban area B.Ed. trainees is 2.016. This 't' value is greater than the table value for critical ratio to be significant even at 0.05 level. Hence, the framed null hypothesis 3 is rejected. It is inferred that, the rural and urban area B.Ed. trainees have differ significantly in their emotional intelligence

Hypothesis: 4

There is no significant difference in the emotional maturity B.Ed. trainees based on their locality.

Table-4: Test for Significant Difference Between Rural and Urban Environment B.Ed Trainees with Respect to Their Emotional Maturity.

Locality	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Rural	170	97.12	15.259	2.948	Significant
Urban	80	91.02	15.217		

As shown in the above table 4, rural area B.Ed trainees have a mean score of 97.12 with standard deviation 15.259. Urban area B.Ed. trainees have a mean score of 91.02 with standard deviation 15.217. The 't' value obtained for difference between the mean scores of rural and urban area B.Ed trainees is 2.948. This 't' value is greater than the table value for critical ratio to be significant even at 0.05 level. Hence, the framed null hypothesis 4 is rejected. It is inferred that, the rural and urban area B.Ed trainees have differ significantly in their emotional maturity.

Hypothesis: 5

There is no significant difference in the emotional intelligence B.Ed. trainees based on their medium.

Table-5: Test for Significant Difference Between Tamil and English Medium of B.Ed Trainees with Respect to Their Emotional Intelligence

Medium	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Tamil	134	72.62	8.749	4.235	Significant
English	116	68.43	6.528		

As shown in the above table 5, Tamil medium B.Ed trainees have a mean score of 72.62 with standard deviation 8.749. English medium B.Ed. trainees have a mean score of 68.43 with standard

deviation 6.528. The 't' value obtained for difference between the mean scores of Tamil and English medium B.Ed. trainees is 4.235. This 't' value is greater than the table value for critical ratio to be significant even at 0.05 level.

Hence, the framed null hypothesis 5 is rejected. It is inferred that, the Tamil and English medium B.Ed. trainees have differ significantly in their emotional intelligence.

Hypothesis: 6

There is no significant difference in the emotional maturity B.Ed. trainees based on their medium.

Table-6: Test for Significant Difference Between Tamil and English Medium B.Ed. Trainees with Respect to their Emotional Maturity

Medium	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Tamil	134	97.28	16.166	2.344	Significant
English	116	92.72	14.328		

As shown in the above table 6, Tamil medium B.Ed trainees have a mean score of 97.28 with standard deviation 16.166. English medium B.Ed. trainees have a mean score of 92.72 with standard deviation 14.328. The 't' value obtained for difference between the mean scores of Tamil and English medium B.Ed. trainees is 2.344. This 't' value is greater than the table value for critical ratio to be significant even at 0.05 level.

Hence, the framed null hypothesis 6 is rejected. It is inferred that, Tamil and English medium of B.Ed. trainees have differ significantly in their emotional maturity.

HYPOTHESIS: 7

There is no significant difference in the emotional B.Ed., trainees based on their qualification.

Table-7: Test for Significant Difference Between UG with B.Ed. and PG with B.Ed. Trainees with Respect to their Emotional Intelligence

Qualification	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
UG with B.Ed	187	71.51	8.455	2.871	Significant
PG with B.Ed	63	68.19	6.164		

As shown in the above table 7, UG with B.Ed trainees have a mean score of 71.51 with standard deviation 8.455. PG with B.Ed. trainees has a mean score of 68.19 with standard deviation 6.164. The 't' value obtained for difference between the mean scores of UG and PG with B.Ed. trainees is 2.871. This 't' value is greater than the table value for critical ratio to be significant even at 0.05 level. Hence, the framed null hypothesis 7 is rejected. It is inferred that, the UG and PG with B.Ed. trainees have differ significantly in their emotional intelligence.

HYPOTHESIS: 8

There is no significant difference in the emotional maturity of B.Ed. trainees based on their qualification.

Table-8: Test for Significant Difference Between UG with B.Ed. and PG with B.Ed. Trainees with Respect to their Emotional Maturity

Qualification	N	Mean	Standard Deviation	t- Value	Level of Significance at 0.05 level
UG with B.Ed	187	96.18	16.249	1.783	Significant
PG with B.Ed	63	92.17	12.569		

As shown in the above table 8, UG with B.Ed trainees have a mean score of 96.18 with standard deviation 16.249. PG with B.Ed. trainees has a mean score of 92.17 with standard deviation 14.328. The 't' value obtained for difference between the mean scores of UG and PG with B.Ed. trainees is 2.344. This 't' value is greater than the table value for critical ratio to be significant even at 0.05 level. Hence, the framed null hypothesis 8 is rejected. It is inferred that, the UG and PG with B.Ed. trainees have differ significantly in their emotional maturity.

HYPOTHESIS: 9

There is no significant difference in the emotional intelligence B.Ed. trainees based on their marital status.

Table-9: Test for Significant Difference Between Married and Unmarried B.Ed. Trainees with Respect Intelligence to their Emotional

Marital status	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Married	71	71.20	7.877	0.643	No Significant
Unmarried	179	70.47	8.143		

As shown in the above table 9, married B.Ed. trainees have a mean score of 71.20 with standard deviation 7.877. Unmarried B.Ed. trainees have a mean score of 70.47 with standard deviation 8.143. The 't' value obtained for difference between the mean scores of married and unmarried B.Ed. trainees is 0.643. This 't' value is less than the table value for critical ratio to be not significant even at 0.05 level. Hence, the framed null hypothesis 9 is accepted. It is inferred that, the married and unmarried B.Ed. trainees do not differ significantly in their emotional intelligence.

Hypothesis: 10

There is no significant difference in the emotional maturity B.Ed. trainees based on their marital status.

Table-10: Test for Significant Difference Between Married and Unmarried B.Ed. Trainees with Respect to their Emotional Maturity

Marital Status	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Married	71	96.32	16.163	0.743	No Significant
Unmarried	179	94.71	15.221		

As shown in the above table 10, married B.Ed. trainees have a mean score of 96.32 with standard deviation 16.163. Unmarried B.Ed. trainees have a mean score of 94.71 with standard deviation 15.221. The 't' value obtained for difference between the mean scores of married and unmarried B.Ed. trainees is 0.743. This 't' value is less than the table value for critical ratio to be not significant even at 0.05 level. Hence, the framed null hypothesis 10 is accepted. It is inferred that, married and unmarried B.Ed. trainees do not differ significantly in their emotional maturity.

Hypothesis: 11

There is no significant difference in the emotional intelligence of B.Ed. trainees based on their nature of college.

Table-11: Test for Significant Difference Between Women and Co-Education College B.Ed. Trainees with Respect to their Emotional Intelligence.

Nature of college	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Women	104	72.07	8.147	2.425	Significant
Co- Education	146	69.58	7.864		

As shown in the above table 11, women college B.Ed. trainees have a mean score of 72.07 with standard deviation 8.147. Co-education college B.Ed. trainees have a mean score of 69.58 with standard deviation 7.864. The 't' value obtained for difference between the mean scores of women and co-education B.Ed. trainees is 2.425. This 't' value is greater than the table value for critical ratio to be significant even at 0.05 level. Hence, the framed null hypothesis 11 is rejected. It is inferred that, the women and co-education college B.Ed. trainees have differ significantly in their emotional intelligence.

Hypothesis: 12

There is no significant difference in the emotional maturity of B.Ed. trainees based on their nature of college.

Table-12: Test for Significant Difference Between Women and Co-Education College B.Ed. Trainees with Respect to their Emotional Maturity.

Nature of college	N	Mean	Standard Deviation	t-Value	Level of Significance at 0.05 level
Women	104	98.06	16.636	2.432	Significant
Co- Education	146	93.26	14.294		

As shown in the above table 12, women college B.Ed. trainees have a mean score of 98.06 with standard deviation 16.636. Co-education college B.Ed. trainees have a mean score of 93.26 with standard deviation 14.294. The 't' value obtained for difference between the mean scores of women and co-education B.Ed. trainees is 2.432. This 't' value is greater than the table value for critical ratio to be significant even at 0.05 level.

HYPOTHESIS: 13

There is no significant difference in the emotional intelligence of B.Ed. trainees based on their parent's occupation.

Table-13: Showing Mean Difference of the Emotional Intelligence Among B.Ed. Trainees Based on their Parent's Occupation.

Source of variance	Sum of squares	Df	Mean square	F
Between groups	264.336	2	132.168	2.052
With in groups	15908.420	247	64.407	
Total	16172.756	249		

From the above table 13, it's clear that there is no significant difference on emotional intelligence of B.Ed. trainees based on their parent's occupation. Hence the null hypothesis is accepted.

Hypothesis: 14

There is no significant difference in the emotional maturity of B.Ed. trainees based on their parent's occupation.

Table-14: Showing Mean Difference of the Emotional Maturity Among B.Ed. Trainees Based on their Parent's Occupation.

Source of Variance	Sum of squares	Df	Mean square	F
Between groups	203.828	2	101.914	0.423
With in groups	59455.116	247	240.709	
Total	59658.944	249		

From the above table 14, it's clear that there is no significant difference on emotional intelligence of B.Ed. trainees based on their parent's occupation. Hence the null hypothesis is accepted.

CORRELATION ANALYSIS

HYPOTHESIS: 15

There is no significant relationship between emotional intelligence and emotional maturity.

Table-15: Showing Correlation between Emotional and Emotional Maturity of B.Ed. Trainees

Correlation	N	df	r	Level of significance
Emotional Intelligence and Emotional Maturity	250	248	0.3009	significant

As shown in the table 15, the relationship between emotional intelligence and emotional maturity is studied using r value. It is found to be 0.3009. This r value is greater than the table value (0.113)

for critical ratio to be significant even at 0.05 level. Hence, the framed null hypothesis 15 is rejected. It is inferred, that there is significant relationship between the emotional intelligence and emotional maturity of B.Ed. trainees.

FINDINGS

1. There exists no significant difference in the emotional intelligence of B.Ed. trainees based on their gender.
2. There exists no significant difference between in the emotional maturity of B.Ed. trainees based on their gender.
3. There exists significant difference in the emotional intelligence of B.Ed. trainees based on their locality.
4. There exists significant difference in the emotional maturity of B.Ed. trainees based on their locality.
5. There exists significant difference in the emotional intelligence of B.Ed. trainees based on their medium.
6. There exists significant difference in the emotional maturity of B.Ed. trainees based on their medium.
7. There exists significant difference in the emotional intelligence of B.Ed. trainees based on their qualification.
8. There exists no significant difference in the emotional maturity of B.Ed. trainees based on their qualification.
9. There exists no significant difference in the emotional intelligence of B.Ed. trainees based on their marital status.
10. There exists no significant difference in the emotional maturity of B.Ed. trainees based on their marital status.
11. There exists significant difference in the emotional intelligence of B.Ed. trainees based on the nature of college.
12. There exists significant difference in the emotional maturity of B.Ed. trainees based on the nature of college.
13. There exists no significant difference in the emotional intelligence of B.Ed. trainees based on their parent's occupation.
14. There exists no significant difference in the emotional maturity of B.Ed. trainees based on their parent's occupation.
15. There exists significant relationship between emotional intelligence and emotional maturity of B.Ed trainees.

CONCLUSION

The theory of emotional intelligence and emotional maturity was developed as an account of human cognition that can be subjected to empirical tests. The assessments of intelligences can play a crucial role in curriculum development. Traditionally colleges have almost exclusively emphasized the development of emotional intelligence. When the concepts are presented through the intelligence in which the learner are strong, they are strong, and they are as capable of learning as their traditionally successful peers.

REFERENCES

1. Abraham Carmeli (2013) "The relationship between emotional intelligence and work attitudes, behavior and out comes". New York: Oxford University
2. Alegre(2012) "Parenting Styles and Children's Emotional Intelligence" Virginia Polytechnic Institute and State University. Wallace Hall
3. Anderson, L.W.(1991).Increasing Teacher Effectives. International Institute for Educational Planning, UNESCO: Paris.
4. Araya (1984).Emotional Maturity and value of superior Children in family. Buch Mn. Educational Survey, IV/ Vol.II /Pg.1327.
5. Bar-on,R.(1997).The Emotional Quotient Inventory [EQ-I] Technical Manual. Toronto, Canada; Multi Health Systems.
6. Chayya, M.P.(2001) Effective Teacher-Effective strategies of Teaching. New Delhi; Alpha Publications.
7. Ellis (1999).Workplace Bullying. A Project, Ruskin College Oxford, U.K.
8. Gakhar S.C.(2003). "Emotional Maturity of students at secondary stage: Self concept and Academic Achievement".
9. Gerald Matthews, Moshe Zeidner, Richard D. Roberts (2014)"Psychological Assessment of Emotional Intelligence: A Review of Self-Report and Performance-Based Testing"
10. Ghosh S(1975); A Study of the Emotional Maturity of Bengali Children, Applied Psychology, Calcutta University.
11. Gopal Anvita (2011)"Exploring the relationship between wellness, Emotional Intelligence and job Stress-a Psycho-management Perspectives
12. John D.Mayer, Glenn Geher(2014)"Emotional Intelligence and the identification of Emotion" P.No-22,81. University of New Hampshire
13. John D.Mayer, Richard D.Roberts and Sigal G.Barsade (2014) "Human Abilities: Emotional Intelligence"P. No-22,81.University of New Hampshire
14. Julian Barling(2012) *Transformational Leadership and Emotional Intelligence: An Exploratory study...* Queen's University.
15. Kaur Jagpreet&Singh Kulwinder (2008). "Emotional Intelligence: A conceptual Analysis". India Lather Manisha (2009) "Emotional Intelligence as a measure for success in life". Kurukshetra University, kurukshetra
16. Mohan Radha (2009) "An exploration of the utility of a self-report Emotional Intelligence Measure: Pre-service Teacher Education" Moshe Zeidner, Gerald Matthews and Richard D. Roberts (2014)"Emotional Intelligence in the Workplace:" Goleman,D.(1996)."Emotional Intelligence: why it can matter more than IQ." New York.
17. Petrides et al (2004). "A study of relationship between Emotional Intelligence, Cognitive ability and Academic Performance". London
18. Rose Opengart (2012) "Emotional Intelligence in the K-12 Curriculum and its relationship to American workplace needs" the University of Alabama in Huntsville. United States.
19. Victor Dulewicz, Malcolm Higgs(2013)" Emotional intelligence – A review and evaluation study" University of Reading, Department of Leadership, Organizations and Behaviour, United Status.

A study on Social Intelligence and Life Satisfaction Among Higher Secondary Students

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ABSTRACT

Human society as we know it could not exist without minds and selves, since all its most characteristic features presuppose the possession of minds and selves by its individual members; but its individual members would not possess minds and selves if these had not arisen within or emerged out of the human social process in its lower stages of development-those stages at which it was merely a resultant of, and wholly dependent upon, the physiological differentiations and demands of the individual organisms implicated in it. Consciousness and intelligence, could not otherwise have emerged; because, that is, some sort of an ongoing social process in which human beings were implicated. All these relationships indicate that life satisfaction is a multidimensional concept. There are various resources found the relationship between life satisfaction and life involvement among the variety of population.

Keywords: characteristic, social process, Intelligence, Human beings, Theoretical concept.

INTRODUCTION

People who are more satisfied by their lives tend to experience greater physical and psychological health than people who are less satisfied with their lives. From an economic point of view, it is important to know what causes people to be satisfied with their lives. From a psychological perspective, life satisfaction is an important theoretical concept to be understood. Life satisfaction has been related to job satisfaction, interpersonal relationship, socio economic status, education, family background and many other variables. Various individuals are using learned social skills to improve the quality of the life and relationships. Most of human psychological problems were associated with the society. The psychological problems like depression, fear, confusion, anger created by the lack of positive human emotions is critical to the happiness of the individual in the society.

LIFE-SATISFACTION AND STUDENTS

Life satisfaction has been related to job satisfaction, interpersonal relationships, socio economic status, education, family background, and many other variables. All these relationships indicate that life satisfaction is a multidimensional concept.

What leads students to be satisfied with their lives? According to the scarcity hypothesis of life satisfaction, people who have fewer life commitments and demands should experience greater life satisfaction. Thus, the student who relaxes on the beach is more satisfied with life than the harried student involved in volunteer organizations, campus government, and the honor society.

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EMOTIONS AND LIFE-SATISFACTION

It probably won't surprise many people that depression hinders life satisfaction, positive emotions and cheerfulness. But you might not have guessed just how powerful depression and cheerfulness are predicting life satisfaction. In other words, a sunny personality can predict your life satisfaction better than a full social calendar. And depression kills satisfaction more than other grim traits such as anxiety or anger. 'Wouldn't our intuitions predict that somebody who is disposed to experience more depression, anxiety, and anger has lower life satisfaction than somebody who is only disposed to experience more depression?' ask the researchers.

NEED FOR THE STUDY

The concept of social intelligence is to be applauded, not because it is totally new, but because it captures the essence of what our children or all of us need to know for living a productive, happy and satisfied life. Practical problem - solving ability; 'keeps our open mind'; 'responds thoughtfully to others ideas; Verbal ability; speaks clearly and articulately'; 'is knowledgeable about a field'.

STATEMENT OF THE PROBLEM

Social intelligence and life satisfaction among higher secondary students was chosen as the topic for the present study. Government, Government aided and private schools were selected from Trichy District to conduct the study. Data were collected from 300 students (150 boys and 150 girls). In order to test the hypothesis proposed, the investigator statistically analyzed the collected data.

OBJECTIVES OF THE STUDY

1. To relate life satisfaction with that of social intelligence.
2. To find out the relationship between social intelligence with that of educational status of the parent in the case of total sample.
3. To identify associations existing between educational status of the parents and life satisfaction of the total sample.
4. To recognize the impact of type of family on social intelligence and life satisfaction of the total sample.
5. To know the impact of Gender on type of school, social intelligence, life satisfaction and various factors of social intelligence.
6. To interrelate various factors of social intelligence in the case govt., govt. aided and private school students.

STATEMENT OF THE PROBLEM

Government, Government Aided and Private Schools were selected to conduct the study. Data were collected from 300 students (150 boys and 150 girls). In order to test the hypothesis proposed, the investigator statistically analyzed the data.

SAMPLE

Total 300 students were taken for the study of which 150 were boys and 150 were girls. The sample was drawn from six schools chosen randomly from higher secondary schools. Out of 300 sample 100 students from Government school, 100 students from Government Aided School and 100 students from Private schools were included.

DISTRIBUTION OF THE TOTAL SAMPLE

Table: 1

Type of School	Name of the School	Boys	Girls	Total
Government	Arulmigu Muthumallai Amman Govt. Hr. Sec. School.	25	25	50
	Govt. Hr. Sec. School	25	25	50
Government Aided	Margoschis Hr. Sec. school.	50	-	50
	St. Marks Hr. Sec. School.	-	50	50
Private	James Memorial Matriculation Hr. Sec. School	25	25	50
	AnithaKumaran Matriculation Hr. Sec. School.	25	25	50
	Total	150	150	300

Social Intelligence Scale

This test consists of 54 items and 12 eminent persons constructed by **Dr.N.K. Chadha**. This tool deals with 6 factors of social intelligence. They are patience, confidence, cooperativeness, sensitivity, sense of humor and recognition of social environment.

ADMINISTRATION

The social intelligence tool is constructed with simple sentences. The following instructions were given to the subjects before administering the test. Read and understand each question properly and then put your mark on any cell against every statement on the answer sheet by making the sign of cross (X) please do not omit any question. In **part I** read the following statements carefully and among the three responses given for each of them, pick up the one which seems to you to be the most likely way in which you would respond. You are to choose only one response from a, b and c, and mark a cross (X) on the appropriate cell on the answer - sheet. In **part II** select the word that most accurately describes the mental state of the person making the statement. Cross out (X) the correct answer on the answer - sheet. In **part III** there are some statements regarding the way you behave and act. Each statement has a forced choice response of either 'yes' or 'No', try and decide whether 'Yes' or 'No' represents your usual way of behaviour and acting. If yes, cross out (X) the cell below 'Yes' and if no, then cross out (X) the cell below 'No'. In **part IV** list of incomplete jokes are given. Against them, there are three choices with which to complete the joke. You are to select and cross out (X) the choice you consider to be the most humorous. In **part V** list of eminent persons are given.

SCORING PROCEDURE

In the case of the first four dimensions scores of 1, 2 and 3 were given to three response alternatives. In the other two dimensions one of three alternatives given is the appropriate response. This response when given was allotted of scores of 1. In the case of the 'Tactfulness' dimension the responses were in the form of 'Yes' or 'No'. The appropriate response was awarded a score of '1'. The last dimension that of Memory was scored '1' or '0' depending on whether or not the subject's response was 'right' or 'wrong'.

LIFE SATISFACTION SCALE

Description

This test consists of 35 items constructed by Dr. Mrs. Promila Singh. She construct a life satisfaction scale based on the following dimensions (a) Taking Pleasure in everybody activities (b) considering life meaningful, (c) holding a positive self-image, (d) having a happy and optimistic outlook, (e) feeling success in achieving goals. The present scale was constructed by considering the above five dimensions of life satisfaction.

Administration

This questionnaire consists of simple statement, which expresses the different way in which students think, feel and behavior in their life situation. They were asked to indicate their responses for each statement by putting a tick (✓) against any one of the five boxes always, often, sometimes, seldom and never and which are respectively scored as 5 4, 3, 2 and 1.

Scoring Procedure

The scale consists of 35 items each item is to be rated on the five-point scale always, often, sometimes, seldom and never and which are respectively scored as 5, 4, 3, 2 and 1. The items relate to the individuals all-round activities and thus give a global picture of one's life satisfaction level. The higher the score on the life satisfaction scale for the higher will be the level of life satisfaction.

Interpreting the Score of Life Satisfaction

Table: 2

Satisfaction level	Range of scores
High	136-175
Average	81-135
Low	35-80

Pilot Study

A pilot study was carried out to know suitability of the time required to administer the test of social intelligence and life satisfaction and to establish the reliability and validity of the tools. So students were selected for the pilot study. The tools were given based on data reliability and validity of the social intelligence questionnaire and life satisfaction questionnaire were calculated for the present study.

ESTABLISHING RELIABILITY AND VALIDITY OF THE TOOLS USED IN THE STUDY

Reliability of Social Intelligence Scale

In order to establish the reliability of the social intelligence scale, the split half method was used. The reliability of social intelligence scale was found to be **0.817**. Hence social intelligence scale is considered as a reliable tool.

Validity of Social Intelligence Scale

The index of validity which is the square root of reliability was found to be **0.9**. Hence social intelligence scale selection for the study was considered to have high validity.

Reliability of Life Satisfaction Scale

The test-retest reliability computed after a lapse of 8 weeks turned out to be **0.91**.

Validity of Life Satisfaction Scale

To determine validity of the life satisfaction scale co-efficient of correlation between the scale of Alam and singh (1971) was computed and the co-efficient of correlation was found to be **0.83**. The scale also possesses face and content validity since experts judged each item.

STATISTICAL TECHNIQUES

Suitable descriptive and inferential statistical techniques were used in the interpretation of the data to draw out a more meaningful picture of results from the collected data. Life Satisfaction and total social intelligence scores were classified as low, moderate and high.

Analysis and Interpretation of Data

Hypothesis: 1

Life satisfaction scores of the students will modify social intelligence.

Table-1: To Correlate Social Intelligence with that of Life Satisfaction of boys & girls of Private School

Variables	Gender	No	Mean	S.D	'r'	't'	L.S
Social intelligence & life satisfaction	Boys	50	99.1	9.26	0.279	2.013	0.05
			126.28	18.32			
	Girls	50	106.46	7.6	0.3339	2.5	0.01
			138.7	12.177			

Table-2: To Correlate Social Intelligence with that of Life Satisfaction of boys & girls of Government Aided Schools

Variables	Gender	No	Mean	S.D	'r'	't'	L.S
Social intelligence & life satisfaction	Boys	50	94.78	8.65	0.229	1.629	N.S
			131.7	14.66			
	Girls	50	103.5	8.39	0.094	0.65	N.S
			138.72	15.55			

Table-3: To correlate social intelligence with that of life satisfaction of boys & girls of Government Schools

Variables	Gender	No	Mean	S.D	'r'	't'	L.S
Social intelligence & Life satisfaction	Boys	50	101.62	7.07	0.321	2.14	0.05
			140.32	17.04			
	Girls	50	102.58	5.97	0.011	0.07	N.S
			136.78	13.36			

The tables 1 to 3 and from Fig. E it is understood that the calculated 'r' values were greater than that of table 'r' values in the case of boys & girls of Private School and boys of Government School. So hypothesis was accepted in these cases and proved life satisfaction scores of the students modified social intelligence scores. Where as in the case of boys and girls of Government Aided School and girls of Government School, the calculated 'r' values were less than that of table 'r' values. Hence hypothesis was rejected in these cases.

Hypothesis: 2

Social intelligence has no impact on Education status of the students.

Table-4: Chi square test Between Education Status and Social Intelligence of boys and girls of Private School

Variables	Gender	No	D.F	χ^2	L.S
Social Intelligence Vs Education Status	Boys	50	4	2.03	N.S
	Girls	50	4	5.05	N.S

Table-5: Chi Square Test Between Education Status and Social Intelligence of boys and girls of Government Aided School

Variables	Gender	No	D.F	X2	L.S
Social Intelligence Vs Education Status	Boys	50	4	8.4	N.S
	Girls	50	4	1.64	N.S

Table-6: Chi square test Between Education Status and Social Intelligence of boys and girls of Government School

Variables	Gender	No	D.F	χ^2	L.S
Social Intelligence Vs Education Status	Boys	50	4	4.29	N.S
	Girls	50	4	2.41	N.S

The tables 4 to 6 shows that the calculate chi-square value were less than that of table chi-square values. Hence the hypothesis was accepted and proved that intelligence has no impact on

education status of the students in the case of boys and girls from Government, Government aided & Private Schools.

Hypothesis: 3

Social intelligence does not depend on the type of family of students.

Table-7: To associate Social Intelligence with that of family status of boys and girls of Private School

Variables	Gender	No	D.F	χ^2	L.S
Social Intelligence Vs Family Status	Boys	50	2	1.87	N.S
	Girls	50	2	2.49	N.S

Table-8: To associate Social Intelligence with that of family status of boys and girls of Government Aided School

Variables	Gender	No	D.F	χ^2	L.S
Social Intelligence Vs Family Status	Boys	50	2	4.12	N.S
	Girls	50	2	0.56	N.S

Table-9: To associate Social Intelligence with that of family status of boys and girls of Government School

Variables	Gender	No	D.F	χ^2	L.S
Social Intelligence Vs Family Status	Boys	50	2	1.72	N.S
	Girls	50	2	0.75	N.S

The tables 7 to 9 show that the calculated chi-square values were less than that of table chi-square values. Hence the hypothesis was accepted and proved that intelligence did not depend upon the type of family of the students in the case of boys and girls from government, government aided and Private Schools.

Hypothesis: 4

"Life satisfaction does not depend on Education status".

Table-10: Chi Square test between Education status and Life Satisfaction of boys and girls of Private School

Variables	Gender	No	D.F	χ^2	L.S
Life Satisfaction Vs Education Status	Boys	50	4	1.02	N.S
	Girls	50	4	5.31	N.S

Table-11: Chi square test between Education status and Life Satisfaction of boys and girls of Government Aided School

Variables	Gender	No	D.F	χ^2	L.S
Life Satisfaction Vs Education Status	Boys	50	4	13.2	0.05
	Girls	50	4	8.5	N.S

Table-12: Chi square test between Education status and Life Satisfaction of boys and girls of Government School

Variables	Gender	No	D.F	χ^2	L.S
Life Satisfaction Vs Education Status	Boys	50	4	1.73	N.S
	Girls	50	4	4.93	N.S

The tables 10 to 12 shows that the calculate chi-square values were less than that of table chi-square values. Hence the hypothesis was accepted and proved that life satisfaction does not depend on education status of the students in the case of boys and girls from Private, Government School and girls from Government Aided School where as in the case of boys of Government Aided School.

Hypothesis: 5

Life satisfaction has no impact on the type of family.

Table-13: Chi square test between Life Satisfaction and family status boys and girls of Private School

Variables	Gender	No	D.F	χ^2	L.S
Life Satisfaction Vs Family Status	Boys	50	2	0.71	N.S
	Girls	50	2	0.48	N.S

Table-14: Chi square test between Life Satisfaction and family status of boys and girls of Government Aided School

Variables	Gender	No	D.F	χ^2	L.S
Life satisfaction Vs Family Status	Boys	50	2	0.82	N.S
	Girls	50	2	3.27	N.S

Table-15: Chi square test between Life Satisfaction and of family status boys and girls of Government School

Variables	Gender	No	D.F	χ^2	L.S
Life Satisfaction Vs Family Status	Boys	50	2	2.73	N.S
	Girls	50	2	0.94	N.S

The tables 13 to 15 show that the calculated chi-square values were less than that of table chi-square values. Hence the hypothesis was accepted and proved that life satisfaction had no impact on the type of family of the students in the case of boys and girls from government, government aided and Private Schools.

Hypothesis: 6

Gender plays an important role on life satisfaction of students.

Table-16: To differentiate life satisfaction of boys & girls of Private Schools

Variable	Gender	No	Mean	S.D	C.R	L.S
Life satisfaction	Boys	50	126.28	18.32	6.9	0.01
	Girls	50	138.7	12.177		

Table-17: To Differentiate life Satisfaction of boys & girls of Government Aided Schools

Variable	Gender	No	Mean	S.D	C.R	L.S
Life satisfaction	Boys	50	131.7	14.66	2.32	0.05
	Girls	50	138.72	15.55		

Table-18: To Differentiate life Satisfaction of boys & girls of Government Schools

Variable	Gender	No	Mean	S.D	C.R	L.S
Life satisfaction	Boys	50	140.32	17.04	1.44	N.S
	Girls	50	136.78	13.36		

The tables 16 to 18 show that the calculated CR value is greater than the table CR values. Hence the hypothesis was accepted and proved that Gender played an important role on life satisfaction of student in the case of Private School and Government Aided School, where as in the case of Government School the calculated CR value were less than that of table CR values. Hence the hypothesis was rejected in these cases.

Hypothesis: 7

Gender plays an important role on total score of social intelligence.

Table-19: To Differentiate the total score of social Intelligence of boys & girls of Private School

Variable	Gender	No	Mean	S.D	C.R	L.S
Social intelligence	Boys	50	99.1	9.26	7.36	0.01
	Girls	50	106.46	7.6		

Table-20: To Differentiate the total score of social intelligence of boys & girls of Government aided school

Variable	Gender	No	Mean	S.D	C.R	L.S
Social intelligence	Boys	50	94.78	8.65	5.11	0.01
	Girls	50	103.5	8.39		

Table-21: To Differentiate the total score of social intelligence of boys & girls of Government School

Variable	Gender	No	Mean	S.D	C.R	L.S
Social intelligence	Boys	50	101.62	7.07	0.692	N.S
	Girls	50	102.58	5.97		

The tables 19 to 21 show that clearly that the calculated CR values were greater than that of the table CR values. Hence the hypothesis was accepted and proved that Gender played an important role on total score of social intelligence of student in the case of Private School and Government Aided School, where as in the case of Government School the calculated CR value were less than that of table CR values. Hence the hypothesis was rejected in these cases.

EDUCATIONAL IMPLICATIONS

The finding of the present investigation is important for the improvement in the quality of Education. The following are some of the major recommendation to implicate the Life satisfaction and social intelligence of the students.

1. Educators and administrators should bring about awareness among students to give more importance to develop Life satisfaction and social intelligence.
2. Parent's role is necessary to develop Life satisfaction of students through guiding, directing, stimulating and encouraging.
3. Lectures should provide inspiring leadership in developing Life satisfaction and social intelligence among students.
4. Emotional development programmes and seminar are to be arranged in the classrooms.

5. Early identification and environmental stimulation by teacher are very much essential. They should conduct Life satisfaction and social intelligence tests in the classrooms.

The positive affect is related to the Degree to which one accomplishes their goals, negative affect is related to the individual's ambivalence about their goals and Conflict between their goals, and life satisfaction was highest for those who had goals that were very important to them.

SUGGESTIONS FOR FURTHER RESEARCH

1. Social intelligence and academic achievement among the secondary school students.
2. Social intelligence in relation to creativity among higher secondary school students.
3. Life satisfaction and intellectual ability among the high school students.
4. Life satisfaction, intelligence and learning process among the higher secondary school students.
5. Life satisfaction and self-confidence among the secondary school students.

REFERENCES

1. Binet, A. (1916), The Development of Intelligence in Children (translated by E.S. Kite). Vineland. N.J.: Training School.
2. Cacioppo, J. T., & Petty, R. E. (1982), The need for cognition. *Journal of Personality and Social Psychology*, 42, 116-131.
3. Cattell, R.B. (1940), Theory of Fluid and Crystallized intelligence: A critical experiment, *Journal of Educational Psychology*, 31, 161-179.
4. Chatterjee, A. and Dutta Roy. D (1991), Awareness of external environment, environmental sati *Applied Psychology*, 29, 2, 74-77.
5. Cheung, C. (2000), Studying as a source of life satisfaction among university students. *College Student Journal*, 34, 79-96.
6. Cohen, A. R., et.al., (1955), An experimental investigation of need for cognition. *Journal of Abnormal and Social Psychology*, 51, 291-294.
7. Diener, E., and R., Larsen, R., (1985), The Satisfaction with Life Scale. *Journal of Personality Assessment* 49, 71-75.
8. Hawkins and Barbara, A Validity and Reliability of a Five Dimensional Life Satisfaction Index, *Mental Retardation*, Vol. 33, No. 5, p. 295-303, Oct. 1995.
9. Henry and Carolyn. S (1994), Family System Characteristics, Parental Behaviours and Adolescent Family Life Satisfaction, *Family Relations*, Vol.43, No.4, p.447-55, Oct.1994.
10. Huebner and Scott. E. (1994), Life Satisfaction Scale and the Piers- Harris Self-Concept Scale, *Psychology in the School*, Vol.33, No.31, pp. 273-77, Oct. 1994.
11. Lewis, Virginia. G and Borders. L (1995), Life Satisfaction of Single Middle-Aged Professional Women, *Journal of Counselling and Development*, Vol.74, No.1, p. 100, Sep.1995.
12. McClelland, B.C. (1973), Testing for competence rather than Intelligence, *American Psychologist*, 28, 1-14.
13. Park, Douglas et.al. (1994), The Influence of Separation Orientation on Life Satisfaction in the Elderly, *International Journal of Aging and Human- Development*, Vol. 39, No.2, p.117, 1994.
14. Pintner, R. and Upshall, C.C. (1928), Some results of social Intelligence Tests, *School and Society*, 27, 369-370.
15. Spearman, C. (1923), The Nature of "Intelligence" and the Principles of Cognition, London: McMillan.
16. Spearman, C. (1923), The Nature of "Intelligence" and the Principles of cognition, London: Mac Millan.
17. Stern, W. (1914), The Psychological Methods of Testing Intelligence, (Translated by G.M. Whipple) *Educational Psychology Monographs*.
18. Thorndike, E.L. (1927), The Measurement of Intelligence, New York: VTeachers College, Columbia University.
19. Vernon, P.F. (1948), Indices of Item consistency and validity, *British Journal of Psychology* 1, 152-166.

Emotional Intelligence and Adjustment of B.Ed. Student - Teachers: A Study

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ABSTRACT

“Educational psychology deals with the behaviour of human beings in educational situations” - Skinner. “Educational psychology describes and explains the learning experiences of an individual from birth through old age” - Crow and Crow. True education is the harmonious development of the physical, mental, moral (spiritual), and social faculties, the four dimensions of life, for a life of dedicated service. Emotions have been referred to as the ‘dynamics of behavior’ which term refers to the energies of forces that initiate activity. Emotion in the organism is the dynamic interval adjustment that operates for the satisfaction and welfare of the individual.

Keywords: Capabilities-behavior-emotional –personality-competencies.

INTRODUCTION

Emotional intelligence (EI) is the ability to monitor one’s own and other people’s emotions, to discriminate between different emotions and label them appropriately, and to use emotional information to guide thinking and behavior. The model proposes that individuals vary in their ability to process information of an emotional nature and in their ability to relate emotional processing to a wider cognition. Emotional intelligence plays an important role in the process of adjustment of B.Ed. Teacher Trainees with better emotional skills easily adjust in new social and cultural environment there by show better performance.

NEED AND SIGNIFICANCE OF THE STUDY

As teaching is a complex and many-sided task it demands a variety of human traits and abilities. Emotional Intelligence is an attempt to extend students teachers understanding of Intelligence, when student teachers have a need a solve problems and make key decisions, EQ comes to aim of IQ and it will keep them miles away from threats like frustration and anxiety.

STATEMENT OF THE PROBLEM

The present study is titled as, “*Emotional Intelligence and Adjustment of B.Ed. Student – Teachers: A Study*”

OBJECTIVES OF THE STUDY

1. To know the level of Emotional Intelligence of B.Ed. teacher trainees.
2. To know the level of Adjustment of B.Ed. teacher trainees.
3. To find out the significant difference between B.Ed. Teacher Trainees Emotional Intelligence and Adjustment based on the select sub samples.

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4. To find out the relationship between the Emotional Intelligence and Adjustment of the B.Ed., Teacher Trainees.

HYPOTHESES OF THE STUDY

1. The level of emotional Intelligence of B. Ed. Teacher Trainees is low.
2. B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence based on the select sub samples.
3. The level of adjustment of B.Ed. Teacher Trainees is low.
4. B.Ed. Teacher Trainees do not differ significantly in their Adjustment based on the select sub samples.
5. There is no relationship between Emotional Intelligence and Adjustment of B.Ed. Teacher Trainees.

DELIMITATIONS OF THE STUDY

The study is delimited to:

1. The study deals only with the B.Ed. teacher-trainees.
2. The study has been confined to the B.Ed. teacher-trainees of Erode, Namakkal and Salem Districts.
3. Only three hundred and Fifty five B.Ed. teacher-trainees from Six B.Ed. College were selected for the study.
4. This study is limited to a few background variables.
5. This study is limited to simple statistical analysis.
6. This study has not been put restriction while answering the research tools. Enough time was given them to answer all those items.

RESEARCH METHODOLOGY

The investigator had selected Normative Methodology and Survey Technique for the present study based on the problem selected.

VARIABLES USED IN THE STUDY

The variables of the present study is,

Independent variables: Gender, Medium of instruction, Optional subjects, Educational qualification, Marital status, Locality, Type of Family, Parent's Educational qualification, Parent's Annual income, Parent's Occupation, Type of College, Nature of college.

Dependent variables: Emotional Intelligence and Adjustment.

SAMPLE AND SAMPLING TECHNIQUE OF THE STUDY

The population for the present study consists of B.Ed. Teacher Training studying in Erode, Salem and Namakkal districts in Tamil Nadu.

TOOLS USED IN THE STUDY

Emotional Intelligence Inventory (EII) was used for the measurement of emotional intelligence of the teacher trainees in the present study was developed by Meer Ahamed Ibrahim,S.(2003) was

adopted and modified by having the suggestions from the experts. Adjustment Inventory used for the measurement of adjustment in the present study was developed by Sinha, A.K.P. and Singh, R.P.(1993).

DESCRIPTION OF THE TOOL

The tool consists of 40 statements with a five point scale.

Emotional Intelligence Inventory

Items in the Inventory: There are two kinds of questions. One is positive questions (7) and the other is negative questions (13).

Administration: The Test is a self administering tool. The required instructions were given in full on the first page of the inventory booklet. There is no time limit. Answers are to be shown on the right hand side of the page and by putting a tick (✓) mark.

DATA COLLECTION PROCEDURE

Teacher Trainees studying in aided and self- finance colleges. Tool with 40 items were given to each and every individual to get responses in the allotted time.

ANALYSIS AND INTERPRETATION OF DATA

The data of the students were collected, scored and subjected to following statistical analysis. descriptive analysis (mean, standard deviation, skewness and kurtosis), and differential analysis (t-Test and F- Test).

EMOTIONAL INTELLIGENCE

The emotional intelligence scores obtained from the whole sample was analyzed. The mean, standard deviation, skewness and kurtosis values for the whole sample are present in Table 1.

HYPOTHESIS: 1 The level of Emotional Intelligence of B. Ed Teacher Trainees is low.

Table-1: Mean and S.D scores of Emotional Intelligence of the Whole sample

S.No	Main Variable	N	Range	Mean	SD	Skewness	Kurtosis	Level
1	Emotional Intelligence	355	40	70.96	8.380	-0.159	-0.482	Average

From the above Table 1 it is found that the mean, S.D scores of Emotional Intelligence of B.Ed. Teacher Trainees are 70.96 and 8.380. The mean value 70.96 is found within the range of $\text{mean} \pm 1\text{S.D.}$ Therefore, the level of Emotional Intelligence of B.Ed. Teacher Trainees is found to be Average.

HYPOTHESIS: 2 The level of Adjustment of B. Ed Teacher Trainees is low.

Table-2: Mean and S.D scores of Adjustment of the Whole sample

Main variable	N	Range	Mean	Std. Deviation	Skewness	Kurtosis
Adjustment	355	48	75.78	10.192	- 0.390	-0.301

From the above Table 2 it is found that the mean, S.D scores of Adjustment of B.Ed. Teacher Trainees are 75.78 and 10.192. The mean value 75.78 is found within the range of $\text{mean} \pm 1\text{S.D.}$ Therefore, the level of Adjustment of B.Ed. Teacher Trainees is found to be Average.

Table: 3 Mean and S.D scores of Emotional Intelligence of the sub sample

S.No	Variables	Sub- Variables	N	Mean	SD
1	Gender	Male	35	72.49	6.810
		Female	320	70.79	8.526
2	Medium	Tamil	236	71.00	8.145
		English	119	70.87	8.862
3	Optional	Arts	54	71.06	8.566
		Science	132	71.23	8.053
		Language	169	70.72	8.610
4	Educational Qualification	UG	247	70.35	8.496
		PG	52	73.29	7.739
		UG with D.T.Ed.,	50	72.50	7.319
		PG with D.T.Ed.,	6	63.00	10.488
5	Marital status	Married	123	71.63	8.652
		Unmarried	232	70.61	8.229
6	Locality	Rural	242	71.08	8.088
		Urban	113	70.70	9.004
7	Type of family	Joint	182	71.09	9.026
		Nuclear	173	70.82	7.665
8	Parents' educational qualification	Tenth	139	70.07	7.984
		Twelfth	51	70.59	9.804
		Degree	24	72.25	9.953
		Uneducated	141	71.75	7.897
9	Parents' Annual Income	Below Rs.25,000	181	70.15	7.799
		Between Rs.25,000 to Rs.50,000	123	70.71	9.100
		Above Rs.50,000	51	74.43	7.831
10	Parents' occupation	Government	37	71.27	8.940
		Private	33	70.85	9.925
		Business	30	71.30	10.148
		Farmer	104	69.66	7.402
		Coolie	151	71.74	8.134
11	Type of College	Aided	55	69.36	9.848
		Self-Finance	300	71.25	8.066
12	Nature of College	Women's	105	68.58	9.209
		Co-education	250	71.96	7.811

From the Table 3 among the groups Male B.Ed. Teacher Trainees(72.49) have more mean score value than Female B.Ed. Teacher Trainees(70.79) in their Emotional Intelligence; Female B.Ed. Teacher Trainees (8.526) have greater deviation than that of Male B.Ed. Teacher trainees (6.810) in their Emotional Intelligence.

Tamil Medium B.Ed. Teacher Trainees (71.00) have more mean score value than English Medium B.Ed. Teacher Trainees (70.87) in their Emotional Intelligence; English and Tamil Medium B.Ed. Teacher Trainees more or less the same deviation in their Emotional Intelligence.

Science Optional subjects B.Ed. Teacher trainees (71.23) have secured more mean score value than Arts and Language Optional subject B.Ed. Teacher Trainees in their Emotional Intelligence. B.Ed. Teacher Trainees all the Optional subjects have the same deviation with slight changes in their Emotional Intelligence.

PG completed B.Ed. Teacher Trainees (73.29) have secured more mean score value than other in their Emotional Intelligence. PG with D.T.Ed completed B.Ed. Teacher Trainees (10.488) have greater deviation than that other B.Ed. Teacher Trainees in their Emotional Intelligence.

Married B.Ed. Teacher Trainees(71.63) have more mean score value than Unmarried B.Ed. Teacher Trainees(70.61) in their Emotional Intelligence. ; Married and Unmarried B.Ed. Teacher Trainees have more or less same deviation in their Emotional Intelligence.

Rural B.Ed. Teacher Trainees(71.08) have more mean score value than Urban B.Ed. Teacher Trainees(70.70) in their Emotional Intelligence ; Urban B.Ed. Teacher Trainees(9.004)) have greater deviation than that of Rural B.Ed. Teacher Trainees(8.008) in their Emotional Intelligence.

Joint Family B.Ed. Teacher Trainees(71.09) have more mean score value than Nuclear Family B.Ed. Teacher Trainees(70.82) in their Emotional Intelligence ; Joint Family B.Ed. Teacher Trainees(9.026) have greater deviation than their Nuclear Family B.Ed. Teacher Trainees(7.665) in their Emotional Intelligence.

B.Ed. Teacher Trainees Whose parents' educational qualification is Degree B.Ed. Teacher Trainees(72.25) have secured more mean score value than other B.Ed. Teacher Trainees in their Emotional Intelligence. B.Ed. Teacher Trainees Whose parents' educational qualification are Degree and up to twelfth std have secured greater deviations than other B.Ed. Teacher Trainees in their Emotional Intelligence.

B.Ed. Teacher Trainees Whose Parents' Annual income is Above RS.50, 000 (74.43) have more mean score value than other B.Ed. Teacher Trainees in their Emotional Intelligence. B.Ed. Teacher Trainees Whose Parents' Annual income Between RS.25, 000 to RS.50, 000(9.100) have greater deviation then other B.Ed. Teacher Trainees in their Emotional Intelligence.

B.Ed. Teacher Trainees Whose Parents' occupation are working in Government concern, who are doing business and whose Parents' occupation are Coolie have secured more or less the same mean value than other B.Ed. Teacher Trainees in their Emotional Intelligence. B.Ed. Teacher Trainees whose Parent's occupation in Business has greater deviation than other B.Ed. Teacher Trainees in their Emotional Intelligence.

Table: 4 Mean and S.D scores of Adjustment of the sub sample

S.No	Variables	Sub- Variables	N	Mean	SD
1	Gender	Male	35	78.06	6.730
		Female	320	75.53	10.479
2	Medium	Tamil	236	75.71	10.130
		English	119	75.91	10.356

S.No	Variables	Sub- Variables	N	Mean	SD
3	Optional	Arts	54	75.75	9.879
		Science	132	76.79	10.368
		Language	169	75.03	10.144
4	Educational Qualification	UG	247	75.15	10.280
		PG	52	78.37	8.655
		UG with D.T.Ed.,	50	77.24	10.334
		PG with D.T.Ed.,	6	67.17	12.007
5	Marital status	Married	123	75.41	10.199
		Unmarried	232	75.97	10.205
6	Locality	Rural	242	75.72	10.047
		Urban	113	75.90	10.540
7	Type of family	Joint	182	75.33	10.353
		Nuclear	173	76.25	10.028
8	Qualification of parents' Education	Tenth	139	74.76	11.191
		Twelfth	51	74.51	10.616
		Degree	24	77.08	9.193
		Uneducated	141	77.01	9.035
9	Parents' Annual Income	Below Rs.25,000	181	75.50	10.318
		Between Rs.25,000 to Rs.50,000	123	74.93	10.467
		Above RS.50,000	51	78.82	8.562
10	Parents' occupation	Government	37	76.03	10.004
		Private	33	74.82	11.709
		Business	30	73.60	11.131
		Farmer	104	74.69	10.107
		Coolie	151	77.11	9.696
11	Type of College	Aided	55	75.64	11.265
		Self-Finance	300	75.80	10.003
12	Nature of College	Women's	105	72.24	11.228
		Co-education	250	77.26	9.355

From the Table 4 among the groups Male B.Ed. Teacher Trainees(78.06) have more mean score value than Female B.Ed. Teacher Trainees(75.53) in their Adjustment. Female B.Ed. Teacher Trainees (10.479) have greater deviation than that of Male B.Ed. Teacher Trainees (6.730) in their Adjustment.

English Medium B.Ed. Teacher Trainees (75.91) have more mean score value than Tamil Medium B.Ed. Teacher Trainees (75.71) in their Adjustment. English and Tamil Medium B.Ed. Teacher Trainees (10.356) have more or less same deviation in their Adjustment.

Science Optional subject B.Ed. Teacher Trainees (76.79) have secured more mean score value than Arts and Language Optional subject B.Ed. Teacher Trainees in their Adjustment. B.Ed. Teacher Trainees all the Optional subjects have the same deviation with slight changes in their Adjustment.

PG completed B.Ed. Teacher Trainees (78.37) have secured more mean score value than other in their Adjustment. PG with D.T.Ed. Completed B.Ed. Teacher Trainees (12.007) have greater deviation than that other B.Ed. Teacher Trainees in their Adjustment.

Unmarried B.Ed. Teacher Trainees (75.97) have more mean score value than Married B.Ed. Teacher Trainees (75.41) in their Adjustment. Unmarried B.Ed. Teacher Trainees (10.205) have greater deviation than that of Married B.Ed. Teacher Trainees (10.199) in their Adjustment.

Urban B.Ed. Teacher Trainees (75.90) have more mean score value than Rural B.Ed. Teacher trainees (75.72) in their Adjustment. Urban B.Ed. Teacher Trainees (10.540) have greater deviation than that of Rural B.Ed. Teacher Trainees (10.047) in their Adjustment.

Nuclear Family B.Ed. Teacher Trainees (76.25) have more mean score value than Joint Family B.Ed. Teacher Trainees (75.33) in their Adjustment; Joint Family B.Ed. Teacher Trainees (10.353) have greater deviation than that of Nuclear Family B.Ed. Teacher trainees (10.028) in their Adjustment.

B.Ed. Teacher Trainees Whose Parents' occupation are working in Government concern Whose Parents' occupation are working in private concern, and whose Parents' occupation are Coolie have secured more or less the same mean value than other B.Ed. Teacher Trainees in their Adjustment. B.Ed. Teacher Trainees whose Parent's occupation in Businesses has greater deviation than other B.Ed. Teacher Trainees in their Adjustment.

Self -Finance College B.Ed. Teacher Trainees (75.80) have more mean score value than Aided College B.Ed. Teacher Trainees (75.64) in their Adjustment; Aided College B.Ed. Teacher Trainees (11.265) have greater deviation than that of Self -Finance College B.Ed. Teacher Trainees (10.003) in their Adjustment.

Co-Education College B.Ed. Teacher Trainees (77.26) have more mean score value than Women's College B.Ed. Teacher Trainees (72.24) in their Adjustment ; and Women's College B.Ed. Teacher Trainees (11.228) have greater deviation than that of Co-Education College B.Ed. Teacher Trainees (9.335) in their Adjustment.

DIFFERENTIAL ANALYSIS

HYPOTHESIS: 3 B.Ed. Teacher Trainees do not differ significantly in their Emotional Intelligence based on the select sub samples.

Gender

Male and Female B.Ed. Teacher Trainees do not differ significantly in their Emotional Intelligence.

Table: 5 shows the 't' Value of Emotional Intelligence of Male and Female B.Ed. Teacher Trainees

Gender	N	Mean	Std. Deviation	't' value	Level of significance
Male	35	72.49	6.810	1.135	NS
Female	320	70.79	8.526		

It is clear from the table 5, that the obtained 't' -value (1.135) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Male and Female B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence.

Medium of instruction

Tamil and English medium B.Ed. Teacher trainees do not differ significantly in their Emotional Intelligence.

Table: 6 shows the 't' Value of Emotional Intelligence of Tamil and English medium B.Ed. Teacher Trainees

Medium	N	Mean	Std. Deviation	't' value	Level of significance
Tamil	236	71.00	8.145	0.138	NS
English	119	70.87	8.862		

It is clear from the table 6, that the obtained 't' value (0.138) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Tamil and English medium B.Ed. Teacher trainees do not differ significantly in their emotional intelligence. In their Present study Medium of instruction is not found to be a determinant factor of Emotional Intelligence.

Optional

B.Ed. Teacher Trainees of different Optional subjects do not differ significantly in their Emotional Intelligence.

Table: 7 shows the 'F' value of Emotional Intelligence B.Ed. Teacher Trainees of different Optional subjects

Source of Variance	Sum of Squares	df	Mean Square	'F' - value	Level of significance
Between Groups	19.504	2	9.752	0.138	NS
Within Groups	24837.944	352	70.562		
Total	24857.448	354			

From the table 7, It is evident that obtained 'F' value (0.138) Emotional Intelligence is found to be lesser than that of table value 2.99 at 0.05 level. Therefore the Null Hypothesis is accepted. It is therefore inferred that B.Ed. Teacher Trainees belonging to different types of Optional Subjects do not differ significantly in their respect Emotional Intelligence.

Educational qualification

B.Ed. Teacher trainees according to their Educational Qualification do not differ significantly in their emotional intelligence.

Table: 8 shows the 'F' value of Emotional Intelligence of different Educational Qualification B.Ed. Teacher Trainees

Source of variance	Sum of Squares	df	Mean Square	'F'	Level of significance
Between Groups	871.919	3	290.640	4.253	Significant at level of 0.01
Within Groups	23985.529	351	68.335		
Total	24857.448	354			

Table Value at 2.60 at 0.05 level (3.78 at 0.01 level)

From the table 8, It is evident that obtained 'F' value (4.253) Emotional Intelligence is found to be greater than that of table value 3.78 at 0.01 level. Therefore the Null Hypothesis is not accepted. It is inferred that B.Ed. Teacher Trainees according to their Educational Qualifications differ significantly among themselves in their Emotional Intelligence.

Table: 9 Shows the 't'- values of B.Ed. Teacher Trainees with different Qualification

Main variable	Sub variable	N	Mean	S.D	't' value	Level of significance
Emotional Intelligence	UG	247	70.35	8.496	2.299	Significant at level 0.05
	PG	52	73.29	7.739		
	PG	52	73.29	7.739	0.528	NS
	UG with D.T.Ed.,	50	72.50	7.319		
	UG with D.T.Ed.,	50	72.50	7.319	2.868	Significant at level 0.01
	PG with D.T.Ed.,	6	63.00	10.488		
	PG with D.T.Ed.,	6	63.00	10.488	2.084	Significant at level 0.05
	UG	247	70.35	8.496		
	UG	247	70.35	8.496	1.666	NS
	UG with D.T.Ed.,	50	72.50	7.319		
	PG	52	73.29	7.739	2.974	Significant at level 0.01
	PG with D.T.Ed.,	6	63.00	10.488		

Marital status

Married and Unmarried B.Ed. Teacher trainees do not differ significantly in their Emotional Intelligence.

Table: 10 shows the 't' Value of Emotional Intelligence of marital status B.Ed. Teacher trainees

Marital status	N	Mean	Std. Deviation	't'- value	Level of significance
Married	123	71.63	8.652	1.090	NS
Unmarried	232	70.61	8.229		

It is clear from the table 10, that the obtained 't' value (1.090) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Married and Unmarried B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence. In their Present study Marital Status is not found to be a determinant factor of Emotional Intelligence.

Locality

Rural and Urban B.Ed. Teacher trainees do not differ significantly in their Emotional Intelligence.

Table:11 shows the 't' Value of Emotional Intelligence of Locality B.Ed. Teacher Trainees

Locality	N	Mean	Std. Deviation	t value	Level of significance
Rural	242	71.08	8.088	0.401	NS
Urban	113	70.70	9.004		

It is clear from the table 11, that the obtained 't' value (0.401) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Rural and Urban B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence. In their Present study Locality is not found to be a determinant factor of Emotional Intelligence.

Type of family

Joint and Nuclear family B.Ed., Teacher Trainees do not differ significantly in their Emotional Intelligence.

Table: 12 shows the 't' Value of Emotional Intelligence of Family type B.Ed. Teacher Trainees

Family Type	N	Mean	Std. Deviation	't' value	Level of significance
Joint	182	71.09	9.026	0.306	NS
Nuclear	173	70.82	7.665		

It is clear from the table 12, that the obtained 't' value (0.306) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that joint and Nuclear family B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence.

Parent's Educational Qualification

B.Ed. Teacher Trainees according to their parent's educational qualification do not differ significantly in their emotional intelligence.

Table: 13 shows the 'F' value emotional intelligence of B.Ed. Teacher Trainees according to Parents' Educational Qualification

Source of variance	Sum of Squares	Df	Mean Square	'F'	Level of significance
Between Groups	245.002	3	81.667	1.165	NS
Within Groups	24612.446	351	70.121		
Total	24857.448	354			

From the table 13, It is obtained 'F' value (1.165) is found less than that of table value 2.99 at 0.05 level. Therefore the Null Hypothesis is accepted. It is inferred that B.Ed. Teacher Trainees according to Parents' educational qualification do not differ significantly in their respect of Emotional Intelligence.

Parent's annual income

B.Ed. Teacher Trainees according to their Parent's annual income do not differ significantly in their emotional intelligence.

Table: 14 shows the 'F' value of B.Ed. Teacher Trainees according to Parent's annual income of B.Ed. Teacher Trainees

Source of variance	Sum of Squares	df	Mean Square	'F'	Level of significance
Between Groups	739.806	2	369.903	5.399	Significant at Level 0.01
Within Groups	24117.642	352	68.516		
Total	24857.448	354			

From the table 14, It is found that obtained 'F' value (1.165) greater than that of table value 2.99 at 0.05 level. Therefore the Null Hypothesis is not accepted. It is inferred that B.Ed. Teacher Trainees according to Parents' different Annual income differ significantly in their Emotional Intelligence. In the present study B.Ed. Teacher Trainees according to Parents' Annual income is found to be determinant factor of Emotional Intelligence.

Table: 15 Shows the 't'- values of B.Ed. Teacher Trainees according to with Parents' different Annual income

Main variable	Sub variable	N	Mean	S.D	't' value	Level of significance
Emotional Intelligence	Below Rs.25,000	181	70.15	7.799	0.566	NS
	Between Rs.25,000 to Rs.50,000	123	70.71	9.100		
	Between Rs.25,000 to Rs.50,000	123	70.71	9.100	2.555	NS
	AboveRs.50,000	51	74.43	7.831		
	AboveRs.50,000	51	74.43	7.831	3.456	Significant at level 0.01
	Below Rs.25,000	181	70.15	7.799		

From the above table 15, is it is evident that the 't' value Mean score is greater than the table value in the case of B.Ed. Teacher Trainees whose Parent's annual income Above RS50,000 and Below 25,000 so the hypothesis is not accepted in the case.

Parent's occupation

B.Ed. Teacher Trainees according to their Parent's occupation do not differ significantly in their emotional intelligence.

Table: 16 shows the 'F' value of Emotional Intelligence of B.Ed. Teacher Trainees according to their Parents' occupation

Source of variance	Sum of Squares	df	Mean Square	'F'	Level of significance
Between Groups	272.983	4	68.246	0.972	NS
Within Groups	24584.465	350	70.241		
Total	24857.448	354			

From the table 16 is found that the obtained 'F' value (0.972) Emotional Intelligence is found to be less than that of table value 2.99 at 0.05 level. Therefore the Null Hypothesis is accepted. It is inferred that B.Ed. Teacher Trainees are to Parents' Occupation do not differ significantly in their Emotional Intelligence.

Type of College

Aided and Self-finance College B.Ed. Teacher Trainees do not differ significantly in their Emotional Intelligence.

Table: 17 shows the 't' Value of Emotional Intelligence of Aided and Self finance College B.Ed. Teacher Trainees

College Type	N	Mean	Std. Deviation	't' value	Level of significance
Aided	55	69.36	9.848	1.540	NS
Self-Finance	300	71.25	8.066		

It is clear from the table 17, that the obtained 't' value (1.540) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Aided and Self-finance College B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence.

Nature of College

Women's and Co-Education College B.Ed. Teacher Trainees do not differ significantly in their Emotional Intelligence.

Table: 18 shows the 't' Value of Emotional Intelligence of Nature of College B.Ed. Teacher Trainees

Nature of College	N	Mean	Std. Deviation	't' value	Level of significance
Women's	105	68.58	9.209	3.523	Significant At the level 0.01
Co-Education	250	71.96	7.811		

It is clear from the table 18, that the obtained 't'-value (3.523) is greater than that of the table value 2.58 at 0.01 level. Therefore, the Null Hypothesis is not accepted. It may be therefore

inferred that Aided and Self-Finance College B.Ed. and Teacher Trainees differ significantly in their emotional intelligence. In their Present study Nature of College B.Ed. Teacher trainees is found to be determined.

HYPOTHESIS: 4 B.Ed. Teacher Trainees do not differ significantly in their adjustment based on the select sub samples.

Gender

Male and Female B.Ed. Teacher Trainees do not differ significantly in their Adjustment.

Table: 19 shows the 't' value of Adjustment of Male and Female B.Ed. Teacher trainees

Gender	N	Mean	Std. Deviation	't' value	Level of significance
Male	35	78.06	6.730	1.396	NS
Female	320	75.53	10.479		

It is clear from the table 19 that the obtained 't'- value (1.396) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Male and Female B.Ed. Teacher trainees do not differ significantly in their Adjustment. In their Present study gender is not found to be a determinant factor of Adjustment

Medium of instruction

Tamil and English medium B. Ed Teacher Trainees do not differ significantly in their adjustment.

Table: 20 shows the 't' Value of Adjustment of Tamil and English medium B.Ed. Teacher Trainees

Medium	N	Mean	Std. Deviation	't' value	Level of significance
Tamil	236	75.71	10.130	0.171	NS
English	119	75.91	10.356		

It is clear from the table 20, that the obtained 't' value (0.171) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Tamil and English medium B.Ed. Teacher Trainees do not differ significantly in their Adjustment.

Optional

B.Ed. Teacher trainees of different optional subjects do not differ significantly in their Adjustment.

Table: 21 shows the 'F' value of Adjustment of B.Ed. Teacher Trainees of different optional subjects

Source of variance	Sum of Squares	df	Mean Square	'F'-value	Level of significance
Between Groups	230.192	2	115.096	1.109	NS
Within Groups	36541.227	352	103.810		
Total	36771.420	354			

From the table 21 It is obtained 'F' value (1.109) Adjustment is found to be lesser than that of table value 2.99 at 0.05 level. Therefore the Null Hypothesis is accepted. It is therefore inferred that B.Ed. Teacher Trainees belonging to different types of Optional Subjects do not differ significantly in their Adjustment.

Educational Qualification

B.Ed. Teacher Trainees of according to their Educational Qualification do not differ significantly in their adjustment.

Table: 22 shows the 'F' value Adjustment of B.Ed. Teacher Trainees of Educational Qualification

Source of variance	Sum of Squares	df	Mean Square	'F'	Level of significance
Between Groups	998.656	3	332.885	3.266	Significant 0.05 at level
Within Groups	35772.764	351	101.917		
Total	36771.420	354			

Table Value at 2.60 at 0.05 level

From the table 22, It is obtained 'F' value (3.266) Adjustment is found to be greater than that of table value 3.78 at 0.01 level. Therefore the Null Hypothesis is not accepted. It is inferred that B.Ed. Teacher Trainees according to their Educational Qualification differ significantly in their Adjustment.

Table: 23 Shows the t- values of B.Ed. Teacher Trainees with different Qualification

Main variable	Sub variable	N	Mean	S.D	't' value	Level of significance
Emotional Intelligence	UG	247	75.15	10.280	2.106	Significant at level 0.05
	PG	52	78.37	8.655		
	PG	52	78.37	8.655	0.597	NS
	UG with D.T.Ed.,	50	77.24	10.334		
	UG with D.T.Ed.,	50	77.24	10.334	2.220	Significant at level 0.01
	PG with D.T.Ed.,	6	67.17	12.007		
	PG with D.T.Ed.,	6	67.17	12.007	1.872	NS
	UG	247	75.15	10.280		
	UG	247	75.15	10.280	1.312	Significant at level 0.01
	UG with D.T.Ed.,	50	77.24	10.334		
	PG	52	78.37	8.655	2.884	Significant at level 0.01
	PG with D.T.Ed.,	6	67.17	12.007		

From the above table 23, it is evident that the 't' value of B.Ed. Teacher Trainees according to their Educational qualifications differ significantly in their Adjustment in the cases of 1. UG and PG, 2.UG with D.T.Ed. and PG with D.T.Ed. 3.UG and UG with D.T.Ed. 4.PG and PG with D.T.Ed. is not accepted in these cases. But in the other two cases the hypothesis is accepted as the obtained 't' value is less than that of the table value.

Marital Status

Married and Unmarried B.Ed. Teacher Trainees do not differ significantly in their Adjustment.

Table: 24 shows the 't' Value of Adjustment of Marital status of B.Ed. Teacher Trainees

Marital status	N	Mean	Std. Deviation	't' value	Level of significance
Married	123	75.41	10.199	0.499	NS
Unmarried	232	75.97	10.205		

It is clear from the table 24 that the obtained 't' value (0.499) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Married and Unmarried B.Ed. Teacher Trainees do not differ significantly in their Adjustment. In their Present study Marital Status is not found to be a determinant factor of Adjustment

Locality

Rural and Urban B.Ed. Teacher Trainees do not differ significantly in their Adjustment.

Table: 25 shows the 't' value of Adjustment of Locality B.Ed. Teacher Trainees

Locality	N	Mean	Std. Deviation	't' value	Level of significance
Rural	242	75.72	10.047	0.158	NS
Urban	113	75.90	10.540		

It is clear from the table 25 that the obtained 't' value (0.158) is less than that of the table value 1.96 at 0.05 levels. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Rural and Urban B.Ed. Teacher trainees do not differ significantly in their adjustment. In their Present study Locality is not found to be a determinant factor of adjustment.

Type of Family

Joint and Nuclear family B.Ed. Teacher Trainees do not differ significantly in their adjustment.

Table: 26 shows the 't' value of Adjustment of Family type B.Ed. Teacher Trainees

Family Type	N	Mean	Std. Deviation	't' value	Level of significance
Joint	182	75.33	10.353	0.849	NS
Nuclear	173	76.25	10.028		

It is clear from the table 26, that the obtained 't' value (0.849) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Joint and Nuclear of family B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence.

Parent's Educational Qualification

B.Ed. Teacher Trainees according to their parent's educational qualification do not differ significantly in their adjustment.

Table: 27 shows the 'F' value Adjustment of B.Ed. Teacher Trainees according to their parent's educational qualification

Source of variance	Sum of Squares	df	Mean Square	'F'	Level of significance
Between Groups	481.704	3	160.568	1.553	NS
Within Groups	36289.716	351	103.390		
Total	36771.420	354			

From the table 27, It is obtained 'F' value (1.553) is found less than that of table value 2.99 at 0.05 level. Therefore the Null Hypothesis is accepted. It is inferred that B.Ed. Teacher Trainees according to Parents' different educational qualification do not differ significantly in their Adjustment.

Parent's annual income

B.Ed. Teacher Trainees according to their Parent's annual income do not differ significantly in their adjustment.

Table: 28 shows the 'F' value of B.Ed. Teacher Trainees according to Adjustment of Parent's annual income

Source of variance	Sum of Squares	df	Mean Square	'F'	Level of significance
Between Groups	576.418	2	288.209	2.803	NS
Within Groups	36195.002	352	102.827		
Total	36771.420	354			

From the table 28 is found that the obtained 'F' value (2.803) Adjustment is found to be less than that of table value 2.99 at 0.05 level. Therefore the Null Hypothesis is accepted. It is inferred that B.Ed. Teacher Trainees according to Parents' different Annual income do not differ significantly in their Adjustment.

Parent's Occupation

B.Ed. Teacher Trainees according to their Parent's occupation do not differ significantly in their Adjustment

Table: 29 shows the 'F' value Adjustment of B.Ed. Teacher Trainees according to their Parent's occupation

Source of variance	Sum of Squares	df	Mean Square	'F'	Level of significance
Between Groups	563.879	4	140.970	1.363	NS
Within Groups	36207.541	350	103.450		
Total	36771.420	354			

From the table 29, It is obtained 'F' value(1.363) Adjustment is found to be lesser than that of table value 2.99 at 0.05 level. Therefore the Null Hypothesis is accepted. It is inferred that B.Ed. Teacher Trainees are to Parents' Occupation do not differ significantly in their Adjustment.

Type of College

Aided and Self-finance College B.Ed. Teacher Trainees do not differ significantly in their Adjustment.

Table: 30 shows the 't' value Adjustment of Aided and Self finance College B.Ed. Teacher Trainees

College Type	N	Mean	Std. Deviation	't' value	Level of significance
Aided	55	75.64	11.265	0.112	NS
Self-Finance	300	75.80	10.003		

It is clear from the table 30, that the obtained 't' value (0.112) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is accepted. It may be therefore inferred that Aided and Self-finance B.Ed. and Teacher Trainees do not differ significantly in their Adjustment.

Nature of College

Women's and Co-Education College B.Ed. Teacher Trainees do not differ significantly in their Adjustment.

Table: 31 show the 't' value of Adjustment. of Nature of College B.Ed. Teacher Trainees

Nature of College	N	Mean	Std. Deviation	't' value	Level of significance
Women's	105	72.24	11.228	4.346	Significant at level 0.01
Co-Education	250	77.26	9.355		

It is clear from the table 31, that the obtained 't' value (4.346) is less than that of the table value 1.96 at 0.05 level. Therefore, the Null Hypothesis is not accepted. It may be therefore inferred that Aided and Self-finance B.Ed. and Teacher trainees differ significantly in their Adjustment.

CORRELATION

HYPOTHESIS: 5 There is no relationship between Emotional Intelligence and Adjustment of B.Ed. Teacher Trainees.

Table: 32 show the Relationship between Emotional Intelligence and Adjustment of B.Ed. Teacher Trainees.

S.NO	Main variable	N	Pearson product moment correlation	df	Table value	Level of significance
1	Emotional Intelligence	355	0.624	352	0.098 at 0.05 level 0.128 at 0.01 level	Significant at 0.01level
2	Adjustment	355				

From the above table 32, it is inferred that obtained correlation 'r' value (0.624) is greater than that of table 'r' value (0.098 at 0.05 level 0.128 at 0.05 level) so, framed hypothesis is not accepted. Therefore, it is inferred that there is significant relationship between Emotional Intelligence and Adjustment of B.Ed. Teacher Trainees.

FINDINGS OF THE STUDY

1. The level of emotional Intelligence and adjustment of B.Ed. Teacher Trainees is Average.
2. Male and Female B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence and Adjustment.
3. Tamil and English medium B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence and Adjustment.
4. B.Ed. Teacher Trainees of different Optional subjects do not differ significantly in their emotional intelligence and Adjustment.
5. B.Ed. Teacher Trainees of Different Educational Qualification differ significantly in their emotional intelligence and Adjustment.
6. Rural and Urban B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence and Adjustment.
7. Aided and Self-finance College B.Ed. Teacher Trainees do not differ significantly in their emotional intelligence and Adjustment.
8. Women's and Co-Education College B.Ed. Teacher Trainees differ significantly in their emotional intelligence and Adjustment.

EDUCATIONAL IMPLICATIONS

Now- a- days, E.Q. is more important than I.Q. for a person to be successful in life. So, efforts can be made by B.Ed. teacher trainees to develop emotional intelligence skills in the less emotionally intelligent time so that they can have better control over their emotions and their lives. B.Ed. teacher trainees should freely and frankly talk about feelings with their peer groups.

REFERENCES

1. **Arvind hans and et.al.,**(2013)A study on Emotional Intelligence Among Teachers, *Journal of Community Guidance & Research*, Vol.29,No1,Pp 38-45,ISSN-0970-1346,

2. **Balasaraswathi and Homar Alexander, D.,(2014)**,The main objectives of the study is to find out the level of Emotional Intelligence of Primary school Teacher Trainees. *Guidance & Research*, Vol.29,No.1,Pp. 3-10,ISSN-0970-1346,
3. **Guru.S, Kanakaraj.T,(2013)**,Emotional Intelligence of Prospective Teachers, *Journal of Educational Research and Extension*,Vol.50(2),April-June-2013,Pp.12-16,ISSN:0973-6190, Sri Ramakrishna Vidhyalaya College of Education, Coimbatore.
4. **Harmeet kaur,(2012)**,attitude towards Teaching profession in Relation to Adjustment of secondary school Teacher, *Edutracks*, Mar.2012,Vol.11,No.6,ISSN: 0972-9844,Neeiamal Publications Pvt.Ltd, Hyderabad.
5. **Joseph Catherine,(2015)**,Attempted a study on social adjustment among B.Ed. Teacher trainees, *International Journal of innovative Research & Development*, June 2014,Vol.3,Issue:6,Pp 126-128.
6. **Nirmala.J,(2010)**, Emotional intelligence among college students in Eritrea, *Experiments in Education*, Vol.xxxviii No.1,Pp-11-15,ISSN-0970-7409,Jan-2010,S.I.T.U Council of Educational Research, Chennai.
7. **Ruchidubey,(2009)**Emotional intelligence among undergraduate students a survey, *Experiments in Education*,Vol.xxxvii No.5,Pp-25-28,ISSN-0970-7409,oct-2009,S.I.T.U Council of Educational Research, Chennai.
8. **Saroj verma and Alka,(2007)**Emotional Intelligence and General well-being among College students, *Psychology of College Students*, Pp No 40-45.
9. **Thilagavathy.T,(2013)**,adjustment and emotional intelligence of high school teachers in Tiruvarur District, *International Journal of Teacher Educational Research (IJTER)* Vol.2 No.5 May, 2013 ISSN: 2319-4642

Higher Education in India- Issues and Challenges - A Study

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INTRODUCTION

Education is must be important to every citizen of the Society. Higher education is a powerful tool to build knowledge based society for any country. Higher education has witnessed tremendous changes in education system. This is the right time to build excellent system in field of education and research. India needs more efficient and educated people to drive our economy forward. There are many Indian around the corner who known for their capabilities and skills. When India can provide skilled people to other countries then why not India must progress from developing to developed country. Higher education in India has experienced phenomenal expansion since independence. India has produced scientists, engineers, technologists, doctors, teachers and managers who are in great demand all over the world.

Now it is one of the top ten countries in our industrial and technological capacity, because of the significant contribution of manpower and tools provided by higher education, especially, technical education. Methods of higher education also have to be appropriate to the needs of four pillars of education, learning to learn, learning to do, learning to be and learning to become. Student centered education and the employment of dynamic method of education will require from teachers new attitudes and skills Methods of teaching through lectures will have to be supplemented with the methods that will lay stress on self study, personal consultation between teachers and students and informative sessions of seminars and workshops. In engineering Indian society, knowledge creation, exchange, networking and highest utilization have become most vital for the advancement of nature.

India needs to make the system of education innovative and futuristic in order to respond to the changing demands of the modern society. Although there have been challenges to higher education in the past, these most recent calls for reform may provoke a fundamental change in higher education. This change may not occur as a direct response to calls for greater transparency and accountability, but rather because of the opportunity to reflect on the purpose of higher education, the role of colleges and universities in the new millennium, and emerging scientific research on how people learn.

These disparate literatures have not been tied together in a way that would examine the impact of fundamental change from the policy level to the institutional level and to the everyday lives of college and university administrators, faculty and students. Now the time has come to create a second wave of institution building and of excellence in the fields of education, research and capability building. We need higher educated people who are skilled and who can drive our economy forward. When India can provide skilled people to the outside world then we can transfer our country from a developing nation to a developed nation very easily quickly.

In past, there have been challenges to higher education; these most recent calls for reform may provoke a fundamental change in higher education. This change may not occur as a direct response to calls for greater transparency and accountability, but rather because of the opportunity to reflect on the purpose of higher education, the role of colleges and universities in the new millennium, and

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emerging scientific research on how people learn. These disparate literatures have not been tied together in a way that would examine the impact of fundamental change from the policy level to the institutional level and to the everyday lives of college and university administrators, faculty and students. Now the time has come to create a second wave of institution building and of excellence in the fields of education, research and capability building. When India can provide skilled people to the outside world then we can transfer our country from a developing nation to a developed nation very easily and quickly.

EQUITY, QUALITY& CHALLENGES OF HIGHER EDUCATION

Today, more than ever before in human history, the wealth or poverty of nations depends on the quality of higher education. Those with a larger repertoire of skills and a greater capacity for learning can look forward to lifetimes of unprecedented economic fulfillment. But in the coming decades the poorly educated face little better than the dreary prospects of lives of quiet desperation said by Malcolm Gillis, President of Rice University, and 12 February 1999. Our university system is, in many parts, in a state of disrepair. In almost half the districts in the country, higher education enrollments are abysmally low, almost two third of our universities and 90 per cent of our colleges are rated as below average on quality parameters. Former Prime Minister Manmohan Singh said in 2007 that "I am concerned that in many states university appointments, including that of Vice-chancellors, have been politicized and have become subject to caste and communal considerations, there are complaints of favouritism and corruption. Education is the process of development of an individual. It is a lifelong process. Education tries to develop the innate potentialities of the individual in a harmonious manner. Education is harmonious development of all the powers of the human being i.e. physical, social, intellectual, aesthetic and spiritual. Thus, education is intimately connected with the life and experience of an individual. Hence education, life and philosophy are closely inter related. There are no anti theses between philosophy of life and philosophy of education. They practically sail in the same boat.

MEANING OF EDUCATION

Generally speaking, Education is utilized in three senses: Knowledge, Subject and a Process. When a person achieves degree up to certain level we do not call it education. As for example if a person has secured Masters degree then we utilize education in a very narrower sense and call that the person has achieved education up to Masters Level. In the second sense, education is utilized in a sense of discipline. As for example if a person had taken education as a paper or as a discipline during his study in any institution then we utilize education as a subject. In the third sense, education is utilized as a process. In fact when we talk of education, we talk in the third sense i.e. education as a process. By going through the text you will be able

to know the process of education. To know the meaning and concept of education

To define the narrower and wider meaning of education

To explain the analytical meaning of education

To know the aims and scope of education

In the present day globalized world India and China are two countries which are redefining the world equation in-terms of population, political power, economy and volume of consumption of natural resources. Development and progress of the citizens of the two countries are

defined by the Knowledge society and skilled manpower. Education is the key factor in shaping the budding superpowers. Higher education in these two countries has centuries old history which is trying to re-invent with the changing times with respect to technology. A country with history of 5000 years and growing population of 1.2 billion is slowly changing at an elephant pace. The consistent growth rate of India in last two decades has been attributed to the higher education system which has been able to generate skilled manpower for the rapid industrialization and knowledge based economy. India has become the hub of Information Technology (IT) & IT enabled services industry and manufacturing industry. Though education system has been able to support service industry Research & Development (R &D) at Universities and industries have not kept pace with developed countries which has created huge divide within the society. The progress which has been made in last two decades has not reached all sections of the society.

The present crisis in environment, energy, poverty, security concerns within India has been mainly due to lack of indigenous cost effective technology to address these issues. This directly correlates to quality of higher of education in India especially quantity and quality of R & D in higher education systems. Universities and colleges have become training centers for the service based industry of the country with short term economic development of the society rather than focusing on long term development of a society which is reliable, stable and prosperous. Many factors have contributed to the degradation of higher education system since independence in 1947 which can be broadly grouped into the following factors but not limited. Financing of higher education Quality of human resources in higher education Quality of the research infrastructure Mismanagement of the system and lack of accountability Society and ethics Lack of industry academia collaborations in research Lack of importance for natural and social sciences.

HIGHER EDUCATION SYSTEM IN INDIA

Education in India dates back to its early civilization time where teaching and learning process revolved around the 'Gurukul system'. This system had been a residential concept wherein the students were educated under the tutorship of a teacher in different areas of religion, philosophy and science. Modern concept of University style education centers were established around 6 BC at Nalanda and Takshila. The concept centralized learning centres with multiple streams continued till the arrival of Europeans to the Indian subcontinent. These higher learning centres were nerve centre of different dynasties which ruled across India for thousands of years and generated the required human resources for construction, irrigation and warfare.

In the middle ages upto 1200 AD the religion based higher learning centres were established throughout the Indian peninsula. These learning centers attracted students from Central Asia, China, Middle east, South East Asia and Rome focusing on Literature, Philosophy, Astronomy Architecture whose influence can be seen across the world in terms temples, construction and irrigation systems.

In the early modern age after 1200 AD the Islamic influences enriched the traditional University learning centres and brought in the disciplines of Geography, Law, Administration and Arabic mathematics to Indian subcontinents.

HIGHER EDUCATION SYSTEM UNDER BRITISH RULE

The major change in the traditional style of higher education was brought by the European rulers starting from 1600 AD. Till 1850 informal European style learning centres existed across India Their main focus was in development of European language speaking administrators and clerks for enriching the establishment of the European rule. The British were successful by 1800 in

controlling much the Indian sub-continent under the rule East India Company. The British established formal system of higher education which continues till date. Lord Macaulay had been responsible in making English as the language of instruction across the education system in India. The British style University was established in Calcutta, Mumbai and Chennai in the year 1857 based on the model of University of London which has been the foundation of the modern higher education system in India. Universities focused on languages, literature, history and philosophy. These learning centers were focused on generating English speaking working class for the British administrative services, army and trade. Modern Science and engineering education which flourished in Europe and America during the late 1800 weren't the main focus under the British rule. By 1903 the Indian Institute of Science was established by Tata with focus on research in science and engineering which is the first higher technical learning system in modern India. The British model of University system continued expand across India leading to growing number of higher learning centers by 1947.

HIGHER EDUCATION AND UNIVERSITY SYSTEM IN INDIA

India with second largest population is home to the third largest higher education system in the world by volume of students enrolled. Government of India through Ministry of Human Resource development (MHRD) under the Department of Higher Education shapes the policies related to higher education. The University Grants Commission (UGC) a statutory body established in 1956 through Parliament enacted law modeled on the UGC of United kingdom is responsible for co-ordination, evaluation and maintaining standards of higher education in India. UGC funded through MHRD is responsible for establishing central universities across India and for recognizing Deemed to be Universities run by privately funded trusts and Universities established by the 28 Federal State governments across India. UGC has established statutory Councils to promote, provide grants, set standards and establish professional education in different areas. Figure 1 explains the overall structure of higher Education system in India.

OBJECTIVE OF THE STUDY

In the light of the issues discussed earlier and the available literature relating to status of higher education in India the following specific objectives are framed to present this macro level study. To analyze the present status of higher education system in India. To highlight the opportunities and challenges faced by the higher education system in India. To examine variations in the enrolment in higher education across states, gender and social groups. To discuss trends in the financing of higher education. To suggest measures to overcome the issues relate to enrolment and financing of higher education.

REFERENCES

1. The Structure of Higher Education: A World View. Eric Ashby: International Council for Educational Development, New York, 1976
2. Higher Education Reform in India, Sage Publications, New Delhi, 1993, <http://www.education.nic.in/htmlweb/edusta.htm>, Ministry of Education, Government of India's Official Website
3. Indian Higher Education Reform: From Half -Baked Socialism to Half- Baked Capitalism, by DeveshKapur and Pratap Bhanu Mehta
4. Chi, Keon S., and Cindy Jasper. 1998. Private Practices: A Review of Commercialization in State Government. Lexington, Kentucky: Council of State Governments.

5. National Center for Education Statistics. 2002. Digest of Education Statistics. Washington, D.C.: U.S. Department of Education. Retrieved February 11, 2003, from the Educational Testing Service website, a
6. Wertz, Richard D. 2000. Issues and Concerns in the Privatization and Outsourcing of Campus Services in Higher Education. New York, New York: National Center for the Study of Privatization in Higher Education.
7. Finkelstein, Martin. 2003. "The Morphing of the American Academic Profession." *Liberal Education* 89(4).
8. Based on data from the National Center for Education Statistics. 2000. National Survey of Postsecondary Faculty: 1999. Washington, D.C.: U.S. Department of Education.
9. Lau, R. 1996. "Shared Governance and Compton Community College District." EDIM 710. Malibu, California: Pepperdine University, Organizational Management & Governance.
10. Retrieved January 11, 2004, from Grapevine, the website of Illinois State University's Center for the Study of Education Policy,
11. National Education Association. 2004. Challenges and Opportunities: State Legislative Views On Higher Education, Results of the 2003 Higher Education Issues Survey. Washington, D.C.: author.
12. Burke, Joseph C., and Henrik Minassians. 2003. Performance Reporting: Real Accountability or Accountability "Lite." Albany, New York: Nelson A. Rockefeller Institute of Government.
13. 2004, from the Postsecondary Education Opportunity website, at McPherson, Michael, and Morton Shapiro. 2002. Global Issues in Higher Education: What American Colleges Should Learn. Washington, D.C.: Educause.
14. Grantham, Martha. 1999. Accountability in Higher Education: Are there 'Fatal Flaws' Embedded in Current U.S. Policies Affecting Higher Education? Fairhaven, Massachusetts: American Evaluation Association.
15. National Education Association. 2004. Challenges and Opportunities: State Legislative Views On Higher Education, Results of the 2003 Higher Education Issues Survey. Washington, D.C.: author

A Study of Self-Concept and Academic Achievement of Socially Disadvantaged Students

Haleshappa T.*

ABSTRACT

The present study used to find out the important relationship between self concept and academic achievement of socially disadvantaged students. Self concept refers to the individual's perception or view of himself. Even though there are many factors which may influence on individuals self-concept. In this study it has been decided to find out the relationship of the self-concept with Academic Achievement of secondary school student. Self-concept Scale and Academic Achievement Test used in the present study. It was concluded from the study that Self-concept was strongly and positively correlated and significant. It can be concluded based on the findings of this study that disadvantaged students of rural secondary schools showed higher Self-concept as compared to disadvantaged students of urban secondary schools. The results differences in Self-concept and academic achievement of disadvantaged secondary school students between rural and urban secondary schools concluded in this study were may be because of several factors outcomes of the life qualitative environment and also cultural differences.

Keywords:- Self-concept. Academic Achievement, disadvantaged students, variables, hypothesis, Objectives, Statistical Techniques.

INTRODUCTION

This self concept is influenced by one's physical self, personal appearance, dress and grooming by abilities and disposition, values, beliefs and aspirations. People with good self concept tend to be more accepting of others. High self esteem is related to independence and open mind. Levanway (1955) has found out people with positive self images are all willing to accept criticism and suggestions. The gulf between a person's self concept and actual experiences is a chronic source of anxiety and can even result in mental disorder. Allport (1961) described personality as the dynamic organization with in individual of this psychological system that determines hischaracteristic behavior and thought. Organization emphasizes the patterning of the independent parts of the personality, structure each of which has a special relation to the whole. It points out that personality is not just a sum of traits one added to another, but rather the different traits or manifest aspects of the personality. Academic achievement has become an index of child's future in this highly competitive world.

CONCEPT OF SELF-CONCEPT

The term self-concept was originally proposed by Lecky in 1945 and adopted by Rogers in 1951 as the key stone of his system of non-directive counseling. This concept is of major importance in education, particularly in the more personal aspects such as motivation and adjustment.

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The self-concept is best conceived as a system of attitudes towards one self. All attitudes are important determinants of behavior, but attitudes concerning the self are much more basic than those in which the individual is less ego-involved and are therefore, correspondingly more potent in deferring behavior.

THE PROBLEM

The present investigation is titled as: “**A Study of Self-Concept and Academic Achievement of Socially Disadvantaged Students**”.

OBJECTIVES OF THE STUDY

1. To study the significant difference between socially disadvantaged students of low and high self-concept with respect to academic achievement.
2. To study the significant interaction effect of location (Rural and Urban) and self-concept (Low and High) on academic achievement of socially disadvantaged students

SIGNIFICANCE OF THE STUDY

The impetus for this study came from the belief that schools vary considerably in their climates and that it can be hypothesized that school climate is one of the important variables which influences the development of the self concept of students including their total performance in the school. It is the self-concept of students which might influence most or their goal seeking behavior. Even though there are many factors which may influence on individual's self-concept, in this study it has been decided to find out the relationship of the self-concept with Academic Achievement of secondary school student of Davanagere district.

VARIABLE OF THE STUDY

In the present study the following variables were considered:

- Self-concept
- Academic Achievement of students.

HYPOTHESES OF THE STUDY

Hypothesis: There is no significant difference between socially disadvantaged students of low and high self concept respect to academic achievement.

Hypothesis: There is no significant interaction effect of location (Rural and Urban) and self concept (Low and High) on academic achievement of socially disadvantaged students.

RESEARCH TOOLS USED

The following tool has been employed for collecting data for the present study.

- Self-concept Scale
- Academic Achievement Test

POPULATION AND SAMPLE

The population of the present study consists of 600 disadvantaged children of secondary schools. The sample of the present study consists of 600 secondary schools students in which 342

boys and 258 girls. The required sample was selected using stratified random sampling technique. 600 students were different secondary schools were drawn for the present investigation.

DATA COLLECTION

The investigator was collected the data form 600 disadvantaged secondary school children of Davanagere district. The investigator has requested the Headmasters of schools and were personally administered the tool to the students. Clear-cut instruction was given to fill up the responses to the items in the tools. The collected data was systematically pooled for analyses.

STATISTICAL TECHNIQUES

For the analysis of data collected, differential analysis, such as mean, standard deviation, ANOVA, t-test, analysis were used.

DATA ANALYSES

Table-1: Results of t-test between Socially Disadvantaged Students of Low and High Self-concept with Respect to Academic Achievement

Self concept	Mean	SD	SE	t-value	p-value	Signi.
Low Self concept	363.55	57.17	3.31	-33.8462	0.0001	<0.05, S
High Self concept	504.20	43.78	2.52			

From the results of the above table, it can be seen that, a significant difference is observed between socially disadvantaged students of low and high self-concept with respect to academic achievement ($t=-33.8462$, $p<0.05$) at 0.05 level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the socially disadvantaged students with high self-concept have significantly smaller academic achievement as compared to socially disadvantaged students with low self concept.

Table-2: Pair-wise Comparison of Interaction Effects of Location (Rural and Urban) and Self-concept (Low and High) on Academic Achievement of Socially Disadvantaged Students by Tukeys Multiple Posthoc Procedures

Interactions	Rural with low SC	Rural with high SC	Urban with low SC	Urban with high SC
Mean	360.68	492.17	367.54	512.86
SD	60.41	38.30	52.30	45.50
Rural with low SC	-			
Rural with high SC	$p=0.0001^*$	-		
Urban with low SC	$p=0.6516$	$p=0.0001^*$	-	
Urban with high SC	$p=0.0001^*$	$p=0.0025^*$	$p=0.0001^*$	-

* $p<0.05$

From the results of the above table, it clearly showed that,

- The socially disadvantaged rural students with low self-concept and socially disadvantaged rural students with high self-concept differ significantly with respect to academic achievement at 0.05 level of significance. It means that, the socially disadvantaged rural students with high self-concept have significant higher self concept as compared to the socially disadvantaged rural students with low self-concept.
- The socially disadvantaged rural students with low academic achievement and socially disadvantaged urban students with high academic achievement do not differ significantly with respect to self-concept scores at 0.05 level of significance. It means that, the socially disadvantaged rural students with low academic achievement and socially disadvantaged urban students with high academic achievement have similar self concept scores.
- The socially disadvantaged rural students with low academic achievement and socially disadvantaged urban students with high academic achievement differ significantly with respect to self concept scores at 0.05 level of significance. It means that, the socially disadvantaged urban students with high academic achievement have significant higher self concept as compared to the socially disadvantaged rural students with low academic achievement.
- The socially disadvantaged rural students with high academic achievement and socially disadvantaged urban students with low academic achievement differ significantly with respect to self concept scores at 0.05 level of significance. It means that, the socially disadvantaged rural students with high academic achievement have significant higher self concept as compared to the socially disadvantaged urban students with low academic achievement.
- The socially disadvantaged rural students with high academic achievement and socially disadvantaged urban students with high academic achievement differ significantly with respect to self concept scores at 0.05 level of significance. It means that, the socially disadvantaged rural students with high academic achievement and socially disadvantaged urban students with high academic achievement have different self concept scores.
- The socially disadvantaged urban students with low academic achievement and socially disadvantaged urban students with low academic achievement differ significantly with respect to self concept scores at 0.05 level of significance. It means that, the socially disadvantaged urban students with high academic achievement have significant higher self concept as compared to the socially disadvantaged urban students with low academic achievement.

FINDINGS OF THE STUDY

- The socially disadvantaged students with high self-concept have significantly smaller academic achievement as compared to socially disadvantaged students with low self concept.
- The socially disadvantaged rural students with high self-concept have significant higher self concept as compared to the socially disadvantaged rural students with low self-concept.
- The socially disadvantaged rural students with low achievement motivation and socially disadvantaged urban students with high achievement motivation have similar self concept scores.
- The socially disadvantaged urban students with high academic achievement have significant higher self concept as compared to the socially disadvantaged rural students with low academic achievement.

- The socially disadvantaged rural students with high academic achievement have significant higher self concept as compared to the socially disadvantaged urban students with low academic achievement.
- The socially disadvantaged rural students with high academic achievement and socially disadvantaged urban students with high academic achievement have different self concept scores.
- The socially disadvantaged urban students with high achievement motivation have significant higher self concept as compared to the socially disadvantaged urban students with low achievement motivation.

IMPLICATIONS OF THE STUDY

On the basis of findings of the study and the observations made by the investigator during the study, a few recommendations which may help in developing proper plan to improve self-concept in relation to academic achievement of socially disadvantaged children of secondary schools have been offered.

These findings contribute to the current Intervention training worth debate. This has important implications for understanding of self-concept. It can be concluded from the study that there is strongly positive correlation between Self-concept and academic achievement these factors can impact each other positively. Hence, the future researchers can consider these findings for the future studies. The findings of study elucidate that Self –concept can be influenced by locality and academic achievement of student of secondary schools. Therefore the results can be benefit for using at psychological counseling services and also it is a good background for the other therapists to find out an effective solution as regards to enhancing Self-concept as regards to the clients. The other implication of this study is to help the psychologists for getting a good case history based on the Effective factors on Self-concept and moderator variable viz., location i.e., Rural and Urban and independent variable academic achievement as regards to the current research.

CONCLUSION

It was concluded from the study that Self-concept was strongly and positively correlated and significant. It can be concluded based on the findings of this study that disadvantaged students of rural secondary schools showed higher Self-concept as compared to disadvantaged students of urban secondary schools. The results differences in Self-concept and academic achievement of disadvantaged secondary school students between rural and urban secondary schools concluded in this study were may be because of several factors outcomes of the life qualitative environment and also cultural differences. The study found that there were no significant differences between rural and urban secondary school disadvantaged students with respect to Self-concept. On the other hand the study shows that there were statistically significant differences as regard to Self-concept and locality and academic achievement of disadvantaged students of secondary schools.

REFERENCES

- Ajeh, O. A. (1991). The home effects on academic achievement. *New Frontiers in Education*. 21(3).
- Amino, (1980). As reported in socialization, personality, and academic achievement in gifted children. *School Review*. 65, Pp. 388-414.
- Areepattamannil, S. (2011). Academic self-concept, academic motivation, academic engagement, and academic achievement: a mixed methods study of Indian adolescents in Canada and India. *A dissertation submitted to the Faculty of Education Queen's University Kingston, Ontario, Canada*.

- Best, J.W., (1993) *Research in Education*. New Delhi : Prentice Hall of India Pvt. Ltd.,
- Ferrer, C. M. S. (2012). Influence of Emotional Intelligence in Self-Concept. *International Journal of Learning & Development*, 2 (1), Pp. 232-240.
- Nawi, N. H. M. (2011). Emotional Intelligence, Personality and Self Esteem: A Comparison of the Characteristics among Two Categories of Subjects. *International Journal of Humanities and Social Science*. 1(8), Pp.238-247.
- Podesta, C. (2001). *Self-Esteem and 6-Second Secret*. California: Corwin.
- Rey, L., Natalio, E., and Pena, M. (2011). Perceived Emotional Intelligence, Self-Esteem and Life Satisfaction in Adolescents. *Psychosocial Intervention*.

A Study of Achievement Motivation and Academic Achievement of Socially Disadvantaged Students

Haleshappa T.*

ABSTRACT

The present study used to find out the important relationship between achievement motivation and academic achievement of socially disadvantaged students of secondary school. Achievement motivation refers to the specific needs for identifying these phenomena. Achievement motivation and academic achievement as a natural and inevitable essential outcome of socially disadvantaged students growth and development. In this study to find out the relationship of the achievement motivation with Academic Achievement of secondary school student. It was concluded from the study that achievement motivation was strongly and positively correlated and significant. It can be concluded based on the findings of this study that disadvantaged students of rural secondary schools showed higher achievement motivation as compared to disadvantaged students of urban secondary schools. Here achievement motivation Scale and Academic Achievement Test used. The results differences in achievement motivation and academic achievement of disadvantaged secondary school students between rural and urban secondary schools concluded in this study.

Keywords:- achievement motivation. Academic Achievement, disadvantaged students, variables, hypothesis, Objectives. Statistical Techniques.

INTRODUCTION

One aspect of this theory is that individuals are motivated to either avoid failure (more often associated with performance goals) or achieve success (more often associated with mastery goals). In the former situation, the individual is more likely to select easy or difficult tasks, thereby either achieving success or having a good excuse for why failure occurred. In the latter situation, the individual is more likely to select moderately difficult tasks which will provide an interesting challenge, but still keep the high expectations for success.

CONCEPT OF ACADEMIC ACHIEVEMENT

Achievement refers to the scholastic or academic achievement of the student at the end of an educational programmed. Academic performance according to the Cambridge University Reporter (2003) is frequently defined in terms of examination performance. Academic achievement refers to what the students have learned what skills the students have learned and is usually measured through assessments like standardized tests, performance assessments and portfolio assessments (Santrock 2006). The descriptive assessment information will usually be translated through grading system such as Grade Point Average (GPA) and course grade. The study will make use of Cumulated Grade Point Average (CGPA) since it provides information of the students' academic performance across time.

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Academic achievement performance, which is measured by the examination results, is one of the major goals of a school. Hayle (1986) argued that schools are established with the aim of imparting knowledge and skills to those who go through them and behind all this is the idea of enhancing good academic performance.

THE PROBLEM

The present investigation is titled as: **"A Study of Achievement Motivation and Academic Achievement of Socially Disadvantaged Students"**.

OBJECTIVES OF THE STUDY

1. To study the difference between socially disadvantaged students of low and high achievement motivation with respect to academic achievement.
2. To study the interaction effect of gender (Boys and Girls) and achievement motivation (Low and High) on academic achievement of socially disadvantaged students.

SIGNIFICANCE OF THE STUDY

The specific needs for identifying these phenomena of achievement motivation and academic achievement as a natural and inevitable essential outcome of socially disadvantaged student growth and development rather than among pathological symptom. The achievement motivation and academic achievement becomes important in the student life of individual disadvantage children. As the students are the pillars of the future generations their value pattern of achievement motivation and academic achievement are vital. So the present study intends to measure the achievement motivation and academic achievement of secondary school disadvantaged children.

VARIABLE OF THE STUDY

In the present study the following variables were considered:

- Achievement Motivation
- Academic Achievement of students

HYPOTHESES OF THE STUDY

Hypothesis: There is no significant difference between socially disadvantaged students of low and high achievement motivation with respect to academic achievement.

Hypothesis: There is no significant interaction effect of gender (Boys and Girls) and achievement motivation (Low and High) on academic achievement of socially disadvantaged students.

RESEARCH TOOLS USED

The following tool has been employed for collecting data for the present study.

- Achievement Motivation Scale
- Academic Achievement Test

POPULATION AND SAMPLE

The population of the present study consists of 600 disadvantaged children of secondary schools.

The sample of the present study consists of 600 secondary schools students in which 342 boys and 258 girls. The required sample was selected using stratified random sampling technique. 600 students were different secondary schools were drawn for the present investigation.

DATA COLLECTION

The investigator was collected the data form 600 disadvantaged secondary school children of Davanagere district. The investigator has requested the Headmasters of schools and were personally administered the tool to the students. Clear-cut instruction was given to fill up the responses to the items in the tools. The collected data was systematically pooled for analyses.

STATISTICAL TECHNIQUES

For the analysis of data collected, differential analysis, such as mean, standard deviation, ANOVA, t-test, analysis were used.

DATA ANALYSES

Table-1: Results of t-test between Socially Disadvantaged Students of Low and High Achievement Motivation with Respect to Academic Achievement

Achievement motivation	Mean	SD	SE	t-value	p-value	Signi.
Low achievement motivation	369.85	60.20	3.37	-31.6997	0.0001	<0.05, S
High achievement motivation	507.54	43.54	2.60			

From the results of the above table, it can be seen that, a significant difference is observed between socially disadvantaged students of low and high achievement motivation respect to academic achievement ($t=-31.6997$, $p<0.05$) at 0.05 level of significance. Hence, the null hypothesis is rejected and alternative hypothesis is accepted. It means that, the socially disadvantaged students with high achievement motivation have significantly smaller academic achievement as compared to socially disadvantaged students with low achievement motivation.

Table-2: Pair-wise Comparison of Interaction Effects of Gender (Boys and Girls) and Achievement Motivation (Low and High) on Academic Achievement of Socially Disadvantaged Students by Tukeys Multiple Posthoc Procedures

Interactions	Boys with low AM	Boys with high AM	Girls with low AM	Girls with high AM
Mean	375.19	504.72	363.49	511.78
SD	61.72	40.62	57.90	47.45
Boys with low AM	-			
Boys with high AM	$p=0.0001^*$	-		
Girls with low AM	$p=0.2000$	$p=0.0001^*$	-	
Girls with high AM	$p=0.0001^*$	$p=0.6941$	$p=0.0001^*$	-

*p<0.05

From the results of the above table, it clearly showed that,

- The socially disadvantaged boy students with low achievement motivation and socially disadvantaged boy students with high achievement motivation differ significantly with respect to academic achievement at 0.05 level of significance. It means that, the socially disadvantaged boy students with high achievement motivation have higher academic achievement as compared to the socially disadvantaged boy students with low achievement motivation.
- The socially disadvantaged boy students with low achievement motivation and socially disadvantaged girl students with high achievement motivation do not differ significantly with respect to academic achievement at 0.05 level of significance. It means that, the socially disadvantaged boy students with low achievement motivation and socially disadvantaged girl students with high achievement motivation have similar academic achievement.
- The socially disadvantaged boy students with low achievement motivation and socially disadvantaged girl students with high achievement motivation differ significantly with respect to academic achievement at 0.05 level of significance. It means that, the socially disadvantaged girl students with high achievement motivation have higher academic achievement as compared to the socially disadvantaged boy students with low achievement motivation.
- The socially disadvantaged boy students with high achievement motivation and socially disadvantaged girl students with low achievement motivation differ significantly with respect to academic achievement at 0.05 level of significance. It means that, the socially disadvantaged boy students with high achievement motivation have higher academic achievement as compared to the socially disadvantaged girl students with low achievement motivation.
- The socially disadvantaged boy students with high achievement motivation and socially disadvantaged girl students with high achievement motivation do not differ significantly with respect to academic achievement at 0.05 level of significance. It means that, the socially disadvantaged boy students with high achievement motivation and socially disadvantaged girl students with high achievement motivation have similar academic achievement.
- The socially disadvantaged girl students with low achievement motivation and socially disadvantaged girl students with low achievement motivation differ significantly with respect to academic achievement at 0.05 level of significance. It means that, the socially disadvantaged girl students with high achievement motivation have higher academic achievement as compared to the socially disadvantaged girl students with low achievement motivation.

FINDINGS OF THE STUDY

- The socially disadvantaged students with high achievement motivation have significantly smaller academic achievement as compared to socially disadvantaged students with low achievement motivation.
- The socially disadvantaged boy students with high achievement motivation have higher academic achievement as compared to the socially disadvantaged boy students with low achievement motivation.
- The socially disadvantaged boy students with low achievement motivation and socially disadvantaged girl students with high achievement motivation have similar academic achievement.

- The socially disadvantaged girl students with high achievement motivation have higher academic achievement as compared to the socially disadvantaged boy students with low achievement motivation.
- The socially disadvantaged boy students with high achievement motivation have higher academic achievement as compared to the socially disadvantaged girl students with low achievement motivation.
- The socially disadvantaged boy students with high achievement motivation and socially disadvantaged girl students with high achievement motivation have similar academic achievement.
- The socially disadvantaged girl students with high achievement motivation have higher academic achievement as compared to the socially disadvantaged girl students with low achievement motivation.

IMPLICATIONS OF THE STUDY

On the basis of findings of the study and the observations made by the investigator during the study, a few recommendations which may help in developing suitable programmes to improve achievement motivation in relation to academic achievement of socially disadvantaged children of secondary schools have been offered.

1. It is observed that the achievement motivation is an important factor in academic achievement of disadvantaged children to improve their social background by encouraging them in school context to achieve more goals in the society. It is necessary to admit the socially disadvantaged children to boost their achievement motivation.
2. The study reveals that the socially disadvantaged girl students with high achievement motivation differ with the socially disadvantaged boy students with low achievement motivation and the girls students are higher academic achievement. Hence it can be concluded that the socially disadvantaged boy students are study hard and try to meet their goals in improving their academic performance and to think more towards achievement motivation and academic achievement.

CONCLUSION

The socially disadvantaged students with high achievement motivation have smaller academic achievement as compared to socially disadvantaged students with low achievement motivation.

The socially disadvantaged boys and girls are similar in their achievement motivation and girl students with high achievement motivation have higher academic achievement when compared to socially disadvantaged boy students also socially disadvantaged boy students with high achievement motivation have higher academic achievement as compared to the socially disadvantaged girl students with low achievement motivation.

The socially disadvantaged boys and girl students need orientation to support proper direction towards achievement motivation and better academic achievement.

REFERENCES

- Ajeh, O. A. (1991). The home effects on academic achievement. *New Frontiers in Education*. 21(3).
- Amino, (1980). As reported in socialization, personality, and academic achievement in gifted children. *School Review*. 65, Pp. 388-414.

- Areepattamannil, S. (2011). Academic self-concept, academic motivation, academic engagement, and academic achievement: a mixed methods study of Indian adolescents in Canada and India. *A dissertation submitted to the Faculty of Education* Queen's University Kingston, Ontario, Canada.
- Best, J.W., (1993) *Research in Education*. New Delhi : Prentice Hall of India Pvt. Ltd.,
- Clark, R. E. (1999) The CANE Model of Motivation to Learn and to Work: A Two-Stage Process of Goal Commitment and Effort. Lowyck, J. (Ed.) *Trends in Corporate Training*. Leuven Belgium, University of Leuven Press.
- Hackman, J. R., and Oldham, G. R. (1976). Motivation Through the Design of Work: Test of a Theory. *Organizational Behavior and Human Performance*, 16, Pp. 250-279.
- Sunday, O. (1998) A Study of Work Motivation Among Educators in Selected Educational Institutions Using Job Characteristics Model. *Dissertation Abstract*, P. 270.
- Suslu, S. (2006) Motivation of ESL Teachers. *The Internet TESL Journal*, XII, 1.
- Vroom, V. H. (1964) *Work and Motivation*. New York: Wiley.

Educational Philosophy of Swami Vivekananda

Dr. (Mrs) Ratani Thakur*

“ Our great national sin is the neglect of the masses and that is the cause of our downfall. No amount of politics would be of any avail until the masses in India are once more well educated, well fed and well-cared for”.

SWAMI VIVEKANANDA'S LIFE (1863 - 1902)

Swami Vivekananda was born on Monday the 12th January 1863 in a Kshatriya family of Calcutta. His original name was Narendranath Dutta before he acquired the new name in 1886 when he took 'Sanyasa'. As a child he developed great taste for music and was adopt in sports. Under the influence of his mother he deeply studied the Hindu scriptures. He also studied all the system of western philosophy. He had an excellent command over Bengali, English and Sanskrit. Once his principal of college Mr.Hastie remarked “Narendra Nath is really a genius. I have travelled far and wide, but I have never yet come across a lad of his talents and possibilities, even in German Universities amongst philosophical students. He is bound to make his remark in life. “ Till his death in 1902, he repeatedly asserted that Indians had become weak and poor because they did not apply their Vedanta to life. He asserted that India needs strength giving religion and a man making education.

SWAMI VIVEKANANDA'S PHILOSOPHY OF LIFE

1. Swami Vivekananda was true vedantist. It is not originated by any person or prophet. The Dvaita, the visista- dvaita and the Advaita are the different expressions of the vedanta. They are the stages for helping the individual to proceed progressively towards the realization of higher ideals till everything is merged in the wonderful unity with the creator.
2. God resides in every human heart. He gave three attributes to God as (i) He is Infinite Existence (ii) He is Infinite knowledge, (iii) He is Infinite Bliss. Thus Vivekanand places very high ideal before man.
3. Swami Vivekananda has intense faith in man and realizes the dignity and diversity of human beings. Infact, he finds the menifestation of God in Man. According to him, “the only God to worship is the human soul, in the human body”.
4. According to Swami Vivekanand, no religion is inferior to any other. All religions lead to the same goal. Religions are the different forces in the economy of God, working for the good of mankind.
5. Swami Vivekanand emphasised universalism and spiritual brotherhood. The saint after having realised the self, seas the self in all creatures.
6. According Swami Vivekanand, ” Perfection is not to be attained, it is already withus. Immortality and bliss are not to be acquired, we already have that”.

SWAMI VIVEKANANDA'S PHILOSOPHY OF EDUCATION

Swami Viveknanda's educational Philosophy is based on Vedanta and Upanishads. He believed that soul exists in every individual. The recognition of this soul is religion.

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Education is the process of self-development. According to him, "We want that education by which character is formed, strength of mind is increased, the intellect is expanded and by which one can stand on one's own feet".

BASIC PRINCIPLES OF EDUCATIONAL PHILOSOPHY

1. Knowledge resides with the individual. All knowledge that the world has ever received comes from the mind. The external world is only the suggestion, the occasion which sets you to study your mind.
2. He believes that the child learns through self-education. The child teaches himself. The teacher is to arrange the necessary environment for him so that he may do his growing.
3. Vivekananda advises us to regard every soul as the soul of God and every child as God. So the teacher has only to serve children. Education should be given according to the needs of children.
4. Swami Vivekananda is an advocate of universal education means education for all. He says that education is the birth right of every human being. He considers education as the soul remedy for the poverty of the people.
5. He considers concentration of mind as the essence of education. Every one wants this power of concentration for success in their life. A Man is called superior to other, if he has greater power of concentration.
6. Vivekananda says that Brahmacharya is essential for developing the power of concentration. Brahmacharya gives mental and spiritual power of the highest kind. He demonstrated how Brahmacharya helps to improve various psychological activities such as learning, remembering, thinking, etc., and thus facilitate the process of education.
7. Vivekananda was an ardent advocate of women education. He wanted to give women an education which may form character and may increase the strength of mind and may enable them to stand on their own feet and become selfless, fearless, brave like Sita, Ahalya Bai, Meera Bai and Jhansi ki Rani.
8. According to him, "One must enter into the heart of religion, that is, one must realise it in his own life". Religion must be a living experience with oneself. True religious education should be imparted to children.
9. Vivekananda was a staunch advocate of national system of education. He wanted to reorganise education on national basis. He desired that education in the country should be wholly national in spirit. He wanted to train the child in India into the various aspects of Indian customs, manner, culture and philosophy and then acquire the knowledge of various civilization of the world.
10. Education to be based on western science coupled with vedanta "Living with Guru and a similar system of imparting education are needed. What we want is western science coupled with vedanta.
11. Vivekananda gave prime importance to the education of the masses. He considers that, "The great National sin is the neglect of the masses and that is one of the chief causes of our down fall. No amount of politics would be of any avail until the masses, in India are once more well educated, well-fed and cared for. We must work for them".

SWAMI VIVEKANAND ON VARIOUS ASPECT OF EDUCATION

Meaning of Education

According to Swami Vivekananda, "Education is the manifestation of the perfection already present in man".

In Vivekananda's words, "You cannot teach a child anymore than you can grow a plant. The plant develops its own nature".

According to him, "the training by which the current and expression of will are brought under control and become fruitful is education".

Aims of Education

According to Swami Vivekananda, the followings are the aims of education :-

- (i) Development of moral and spirituality in social setting i.e. to create a human being and development of a spirit of fellow-being.
- (ii) Development of character which means doing good to others, courage, fearlessness and strength for noble cause. For this, he emphasized the practice of Brahmacharya, which helps in the development of mental, moral and spiritual powers leading to purity of thoughts, words and deeds.
- (iii) Mental development of the individual - Swami Vivekananda believed that knowledge is inherent in man. Perfection is inherent in man. Thus, the aim of education is to discover or uncover the knowledge that lies hidden in our mind.
- (iv) Physical development of the individual is an important aim of education. Vivekananda felt that both self realization and character building are impossible in the absence of physical development and education. He himself took physical exercise as part of his daily routine. Power, in his opinion is happiness, a long and perfect life while weakness is a never ending burden which culminates in death.
- (v) Vocational development of the individual is also important Education which does not enable the individual to stand on one's own feet is useless. For achieving vocational efficiency, Vivekananda recommended training in agriculture and industry.
- (vi) Aim of reaching perfection - According to him, one of the important aims of education is the manifestation of the perfection. Education helps in the manifestation and development of these powers.
- (vii) Religious Development is an essential aim of education. According to Swami Vivekananda, each individual should be able to search out and develop the religious seed embedded in him and thus find the absolute truth or reality.
- (viii) Aim of promoting universal brotherhood means for establishing brotherhood in all mankind. Education must promote the spirit of universal brotherhood. Education must teach man that soul is the same in all. Only the education is worth to impart this spirit to man.
- (ix) The Aim of developing faith in one's own self, shraddha and spirit of renunciation is must. Vivekananda emphasis on the fact that faith in one's own self must be created through education. Education must give one the faith, "Arise, awake and stop not till the goal is achieved". It is shraddha or faith which moves the word and world.
Today our country needs the spirit of renunciation. With renunciation none can work for others. It is a great privilege for one to be able to do something to the world.
- (x) The aim of searching unity in diversity. The true aim of education is to develop insight into the individuals so that they are able to search out and realize unity in diversity. Swami Vivekananda has further asserted that physical and spiritual worlds are one, their distinctness is an illusion (Maya). Education should develop this sense which finds unity in diversity.

Curriculum

- Swami Vivekananda advocated the inclusion of all such subject in the curriculum to foster material welfare with spiritual development. On the one hand he stressed the study of

vedanta, Upanishdas, Puranas, Religion and philosophy for spiritual development while on the other, he stated the importance of scientific education.

- Vivekananda observes that art is an indispensable part of life and hence education in science must be supplemented by the teaching of arts.
- Vivekananda stressed the need for common language for unity in the country.
- He felt that it was necessary to encourage every regional language because it is the mother tongue of child.
- He believed that Sanskrit is the source of all Indian languages. He added that our awareness of our cultural heritage and past greatness depended upon our knowledge of Sanskrit. This language gives stability and permanence to the progress of our country.
- Vivekananda also recommended the study of subject like history, geography, economics, mathematics home science, psychology and agriculture.
- He felt that both self-realization and character building are impossible in the absence of physical education. What we want is muscles of iron and nervous of steel.

Methods of teaching learning

Swami Vivekananda emphasized the following methods of teaching-learning :-

1. Self teaching- "No one was ever taught by another. Each of us has to teach himself. A child educates itself".
2. Living examples of Teacher- "Words even thoughts, contribute only one-third of the influence in making an impression and the man two-third.
3. Teaching through positive suggestion- "We should give positive ideas. Negative ideas only weaken men. If you speak kind words to them and encourage them, they are bound to improve.
4. Concentration as the only method of education - The power of concentration is the only key to the house of knowledge. He insisted Brahmacharya for concentration.
5. Qualities of the Learner - "The condition necessary for the taught are purity, a real thirst after knowledge and perseverance.
He has also expressed his views on the methods of teaching - learning.
6. Method of individual guidance and counselling - students can be kept on the right way through the method of individual guidance and counselling.
7. Freedom of education :- Swami Vivekananda was a strong supporter of freedom in Education because he believed that it was the prerequisite of development. Teacher should not put any pressure on his students.
8. Discussion and contemplation Method :- Vivekananda advocated discussion and contemplation to be followed in education. The student can remove the difficulties in his way by discussing them with his teacher (education) in an formal and informal atmosphere.
9. Imitation Method - Children like to imitate the activities of others. He advocated utilizing such qualities in the teaching process to develop divine wisdom.
10. Activity Method - Learning through activities mean it can provide direct experience to the children. He also advocated for the introduction of activities like excursion, camp etc., to help the students to understand the value of social service.

Role of the Teacher

Swamiji advocated the qualities that teacher should have :-

1. Teacher should be provider of healthy environment to his student.
2. Swamiji stress upon education that their attitude of teaching should be that of worshipper.

3. According to him, “ Teacher is a philosopher, friend and guide, helping the student to go forward in his own way”.
4. Teacher should be sinless.
5. Teacher should know the spirit of scriptures.
6. Teacher should be of a high character.
7. He must be pure in mind and heart and have love for his student.

Place of Child

Like Froebel, swamiji emphasized the education to be child centered. Child is the store house of knowledge. Knowledge resides within him. He advised that child’s growth should be naturally and spontaneously Vivekananda asserted,” Go into your own and get the upanishads out of your own self. You are the greatest book that ever was or will be. Until the inner teacher opens, all outside teaching is in vain”.

Discipline

According to Swamiji discipline is an important aspects of a person’s character. He believed that teaching a child or disciplining him from outside is only a myth. He wants each of us to teach ourselves.

He said, “ If you don’t allow a child to become a lion, he will become a fox,” children imbibe more from the teachers own than they do from books and lectures. Discipline therefore, is to be caught rather than taught.”

CONCLUSION

Swami Vivekananda was a social reformer, a world teacher, a great educationist and a practical saint of modern India who wanted to revive ancient wisdom. Through out his life he preached and practiced brotherhood of man, realization of God, renunciation and righteousness. He had deep faith in vedanta and laid emphasis on self knowledge, self- reliance, courage, concentration, Brahmacharya, women education and education for the masses. He established Rama Krishna Mission Ashrams and tried to spread knowledge of vedas through these Ashrams.

Swami Vivekananda’s views on education may be summed up in his own words,” We want the education by which character is formed, strength of mind is increased, the intellect is expanded and by which one stands on one’s own feet”.

REFERENCES

1. Aggrawal, J.C (2002) - Theory and Principles of Education, Vikas publishing House Pvt.Ltd., New Delhi.
2. Aggrawal, J.C.(2008) - Philosophical and sociological perspectives on Education, Shipra publications, New Delhi.
3. Dr.Gurusaran Das Tyagi & Dr. Vijay Kumar Nand - Udiyaman Bharat Main Shikshan, Vinod Pustak Mandirm Agra - 2.
4. Dr.J.S. Wadia, (2003)- Theory and principles of Education, Paul publishers, Punjab.
5. Dr.P.A. Ahire. (2011) - Shaishinik Vicharawant Aani Samaj Sudharak, Aarthav publications, Dhule.
6. Swami Tejasanand(2016)- A short life of Swami Vivekananda Advaita Ashrawa,, Uttarakhand, Himalayas.
7. Swami Prabha Nand (2017)- Niveditia of India, Ramakrishna Mission, Institute of Cultura, Kolkatta.

SHG - An Instrument of Social and Economic Empowerment of Rural India

Ravindra Kumar*

ABSTRACT

In India the formal financial institutions have not been able to reach the poor households and particularly women. The role of institutional framework is vital in determining the space of growth and the quality of growth. The World Bank has stressed the role of institutions in its Report 2005 as "Institutions for Poor." The challenge of economic development being a multi dimensional one, it naturally needed multi dimensional policy. However till 90s the policies of developing countries were concentrated only on raising the income rather than raising the standard of living of the people. This has resulted into exclusive growth which created island of prosperity in the midst of the abject poverty.

In a country like India where the population already exceeds one billion and in its rural areas where almost half of its residents live below poverty line - the ideology of Self Help Group (SHG) bears enormous potentialities to offer some alternative and innovative ways for such nation to get rid of the vicious cycle of rural poverty. The present article highlights the role of SHG in enhancing employment in non-formal sector and its impact on savings, standard of living and other benefits accrued.

CONCEPT OF SHG

Credit has been considered not only as one of the critical inputs in agriculture, but also an effective means of economic transformation. A large number of agencies, including co-operatives, regional rural banks, commercial banks, non banking financial institution, self help groups and well spread informal credit outlets represent Indian rural credit delivery system. These networks, apart from working as financial intermediaries, also play a key development role in the economy. The key milestone of rural credit system are Rural Credit Survey Committee report (1954) and acceptance of its recommendations, nationalization of major commercial banks (1969 and 1980), establishment of RRBs (1975), establishment of NABARD (1982) and the one going financial sector reforms since 1991. Further, several institutes like Kisan Credit Card scheme, special Agriculture credit plan, RIDF scheme etc, have been put in place to increase the flow of credit to agriculture sector. An important development in this regard is the phenomenal growth of the Self help group since 1990.

Self Help Group is a method of organizing the poor people and the marginalized to come together to solve their individual problem. The SHG method is used by the government, NGOs and others worldwide. Grameen Bank of Bangladesh is a people bank formed by the poor to provide easy loans for themselves. The poor collect their savings and save it in their own banks. In return they receive easy access to loans with a small rate of interest to start their micro unit enterprise. Thousands of the poor and the marginalized population in Bangladesh are building their lives, their

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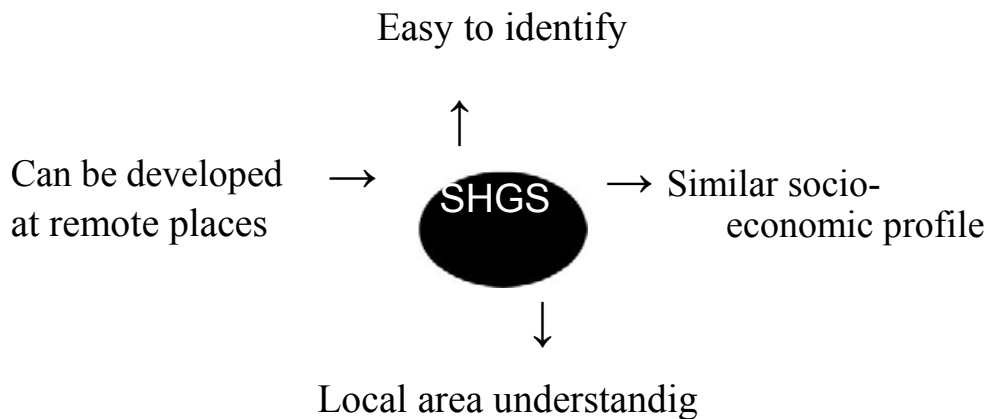
families and their society through Self Help Group. The 9th Five Year Plan of the government of India had given due recognition on the importance and the relevance of the Self Help Group method to implement developmental schemes at the grassroots level.

In 1991-92, a pilot project for linking about 500 SHGs with banks was launched by NABARD in consultation with the Reserve Bank of India. Since launching it as pilot project, it has proved its efficacy as a mainstream programme for banking by the poor who mainly comprise the marginal farmers, landless labourers, artisans and craftsmen and other engaged in small business like hawking and vending in the rural areas.

DEVELOPMENT OF SHGS

For the purpose of poverty alleviation especially in rural areas government has initiated the concept of Self Help Groups pooling in the similar socio-economic profile. They are provided with skill training and certain loan amount is advanced so that they can take up certain activity. Apart from government bodies NGOs, SHPAs (Self help promotion agencies), FIIs/NBFCs. Various activities are undertaken by SHGs in villages but broadly limiting to manufacturing and distribution of indigenous products (local products made of raw materials available from natural resources such as - cane products, farm equipments, flower bouquets. Food, Dairy and Meat products and so on.

BENEFITS OF SHGS



ROADMAP OF SHG

The small beginning of linking only 500 SHGs to banks in 1992 had grown to over about 8 million SHGs by March 2012. As per NABARD's microfinance report as on March 2012, about 79.6 lakh SHGs, with an estimated membership of 9.7 crores, have savings accounts in the banks, with aggregate bank balance of j 6,551 crores. Over 43.54 lakh SHGs have loan accounts with total loan outstanding of j 36,340 crores. The total number of SHG Federations formed is 1.66 lakh most of which are primary federations. Decreasing trend in the number of SHGs that have a loan outstanding with banks during 2010-12 which came down from 48.51 lakh SHGs in 2010 to 43.54 lakh SHGs as on March 2012, a reduction of nearly 10 % is a major cause for concern. During the same period, the number of SHG having a savings bank account has gone up from 69.53 lakh SHGs to 79.6 lakh

SHGs, an increase of nearly 15 %. Only 55 % of the SHGs that have a bank account are having a loan outstanding with the bank. Another disturbing trend is steady increase in Non Performing Assets (NPAs) which doubled in two years from 2.9 % in 2010 to 6.1% in 2012. Increasing NPAs and reducing percentage of SHGs that have bank loan outstanding may adversely affect the prospects of newer SHGs being promoted.

SIGNIFICANCE IN EMPOWERING RURAL INDIA

In the last two decades, since the inception of this pioneering microfinance model, numerous pilot studies and researches conducted have explored the multifaceted significance of SHG-approach which was instrumental in providing major impetus to sustainable rural growth of the nation - may be portrayed through the diagram.

SHGS AND MICRO-ENTERPRISE

Development of Microenterprise is relatively a new phenomenon. As per study of **M. Kunhaman**, 2012, SHGs can better promote microenterprises, especially in rural areas. The microenterprises can assist in delivery and distribution of company products in the areas untapped. The purpose can be addressed by companies through two different approaches : 1. Adoption Approach, and 2. Development Approach

Adoption Approach : In this approach corporate entities can select a SHG who has their own products (indigenous) but lack technology, capital, skill and market to increase their scale of operation though the product may have potential to be a future product.

Lizzat papad is a well known brand but is a result of seven women's who have thought of enhancing their income. They organize few women and everyone works passionately to manufacture papads. Few members are involved in distribution and revenue is generated. Likewise there are various other self help groups of men / women who are working together and develop certain indigenous products but because of deficiency of skill, technology and capital they are not able to develop into an enterprise (small scale or Microenterprises). Companies in similar line can identify these groups developing their own products and can adopt the complete

DIAGRAM - 1

Significance of SHGs in Empowering Rural India

Generating a sense of social integrity among its members and encouraging collective effort for combating with different ill practices, prevalent across rural societies like Dowry, Alcoholism etc. business. This can help in faster new product development (innovation and product line extension).

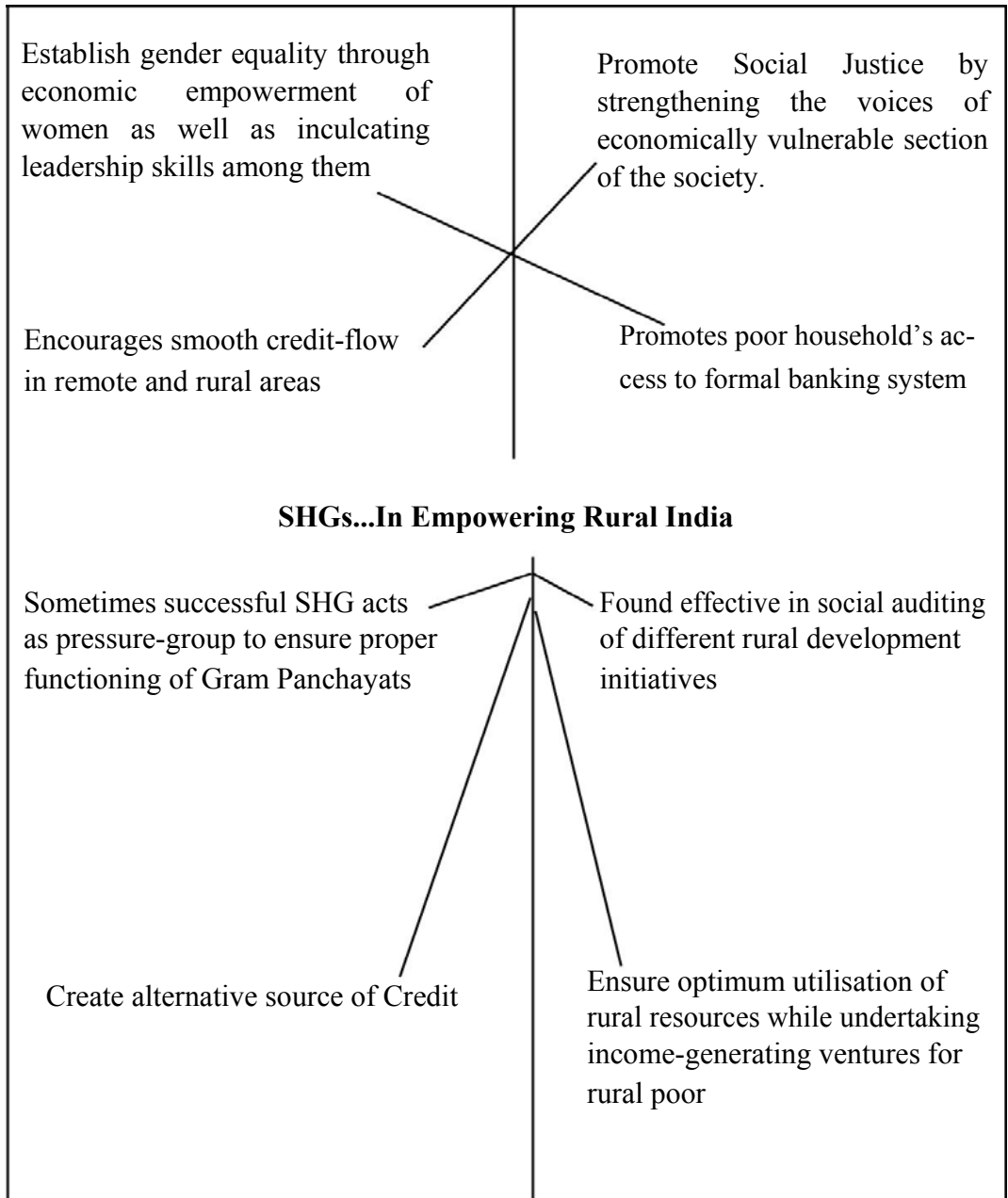
The major benefits addressed by **N. Srinivasan**, Material Manager, Taj Coromandel as "We are able to get fresh produce at a reasonable rate. As it eliminates middlemen, there are fewer communication problems and we are able to deal with them easily."

Various objectives which force companies to look for new product includes - product failure, product line extension and diversification, competition and customization as per the taste of local market. Companies can identify SHGs involved in production of various local products. If product falls under the interest of company product line they can adopt the SHG and further develop it as a strategic business unit. The SHG has resource and capabilities. The company can adopt corporate parenting in various stages of development of SHG. The approach can help the SHG to develop into a microenterprise or small scale enterprise. They can be further developed as associates in the region for the company undertaking production, sales and after sales activities (in case of consumer durables).

Diagram - 1

Significance of SHGs in Empowering Rural India

Generating a sense of social integrity among its members and encouraging collective effort for combating with different ill practices, prevalent across rural societies like Dowry, Alcoholism etc.



DEVELOPMENTAL APPROACH

The second approach for business entities is that they can work on developing business skill of SHGs which are functional but due to certain limitations like lack of technology, business skill and seed capital they are not able to upgrade there business potential. With the corporate - SHG linkage these drawback can be reduced. The major advantage to SHGs is that they are easy to form and they can develop themselves and improve their skill and expertise. On the other side of the coin the corporate can be benefitted by the services which are provided by various SHGs as their functionaries (Supply Chain, Logistic, and After Sale Service.)

Generally marketers face some common problems with there products in rural market which includes.

- (i) Developing adequate Point of Sale (PoS) for Distribution and Logistics.
- (ii) Developing Point of Procurement of Raw materials.
- (iii) After sale services in case of consumer durables.

SHGs can provide an alternative to such problems if they can be trained and developed accordingly. If we look at the case of Jeevika they had developed a good mix of distribution plan including-street vendors, direct sales persons and Retail sales.

The major limitation to their sustainable profit includes - similar line of products offered by companies, quality, and sales skills. This requires a collaborative effort from the industry to further develop them into enterprises specializing in logistics and distribution, developing PoS and sales services.

- The SHG routes of distribution can provide another vehicle of product delivery / PoS / PoP and sales services.
- SHG Managed PoS (Pont of Sales) / PoP (Point of Procurement) / Sales service Apart from the corporate distribution process using authorized retailers and distributors another channel can integrate SHGs in the process of distribution through developing master distribution centers which acts as sub stockist for the channel in the area.

They can forward the product to groups involved in direct sales and SHG members operated and managed point of sales which can be developed in prox- imity to significant population. These SHG members managed point of sales can also act as point of procurement for various products such as agricultural produces, dairy products, fish and meat produces from the areas and After Sales services of durable goods. These can further enhance the operation and scale of SHG members.

UNEVEN DISTRIBUTION AND IMBALANCE OF SHGS

According to NABARD's publication '**Status of Microfinance in India 2011-12**', there is unevenness in the geographical spread of SHG bank linkage programme and credit deepening. As on March 2012, out of 33 states in 22 states and union territories less than 50 % of SHGs having a saving bank account, have a loan outstanding to banks; another 10 states have 50 to 80 percent of SHGs with loan outstanding and only one state namely Andhra Pradesh has 80 % of SHGs with loan outstanding to banks. The percentage of SHGs credit linked to bank is highest in AP with 94 % and lowest in the country in Arunachal Pradesh with 4 % out of 33 states, 9 states and union territories namely Andhra Pradesh (94 %), Puducherry (76 %), Tripura (74 %), Bihar (73 %), Jharkhand (71 %), Odisha (58 %), West Bengal (56 %), Tamilnadu (56 %) and Himachal Pradesh (55 %) have more than the national scenario (55 %).

During the financial year 2011-12, the banks disbursed a total loan of j 16,535 crores to 11,47,878 SHGs with an average of j 1,44,046 per SHGs. The average amount of loan per SHG is highest in Andhra Pradesh with j 2,15,875 and lowest in Lakshadweep with j 14,375. Of the total 33 states and union territories, majority states and union territories' average loan size is more than j 1,00,000 (19) followed by j 50,000 to j 1,00,000 (12) and less than j 50,000 (2).

There is a wide difference in the average loan per SHG accross the states / union territories. Further, there are only six states / union territories namely Andhra Pradesh (j 2,15,875), Puduchery (j 1,94,230), Karnataka (j 1,85,290), Haryana (j 1,60,309), Kerala (j 1,54,620) and Uttrakhand (j 1,48,155) that have more than the national average of loan per SHG.

DYNAMICS OF SHGS FROM SWOC - LENS

From the evidence and records available with some of the Indian research institutes and universities, issues and agendas related to SHGs have been found to be one of the most popular research topics across social science academic fraternity which continue to lure the mind of researchers and academicians; however when we look into those studies and research-reports minutely, keeping in mind the SWOC (**Strengths-Weaknesses-Opportunities-Challenges**) framework along with its areas of strengths, some of the emerging areas of concerns and weaknesses of SHGs also attract our attention (See Box - 1).

Box - 1, SHG-approach has emerged to be one of the most aggressive and effective strategies for empowering rural women and alleviating rural poverty. We must say that SHGs have been evidently instrumental in bringing about structural changes in rural economy as well as accross rural societies of India towards a progressive and positive direction.

There is need to focus on concerns of women under the SHG pro-gramme and in credit lending. The following measures are recommended in this context :

- (i) An integrated approach is required for meeting overall credit needs of a poor family in terms of backward linkages with technology and forward linkages with processing and marketing organizations.
- (ii) Credit needs to be provided for diversified activities including income generating livelihood activities productions, housing consumption loan and against sudden calamities.
- (iii) The delivery system has to be proactive and should respond to the financial needs of the farmers.
- (iv) Simplify the process of giving loans, i.e. reduce the number of questions to important non repetitive ones.
- (v) Provide gender sensitization training to bank staff so that they are sensitized to the needs of rural clients especially women.

MFIs on its own are unlikely to be able to address formidable chal- lenges of underdevelopment, poor infrastructure and governance. It needs :

- Appropriate legal structures for the structured growth of microfinance oper-ations.
- Ability to access loan funds at reasonable low rates of interest.
- Appropriate loan products for different segments.
- Ability to innovate, adapt and grow.
- Bring out a compendium of small and micro enterprises for the microfinance clients.
- Ability to attract and retain professional and committed human resources.
- Identify and prepare a panel of locally available trainers.
- Ability to train trainers.
- Capacity to provide backward linkages or create support structures for mar-keting.
- Finding adequate levels of equity for the new entities to leverage loan funds.

Box - 1: Need To Be Done

In spite of existing drawbacks and weaknesses as reflected from

Strengths	Weaknesses	Opportunities	Challenges
μ Through socio-economic empowerment of women, SHGs often create hope for gender equality within societies. μ Low financial investment through SHGs can ensure large economic benefits in return. μ SHGs build integrity among its members or people from more or less same socio-economic background, which often lead towards social integrity across rural villages. μ SHGs expand the horizons of livelihood opportunities for rural poor. μ SHGs are prone towards effective and optimum utilisation of existing community-resources for creation opportunities for new livelihood. μ Strong integrity and cohesion among SHG members sometimes lead to social movement against ill practices of the society. μ The ideology of SHGs encourages involvement and participation of people from lowest economic strata or from most vulnerable section of the society - for their socio-economic empowerment - which ultimately becomes instrumental in establishing social justice in society.	μ Reluctance among SHG members to return loan taken from banks. μ Apathy of rural banks to provide fund to SHGs, keeping in view their failures to return bank-loan in time. μ Lack of knowledge and proper orientation among SHG-members to take up suitable and profitable livelihood options. μ Lack of regular supervision and monitoring on SHG-activities by the loan providing banks. μ Lack of awareness among SHG-members regarding their own community resources, often leaves them with limited options for income-generating activities which only produces marginal profits. μ There is growing need to organise suitable capacity-building or orientation programs for the SHG-members who have been provided loan so that they can go for a cost-benefit analysis before making financial investment.	μ SHGs often appear to be instrumental in rural poverty alleviation. μ Economic empowerment through SHGs, provides women the confidence for participation in decision-making affairs at the household-level as well as at the community-level. μ Un-utilised and under-utilised resources of the community can be mobilised effectively under different SHG-initiatives. μ Leaders and members of successful SHGs bear the potentiality to impact also on resource for different community-developmental initiatives. μ Active involvement in different SHG-initiatives helps members to grow leadership-skills. Evidences also show that often women SHG-leaders are chosen as potential candidates for Panchayat Pradhans or representatives to Panchayat Raj Institution (PRI).	μ Dominance of patriarchal mentally across rural societies, often creates obstacles for women to join SHG or to take up income-generating assignments / projects outside home. μ Inability of the SHG-members to explore innovative options for livelihood opportunities or economically beneficial projects. μ Because of communication, very often rural banks cannot reach the geographically isolated or remote villages due to lack of funding-sources or financial assistances. μ Incidences of misappropriation of funds by SHG-members very often reported which maligns the spirit and ideology of SHG-formation. μ Sometimes Govt. fail to provide equal attention towards the agenda of spreading the spirit of SHG-formation along with other income-generating schemes or flagship programs like MANREGA, Bharat Nirman, NRHM etc.

REFERENCES

1. A study on "Self Help Groups in India : A study of the lights and dark sides" by APMAS (Mahila Abhivrudhi Society, Andhra Pradesh)
2. G. Srinivasan & Ajay Tankha (2010) : Report on SHG Federations - Devel-opment Costs and Sustainability.
3. M. B. Nanavati & J. J. Anjaria (1970) : The Indian Rural Problem, Mumbai.
4. C. H. Hanumantha Rao (2005) : Agriculture, Food Security, Poverty and Environment, New Delhi
5. Ashok Gulati & Sudha Narayanan (2003) : The subsidy syndrom in Indian Agriculture, New Delhi
6. V. M. Rao & P. D. Jeromi (2000) : Modernising Indian Agriculture - Priority Task and Critical Policies, Development Research Group, Study No. 21
7. India - Re-energizing the Agricultural Sector to Sustain Growth and Reduce Poverty, Oxford University Press, New Delhi (2005)
8. R. Radha Krishna (ed.) : India Development Report 2008, Oxford University Press, New Delhi
9. NABARD : Status of Microfinance in India 2011-12
10. Salomo et. al., (2010) : Research Paper on Sustainability of SHG (2012)
11. K. Raja Reddy & C. S. Reddy : Self Help Group in India - A study on Quality and Sustainability, ENABLE Publication, Hyderabad
12. Yojana (Various Issues)
13. Kurukshetra (Various Issues)
14. The Economic Times
15. Economic and Political Weekly
16. Journal of the Indian School of Political Economy
17. Inian Economic Journal
18. Bihar Economic Journal
19. Indian Journal of Agricultural Economics
20. Business Standard
21. Facts

Social Banking in India : A Short Sketch of Financial Inclusion

Ajay Kumar Singh*

Commercial Banking constitutes the largest segment of the Indian financial system. The Indian banking has acquired a wide reach, judged in terms of expansion of branches and the growth of credit and deposits. Banks as financial intermediaries collect deposits from savers and on-lend these to investors and others. The deposit of banks form the basis of their lending operations.

Gearing up to tackle the challenges the current global economy is posing, Indian banking sector is preparing for a giant leap. Innovation holds the key when it comes to robust performance in any field and banking is no exception. That's the reason why banking sector in India is inventing new business models. For the past couple of decades, Indian banking sector has witnessed a phenomenal growth and a lot of transition is still taking place in the field.

INITIATIVE OF FINANCIAL INCLUSION

Financial inclusion is a process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups in particular, at an affordable cost, in a fair and transparent manner, by regulated, mainstream institutional players (GOI, 2008). The objective of financial inclusion is to transform the lives of vulnerable people, mainly poor, by providing them access to banking finance and enabling them to generate stable income (Reddy, 2017).

The Reserve Bank of India (RBI) and the National Bank for Agriculture and Rural Development (NABARD) have also been making concerted efforts in extending banking across the country under which schemes of microfinance initiatives, and business correspondents (BCs) were launched. Other initiatives included establishing Regional Rural Banks (1975), adopting service area approach (1989), and Self- Help Group-Bank linkage programme (1989, 1990).

The reach of banking was limited despite different initiatives of financial inclusion contributing in changing the economic landscape in India. There were still important factors such as poverty, low income levels, and distance from bank branches that were restricting vulnerable groups from getting access to the formal banking system. According to Census 2011, only 58.7 percent of total households in India and only 54.4 percent households in rural areas had access to formal banking services (Table 1).

Table-1: Percentage of Households availing Banking Services

House holds	As per Census 2001			(Households in Crore) As per Census 2011		
	Total number of households	Number of households availing banking services	Percent	Total number of households	Number of households availing banking services	Percent
Rural	13.8	4.2	30.1	16.8	9.1	54.4
Urban	5.4	2.7	49.5	7.9	5.3	67.8
Total	19.2	6.8 i	35.5	24.7	14.5	58.7

Source : YOJANA, Jan. 2018

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GOVERNMENT INITIATIVES

To ensure a banking account in every household, the Prime Minister, on assuming office, in the maiden speech from the Red Fort on August 15, 2014 announced the need for concerted efforts. Pradhan Mantri Jan Dhan Yojana (PMJDY), which envisages universal access to banking facilities with at least one basic banking account for every household, consolidates government's effort to increase number of households availing banking services. As of December 06, 2017 a total of 30.7 crore accounts had been opened under the scheme of which 18.1 crore are in rural areas and 12.7 crore in urban areas. The number of RuPay cards have also increased to 23.1 crore. The progress has been impressive, considering that total amount of bank deposits with commercial banks was ₹ 69,841.2 crore as on December 06, 2017 (Table - 2). The size of branch network increased rapidly in rural areas though growth rate was higher in urban and metropolitan areas (Table - 3). In 2015, the presence of nationalized banks, and SBI and its Associates was highest in rural areas (Table 4).

The public sector banks, traditionally involved in social banking, continue to play an important role in extending banking services to unbanked areas but share of private banks, both in number of accounts and amount outstanding is increasing significantly in the last decade (Table 5). Some of the banks benefited from institutional memory as they earlier operated

Pigmy, Honey deposit or Jeevannidhi Schemes, which migrated to no-frill or basic saving accounts in recent years. The commercial banks have played a significant role in extending credit in northern region, especially in rural and semi-urban areas (Table 6). There has also been a significant increase in credit in urban areas in Eastern and North-Eastern region. In extending credit to agriculture sector, commercial banks have been more successful than RRBs or Cooperative Banks (Table 7).

INNOVATION IN EXTENDING CREDIT

To extend banking services to unbanked population, commercial banks began exploring alternative to brick and mortar branch like mobile vans, banking kiosks and BCs. A large number of the unbanked customers are those who have never entered a bank branch and the BC channel introduced them to a process of inculcating banking culture.

Table 2 : Status of Pradhan Mantri Jan Dhan Yojana (As on December 6, 2017)

Bank Name/type	Number of Beneficiaries Rural	Accounts Urban	Deposit In (Crore)	Number of RuPay Cards Debit issued to beneficiaries (in Crore)
Public Sector Banks	13.3	11.5	55646.6	18
Regional Rural Banks	4.2	0.8	12033.9	16
Private Sector Banks	0.6	0.4	2160.6	0.9
Grand Total	18.1	12.7	69841.2	23.1

Source : GoI - <https://pmjdy.gov.in/account>

Table-3: Number of Bank Branches by Population Group

Year	Rural	Semi-Urban	Urban	Metropolitan	Total
1969	1833	3342	1584	1503	8262
1979	13337	7889	5037	3939	30202
1989	33014	11166	7524	5995	57699
1999	32857	14168	9898	8016	M939
2009	30943	19282	15356	14288	79869
2017	48806	38201	24574	26478	138059

Note: Data exclude 'administrative Offices'.

Source: **RBI**, Handbook of Statistics on Indian Economy.

The progress of financial inclusion has been extensive with banking outlets increasing from 33,378 in March 2010 to 50,860 in March 2017 while those with BCs, increased rapidly from 34,316 to 5,47,233. The business transacted as well as number of accounts have increased manifold during the last seven years (Table 8). The amount deposited in basic savings account through BCs increased nearly 26 times while that through branches recorded an increase of 15 times over the period. The amount transacted through use of information technology recorded highest growth over the period. Finally, encouraging results of PMJDY are apparent - amount in basic savings account and transactions through use of technology show a substantial increase after 2014.

Table-4: Number of Bank Branches by Bank Group - 2015

Type of Banks	Rural	Semi-urban	Urban	Metropolitan	Total
SBI and Associates	8029	6593	4304	3622	22548
Nationalized Banks	21605	16956	13083	11703	63347
Regional Rural Banks	14613	3748	1071	228	19660
Private Sector Banks	4302	6457	4521	4698	19978
Foreign Banks	8	12	57	247	324
All-India	48557	33766	23036	20498	125857

Source : YOJANA, Jan. 2018

Table-5: Bank Group-wise Outstanding Credit of Scheduled Commercial Banks

(Accounts in Million and Amount in j Billion)

	1996 March		2016 March	
	No. of Accounts	Amount Out-standing	No. of Accounts	Amount Out-standing
SBI and Associates	8029	6593	4304	3622
Nationalized Banks	21605	16956	13083	11703
Regional Rural Banks	14613	3748	1071	228
Private Sector Banks	4302	6457	4521	4698
Foreign Banks	8	12	57	247
All Banks	48557	33766	23036	20498

* In 1996 : Other Scheduled Commercial Banks.

Source : RBI, *Basic Statistical Returns of Scheduled Commercial Banks in India*.

JOURNEY AHEAD

The ongoing deregulation and liberalization of the financial markets have thrown up some challenges for banks in India. The most exciting among them has been the emergency of an increasingly competitive environment in the banking industry with the arrival of new domestic and foreign private players. Starting with the advantage of strong capitalization, modern technology, lean network and more importantly, without any accumulated problems of the past, the new domestic entrants in particular were ambitious in their business targets and keen to expand their activities all over the country. Empowered with a model that ensures networking of branches with connection to a central processing centre for back office operations like account opening, loan maintenance etc. and equipped with the ability to employ and best workforce in the market by offering attractive compensation packages, the new generation banks soon began to pose a stiff competition to public sector banks.

In the face of this unprecedented onslaught, PSBs realized that in times to come, they would need to convert challenges into opportunities. The success obtained by private players through the networked model of banking prompted PSBs to embrace the same design. Today, not only are all PSBs fully computerized, some among them are also fully networked, while others are not far from accomplishing it. The seven Associate Banks of the State Bank Group are in fact the first PSBs to be fully networked in India.

In addition to computerization and networking, another major innovation that competition has encouraged in the banking industry is the popularization of alternative delivery channels like Automated Teller Machines (ATMs) and Internet Banking. These channels provide customers access to basic banking facilities round the clock and also help reduce operating costs of banks. Banks are also investing substantially in Information Technology to improve efficiency in their operations as also to provide top class customer service.

The post-reform era has also witnessed a rapid growth of retail finance, which till recently was perhaps somewhat neglected as banks concentrated mostly in financing the manufacturing and

agricultural sectors. With large manufacturing companies finding alternative and cheaper sources for funding their needs, banks have now turned to consumer finance in a big way. Retail finance today forms about a quarter of bank credit. The ready availability of bank credit has contributed in no small measure to the consumer boom that the economy has been witnessing of late including an upsurge in the housing and automobile sector, giving in turn a fillip to the real economy.

While the opening up of the Indian financial markets has provided enormous, opportunities to banks to tap new areas of business, it has also

sposed an enormous challenge for the smaller banks to compete with the new entrants in terms of funds base, technology and new products. With the further opening up of the Indian banking sector to foreign investors under to WTO agreement in April 2009, the smaller PSBs may well not be able to withstand the pressures on profitability for long. In order to overcome this, these banks would perhaps need to consolidate through amalgamations, as is the global phenomenon today.

Notwithstanding India's expanding economy and the phenomenal growth of bank credit in recent times, it is however lamentable that in India's countryside, about 58 per cent of farming households and 70 per cent of non-farming households, still lack access to basic banking services. Banking penetration is, in fact, so low in India that bank deposits represent only 60 per cent of the GDP as compared to 190 per cent in China or 142 per cent in Japan. Despite the boom in the economy, economic disparities, thus, continue to grow in India with the rich becoming richer and the poor poorer. It is, therefore, imperative that a balance is struck between the demands of a market economy and the urgent needs of financial inclusion.

Drawing on **Prof. C.K. Prahalad's** much-publicized theory that 'the world's most exciting, fastest-growing new market is where you least expect it at the bottom of the pyramid', Indian banks have increasingly begun to look for business among the rural poor. They are now working towards providing basic financial services to the villagers through a network of e-kiosks and agents-a business model that has been successfully tried in other developing economies. The day when a bouquet of financial services will be available to six lac Indian villages is perhaps not too far away.

CONCLUSION

To conclude, commercial banks, especially public sector banks, have played an important role in extending financial inclusion in the country, especially rural and semi-urban areas. The successful expansion of banks is now being used to leverage the infrastructure for other financial products like insurance schemes and pension funds.

Note : BSBDA - Basic Savings Bank Deposit Account, OD - Overdraft, KCC - Kisan Credit Card, GCC - General Credit Card, BC - Business Correspondents,

Table 6 : Outstanding Credit of Commercial Banks (₹ Billion)

	1996				2016			
	Rural	Semi-Urban	Urban	Metro-Politan	Rural	Semi-Urban	Urban	Metro-Politan
Northern Region	77	53	85	216	1774	1990	2964	10502
North-Eastern Region	12	8	8	-	181	252	220	-
Eastern Region	59	37	46	116	866	714	1351	2837

	1996				2016			
	Rural	Semi-Urban	Urban	Metro-Politan	Rural	Semi-Urban	Urban	Metro-Politan
Central Region	66	58	71	47	1352	1226	2231	1708
Western Region	64	57	60	646	913	1368	1414	20703
Southern Region	109	155	172	278	2270	3813	4784	9789
All-India	386	369	444	1348	7358	9363	12966	45540

Source : YOJANA, Jan. 2018

Table 7 : Targets and Achievements for Agricultural Credit

(j Billion)								
Year	Commercial Bank		Co-operative Bank		RRBs		Total	
	Target	Achieve-ment	Target	Achieve-ment	Target	Achieve-ment	Target	Achieve-ment
2013-14	4750	5090	1250	1199	1000	827	7000	7116
2016-17*	6250	7998	1500	1428	1250	1232	9000	10658
* Provisional								

Source : RBI Annual Report

Table 8 : Progress on Financial Inclusion by Banks

(Year ending March)						
		Amount				(₹ Billion)
Year	BSBDA		OD	KCCs	GCCs	ICT
	Branches	BCs				
2010	44	11	0.1	1240	35	7
2014	273	39	16	3684	1097	524
2017	691	285	17	5805	2117	2652
		Volume				(Million)
Year	BSBDA		OD	KCCs	GCCs	ICT
	Branches	BCs				
2010	60	13	0.2	24	1	27
2014	126	117	6	40	7	
2017	254	280	9	46	13	

ICT - Information and Communication Technology.

Source : RBI

REFERENCES

1. Rakesh Mohan (2005) : Financial Sector Reform in India - Policies and Performance Analysis, Economic and Political Weekly.
2. Economic Survey 2017-18' GOI.
3. India 2018
4. Reddy, Y. V., (2017). Advice and Dissent, Harper Business.
5. Reserve Bank of India, (2016) : Report on Trend and Progress of Banking in India.
6. Roy, T, (2011), The Economic History of India : 1857-1947, Oxford University Press, New Delhi.
7. Singh, C and G Naik, (2017) : Financial Inclusion in India : A Case Study of Gubbi. IIMB Working No. 549, May.
8. Singh, C., and S. Ananth, (2016) : Creating an Enabling Digital Ecosystem: Issues & Challenges, In S. Kochhar, and (editor) Modi's Odyssey Digital India, Developed India, Skoch Media Pvt. Ltd., Haryana.

उत्तराखण्ड में प्रचलित परंपराओं में पर्यावरण संरक्षण (हरियाली देवी के विशेष सन्दर्भ में)

डॉ. शिवचन्द सिंह रावत*

सृष्टि की उत्पत्ति प्रकृति एवं पुरुष के संयोग का ही परिणाम है। विश्व की सभी सभ्यताओं में विभिन्न रूपों में प्रकृति एवं पुरुष के महत्त्व को स्पष्ट किया गया है। प्रकृति की पूजा मातृ शक्ति के रूप में प्राचीन काल से ही प्रचलित रही है। यही कारण है कि नवपाषाण काल तथा विश्व की अनेक प्राचीन सभ्यताओं के अवशेषों में स्त्री मूर्तियाँ बड़ी संख्या में प्राप्त हुई हैं, जिनसे स्पष्ट होता है कि उस समय मातृ शक्ति की पूजा मुख्यतया प्रचलित रही होगी। संभवतः मनुष्य ने सर्वप्रथम उर्वरा शक्ति के रूप में मातृ देवी की पूजा को आरम्भ किया होगा। मिस्र, सीरिया, ईरान व दक्षिण-पूर्वी यूरोपीय देशों में बहुत सी स्त्री मूर्तियाँ मिली हैं। इससे प्रमाणित होता है कि उस समय के मनुष्य मातृ-देवी के उपासक थे।¹ कालांतर में मनुष्य द्वारा अनेक प्रत्यक्ष व अप्रत्यक्ष शक्तियों को देवी-देवता मानकर पूजा जाने लगा। इनमें से कृषि प्रधान देशों में सूर्य का और मरुभूमि तथा वनस्पति प्रधान क्षेत्रों में प्रायः चन्द्रमा का स्थान ऊँचा माना जाता था। इसी प्रकार चीन वाले आकाश की अनन्तता के कारण उसको विशेष रूप से महत्त्व देते थे। सूर्य की उपासना भारत, ईरान, मिस्र, रोम व यूरोप में प्रचलित हुई, जबकि अरब, यूनान, मेसोपोटामिया में चन्द्रमा का विशेष महत्त्व माना जाता था।²

यद्यपि शक्ति उपासना का प्राचीनतम साक्ष्य ऋग्वेद के वाग्भृणीसूक्त में मिलता है, जिसे शक्ति पूजा का आद्य रूप कहा जा सकता है।³ साथ ही भारत में पाँचवीं सदी से मातृका पूजन की परंपरा के अभिलेखीय साक्ष्य भी प्राप्त होते हैं। मालव नरेश विश्वकर्मा के शिलालेख में उल्लेख मिलता है कि उनके मंत्री ने पुण्य लाभ के लिए डाकिनियों से युक्त जलनिनादिनी, तंत्रोद्भूत प्रवण जलनिधि विक्षोभकारिणी मातृकाओं का मंदिर बनवाया।⁴ भारतीय ग्रन्थों में मार्कण्डेय पुराण में देवी महात्म्य में देवी को महामाया, योगनिद्रा के रूप में मधु और कैटभ नामक राक्षसों से ब्रह्मा की रक्षा करने वाली मधुकैटभनाशिनी, चण्डमुण्डविनाशिनी कहा गया है। सांख्य दर्शन में सृष्टि की उत्पत्ति को प्रकृति व पुरुष के संयोग का परिणाम बताया गया है, इन दोनों के संयोग से ही सृष्टि की उत्पत्ति हुई, जिसमें प्रकृति को स्त्री रूप मानते हुए उसे उर्वरा शक्ति का प्रतीक कहा गया है। यही नहीं भारतीय ग्रन्थों में ईश्वर के विविध रूपों जैसे ब्रह्मा, विष्णु व महेश की शक्ति का स्रोत भी प्रकृति के स्त्री स्वरूप को ही माना गया है, जिसमें कमला, लक्ष्मी व गौरी को उनकी शक्ति के रूप में वर्णित किया गया है। इसी तरह संसार के काल चक्र को नियंत्रित करने वाली तथा सम्पूर्ण जगत को नियंत्रित करने वाली शक्ति को माया कहा गया है। वेदान्त के अनुसार ब्रह्म की माया ही इस विविध सृष्टि का कारण है। इस प्रकार की धार्मिक भावना से विभिन्न संप्रदायों में पार्वती, उमा-महेश्वरी-लक्ष्मी के रूप में आविर्भूत हुई और शक्ति के रूप में स्थापित हो गई। शक्ति पूजा का दूसरा कारण अनेक जातियों तथा आदिवासियों

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में मातृ देवी तथा बौद्ध धर्म में शक्ति का तारा के रूप में पूजा जाना भी सम्मिलित रहा है। इन सब कारणों से छठी सदी से शक्ति-उपासना स्पष्ट एवं निश्चित रूप में दिखाई देती है और नवीं सदी तक इस मत का प्रबल प्रभाव दृष्टिगोचर होता है। इसी कारण वैष्णवागम शैवागम तथा शक्ति तंत्रों की इस काल में बड़ी संख्या में रचना हुई तथा साथ ही मातृ-देवियों के मंदिरों की भी स्थापना हुई।⁵ पूर्वमध्यकाल में ही बंगाल में शक्ति पूजा का बहुत प्रचलन हुआ और इसी कारण कालिका देवी के नाम पर कलकत्ता का नाम पड़ा है। मध्य प्रदेश में चौंसठ योगिनियों का मंदिर भी इसी कारण से बना जो कि शक्ति के चौंसठ रूपों को प्रदर्शित करता है।⁶ इसी प्रकार उत्तराखण्ड में भी शक्ति पूजा प्रचलित रही है। यहाँ मातृ शक्ति के अनेक मंदिर स्थित हैं तथा इनमें मातृ शक्ति को अनेक रूपों में पूजा जाता है, जैसे-दुर्गा, चामुण्डा, नन्दा, उमा, पार्वती, सुरकंडा, चन्द्रबदनी, हरियाली, कुँजापुरी आदि। इनमें से हरियाली देवी को नंद व यशोदा की पुत्री महामाया माना जाता है तथा जिसे कंस ने वसुदेव व देवकी की आठवीं संतान समझकर पृथ्वी पर पटक दिया था। जब कंस ने महामाया रूपी बालिका को पृथ्वी पर पटका तो उसके शरीर के विभिन्न अंग इधर-उधर गिर गये थे, जिनमें से महामाया का हाथ यहाँ गिरा था। इस तरह यहाँ महामाया के बाल स्वरूप की पूजा की जाती है। जिसे भारतीय धर्मग्रन्थों में योगमाया, योगनिद्रा आदि कहा गया है। इसी योगमाया की उत्तराखण्ड के जनपद रुद्रप्रयाग में हरियाली देवी के नाम से पूजा की जाती है। यद्यपि इस क्षेत्र में हरियाली देवी के कई मंदिर हैं, किन्तु प्रस्तुत अध्ययन हरियाली कांठा पर स्थित प्रसिद्ध मंदिर के संदर्भ में है। हरियाली देवी का यह सिद्ध पीठ ऋषिकेश से बदरीनाथ जाने वाले राष्ट्रीय राजमार्ग संख्या 58 पर रुद्रप्रयाग जनपद मुख्यालय से 38 किमी दूर है। इस सिद्धपीठ की प्राचीनता के संदर्भ में हरिमोहन लिखते हैं कि इस शक्तिपीठ के बारे में यह भी प्रचलित है कि जब आदिगुरु शंकराचार्य बदरीनाथ की ओर जा रहे थे तो उन्होंने भी इस मंदिर में देवी के दर्शन किये थे।⁷ इस सिद्धपीठ के लिए राष्ट्रीय राजमार्ग पर स्थित नगरासू से 25 किमी दूर कोदिमा गाँव तक सड़क मार्ग से तथा वहाँ से 7 किमी का मार्ग पैदल चलकर पूरा करना पड़ता है। बाला सुन्दरी तथा योगमाया के रूप में हरियाली देवी का धार्मिक महत्त्व तो है ही साथ ही इस मंदिर तथा देवी के बालस्वरूप से अनेक परंपराएँ जुड़ी हैं जो इसे अन्य शक्तिपीठों तथा मंदिरों से अलग करती हैं।

वैसे तो संपूर्ण भारत ही विविध संस्कृति एवं परंपराओं का देश है तथा यहाँ ऐसी अनेक परंपराएँ अपनाई जाती हैं, जिनसे हमारी संस्कृति सदियों से जीवित है। भारतीय सभ्यता तथा परंपराओं के संदर्भ में ए0एल0 बाशम लिखते हैं कि “भारत की प्राचीन सभ्यता मिश्र, मेसोपोटामिया तथा यूनान की सभ्यता से इस दृष्टि से भिन्न है कि इसकी परंपराएँ आज तक अविच्छिन्न रूप से सुरक्षित बनी हुई हैं।”⁸ निश्चित ही ए0एल0 बाशम का संकेत भारत की उन परंपराओं की ओर है जो वैदिक काल से लेकर आज तक प्रचलित हैं। इनमें मातृ पूजा, वृक्ष पूजा, जल पूजा, प्रकृति के विविध रूपों की देवी-देवताओं के रूप में पूजा करना आदि मुख्य हैं। इसी प्रकार उत्तराखण्ड में भी ऐसी अनेक परंपराएँ हैं, जिनसे पर्यावरण संरक्षण को बढ़ावा मिलता है। ये परंपराएँ जहाँ हमारे धर्म तथा संस्कृति से जुड़ी हुई हैं वहीं इनसे पर्यावरण को संरक्षित करने में भी सहायता मिलती है। ऊँचे बुग्याल वाले क्षेत्रों में जूते-चप्पल न ले जाना, बड़े खुरों वाले जानवरों का बुग्यालों में जाना वर्जित किया जाना कहीं न कहीं हमारे पर्यावरण को संरक्षित करता है। हरियाली देवी कांठा यात्रा तथा इसकी पूजा-पद्धति से सम्बन्धित परंपराएँ भी कुछ इसी तरह पर्यावरण को संरक्षित करने का संदेश देती हैं। हरियाली

देवी के दर्शन से लेकर पूजा-पद्धति तथा हरियाली कांठा यात्रा में इस तरह की परंपराएँ अपनाई जाती हैं कि जिनके विश्लेषणात्मक अध्ययन से स्पष्ट होता है कि निश्चित ही ये परंपराएँ हमारी प्रकृति एवं पर्यावरण को संरक्षित करने के लिए ही स्थापित की गई होंगी।

सर्वप्रथम हरियाली देवी का नाम ही अपने आप में पर्यावरण संरक्षण का प्रतीक है। हरियाली अर्थात् हरा-भरा। हरियाली देवी का यह नाम क्यों पड़ा? इस संदर्भ में हरियाली देवी के निकटवर्ती ग्राम कोदिमा के समाजसेवी श्री छत्तर सिंह नेगी बताते हैं कि “पाबों (हरियाली देवी मंदिर का अन्य निकटवर्ती ग्राम) के एक व्यक्ति को हरियाली देवी कांठा पर जब देवी की उपस्थिति का ज्ञान हुआ तो उन्हें रिंगाल (एक प्रकार की पहाड़ी घास) नामक हरी घास के बीच एक छोटी बच्ची के रोने की आवाज सुनाई दी, इस प्रकार हरी घास में देवी की मौजूदगी से उसका नाम हरियाली देवी पड़ा।”⁹ वैसे भी हरियाली कांठा (गढ़वाली बोली में कांठा ऊँची पर्वत चोटियों को कहा जाता है) को निकट से देखने पर स्पष्ट होता है कि हरियाली देवी का नाम निश्चित ही प्रकृति के हरे-भरे रूप के कारण ही पड़ा होगा। हरियाली कांठे की यह मुख्य विशेषता है कि यह वर्ष भर हरा-भरा रहता है तथा एक और तथ्य जो कि इस कांठे को और कांठों से अलग करता है वह यह है कि इस कांठे पर वर्ष भर हरी-हरी घास उगी रहती है। सामान्यतया पहाड़ी वनों में यह देखने को मिलता है कि बाँज-बुरांस के जंगलों में हरी घास कम उगती है, जबकि चीड़ के जंगलों में खूब हरी घास होती है, किन्तु यहाँ हरियाली कांठे के बारे में यह तथ्य बिल्कुल अलग है। हरियाली कांठा बाँज, बुरांस, खर्सू, मोरु का जंगल होने के बावजूद यहाँ सर्वत्र हरी-हरी घास उगी है। संभवतः इसी कारण इस कांठे का नाम हरियाली या ‘हरियाल’ पड़ा होगा। इस प्रकार हरियाली देवी का यह नाम निश्चित ही पर्यावरण संरक्षण का प्रतीक प्रतीत होता है।

हरियाली देवी शक्तिपीठ से जुड़ा एक अन्य महत्वपूर्ण तथ्य यह है कि इस मंदिर में देवी के दर्शन करने के लिए एक सप्ताह पूर्व से लहसुन, प्याज, माँस, मदिरा आदि का त्याग करना पड़ता है। इस संदर्भ में हरिमोहन भी लिखते हैं कि “आज भी यहाँ पौराणिक परंपराओं के साथ नियमों का कठोरता से पालन किया जाता है। मंदिर में प्रवेश करने वालों के लिए आज भी यह आवश्यक है कि उन्हें एक सप्ताह पूर्व से तामसी भोजन का त्याग करना पड़ता है।”¹⁰ संभवतः इसका उद्देश्य भी कहीं न कहीं प्रकृति की स्वच्छता तथा उसके पर्यावरण को सुरक्षित रखने से है। सामान्यतया तामसी भोजन करने से व्यक्ति में शीघ्र क्रोध तथा उग्रता आ जाती है, ऐसी स्थिति में वह गंभीरता खो देता है तथा इस कारण उसकी सात्विक प्रवृत्ति भी प्रभावित होती होगी साथ ही संभव है कि वह ऐसा कोई कदम उठाये जिससे प्रकृति व पर्यावरण को क्षति पहुँचे। शायद इसीलिए यहाँ दर्शन करने से पूर्व तामसी भोजन करना वर्जित किया जाता होगा, जिससे कि मन की सात्विकता भी बनी रहे।

इस मंदिर से जुड़ी एक और परंपरा यह है कि मंदिर जिस पहाड़ी की चोटी पर बना हुआ है उसके आस-पास के वन क्षेत्र को संरक्षित किया गया है। इस संरक्षित वन क्षेत्र से किसी भी प्रकार से चारा पत्ती या ईंधन, ईमारती लकड़ी लाना वर्जित है। इस संदर्भ में इस क्षेत्र के प्रसिद्ध पर्यावरणविद् श्री जगत सिंह जंगली बताते हैं कि “हरियाली देवी का पर्यावरण संरक्षण से गहरा संबंध है। हरियाली वैसे ही पर्यावरण संरक्षण का प्रतीक है। हरियाली कांठा के नीचे संरक्षित वन इस तथ्य का साक्ष्य है कि यह क्षेत्र प्रकृति व पर्यावरण संरक्षण

का अद्भुत उदाहरण है। इस वन क्षेत्र से घास, लकड़ी, चारापत्ती आदि लाना वर्जित है, इस प्रकार यह पूर्णतया संरक्षित वन है।¹¹ यही नहीं इस संरक्षित वन क्षेत्र में वन्य जीवों का शिकार करना भी पूर्णतया निषिद्ध है।

पर्यावरण संरक्षण से जुड़ी इस मंदिर की एक और परंपरा यह है कि इस मंदिर में महिलाओं का जाना पूर्णतया वर्जित है। यहाँ यह भी एक महत्वपूर्ण तथ्य है कि उत्तराखण्ड में यह एकमात्र मंदिर है जहाँ महिलाओं का प्रवेश वर्जित है। यद्यपि यह भी उल्लेखनीय है कि हरियाली देवी के अन्य मंदिरों में महिलाएँ प्रवेश कर सकती हैं, किन्तु प्रस्तुत अध्ययन से संदर्भित हरियाली कांठा पर स्थित मंदिर में ही सिर्फ महिलाओं का प्रवेश वर्जित है। इस संदर्भ में जब स्थानीय लोगों से जानकारी ली गई तो उनमें से अधिकांश ने इसे एक परंपरा बताया, जिसका पालन करना वे अपना कर्तव्य बताते हैं। कोदिमा गाँव की एक जागरूक महिला श्रीमती माहेश्वरी देवी बताती हैं कि “यह परंपरा इसलिए है, क्योंकि महिलाओं के मासिक धर्म के कारण मंदिर की पवित्रता प्रभावित होती है, इसलिए उन्हें मंदिर में जाने से वर्जित किया गया है।”¹² परन्तु यदि इसका विश्लेषण किया जाय तो ऐसा प्रतीत होता है कि संभवतया यह परंपरा हरियाली कांठा स्थित संरक्षित वन को बचाने के लिए भी प्रचलित की गई हो। उत्तराखण्ड की ग्रामीण अर्थव्यवस्था में महिलाओं की महत्वपूर्ण भूमिका होती है। महिलाएँ ही उत्तराखण्ड की कृषि का आधार हैं। पशुपालन से लेकर घर गृहस्थी तक संपूर्ण जिम्मेदारी उन्हीं के ऊपर होती है। इसलिए उत्तराखण्ड के ग्रामीण क्षेत्रों में महिलाएँ जहाँ भी जाती हैं, अपने साथ दरांती तथा रस्सी अवश्य साथ ले जाती हैं, ताकि वापसी में वे अपने पशुओं के लिए चारा या घर के ईंधन के लिए लकड़ी आदि ला सकें। अतः ऐसी स्थिति में जब महिलाएँ हरियाली कांठे पर स्थित मंदिर में जायेंगी ही नहीं तो वे संरक्षित वन से चारा पत्ती नहीं ला सकेंगी और इस प्रकार वन संरक्षित रह सकेगा। संभवतः हरियाली कांठा मंदिर में महिलाओं का प्रवेश इसलिए भी वर्जित किया गया हो।

हरियाली देवी की पूजा से सम्बन्धित एक महत्वपूर्ण परंपरा गोवर्धन पूजा के दिन हरियाली देवी की पूजा करना है। इस क्षेत्र में हरियाली देवी के जसोली स्थित मंदिर से देवी की यात्रा आरम्भ होकर हरियाली कांठा मंदिर तक यात्रा आयोजित की जाती है तथा फिर हरियाली कांठा मंदिर में पूजा की जाती है। संभवतः हरियाली देवी की यह पूजा उसके प्रकृति स्वरूप को लेकर की जाती है। क्योंकि शिव, विष्णु आदि की नारी शक्ति की पूजा के प्रचलन में मूलतः सांख्य दर्शन के पुरुष और प्रकृति की संकल्पना का योगदान माना जाता है। शक्ति को परम पुरुष की स्वतंत्र किन्तु अपृथक् सृजनात्मक शक्ति के रूप में संकल्पित किया गया है। इसके संयोग से ही सृष्टि संभव हो सकती है। ब्रह्मवैवर्त पुराण के प्रकृतिखण्ड में इसका विस्तृत विवेचन किया गया है। इसमें शक्ति को माया का प्रतिरूप कहा गया है। इसे सत्त्व, रज, तथा तम तीनों गुणों से संपन्न कहा गया है। इस मूल शक्ति का ही मूर्तिकरण करके इसे पंचधा रूपों —दुर्गा (शिव शक्ति), लक्ष्मी (विष्णु शक्ति), सरस्वती (विष्णु शक्ति), सावित्री (ब्रह्म शक्ति) तथा राधा (कृष्ण शक्ति) के रूप में मान्यता दी गई है।¹³ इस प्रकार मातृ शक्ति को वैदिक ग्रन्थों में प्रकृति का रूप माना जाता है। गोवर्धन पूजा के दिन हरियाली देवी की पूजा करना भी संभवतः माता हरियाली देवी के प्रकृति रूप की ही पूजा को स्पष्ट करता है। संभवतः जिस प्रकार कृष्ण ने गोकुल वासियों के साथ मिलकर गोवर्धन पर्वत की पूजा करके प्रकृति के स्वरूप की पूजा की थी, उसी प्रकार हरियाली देवी की पूजा भी प्रकृति की पूजा का ही एक अंग है। इस प्रकार गोवर्धन पूजा के दिन माँ हरियाली देवी की पूजा करना निश्चित ही उसके प्रकृति स्वरूप की पूजा करना है, इस प्रकार यह पर्यावरण संरक्षण का प्रतीक है।

हरियाली देवी का पर्यावरण संरक्षण से सीधा सम्बन्ध इस तथ्य से भी स्पष्ट होता है कि हरियाली कांठा इस क्षेत्र की सबसे ऊँची चोटी है तथा यह चोटी व इसका वन क्षेत्र धनपुर, रानीगढ़ तथा बचणस्यूँ पट्टियों का जीवन आधार है। इसी कांठा से इन क्षेत्रों के महत्त्वपूर्ण जल स्रोत संचरित होते हैं। ऐसी स्थिति में यदि हरियाली कांठा स्थित वन क्षेत्र नष्ट हो जायेगा तो इन क्षेत्रों के जल स्रोत सूख जायेंगे। अतः हरियाली कांठा वन क्षेत्र को संरक्षित रखने की परंपरा के पीछे वैज्ञानिक कारण भी है कि इस वन क्षेत्र के संरक्षित रहने से यहाँ के जल स्रोत सुरक्षित रह सकेंगे।

हरियाली कांठा स्थित देवी मंदिर तक यात्रा के संदर्भ में हरियाली देवी मंदिर के पुजारी श्री सच्चिदानंद चमोली बताते हैं कि “इस यात्रा हेतु यह परंपरा है कि इस यात्रा में सभी यात्री नंगे पाँव यात्रा करते हैं, कोई भी यात्री जूते, चप्पल पहन कर यात्रा नहीं कर सकता है।”¹⁴ संभवतः यह परंपरा भी कहीं न कहीं हरियाली कांठा की पवित्रता तथा इसके प्राकृतिक स्वरूप को बचाये रखने का प्रयास है। जूते, चप्पलों से प्राकृतिक वनस्पति, जड़ी-बूटी आदि को क्षति न पहुँचे, संभवतः इसलिए जूते, चप्पल ले जाना यात्रा में वर्जित किया जाता होगा।

हरियाली कांठा स्थित मंदिर तक यह यात्रा वर्ष में दो बार जसोली स्थित मंदिर से हरियाली कांठा तक आयोजित की जाती है। गोवर्धन पूजा तथा श्रीकृष्ण जन्माष्टमी के दिन। इस यात्रा का एक महत्त्वपूर्ण पड़ाव पंचरंग्या है, जिसके नाम में शायद पर्यावरण संरक्षण का संदेश छुपा हुआ है। पंचरंग्या में देवी को पाँच जलधाराओं के जल से तथा पंचगव्य, पंचामृत से स्नान कराया जाता है। इसी कारण इस स्थान का नाम पंचरंग्या कहा जाता है। संभवतः पंच जल धाराएँ जहाँ भारत की पाँच पवित्र नदियों का प्रतीक हैं वहीं पंचगव्य, पंचामृत प्रकृति के पंच तत्वों का प्रतीक हैं। इस प्रकार ऐसा प्रतीत होता है कि पंचरंग्या पड़ाव पर आयोजित स्नान में प्रकृति के पंच तत्वों को महत्त्व प्रदान किया जाता है। वैसे पंचरंग्या नाम का शाब्दिक अर्थ है—पाँच रंगों वाला। लगता है यहाँ पाँच रंगों का अर्थ इस स्थान की ऊँचाई पर खिलने वाले पाँच रंगों के पुष्पों से संदर्भित भी हो सकता है, क्योंकि इतनी ऊँचाई पर यहाँ अनेक सफेद, लाल, पीले, नीले, नारंगी आदि विविध रंगों के पुष्प खिलते हैं। संभवतः इस कारण भी इस स्थान का नाम पंचरंग्या कहा जाता हो।

इस प्रकार हरियाली देवी यद्यपि नंद व यशोदा की पुत्री योगमाया हैं तथा योगमाया के बालस्वरूप की ही बाला सुन्दरी के रूप के पूजा की जाती है, किन्तु हरियाली देवी की पूजा व हरियाली कांठा पर स्थित पवित्र सिद्धपीठ तक की यात्रा में अपनाई जाने वाली परंपरा में निश्चित ही प्रकृति के मातृ स्वरूप की पूजा के साथ-साथ ही परंपराओं के माध्यम से पर्यावरण संरक्षण का प्रयास किया गया है। परंपराओं के द्वारा किस प्रकार पर्यावरण को संरक्षित किया जा सकता है, यह हरियाली देवी की पूजा-पद्धति तथा हरियाली कांठा की यात्रा में अपनाई जाने वाली परंपराओं में स्पष्ट है।

सन्दर्भ

1. शर्मा, हरिशंकर, विश्व का इतिहास, मलिक एण्ड कंपनी (प्रकाशन), जयपुर, 1994, पृ0-07
2. त्रिपाठी, रामप्रसाद, विश्व-इतिहास (प्राचीन काल), हिन्दी समिति, सूचना विभाग, उत्तर प्रदेश, 1968, पृ0-35
3. शर्मा, डी0डी0, उत्तराखण्ड का सामाजिक एवं सांस्कृतिक इतिहास-5, उत्तराखण्ड के धार्मिक संप्रदाय, उत्तरायण प्रकाशन, हल्द्वानी, पृ0-93
4. शर्मा, डी0डी0, उपरोक्त, पृ0-93

5. झा, डी0एन0 एवं श्रीमाली, के0एम0, प्राचीन भारत का इतिहास, हिन्दी माध्यम कार्यान्वय, निदेशालय, दिल्ली वि0वि0, दिल्ली, 1995, पृ0-398
6. ओमप्रकाश, प्राचीन भारत का सामाजिक इतिहास, विश्व प्रकाशन, नई दिल्ली, 2001, पृ-56
7. हरिमोहन, उत्तरांचल में पर्यटन : नए क्षितिज, तक्षशिला प्रकाशन, नई दिल्ली, 2003, पृ0-154
8. बाशम, ए0एल0, अद्भुत भारत, अनुवादक-शिवलाल अग्रवाल एण्ड कंपनी, आगरा, पृ0-03
9. साक्षात्कार, श्री छत्तर सिंह नेगी, समाजसेवी, ग्राम कोदिमा (रानीगढ़), जनपद, रुद्रप्रयाग, उत्तराखण्ड
10. हरिमोहन, पूर्वोक्त, पृ0-154
11. साक्षात्कार, श्री जगत सिंह जंगली, प्रसिद्ध पर्यावरणविद्, ग्राम कोट मल्ला (रानीगढ़), जनपद, रुद्रप्रयाग, उत्तराखण्ड
12. साक्षात्कार, श्रीमती माहेश्वरी देवी, ग्राम कोदिमा (रानीगढ़), जनपद, रुद्रप्रयाग, उत्तराखण्ड
13. शर्मा, डी0डी0, उपरोक्त, पृ0-102-103
14. साक्षात्कार, श्री सच्चिदानंद चमोली, पुजारी, हरियाली देवी मंदिर ग्राम जसोली (रानीगढ़), जनपद, रुद्रप्रयाग, उत्तराखण्ड

विभिन्न शिक्षण प्रशिक्षण संस्थाओं के संगठनात्मक परिवेश का प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति पर प्रभाव

भारती मिश्रा* और डॉ. (श्रीमती) के.के. दुबे**

सारांश

प्रस्तुत शोध अध्ययन के प्रमुख उद्देश्य हैं:—विभिन्न शिक्षण प्रशिक्षण संस्थाओं के संगठनात्मक परिवेश का प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति पर प्रभाव का अध्ययन/शासकीय, अशासकीय एवं विश्वविद्यालय शिक्षण विभाग में अध्ययनरत् 720 छात्राध्यापकों को प्रस्तुत अध्ययन के न्यादर्श के लिए चुना गया है। शिक्षक अभिवृत्ति मापनी—डॉ. एस.पी. अहलुवालिया का प्रयोग किया गया है। निष्कर्ष के रूप में पुरुष एवं महिला प्रशिक्षणार्थियों के सम्मिलित समूह की शैक्षणिक अभिवृत्ति पर संगठनात्मक परिवेश का सार्थक प्रभाव होता है। अशासकीय प्रशिक्षण संस्थाओं के पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में लिंग भिन्नता होती है एवं शासकीय प्रशिक्षण संस्थाओं एवं विश्वविद्यालय शिक्षण विभाग के पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में लिंग भिन्नता नहीं होती है।

की वर्ड्स— संगठनात्मक परिवेश, शैक्षणिक अभिवृत्ति एवं बी. एड. प्रशिक्षणार्थी।

प्रस्तावना

यह सर्वमान्य है कि शिक्षक राष्ट्र के कर्णधार होते हैं एवं वे राष्ट्र के भाग्य के निर्माता होते हैं। यह इसलिए कहा गया है कि प्रत्येक विद्यार्थी जब वह बालक या बालिका होता है तो उसमें प्रतिभाएँ एवं गुण अंतर्निहित होते हैं। शिक्षक अपने शिक्षण कार्य के माध्यम से विद्यार्थियों के इन अंतर्निहित क्षमताओं, योग्यताओं, आदि को प्रस्फुटित कर विद्यार्थियों की सर्वांगीण विकास में सहायक होते हैं एवं अपना पूर्ण योगदान देते हैं। यह महत्वपूर्ण है कि शिक्षा पद्धति उसी समय अच्छी हो सकती है जब शिक्षक कुशल होगा। कुशल शिक्षक ही शिक्षा के प्रति अपने दायित्वों का सफलतापूर्वक निर्वाह करते हैं एवं उनकी शिक्षण अभिवृत्ति उनमें सकारात्मक गुणों का विकास करती है। अच्छे शिक्षक होने के लिए, उनमें शिक्षणकार्य के प्रति सकारात्मक अभिवृत्ति हो, यह आवश्यक हो जाता है कि वे कुशल अध्यापकों से प्रशिक्षण प्राप्त करें एवं अर्जित ज्ञान का अपने शिक्षण कार्य में उपयोग लाएं। प्रशिक्षण प्राप्त करने के लिए विभिन्न प्रकार की प्रशिक्षण संस्थाएँ उपलब्ध हैं। ये शासकीय, अशासकीय अथवा स्वशासी हो सकती हैं। बी.एड. का प्रशिक्षण प्रशिक्षणार्थी को शासकीय एवं अशासकीय प्रशिक्षण महाविद्यालयों एवं विश्वविद्यालय के शिक्षण विभाग में प्राप्त होता है, उनका संगठनात्मक परिवेश भिन्न होता है।

*सहायक प्राध्यापक, महर्षि महेश योगी वैदिक विष्वविद्यालय लमती, जबलपुर (म.प्र.)

**सेवानिवृत्त प्राचार्य, शासकीय शिक्षा महाविद्यालय, जबलपुर (म.प्र.)

संगठनात्मक परिवेश एक ऐसा मानव पर्यावरण चक्र है जो एक संगठन में कर्मचारियों के कार्य हेतु बनाया जाता है। किसी भी संगठन के परिवेश का प्रभाव सभी लोगों पर—प्रत्यक्ष या अप्रत्यक्ष, दोनों ही रूपों में पड़ता है। किसी संगठन के परिवेश का प्रभाव उसकी स्वयं की उन्नति एवं वहाँ कार्य करने वाले कर्मचारियों के विकास एवं उन्नति पर भी पड़ता है, जैसे यदि किसी संस्था का वातावरण खुला है, वहाँ सभी कर्मचारियों को अपनी योग्यता बढ़ाने एवं छात्रों को अपनी प्रभावी विधियों से पढ़ाने की स्वतंत्रता होती है तो वहाँ शिक्षक/कर्मचारी मन लगाकर अपना कार्य करता है, तो उनकी भी उन्नति होती है और संस्था का भी अच्छा नाम होता है।

संगठनात्मक परिवेश को विभिन्न विद्वानों ने अलग-अलग तरह से परिभाषित किया है जिसका मूल संगठन के प्रबंधन की प्रकृति से है। सामान्य रूप से शासकीय, अशासकीय एवं स्वशासी प्रबंधन के तरीके होते हैं जो विभिन्न संगठनात्मक परिवेशों को इंगित करते हैं। संगठन के परिवेश के विभिन्न पक्षों के बारे में व्यक्ति जो प्रत्यक्षीकरण करता है वह संगठनात्मक परिवेश के रूप में जाना जाता है। अलग-अलग प्रबंधन में यह प्रत्यक्षीकरण अलग-अलग तरह का होता है।

विभिन्न संगठनात्मक परिवेशों का प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति संबंधी जो प्रमुख कार्य हुए हैं उनमें एच.सी. (1988) ने पाया कि गोरखपुर शहरी के महाविद्यालयों में संगठनात्मक परिवेश का शिक्षक प्रत्यय अभिवृत्ति एवं अन्य चरों के साथ संबंध है जिसमें गोरखपुर के 104 महाविद्यालयों में से 520 शिक्षकों का चयन किया और पाया कि खुले परिवेश के शिक्षकों में सकारात्मक शिक्षण अभिवृत्ति एवं बंद परिवेश के शिक्षकों में नकारात्मक शिक्षण अभिवृत्ति पाई गई इससे स्पष्ट होता है कि संगठनात्मक परिवेश को शिक्षकों की शिक्षण अभिवृत्ति पर सीधा प्रभाव पड़ता है।

बीसन, डब्ल्यू माइकल एवं अन्य (2008) ने यह अनुभव किया कि विद्यालयों में विद्यालय के वातावरण के प्रत्यक्षीकरण का शिक्षकों के प्रत्यक्षीकरण पर प्रभाव पड़ता है इनका विद्यालय के विभिन्न गतिविधियों के क्रियान्वयन में प्रत्यक्ष एवं अप्रत्यक्ष रूप से भी प्रभाव पड़ता है। अप्रत्यक्ष रूप से कहा जा सकता है कि विद्यालय से संगठनात्मक वातावरण का शिक्षकों के अभिवृत्तियों पर प्रभाव पड़ता है।

बोस, श्रीमती संघमित्रा एवं बैराग्य श्यामसुन्दर ने शिक्षकों को शिक्षकीय व्यवसाय के प्रति अभिवृत्ति पर कुछ जनांकिकी कारणों के प्रभाव के अध्ययन में पाया कि शिक्षकों के अभिवृत्ति में लिंग, जाति एवं शिक्षण अनुभव के संदर्भ में सार्थक अंतर है।

वर्तमान समय विज्ञान एवं तकनीकी का युग कहा जाता है कि जिसमें अत्याधिक प्रतिस्पर्धा है जिसमें शिक्षा की महत्वपूर्ण भूमिका होती है जिसने शिक्षा का ऐसा उद्देश्य होना चाहिए जो अधिगम समाज के साथ-साथ वैश्विक समाज के निर्माण में सहायक हो यह सब कुछ विद्यार्थियों को शिक्षा देने वाले शिक्षकों पर निर्भर करता है अतः विभिन्न परिवेश के शिक्षकों की शिक्षण अभिक्षमता का अध्ययन करना अत्यंत सामाजिक प्रतीत होता है जिससे विभिन्न परिवेश के शिक्षकों के शैक्षणिक अभिवृत्ति का तुलनात्मक अध्ययन कर शिक्षा के अधिकतम सर्वमान्य विकास हेतु कार्य किया जा सके।

यह महत्वपूर्ण है कि यदि हमें भविष्य में ऐसे विद्यार्थी चाहिये जो राष्ट्र के विकास में अच्छे नागरिक बनकर योगदान दे सकें तो यह आवश्यक हो जाता है कि सभी प्रशिक्षण संस्थाओं में अच्छे संगठनात्मक परिवेश के सकारात्मक विशेषताओं को समाहित किया करें जिससे ऐसे प्रशिक्षणार्थी मिल सकें जिसकी शिक्षण कार्य

के प्रति सकारात्मक अभिवृत्ति हो और वे विद्यार्थियों के विकास में अपना अधिकतम संभाव्य योगदान दे सकें। विभिन्न शिक्षण प्रशिक्षण संस्थाओं के संगठनात्मक परिवेश का प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति पर प्रभाव

उद्देश्य

1. प्रशिक्षण संस्थाओं के संगठनात्मक परिवेश का प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति पर प्रभाव का अध्ययन।
2. शासकीय/अशासकीय/ विश्वविद्यालय शिक्षण विभाग के पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में लिंग भिन्नता का अध्ययन।

परिकल्पना

1. प्रशिक्षण संस्थाओं के संगठनात्मक परिवेश का प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति पर सार्थक प्रभाव नहीं पड़ता है।
2. शासकीय/अशासकीय/विश्वविद्यालय शिक्षण विभाग के पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में सार्थक लिंग भिन्नता नहीं होती है।

न्यादर्श

कुल 720 छात्राध्यापक/छात्राध्यापिकाओं को न्यादर्श के रूप में निम्नानुसार चयनित किया जवेगा।

न्यादर्श तालिका

प्रशिक्षणार्थी			
परिवेश	पुरुष	महिला	योग
शासकीय	15	35	50
अशासकीय	135	325	460
विश्वविद्यालय शिक्षण विभाग	60	150	210
योग	210	510	720

चर

स्वतंत्र चर — संगठनात्मक परिवेश
 परतंत्र चर — शैक्षणिक अभिवृत्ति
 नियंत्रित चर — बी. एड प्रशिक्षणार्थी

परीक्षण

शिक्षक अभिवृत्ति मापनी — (Teacher Attitude Inventory)

निर्माणकर्ता – डॉ. एस.पी. आहलूवालिया (1971)

परिणामों का विश्लेषण एवं व्याख्या—

इन्हें निम्नांकित सारणियों में प्रस्तुत किया गया है।

तालिका क्रमांक-01

प्रशिक्षण संस्थाओं के संगठनात्मक परिवेश का प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति पर सार्थक प्रभाव नहीं पड़ता है।

समूह	संख्या	मध्यमान	मानक विचलन
शासकीय	50	275.78	25.27
अशासकीय	460	242.71	34.11
विश्वविद्यालय शिक्षण विभाग	210	26.50	23.40

प्रसरण विश्लेषण की सारांश तालिका

विचरण के स्त्रेत	स्वतंत्रता के अंश	वर्गों का योग	वर्गों का मध्यमान	एफ अनुपात	‘पी’ मान
समूह के मध्य	2	95109.62	47554.81	50.16	<0.01
समूह के बीच	717	679732.04	948.02		

स्वतंत्रता के अंश —2,717

0.05 स्तर पर सार्थकता हेतु मान —3.00

0.01 स्तर पर सार्थकता हेतु मान —4.62

उपरोक्त तालिका में प्रदर्शित परिणामों से स्पष्ट हो जाता है कि विभिन्न संगठनात्मक परिवेश के पुरुष एवं महिला (सम्मिलित समूह) प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में सार्थक अंतर है, प्राप्त एफ अनुपात का मान 50.16 आया है जो 0.01 स्तर पर सार्थक है। शासकीय संस्थाओं में अध्ययनरत पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति सबसे अधिक है एवं अशासकीय संस्थाओं की पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति सबसे कम है।

उपरोक्त परिणामों के आधार पर निष्कर्ष स्वरूप कहा जा सकता है कि संगठनात्मक परिवेश का पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति पर प्रभाव पड़ता है। अतः पूर्व में ली गई परिकल्पना स्वीकृत नहीं होती है।

तालिका क्रमांक-02

शासकीय/अशासकीय/विश्वविद्यालय शिक्षण विभाग के पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में सार्थक लिंग भिन्नता नहीं होती है।

संगठनात्मक परिवेश	लिंग	N	M	S.D	t/C.R	‘P’ Value
शासकीय	पुरुष	15	275-.40	27.04	0.07	>1.05
	महिला	35	275.94	24.88		

अशासकीय	पुरुष	135	238.54	23.67	2.03	<0.05
	महिला	325	244.44	37.50		
विश्वविद्यालय शिक्षण विभाग	पुरुष	60	266.67	17.69	1.44	>0.05
	महिला	150	262.23	25.27		

उपरोक्त तालिका में प्रदर्शित परिणामों से स्पष्ट हो जाता है कि शासकीय संस्थाओं एवं विश्वविद्यालय शिक्षण विभाग के पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में लिंग भिन्नता नहीं होती है। प्राप्त टी मान/क्रांतिक अनुपातों का मान क्रमशः 0.07 एवं 1.44 है जो 0.05 स्तर पर सार्थक नहीं है।

अशासकीय प्रशिक्षण संस्थाओं के पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में लिंग भिन्नता है। प्राप्त क्रांतिक अनुपात का मान 2.03 है जो 0.05 स्तर पर सार्थक है। अशासकीय महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति पुरुष प्रशिक्षणार्थियों से अधिक है।

अतः पूर्व में ली गई परिकल्पना आंशिक रूप से स्वीकृत होती है।

परिणामों की व्याख्या

विभिन्न संगठनात्मक परिवेश अर्थात् शासकीय, अशासकीय एवं विश्वविद्यालय शिक्षण विभागों के प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में सार्थक अंतर है। इन सभी संस्थाओं में प्रशिक्षण लेने आये, प्रशिक्षणार्थियों की मानसिक सोच शिक्षक बनने की नहीं होती है लेकिन प्रशिक्षण के लिए चयन पूर्व परीक्षा के आधार पर होता है जिसमें प्रशिक्षणार्थी पूर्व परीक्षा के लिए कोचिंग करके परीक्षा तो पास कर लेते हैं लेकिन वे अपनी अभिवृत्ति को नहीं बदल पाते हैं। शासकीय संस्थाओं के प्रशिक्षणार्थी पहले से ही शिक्षक बन जाते हैं तो उसकी अभिवृत्ति एक शिक्षक बनने की हो जाती है लेकिन अशासकीय संस्थाओं एवं विश्वविद्यालय प्रशिक्षणार्थियों की मानसिक सोच पूर्णतः शिक्षक बनने की नहीं होती है वे तो सिर्फ रोजगार पाने के अवसर के कारण ही प्रवेश ही लेते हैं संभवतः इसलिए वे शिक्षण अभिवृत्ति के संदर्भ में अलग-अलग हैं।

यह महत्वपूर्ण है कि शासकीय एवं विश्वविद्यालय शिक्षण विभाग के पुरुष प्रशिक्षणार्थियों एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में लिंग भिन्नता नहीं होती है जबकि अशासकीय संस्था में अध्ययनरत् पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में सार्थक अंतर है।

विश्वविद्यालय शिक्षण विभाग एवं शासकीय प्रशिक्षण संस्थाओं की तुलना में अशासकीय प्रशिक्षण संस्थाओं के अकादमिक एवं संगठनात्मक परिवेश में भिन्नता होती है।

अशासकीय प्रशिक्षण संस्थाओं के प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में लिंग भिन्नता होने संबंधी परिकल्पना से स्पष्ट होता है महिला प्रशिक्षणार्थियों का दायित्व परिवार का भरण पोषण करने का नहीं होता है लेकिन पुरुषों पर यह दायित्व सर्वोपरि होता है जिस कारण वे प्रशिक्षण के लिए प्रवेश तो लेते हैं लेकिन अपनी अभिवृत्ति को पूर्णतः एक ओर केन्द्रित नहीं कर पाते हैं और वे अन्य जीविकोपार्जन के कार्य भी करते हैं इस संदर्भ में बोस, संघमित्रा एवं बैराग्य श्यामसुन्दर का शोध महत्वपूर्ण है जिसमें उन्होंने पाया कि शिक्षकों की अभिवृत्ति में लिंग, जाति, एवं शिक्षण अनुभव के संदर्भ में सार्थक अंतर है। प्रस्तुत शोध परिणाम इन परिणामों के आंशिक रूप से समान है।

निष्कर्ष

1. विभिन्न संगठनात्मक परिवेश से पुरुष एवं महिला के सम्मिलित समूह के प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति पर संगठनात्मक परिवेश का सार्थक प्रभाव होता है।
2. अशासकीय प्रशिक्षण संस्थाओं के पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में लिंग भिन्नता होती है।
3. शासकीय प्रशिक्षण संस्थाओं एवं विश्वविद्यालय शिक्षण विभाग के पुरुष एवं महिला प्रशिक्षणार्थियों की शैक्षणिक अभिवृत्ति में लिंग भिन्नता नहीं होती है।

संदर्भ ग्रंथ सूची

- अस्थाना, विपिन (2005) मनोविज्ञान एवं शिक्षा में मापन एवं मूल्यांकन, चौदहवाँ संस्करण, विनोद पुस्तक मंदिर, आगरा।
- कपिल, एच.के. (2006) अनुसंधान विधियाँ, जस्ट बुक्स।
- मिश्रा, विकास (2006) अध्यापकों तथा अध्यापिकाओं की अध्यापन कुशलता का तुलनात्मक अध्ययन (सी.एस.जे.एन.) विश्वविद्यालय, कानपुर।
- International Journal of Educational and Psychological Research (IJETR) ISSN- 2279-0179, PP. 9-29.
- www.eric.ed.gov.
- www.Google.co.in
- www.enwikipedia.org/wiki

दृष्टि बाधित, मूकबधिर एवं अस्थि बाधित विद्यार्थियों की परीक्षा संबंधी चिंता का अध्ययन

डॉ नाजिया आबिद खान* और श्रीमती धरणी राय**

सारांश

हमारे राष्ट्र में शारीरिक, मानसिक एवं सामाजिक दोषों से युक्त ऐसे व्यक्ति हैं, जो अपनी दैनिक आवश्यकताओं की पूर्ति करने में असमर्थ हैं और समाज के प्रति अनूकूल बनने की सामर्थ्य नहीं रखते हैं। अतः आवश्यकता है, कि सामान्य बालकों की तरह विकलांग बालकों को उनकी प्रतिभा एवं अन्तर्निहित कौशल से साक्षात्कार करायें न कि उन्हें शारीरिक न्यूनताओं का बोध कराया जायें, ताकि वह शिक्षा के द्वारा उन कमियों को पूरा कर स्व अनुशासन और स्वालंबन के महत्व को जीवन में स्थान देकर अपना सर्वोत्तम विकास कर सकें। आधुनिक समय में शिक्षा को गतिशील माना गया है तथा शिक्षा को आजीवन चलने वाली प्रक्रिया बताया गया है। उन्नीसवीं शताब्दी के उत्तरार्द्ध तक विश्व में मानवतावादी उदार दृष्टिकोण का अभ्युदय हुआ और विकलांग समेत सभी वर्गों के लिए शिक्षा व कल्याण की बात सोची जाने लगी। विकलांग बच्चों को समावेशी शिक्षा से जोड़ने का अर्थ है कि उनको सामान्य बच्चों के साथ नियमित शाला में ही आवश्यक सहयोग देकर अध्ययन करने की सुविधा देना है। वर्तमान समय में प्रतिस्पर्धा इतनी बढ़ गई है कि छात्र इस प्रतिस्पर्धा से चिंतित रहते हैं। यही चिन्ता उन्हें परीक्षा के समय भी होती है। परीक्षा में किस प्रकार के प्रश्न आयेंगे उन प्रश्नों को हल कर पाऊँगा कि या नहीं, मेरा कोर्स पूरा नहीं हुआ है, इन सभी प्रकार के आशंका, डर, भय, तनाव और चिंता के कारण उसका परीक्षा फल प्रभावित होता है। अतः प्रस्तुत शोध पत्र में दृष्टिबाधित, मूकबधिर तथा अस्थिबाधित विद्यार्थियों की परीक्षा संबंधी चिंता का अध्ययन किया गया जिसमें कि सार्थक अंतर पाया गया।

प्रस्तावना

शिक्षा एक सतत् प्रक्रिया है, इस प्रक्रिया में विकलांग व्यक्ति के ज्ञान का संचय करने की प्रक्रिया का मूल्यांकन परीक्षा के रूप में किया जाता है। इस मूल्यांकन में व्यक्ति की अंतर्निहित शक्तियाँ बाहर निकालकर सामने आती हैं, एवं त्रुटियाँ होने या अधिराम की कमी के कारण वह परीक्षा की प्रक्रिया में पूर्णरूप से तटस्थ व खरा नहीं उतर पाता है। जिससे उनके चिंता का स्तर ऊपर उठने लगता है, और परीक्षा फल प्रभावित होता है। राष्ट्रीय नमुना सर्वेक्षण संगठन द्वारा 2002में कराये गये सर्वेक्षण के अनुसार देश में विकलांग

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व्यक्तियों की अनुमानित संख्या 1.85 करोड़ हैं, जो देश की कुल संख्या का 1.8 प्रतिशत हैं। जिसमें श्रवण विकलांगता—30.62 लाख, मूक बधिर—21.55 लाख, दृष्टिबाधित—20.31 लाख तथा आंशिक दृष्टि दोष— 8.31 लाख, मानसिक मंदता— 9.91 लाख, चलन निः शक्तता — 106.34 लाख हैं। भारत में विकलांग शिक्षा के क्षेत्र में 19वीं सदी के प्रारंभ से ही विधिवत् प्रयास हुये, जिसमें सर्वप्रथम दृष्टिबाधित पर ध्यान दिया गया, ब्रिटिश शासन ने 1942 में अंधत्व के कारण निवारण और कल्याण हेतु सीमित का गठन किया गया। माध्यमिक शिक्षा आयोग (1952—1953) ने विकलांग बालकों की शिक्षा के लिए विशेष शालाओं की स्थापना का सुझाव दिया गया, आयोग का मत था कि विशेष शालाओं में विकलांगों को विशेष देख-रेख व सुविधाएँ प्राप्त होगी। इसी उद्देश्य को लेकर मूकबधिर की शिक्षा एवं उनके प्रशिक्षण का भार 'केन्द्रीय समाज कल्याण' को सौंपा गया। राष्ट्रीय शिक्षा नीति (1986) के अनुसार विकलांगों को शिक्षा देने का उद्देश्य यह है कि वह समाज के साथ कंधे से कंधे मिलाकर चल सकें तथा शिक्षा के माध्यम से विकलांग विद्यार्थियों के जीवन में परीक्षा चिंता को कम करके उनमें आत्मविश्वास को भर कर उनके जीवन को सरल बनाया जा सकता है।

निःशक्त व्यक्ति अधिनियम (1995) के अनुसार अंधत्व

1. दृष्टि का पूर्ण अभाव
2. सुधारक लेंसों के साथ बेहतर नेत्र में दृष्टि की तीक्ष्णता जो 6/60 या 20/200 (स्नेलन) से अधिक न हो।
3. दृष्टि क्षेत्र की सीमा जो 20 डिग्री कोण वाली या बदतर हो।

क्विंगली एवं क्रिश्मर (1982)

“एक बधिर बच्चा वह है जिसमें 91 डेसीबल या अधिक मात्रा में श्रवण क्षमता का सेन्सरी न्यूरल हास हुआ है।”

बैनर्जी सी.दत्ता.ए. (1970) ने यह पाया, कि सामान्य बालकों की तुलना में मूक बालकों की रुचि बिल्कुल भिन्न होती है, यद्यपि मूक बालक सामान्य बालकों की तरह पैदा हुये इस अंतर का कारण शायद दोष था। देशमुख (1979) ने यह पाया, कि विकलांग व्यक्ति व सामान्य व्यक्ति के व्यक्तित्व में कोई महत्वपूर्ण अंतर नहीं पाया गया। रोडीकर एस. आर (1981) ने यह पाया, कि विकलांग बालकों के शिक्षण हेतु विशेष रूप से प्रशिक्षित शिक्षक नियुक्त किये जाये। सीताराम (1984) ने यह पाया, कि अक्षम बालकों को सामान्य शालाओं में दी जा रही शिक्षा सैद्धांतिक है, रोजगारन्मुखी नहीं। सूद व कोटक (1994) ने पाया, कि परीक्षा चिन्ता तथा उस परीक्षा में छात्र की निष्पत्ति के संबंधों को अधिक अच्छे से समझने के लिए इस अध्ययन में परीक्षा के विभिन्न क्षणों के दौरान छात्रों के संज्ञान के बारे में बताता है। शर्मा (1996) ने यह पाया, कि लड़कियों में लड़कों की अपेक्षा अधिक चिन्ता पाई गई। अजवानी एवं शर्मा (2004) ने यह पाया, कि जैसे-जैसे सांख्यिकीय को लेकर परीक्षा चिन्ता की छात्र में वृद्धि होती है, वैसे सांख्यिकीय में छात्रों के प्रदर्शन में कमी पाई गई। अतः प्रस्तुत शोध अध्ययन में हमने श्रवण बधित, दृष्टि बाधित, एवं अस्थि बाधित विद्यार्थियों के परीक्षा संबंधी चिन्ता का अध्ययन किया गया है।

उद्देश्य

प्रस्तुत अध्ययन हेतु उद्देश्यों का निर्धारण किया गया है:-

1. दृष्टिबाधित एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता का अध्ययन करना।
2. मूकबधिर एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता का अध्ययन करना।
3. अस्थिबाधित एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता का अध्ययन करना।

परिकल्पना

प्रस्तुत अध्ययन के उद्देश्य की पूर्ति हेतु निम्न शून्य परिकल्पनाओं का निर्माण किया गया :-

1. दृष्टिबाधित एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता के मध्य सार्थक अंतर नहीं पाया जायेगा।
2. मूकबधिर एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता के मध्य सार्थक अंतर नहीं पाया जायेगा।
3. अस्थिबाधित एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता के मध्य सार्थक अंतर नहीं पाया जायेगा।

न्यादर्श

प्रस्तुत शोध अध्ययन में न्यादर्श रायपुर जिले के शासकीय एवं अशासकीय विद्यालयों से कक्षा छठवीं से आठवीं तक के 30 दृष्टिबाधित, 30 श्रवणबाधित, 30 मूकबधिर एवं 30 सामान्य विद्यार्थियों का चयन किया गया।

शोध उपकरण

शोध अध्ययन हेतु शोधकर्त्ता द्वारा डॉ. मधु अग्रवाल एवं वर्शा कौशल के द्वारा निर्मित परीक्षा चिन्ता मापनी का उपयोग किया गया है।

अध्ययन विधि

शोधकर्त्ता ने वर्णनात्मक सर्वेक्षण विधि का उपयोग किया गया है।

परिकल्पना -1

दृष्टिबाधित एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता के मध्य सार्थक अंतर नहीं पाया जायेगा।”

सारणी क्रमांक - 1

क्रमांक	तुलनात्मक समूह	प्रदत्तों की संख्या	मध्यमान	प्रमाणिक विचलन	टी' मूल्य
1.	दृष्टिबाधित विद्यार्थी	30	21.13	6.11	3.74
2.	सामान्य विद्यार्थी	30	14.43	7.68	

df=58, $p < 0.05 = 2.00$ (सार्थक अंतर पाया जाता है)

उपरोक्त परिकल्पना की जाँच हेतु एकत्रित आंकड़ों की सांख्यिकीय विश्लेषण के लिए प्राप्त आंकड़ों द्वारा मध्यमान क्रमशः 21.13, 6.11 तथा प्रमाणिक विचलन 14.43, 7.68 हैं, जिसका 'टी' मान 3.74 है जो कि सारणी मान तुलना से अधिक है। दोनों समूहों के मध्य सार्थक अंतर हैं, अतः शून्य परिकल्पना अस्वीकृत की जाती है।

परिकल्पना - 2

“मूकबधिर विद्यार्थियों एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिंता के मध्य सार्थक अंतर नहीं पाया जायेगा।

सारणी क्रमांक -2

क्रमांक	तुलनात्मक समूह	प्रदत्तों की संख्या	मध्यमान	प्रमाणिक विचलन	‘टी’ मूल्य
	मूकबधिर विद्यार्थियों	30	15.1	7.19	0.35
	सामान्य विद्यार्थियों	30	14.43	7.68	
df=58, p>0.05=2.00 (सार्थक अंतर नहीं पाया गया)					

उपरोक्त परिकल्पना की जाँच हेतु एकत्रित आंकड़ों की सांख्यिकीय विश्लेषण के लिए प्राप्त आंकड़ों द्वारा मध्यमान क्रमशः 15.1, 7.19 तथा प्रमाणिक विचलन 14.43, 7.68 हैं, जिसका 'टी' मान 0.35 है, जो कि सारणी मान तुलना से कम है। दोनों समूहों के मध्य सार्थक अन्तर नहीं हैं, अतः यह परिकल्पना स्वीकृत हुई।

परिकल्पना - 3

“अस्थिबाधित एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिंता के मध्य सार्थक अंतर नहीं पाया जायेगा।”

सारणी क्रमांक -3

क्रमांक	तुलनात्मक समूह	प्रदत्तों की संख्या	मध्यमान	प्रमाणिक विचलन	‘टी’ मूल्य
	अस्थिबाधित विद्यार्थियों	30	22.17	6.14	4.32
	सामान्य विद्यार्थियों	30	14.43	7.68	
df=58, p<0.05=2.00 (सार्थक अंतर पाया गया)					

उपरोक्त परिकल्पना की जाँच हेतु एकत्रित आंकड़ों की सांख्यिकीय विश्लेषण के लिए प्राप्त आंकड़ों द्वारा मध्यमान क्रमशः 22.17, 6.14 एवं प्रमाणिक विचलन 14.43, 7.68 हैं, जिसका 'टी' मान 4.32 है, जो कि सारणी मान तुलना से अधिक है। दोनों समूहों के मध्य सार्थक अन्तर हैं। अतः शून्य परिकल्पना अस्वीकृत होती है।

परिणाम एवं व्याख्या – प्रस्तुत अध्ययन द्वारा निम्न परिणाम प्राप्त हुए :—

1. दृष्टिबाधित एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता की सांख्यिकीय गणना के आधार पर प्राप्त 'टी' मूल्य विश्वसनीय स्तर के मान से अधिक पाया गया है। अतः दृष्टिबाधित विद्यार्थियों में सामान्य विद्यार्थियों की अपेक्षा परीक्षा संबंधी चिन्ता अधिक पाया गया।
2. मूकबधिर एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता की सांख्यिकीय गणना के आधार पर प्राप्त 'टी' मूल्य विश्वसनीय स्तर के मान से कम पाया गया, अतः मूकबधिर एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता के मध्य कोई सार्थक अंतर नहीं पाया गया।
3. अस्थिबाधित एवं सामान्य विद्यार्थियों के परीक्षा संबंधी चिन्ता की सांख्यिकीय गणना के आधार पर 'टी' मूल्य विश्वसनीय स्तर के मान से अधिक पाया गया। अतः अस्थिबाधित विद्यार्थियों में सामान्य विद्यार्थियों की अपेक्षा परीक्षा संबंधी चिन्ता अधिक पाया गया।
4. दृष्टिबाधित एवं अस्थिबाधित विद्यार्थियों में सामान्य विद्यार्थियों की तुलना में परीक्षा संबंधी चिन्ता अधिक पाई गई।
5. सामान्य विद्यार्थियों एवं मूकबधिर विद्यार्थियों में जो अंतर पाया गया वो सार्थक महत्व का नहीं है।

शैक्षिक अनुपयोग

1. विकलांग विद्यार्थियों के मानसिक विकास हेतु उन्हें अध्ययन एवं अन्य गतिविधियों हेतु पूर्ण अवसर प्रदान किया जाना चाहिए, जिससे विद्यार्थियों को अधिकाधिक इस प्रकार को वातावरण मिल सके जिससे उनकी परीक्षा चिन्ता को दूर किया जा सके।
2. विकलांग बालक एवं बालिकाओं के लिए अतिरिक्त शालाओं की व्यवस्था की जानी चाहिए।
3. पाठ्यक्रम ऐसा होना चाहिए जो विद्यार्थियों के अनुकूल तथा समझने में आसानी हो।
4. शैक्षिक संस्थाओं द्वारा ऐसे शैक्षिक वातावरण का निर्माण करना चाहिए जिसमें विद्यार्थी अपनी उपलब्धि योग्यतानुसार समय-समय पर ज्ञात करें तथा तदनुसार सुधार लाये।
5. शिक्षकों तथा अभिभावकों द्वारा बालक पर परीक्षा के समय किसी भी प्रकार का दबाव नहीं डालना चाहिए जिससे बालक के मन में किसी भी प्रकार का नकारात्मक विचार न पैदा हो।
6. विशिष्ट बालकों के परिवारों को आर्थिक सहायता दी जानी चाहिए।

संदर्भ ग्रंथ सूची

- अजवानी जे.सी एवं शर्मा आर.ए. (2004)– टेस्ट एन्जाइटी इन रिलेशन टू एकेडेमीक एचीवमेंट इंडियन जनरल ऑफ साइकोमेट्री एण्ड एजुकेशन वल्यूम-35-2, पेज न.-123
- कुमार संजीव (2008) – विशिष्ट शिक्षा जानकी प्रकाशन, पटना पृष्ठ संख्या 12-13, 29, 61, 82
- जायसवाल सीताराम (1994) – 'समायोजन मनोविज्ञान' उत्तर प्रदेश ग्रंथ अकादमी, लखनऊ, पृष्ठ संख्या- 118
- देशमुख (1979) – "शारीरिक दृष्टि से विकलांग व्यक्तित्व की विशेषताओं पर एक अध्ययन" थर्ड सर्वे ऑफ एजुकेशन 1978-83 पृष्ठ संख्या-344
- बैनर्जी सी दत्ता.ए.(1970) – "मूकबधिर विद्यार्थियों की रुचि का अध्ययन" थर्ड सर्वे ऑफ एजुकेशन 1978-83 पृष्ठ संख्या 110

- रोडीकर.एस.आर (1981)– “शारीरिक रूप से विकलांग बालकों की शैक्षिक व व्यवसायिक आवश्यकताओं का अध्ययन” थर्ड सर्वे ऑफ एजुकेशन 1978–83, पृष्ठ संख्या–184–185
- शर्मा कुमाराय व मिश्रा (1996) – बिहेवियरियल इटरवेशन इन टेस्ट एन्जाईटीक जनर्ल ऑफ इंडियन एकेडमी ऑफ एप्लाइड साइकोलॉजी वॉल्यूम 14–1, पृष्ठ न. 57–60
- सूद व कोटक (1994)– कग्निशनस् ऑफ टेस्ट एनेक्सीयम स्टुडेन्स ड्युरिंग एन एक्चुयल टेस्ट सिचवेशन जर्नल ऑफ दी इंडियन एकेडमी ऑफ एप्लाइड साइकोलॉजी वॉल्यूम–20, पेज नं– 23–30 ।

विशेष आवश्यकता वाले बच्चों को शिक्षा की मुख्य धारा से जोड़ने हेतु प्रयास

श्रीमति आरती शर्मा*

किसी कक्षा में विभिन्न तरह के बच्चे होते हैं जिनकी अपनी अपनी आवश्यकताएँ हो सकती हैं। जैसे – कुछ बच्चे अक्षरों को उल्टा लिखते हैं, कुछ की श्रवण शक्ति कम होती है, कुछ मंद बुद्धि वाले होते हैं। सभी बच्चे सामान्य गति से नहीं सीख पाते हैं। कुछ बच्चों का उच्चारण स्पष्ट नहीं होता है, जिसके कारण इन बच्चों का विकास एवं दैनिक कार्यशीलता प्रभावित होती है।

इन्हीं विभिन्नताओं के कारण इन बच्चों के पालन पोषण में कुछ भिन्न या विशिष्ट तरीके अपनाने की आवश्यकता होती है। उनकी शिक्षा के लिए विशेष योजना बनानी पड़ती है। यह सुनिश्चित करना पड़ता है कि उनके अनुकूलतम विकास को बढ़ावा मिले। अभिभावकों और शिक्षकों को इन बच्चों को बोलना सिखाने, चलने, फिरने, मित्र बनाने और वे कौशल और संकल्पनाएं जो सामान्य बच्चे विकास के दौरान सहज रूप से प्राप्त कर लेते हैं उन्हें अर्जित करने और सिखाने के लिए विशेष प्रयास करने होते हैं। इन बच्चों की जरूरतों से भिन्न होती है अर्थात् उनकी कुछ विशेष जरूरतें होती हैं।

कुछ क्षेत्रों में स्पष्ट रूप से दृष्टिगत होने वाली विभिन्नताओं के बावजूद विशिष्ट बच्चों कई प्रकार से अपनी आयु के सामान्य बच्चों के समान होते हैं।

विशेष आवश्यकता वाले छात्रों की पहचान

सामान्य रूप से कार्य करने के लिए 6 क्षेत्र निर्णायक हैं ये हैं – दृष्टि, श्रवण शक्ति, गतिशीलता, सम्प्रेषण, सामाजिक, भावनात्मक संबंध, बुद्धिमत्ता। इसके अतिरिक्त आर्थिक रूप से सुविधावंचित बच्चे भी विशेष हैं क्योंकि गरीबी के कारण वे जीवन के कई अनुभवों से वंचित रह जाते हैं वे स्कूल नहीं जा सकते क्योंकि उन्हें बचपन से ही काम शुरू करना पड़ता है, ताकि वे परिवार की आय बढ़ा सकें। लड़कियों को अक्सर घर पर ही रोक लिया जाता है ताकि वे छोटे भाई-बहनों का ध्यान रख सकें और घर के कामकाज कर सकें।

कोई बच्चा अथवा व्यक्ति जो इन क्षेत्रों में से एक या उससे अधिक क्षेत्रों में कोई कठिनाई महसूस करता है वह विशिष्ट बच्चा कहलाता है। उपरोक्त में से किसी एक क्षेत्र में ही कठिनाई व्यक्ति को इस असमर्थता से निपटने के लिए अतिरिक्त प्रयास की आवश्यकता होती है।

उद्देश्य

- (अ) विशेष आवश्यकता वाले बच्चों को शिक्षा के समान अवसर प्रदान करना।
- (ब) शिक्षक द्वारा सामान्य व विशिष्ट बालक की व्यक्तिगत विभिन्नता के आधार पर शिक्षा विधि प्रविधि का उपयोग करना।

*मध्य प्रदेश

- (स) म.प्र.शासन द्वारा विशिष्ट बालकों के लिए चलाई गई योजना का पृष्ठपोषण।
- (द) सामावेशित शिक्षा प्रणाली का प्रयोगिक रूप में शामिल करना।

परिकल्पना/पूर्वकथन

- (अ) विशेष आवश्यकता वाले बच्चों को शिक्षा के समान अवसर प्रदान करने में कोई सार्थक अंतर नहीं पाया गया।
- (ब) शिक्षक द्वारा सामान्य व विशिष्ट बालक की व्यक्तिगत विभिन्नता के आधार पर शिक्षा विधि व प्रविधि के उपयोग में कोई सार्थक अंतर नहीं पाया गया।
- (स) म.प्र.शासन द्वारा विशिष्ट बालकों के लिए चलाई गई योजना का पृष्ठपोषण।

शोध प्रविधि

द्वितीयक समंको के द्वारा शोध पत्र तैयार किया।

मुख्य संप्राप्तियां एवं निष्कर्ष

वर्तमान में विशिष्ट शैक्षिक आवश्यकताओं वाले बालकों के लिए शिक्षा की दो प्रकार की व्यवस्थाएँ हैं। एक जिन्हें विशेष विधालय कहते हैं जो ज्यादातर शहरों में स्थित आवशीय है। जिनका उद्देश्य एक प्रकार के विशिष्ट बालाके की विशिष्ट शैक्षिक आवश्यकताओं को पूरा करना होता है एवं दूसरा तरीका उन्हें अन्य सी बालकों के साथ आस-पड़ोस के सामान्य विधालय में भेजा जायें और वही उनकी विशिष्ट शैक्षिक आवश्यकताओं को पूरा करने की व्यवस्था की जायें। यदि बालक इस प्रकार के विधालय में जाता है तो वह अपने मां-पिता के साथ अन्य भाई बहनों के साथ रह सकता है दूसरा इस प्रकार के विधालयों में सभी बालक दूसरे से मिल जुलकर एक दूसरे से सीख सकते हैं। इसके अलावा बालक को बाद में अपने आपको दुनिया में समायोजित करने में सहायता मिलती है क्योंकि आखिरकार उसको रहना तो उसकी उसी सामाज में है जिसका कि वो हिस्सा होता है। इसलिए क्यों न बालक को प्रारंभी से ही सब माहौल में रखा जाये जहां उसे विधालय की शिक्षा समाप्त करने के पश्चात रहना है? इसलिए अच्छा है कि आरंभ से ही बालक को मुख्यधारा वाले ऐसे विधालय में शिक्षा ग्रहण करने के लिए भेजा जाये जहां अन्य सामान्य बालक भी जाते हैं। इस अवधारणा के साथ समावेशित शिक्षा व्यावस्था प्रणाली का आरंभ हुआ। समावेशित शिक्षा से तात्पर्य ऐसी शिक्षा प्रणाली से है जिसमें पश्रत्येक बालक को चाहे वो विशिष्ट हो सामान्य बिना किसी भेदभाव के एक साथ एक ही विधालय में सभी आवश्यक तकनीको व सामग्रीयों के साथ उनकी सीखनें सिखाने के जरूरतों को पूरा किया जाये।

सुझाव

जिस प्रकार हमारा संविधान किसी भी आधार पर किये जाने वाले भेदभाव को निषेध करता है उसी प्राकर समावेशित शिक्षा विभिन्न ज्ञानेद्रिय, शारीरिक, बौद्धिक, सामाजिक, आर्थिक आदि कारणों से उत्पन्न किसी बालकों की विशिष्ट शैक्षिक आवश्यकताओं के बावजूद उन बालकों को भिन्न देखे जाने के बजाए स्वतंत्र

आधिगमकर्त्ता के रूप में देखती है अतः विशेष आवश्यकता वाले बच्चों को शिक्षा की मुख्य धारा से जोड़ने हेतु निम्नलिखित सुझाव है।

1. समावेशित शिक्षा प्रणाली का उपयोग किया जाए।
2. समय समय पर सरकार के द्वारा शिक्षकों को विशेष आवश्यकताओं वाले छात्रों को शिक्षा देने की नवीन प्रणालियों हेतु आयोजन करवाना।
3. प्रत्येक बालक की विविधता के प्रति आदर रखना।
4. समावेशित विधालयीन वातावरण का निर्माण करना चाहिए।
5. इस प्रक्रिया में नियमित शिक्षक, विशेष शिक्षक, अभिभावक और परिवार, सामुदायिक अभिकरणों के साथ विधालय कर्मचारियों के बीच सहयोग और सहकारिता शामिल करना चाहिए।
6. अभिभावक व छात्र मार्गदर्शन व निर्देशन की व्यवस्था होनी चाहिए।
7. एक अकेले व्यक्ति के प्रयास से उन्हें शिक्षा की मुख्य धारा से नहीं जोड़ा जा सकता है अतः समुदाय की सक्रीय भागीदारी आवश्यक है।
8. अध्यापको तथा विशिष्ट अध्यापकों से बालक की विशिष्ट शैक्षिक आवश्यकताओं को पूरा करने के लिए सहयोग व सहकारपूर्ण व्यवहार करना चाहिए।
9. पाठ्यक्रम में विविधता तथा पर्याप्त लचीलापन होना चाहिए ताकि प्रत्येक बालक की क्षमताओं आवश्यकताओं तथा रुचि के अनुसार अनुकूल बना सकें।
10. बालक में विभिन्न योग्यताओं का विकास हो ताकि विधालय से बाहर समाजिक जीवन से भी जोड़ा जा सकें।
11. बालकों को सामाजिक रूप से एक उत्पादित नागरिक बनाने में योगदान दे सकें।
12. इसके अतिरिक्त बालक के समय का सदुपयोग करने की शिक्षा प्राप्त हो सके।
13. व्यक्तिगत विभिन्नता के आधार पर शिक्षाविधि प्रविधियों का उपयोग करना।

कार्यवाही योग्य बिंदू

बच्चों के जीवन के हर क्षेत्र में चाहे सुनिश्चित किये जाने की जरूरत है स्कूल को ऐसे केन्द्र बनाए जाने की आवश्यकता है जहां बच्चों को जीवन की तैयारी कराई जाए और यह सुनिश्चित किया जाए कि सभी बच्चों खासकर शारीरिक या मानसिक रूप से असमर्थ बच्चों, समाज के हासियों पर जीने वाले बच्चों और कठिन परिस्थितियों में जीने वाले बच्चों को शिक्षा के इस महत्वपूर्ण क्षेत्र के सबसे ज्यादा फायदे मिले।

Mother Daughter Relationship in the Novels of Shashi Deshpande

Ms. Humaira Mehraj* and Dr. Ashok Kapil**

ABSTRACT

Mothers are everywhere in literature, especially, though not exclusively, in work by women writers. Mother-daughter relations are particularly ambivalent, as daughters negotiate their way through 'the fluctuations of symbiosis and separation' (20) in their relationships with their mothers, in a quest for their own sense of self.

Not surprisingly, perhaps, feminist thinkers have produced most of the influential contemporary work on motherhood and especially on mother-daughter relationships. Indeed, motherhood has been a complex issue for feminism, and feminist debates throughout the twentieth century grappled with its contradictions, from women's relations with their mothers to women's experiences as mothers. Motherhood is such an explosive topic because, as Nancy Chodorow argues in her classic work on 'the reproduction of mothering' (Chodorow 1978), it is so deeply embedded in our concepts of identity, in the construction of individual subjectivities and in the social organization of gender.

The mother-daughter relationship has always occupied an important place in Deshpande's fiction. She has not valorized the image of mother as goddess; instead she has rendered more human qualities to her.

Shashi Deshpande one of the eminent writers in Indian English literature was born in Dharwad to the renowned Sanskrit scholar Shri Ranga. Literary atmosphere in the family and lack of constraints led to a very balanced and clear view of many omnipresent dilemmas of human mind.

Our society is full of paradoxes and contradictions. Here a female is considered to be a peripheral member of family, both in her parent's house as well as husband's. Throughout her life time she is unable to decide her roots and this leads to her insecurity. As a daughter is closest to her mother, this insecurity is rubbed on to her also.

"to make myself in your image was never the goal I sought".

These lines from one of the novels of Shashi Deshpande represent the crux of a very crucial and closest of the relationship that of between mother and daughter. The fear, the panic, the suffocation and helplessness is all there in the novels and the thought of one's ownself. This owning one's mother is the question to be probed.

Keywords: Crux, Suffocation, Ambivalent, Feminism, Grappled, Relationship, Peripheral, Hypocritical,

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IMPRESSIONS

The Webster dictionary defines mothering as 'caring for another with maternal affection or tenderness'. The concept of motherhood conceived by male restricts woman's quest for wholeness. Motherhood is equated with surrender, service and perpetually being effaced. Ideologically motherhood gains strength from the elevated myth of Mother Goddess but in all practicality, it demands the sacrifice of all ambitions, liberty and identity for the sake of happy family. Like maternalists of the early women's movement, contemporary women draw on their identities as mothers to protect their families. Historian Temma Kaplan has called such maternal authority 'female consciousness' to distinguish it from feminist consciousness. "When women act in the name of their assigned gender identity to improve their lives and protect their families, they do not necessarily demand privileges enjoyed by men." (Tandon 131)²

The debate over mothering continues to rage inside and outside the feminist community. There are two groups of feminists on this particular issue of mothering. Jeffner Allen argues that giving birth to children buttresses the patriarchy, saps women's energy, and is evolutionary unsound. She urges women to 'evacuate' mothering. Others like Luce Irigaray have valorized women's child bearing as one of the few expressions of power women under patriarchy possess. These feminists 'embrace motherhood' and decry the loss of female control over the spiritual and physical dimensions of childbirth. Irigaray further holds the view that motherhood is allowed only a small space, denied economic or social status and separated from the very aspect of sexuality. The daughter in the patriarchal system must separate from the mother in order to gain her own identity. The daughter is thus 'exiled' from her first identity and history. Irigaray argues that this condition must be rectified by the invention of a new language that redefines motherhood in explicitly sexual terms. Such a language will allow the mother and daughter separate identities but retain their bond. (Tandon 130)³

French feminist theory in particular has tended to focus on the power of mother; not the patriarchal power of dominance and control, but of nurturance and creation. Deliverance from (patriarchy), they claim, requires the liberation of the mother and the revaluing of women's bodily experiences of creation and women's relationship with women. Finally, a compromise was held by some. It upholds that child rearing, if not bearing must be shared by men and women. The role of mothering is one of nurturing and of caretaking; in the sense, almost anyone can be Smother.

Mothers are everywhere in literature, especially, though not exclusively, in work by women writers. Mother-daughter relations are particularly ambivalent, as daughters negotiate their way through 'the fluctuations of symbiosis and separation' (20) in their relationships with their mothers, in a quest for their own sense of self.

Not surprisingly, perhaps, feminist thinkers have produced most of the influential contemporary work on motherhood and especially on mother-daughter relationships. Indeed, motherhood has been a complex issue for feminism, and feminist debates throughout the twentieth century grappled with its contradictions, from women's relations with their mothers to women's experiences as mothers. Motherhood is such an explosive topic because, as Nancy Chodorow argues in her classic work on 'the reproduction of mothering' (Chodorow 1978), it is so deeply embedded in our concepts of identity, in the construction of individual subjectivities and in the social organization of gender.

Bonds between women suggest a dominant model for feminist intercommunity relations. Its originators see it carrying the meaning of shared oppression, common victimization, and solidarity. It has been used to advocate interracial, international, and cross-cultural bonds among women. It has been used to unite women of every class and society to fight against patriarchy. The term 'sisterhood' which promotes understanding, equality and solidarity among women has faced considerable criticism especially from feminists of the developing countries. The critics like Chandra Talpade Mohanty

see it as a product of white, Euro-centric feminism that neglects the distinct political, cultural and financial conditions of women in different countries. There are considerable divergences in personal experiences, cultural background and the realistic problems faced by women in the developing country and those in developed countries. These differences, in many cases restrain woman's life and position.

The relationship of women to each other is a theme found commonly in women's fiction. The mother-daughter relationship is of particular interest in this regard. Shashi Deshpande brings out the strained mother-daughter relationship in her fiction. The mother-daughter relationship has always occupied an important place in Deshpande's fiction. She has not valorized the image of mother; instead she has rendered more human qualities to her. Deshpande in the essay "Telling Our Own Stories" writes about womanhood:

Even today, our ideas about motherhood are so set in images of loving and cooing mothers, that I am often asked, Why are the mothers in your novels so unloving? Unloving? No, it's because we have this stereotypical image of what a loving mother is like, that we find any variation to be lacking in 'motherly' feelings. It seems to me that we need to get rid of these images to release ourselves from guilt. (Deshpande 96-97)⁸

Our society is full of paradoxes and contradictions. Here a female is considered to be a peripheral member of the family, both in her parents' house as well as husband's. Throughout her lifetime she is unable to decide her roots and this leads to her insecurity. As the daughter is closest to the mother, this insecurity is rubbed on to her also. Shashi Deshpande has delved into the problems of every woman in this hypocritical society where she is rendered a second grade position but is expected to carry the burden of the family. The double-edged treatment plays disarray on her psyche.

She is confused about her own role in the society and family. Shashi Deshpande has portrayed the inner turmoil of a woman, fighting within herself, and her surroundings. The psychic imbalance stems from the unresolved love-hate relationship between mother and daughter. While tracing the conflicts of her female characters, Deshpande has also explored that sometimes women themselves create conflicts in the lives of other women.

All our mothers teach us is what they have learned in the crucible of sexism. They cannot give us a sense of self-esteem which they do not possess. We must learn to interpret anew the experience our mothers have passed on to us, to see these lives in terms of struggle, often unconscious, to find and maintain some peace, beauty and respect for themselves as women.

An important achievement of the Second Wave Feminist movement had been the revaluation of the mother-daughter bond and an assessment of its centralization in the family and social structure as well as in the development of the female personality. The urge by feminists like Rich to uncover the voices bespeaking this most precious of female relationships received an overwhelming response from women writers all over the world. The voices have come ringing out of the abyss of silence, documenting the pains, pleasures, struggles and misunderstandings that shade the knowledge of motherhood and daughterhood, "a knowledge that is subliminal, subversive, pre-verbal: the knowledge flowing between two alike bodies, one of which has spent nine months inside the other."

To understand the mother daughter relationship in Deshpande's, works it would be appropriate to appreciate the psyche of a mother. Simone de Beauvoir in the chapter on mother writes that;

some women feel their femininity as an absolute curse; such a woman wishes for or accepts a daughter with a bitter pleasure of self-recognition in another victim, and at the same time she feels guilty for having brought her into the world... Vexed at having produced woman, the mother greets her with this ambiguous curse: 'You shall be a woman.' She hopes to compensate for her inferiority by making a superior creature out of one whom she regards as her double; and she also tends to inflict upon her the disadvantages from which she has suffered. (533)⁹

The mother at times imposes on the girl child exactly her own fate. Sometimes the mother, on the contrary, forbids the child to resemble her. Beauvoir says that the real conflict arises when the girl grows older, and when she wishes to establish her independence from her mother.

This seems to the mother a mark of hateful ingratitude; she tries obstinately to checkmate the girl's will to escape; she cannot bear to have her double become an 'other'. The pleasure of feeling absolutely superior – which men feel in regard to women – can be enjoyed by woman only in regard to her children, especially her daughters; she feels frustrated if she has to renounce her privilege, her authority. (534)¹⁰

Shashi Deshpande said that; "being mother, daughter, wife is important for a woman but that is not the be all and end all of her existence."

In her words, she has shattered the Sati-Savitri image of women and has given them more authenticity. Children question their parents, girls fight for their right. This is a move towards self consciousness.

But despite the tussle, there is strong urge to return home, to the security and warmth of family. Although mother-daughter in Shashi Deshpande's novels are at logger heads, but still mother is most important relation in their lives. Shashi Deshpande herself said in the interview that; "I consider that the relation between mother-daughter is abnormal, in which they do right." But the heroines also realize that the home and parents are not the refugee, but she is her own refuge. Hence they, after rejuvenating themselves, start their life with a new vigour, as the epigraph of *The Dark Holds No Terrors* reads;

You are your own refuge,
there is no other refuge;
this refuge is hard to achieve

REFERENCES

1. Jain, Jasbir. *Gendered Realities, Human Spaces: The Writing of Shashi Deshpande*. New Delhi: Rawat Publications, 2003. Print.
2. Tandon, Neeru. *Feminism: A Paradigm Shift*. New Delhi: Atlantic Publishers, 2008. Print.
3. Deshpande, Shashi. "Telling Our Own Stories." *Writing from the Margin and Other Essays*. India: Penguin, 2003.
4. Kotwal, Deepshikha. "Gender and Sexual Identity in Shashi Deshpande's *That Long Silence*." *English Studies in India: A Journal of Literature and Language*. 7(1999): 38-44.
5. Ibid, 63
6. Ibid, 18
7. Ibid, 109
8. Ibid, 197
9. Ibid, 13
10. Shashi Deshpande. *Roots and Shadows*. Orient Longman Ltd., 1993, 22.

Silence, Surrender and Compromise by Women

Ms. Humaira Mehraj* and Dr. Ashok Kapil**

ABSTRACT

In male dominated Indian society, women are given a secondary place. Whether a woman is a technologist, a bureaucrat, a lawyer, a novelist or a scientist, she can not escape her ordained duties as a wife or a family member. Women novelists of Indian languages and Indo-Anglian literature have taken up issues related to their status and tried to influence the conscience of the society. The contribution of women writers to the variety and validity of Indo-Anglian novel is considerable. Fiction by women writers provides searching insights and a great deal of human understanding.

In India a woman's life is governed by tradition and family customs. A good woman is one who is a good daughter, a good wife and a good mother. To be good means to be of a sacrificing, self-abnegating, meek and of quiet nature. Jaya's married life has always been attending to the needs of the husband. Tending and caring for the children becomes her full-time occupation. She states in "unequivocal terms" that Mohan is her profession, career and means of livelihood. In the process, she becomes dwarfed and annihilated as an individual. She believes that there is pain in hostility, and rebellion is anguish and agony. Hence, she adopts a subaltern and subservient attitude:

That long silence, acclaimed master piece of feminist writing in Indo-anglian fiction raises the status of Shashi Deshpande among the writers of present day; the novel highlights the image of middle class women sandwiched between the tradition and modernity.

Key words: sssModernity, technologist, bureaucrat, ordained, Indo-Anglian, conscience, contribution, validity, considerable, self-abnegating, subservient, acclaimed, unequivocal, sandwiched.

IMPRESSIONS

Since the dawn of independence in India, one witnesses in Indian fiction in English the emergence of a new interest in the plight of Indian women in rapidly changing social milieu. Several writers have made conscious and sustained attempts to analyse the predicament of women from various angles. It is interesting to note that though the problems of women have been engaging the attention of all major Indian writers in English, these problems have formed the bulk and core of creative output of women novelists writing in English, in particular.

Shashi Deshpande's novels are undoubtedly a searing portrait of Indian womanhood in distress. Also, they labour under an obsessive compulsive preoccupation with woman's quest for selfhood. Her women protagonists - Indu, Saru, Jaya, Urmila, and Sumi invariably undertake an arduous journey which transports them from a state of self-effacement to one of self-realisation.

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Shashi Deshpande's *That Long Silence* generates a dialogue regarding women's speech to counter the silence that pervades the patriarchal culture which they inhabit. To achieve this goal, I have examined two ideologies—one grounded in patriarchy and the other grounded in female agency and dialogue to reveal the problems within the gender sphere..

Women's lack of access to public speech, the resultant silence, and their attempts to reclaim voice have invited serious debates in recent critical discourse studies. The problematic categories of male speech and female silence have been traced to the unequal gender positions which turn men into active speakers while rendering women muted and passive listeners. Access to public speech is a privilege men have enjoyed in patriarchal cultures. For men, the transition from private to public speech does not pose much of a challenge, whereas women's speech is either restricted by gendered speech systems, or, if permitted, characterized by its private nature. Social identification in patriarchal cultures is made linguistically, through speech. The words women speak situate them in their gender locations and class, thus precluding the possibility of expressing individual opinion. Women's speech does not, therefore, enable them to either resist or challenge the ideological constraints superimposed by patriarchy. Such control of speech is a crucial part of the hegemony of dominant groups, which implies that the denial of access to public speech is one of the major forms of the oppression of women within a social class as well as in trans-class situations.

What constitutes this silence? What forces women's entry into the public sphere and the vocalization of their gendered experiences? The silencing of women in patriarchal modes of discourse remains unchallenged and continues to dominate cultural spheres through the reaffirmation of ideologically-determined gender roles.

Discourse studies that focus on the dialectical relation between women's silence and speech posit that women define and categorize areas of difference and similarity, which allows them to comprehend the world around them. The very forms of the dominant mode of discourse show the mark of the dominant masculine ideology. Hence, when a woman speaks herself into existence, she is forced to negotiate her speech in masculine terms. The implications of such cultural exclusion based on difference which can be used to explain the 'unspeakability' of women in the public sphere.

That Long Silence is an acclaimed novel by Shashi Deshpande. In this story the author reveals an intriguing picture of an ordinary middle class educated woman. The name of the protagonist is Jaya who lives with her husband Mohan and two children Rahul and Rati. The story entirely revolves around Jaya her married life and her role as a dutiful wife. She plays the role of an affectionate mother, dutiful to her in-laws and her relatives. It gives a simple enchanting scenes solely expressed by the author. According to the author husbands don't give attention to wives emotions, likes and dislikes. The author expresses the emotion with vivid details like that of lovemaking, relationship with children, etc. She reflects her lifestyle, her role clarity, is she living for her or for someone else, etc. Throughout the story she is engaged in searching her identity as an individual. In this story one situation arises when husband and wife's relation was given an offbeat. Two individuals though very intimate but couldn't relate each other in terms of feelings or understanding. Many married women might find some instances similar in their everyday lives after reading the story. Author has done a good job in expressing intimacy. Sexual feelings are expressed in its natural tone.

The novelist takes the help of small details to imprint the readers mind the secondary roll of women in Indian household. In Jaya's house it was ordained that the girls clear up after the males. "Why can't one of the boys do it? Janu or Sidhar? why does it have to be me and Veena?" (TLS81). Mocking faces were the only answer to the question raised by a girl. Not only men but also women in the family systematized the procedure. Mohan, Jaya's husband is aghast when his wife hints that he should cook during her confinement. Jaya can not find her name in the family tree drawn by her uncle. Later she learns that married women belong to the family of her in-laws.

Even the very conduct of the girl is conditioned by the family from her early childhood. Jaya is chided by her grand mother for exhibiting curiosity. Some oft repeated maxims for the “would be wives” reveal how women are viewed in society controlled by men and the traditional women of the family. Jaya often hears, “a husband is like a sheltering tree” (TLS 137) and “the happiness of your husband and home depends entirely on you” (TLS 138). The winning of a husband, his longevity and the propagation of his lineage through a male child are the goals of women.

The novel attempts to break the silence thrust on women and their position in society by the domineering males. It depicts the suppressed feelings, aspirations and agony of women and also challenges then men to alter their attitude to give women their rights and dignity.

Jaya’s distant cousin Kusum never voices her opinions. Since she has internalised all her anger and maintain silence, she takes rescue in insane world. In her madness, she can be ‘gloriously’ herself (TLS 127). Entry into insane world is a kind of escapism. When this sane world is too much for her, she jumps into the well and kills herself. Like Kusum there are so many women in the society who silently swallow their pain and sufferings.

Kamat, a lonely young widower lives above Jaya’s apartment. Jaya’s writings receive comments, criticism and encouragement from Kamat. Jaya enjoys her intimate friendship with Kamat by sharing her opinions and ideas about her stories which she could not do with Mohan. She admires him for treating her as his equal and only in his presence; she can be in her own self. It had been a revelation to me that two people, a man and a woman, could talk this way: with this man, I had not been a woman. I had been just myself. (TLS 213) No doubt Mohan encourages her to write but the way he expects. Her writing is also a kind of breaking the silence. Rajeswarisunder Rajan argues, Deshpande’s protagonist breaks her silence at one level through the act of writing itself, at another level through renegotiating interpersonal relations within the family”. One of her stories has won the prize where she has made a mention that a man who could not reach out to his wife except through her body. This hurts Mohan because he is afraid that people would think that the man is Mohan and the woman is Jaya. Jaya doesn’t want to jeopardize her marriage and thereby she changes her style of writing.

This is the problem not only with Jaya but also with all women writers. They tuned their mind and ways of life according to the need and expectation of men. Since Mohan thinks, for a woman, to be angry is to be unwomanly; Jaya set her mind not to be angry even in writing. She confines her thoughts and defines her role according to the expectation of her husband. Naturally she has lost her ‘true self’. Anger which has been internalized has turned her to be nervous and incompetent. She says: “...no woman can be angry. Have you ever heard of an angry young woman? ... A woman can never be angry; she can only be neurotic, hysterical, frustrated”. Jaya married Mohan as he had decided to marry the convent educated, cultured Jaya. After the marriage also Jaya found him a stranger. Intimacy with him had seemed a grotesque indecency. Jaya has shaped her life according to the desire of Mohan and loses her own self and identity. She admits:

The concept and image of women has under gone a positive change. No society can ever progress without an active participation of women who an integral part of human civilization in its overall development. The present paper attempts to interpret and record the reverberation of gender awareness revealed by Shashi Deshpande in her novel *That Long Silence*. She evinces keen interest in the empowerment of women in the multifaceted aspects of life. The women of Shashi Deshpande face formidable challenges to gain their rightful place in the society. They are culture specific traditional. The major problems faced by Shashi Deshpande’s women characters are the psychological conditioning and gender discrimination, which determine the adult personality of female child. The feminist consciousness is achieved by her educated middle class women.

Shashi Deshpande wants to transform the society and she realizes the necessity for women’s education and economic independence which can eradicate poverty. She is concerned with the

duties of a devoted wife "Pativerta" and with these women's struggle to revolt against slavery. But her women come to a point of compromise and avoid all open fights. They practice non violence and advocate that people should learn to negotiate disagreements and problems without fighting. This is seen at the end of that long silence where the women propagandists, Jaya decides to clarify the matter with her husband, on his return from his self-imposed exile. Shashi brings out the guilt feelings from her protagonists and enables them to move in positive direction to maximize their potential.

Neither Jaya nor her creator Shashi Deshpande totally Advocate western feminism. Still they are feminists- Indians in all respects, rooted to their conservative culture. No wonder, Jaya and Shashi subsist on a compromised life.

REFERENCES

1. Swain, S.P. "Shashi Deshpande's The Dark Holds No Terrors: Saru's Feminine Sensibility," *Indian Women Novelists*. Ed. R.K. Dhawan, Set III, Vol. 4, New Delhi: Prestige Books, 1995. Print.
2. Sandhu Sarabjit. *The Novels of Shashi Deshpande*. Prestige Books in Association with ISCS, New Delhi, 1991. Print.
3. Bhatnagar, O.P. "Indian Womanhood: Fight for Freedom in Roots and Shadows." *Indian Women Novelists*. Ed. R.K. Dhawan. Prestige books, New Delhi. 1991. Print.
4. Haldar, Santwana. *Shashi Deshpande's That Long Silence: A Critical Study*. New Delhi: Asia Book Club, 2005. Print.
5. Ramamurthy, P. "My Life is My Own: A Study of Shashi Deshpande's Women." *Indian Women Novelists Set I. Vol.V* Ed. R.K. Dhawan. New Delhi: Prestige Books, 1991. Print.

Creating Teacher Preparedness to Adopt Pedagogic Practices that Cater to Inclusion – An Institutional Approach

Dr. Jayashree Inbaraj*

ABSTRACT

Institutions need to proactively make changes in their orientation to inclusive practices. The research paper is a description of a case study approach of an institution to describe its three year initiative towards inclusive practices data. The rationale for the research is that General B.Ed colleges fall short in their commitment to address inclusion in the teacher training. And since teachers are key players in advancing school as a change factor for inclusion to succeed it becomes imperative for general teacher education colleges to respond to this need. The findings of the study indicate that the co-teaching as a collaborative model between a general B.Ed college and a special education dept was seen as highly beneficial to create preparedness for pre-service teachers and teacher educators for both institutions. Integration of key questions in the lesson plan was viewed as a very valuable exercise by majority of the pre-service teachers.

Keywords: Inclusion, inclusive practice, co-teaching, integration, accommodations.

INTRODUCTION

The most emancipated and simplest way of defining inclusive education is to say inclusion is about how we develop and design our schools, classrooms, programs and activities so that all students learn well and participate together. Sebba and Ainscow (1996) defines "Inclusion as the process by which a school attempts to respond to all pupils as individuals by reconsidering its curricular organization and provision. Through this process, the school builds its capacity to accept all pupils from the local community who wish to attend and, in so doing, reduces the need to exclude pupils." Therefore Inclusive Education is all about accepting all learners and teaching all students, in the best way to bring their best potential to the fore.

The UNESCO 'Salamanca Statement' adopted at the 'World Conference on Special Educational Needs: Access and Quality' (1994) called upon the attention of all governments and provided a Framework of Action towards special needs education. It states that "Regular schools with an inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all, moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system." Three decades later India can claim to have its intention in place towards inclusive education through several significant policies for inclusion but their implementation efforts have not resulted in an inclusive system of education, nor have we achieved our goal of "education for all" across the country.

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The complex problems of the country, the systemic ills of the education system including teacher education in particular have resulted in not empowering regular schools to become the vehicle to combat discrimination and adopt inclusion. If schools have to cater to inclusion then teachers have to play a key role. However, the training and preparation of teacher education until now has been dismal in this area. Most general teacher education colleges do not address the area of inclusion effectively. There is lip service to the term with some stray topic or workshop organized once a year to just touch the tip of the iceberg. General Teacher education colleges until now have been behaving as though inclusion is an option in their curriculum and training. There is very little evidence of treating the subject as a non-negotiable. Most general colleges as a practice do not attempt to address inclusion in the lesson plans. There is no training for inclusion while they observe, or give practice lessons. The significant question is then is “if you do not include questions on inclusion in the lesson plan and student teachers are not sensitized through training and practice for inclusive practices how will they respond to this need?” They will not is the clear cut answer because if there is no opportunity for thought and practice there will be change. In service teachers in most schools are in adept at catering to children with special needs because neither the training college nor the school is doing much to design an integrated approach and systematic approach to inclusion.

THE CONTEXT

It was a fact that the general B.Ed colleges fall short in addressing inclusion. The gap was sharply felt by the teacher educators when they visited inclusive schools. Trainees either ignored children with special needs in the class as they didn't exist or lost grip of the lesson as they didn't know how to cope with the differently abled in their class. Teacher educators at Smt. Kapila Khandvala college of Education in Mumbai could starkly see this gap. The institution initiated a pilot study on 'Co-teaching for Inclusion' by collaborating with the Special Education Dept of SNDT University, Juhu, Mumbai for a cohort group of ten students in all from both institutions. For two years confidence through the collaborative model was tested to build faith that inclusion is possible. The co-teaching model with a special B.ED course helped in the process. The experiment which was modeled for two years, gave the faculty and student teachers the confidence that catering to special needs in the classroom is possible with understanding, planning and meticulous implementation. The collaborative co-teaching model experience increased the confidence among educators at the general B.Ed College to declare their intent to take on more in terms of inclusion. The college then attempted to integrate key questions on inclusion with the help of an expert. Student teachers were required to address key questions to address inclusion in their lessons, think about the accommodations they will make for any special learner they envisage in the classroom both in the process stage and evaluation stage. Consequently, Teacher Educators had to guide these lessons and so had to think about whether student responses in terms of the needs or disability mentioned and accommodations mentioned in the lesson plan were appropriate. The co-teaching experience gave some amount of confidence to teacher educators to do this.

METHODOLOGY

The study is a qualitative study of the experiences of a general B.ED college over three years to build capacities in student teachers and teacher educators in the area of inclusion through the co-teaching for inclusion and integration approach. The pilot study as an action research in the initial two years on co-teaching was on a small scale and the experiences of student teachers and teacher educators involved were studied in detail through observation of actual lessons, video tapes of the lessons, and an open ended questionnaire. The findings helped to follow the integration model

in the third year so that a large group of student teachers benefit. A questionnaire to understand student teachers experiences and feedback to handling questions on inclusion in the lesson plan was administered and the analysis of data was carried out.

OBJECTIVES OF THE STUDY

- To create institutional readiness in a general B.ED college to work towards inclusion through a Collaborative Co-teaching model to prepare a cohort of student teachers and teacher educators towards inclusion and inclusive practices.
- To develop confidence in the practice among teacher educators to take on the integration approach to inclusion in teacher training.
- To develop specific skills among teacher educators and student teachers through workshops by experts in the area of inclusive practices for classroom.
- To study the outcomes of integrating key questions on inclusion in the lesson plans.
- To consolidate findings from the three year experience towards institutional capacity building in the area of inclusion.

FINDINGS OF THE STUDY

a. Co-teaching for Inclusion

The co-teaching experience was useful learning experience for student teachers from both institutions (the general B.Ed College and the special B.Ed College).

The general B.ED student teacher contributed more in content organization and methodology and the special education student teacher towards inclusive practices and appropriate accommodations B.Ed college students.

The co-teaching lessons practiced in the inclusive school settings indicated that co-teaching as a model works well and special students in the class benefit due to accommodations designed and implemented.

The student teachers required guidance from teacher educators for this inclusive lesson planning from both organizations which required more coordination and time from teacher educators across the institution.

The lesson plans for an inclusive class that emerged from the cooperation of the pair of student teachers was appreciated by the teacher educators who observed the lessons. Teacher educators from both organizations felt it was a worthwhile experience.

The important challenges were time constraint and, managing the timetables of the two institutions involved.

b. Integration of Key Questions on Inclusion in the Lesson Plan

The quasi statistics that emerged from the qualitative analysis of student feedback indicates the following: 1. a large majority (nearly 96%) thought the idea of introducing questions on inclusion in the lesson plan is much required. 2. 83% felt these inputs given by the college were sufficient. 3. 82% felt the workshop on inclusion and learning disabilities benefited them. 4. 93% said they now realize that their lesson plan cannot ignore diverse learners. 5. A large majority (98%) said it would have been better to start in the first semester as they would have had more time to learn about inclusion. 6. 85% agreed that the teacher educators of the college made effective efforts to guide them for inclusion based questions and a large majority were satisfied with the guidance. 7. More than 90% said they want to learn more about inclusive strategies

and an overwhelming majority said inclusion is an area that teachers cannot ignore and that it was a good start to make them think about inclusion. 8. Nearly 50% did not find the questions on inclusion easy to address.

More than 120 lesson plans were analyzed with the help of an expert for responses to inclusion in the lesson plan to study response to key questions on inclusion. Overall the findings indicate a positive reception to the idea of inclusion. It also showed the student teachers had made attempts to engage with those questions. And many of them indicated they were interested in learning further. However, more than 50% lesson plans indicated that the student teachers gave vague responses to the key questions on inclusion. The responses exhibited lack of understanding of learning disabilities, special needs and accommodations required.

The fact that nearly 50% did not find the questions on inclusion easy to attempt indicates more training to teacher educators and more time for student teachers to internalize the idea is required. The responses and expert interview further indicated that it would be good practice to have a complete inclusive lesson plan than just have few key questions to address. For if student teachers don't have to carry their understanding to the next level student teachers may get casual in their initial response. The qualitative analysis of the lesson plans with the help of an expert also indicated that the lesson plans included generic ideas like 'I will ask oral questions to a dysgraphic student' or will bring some special need student to the front benches to very specific strategies like reinforcement of terms, pacing, use of ICT, concept maps, mind maps, buddy learning, word chart, cheat codes etc. 25% of student teachers attempts seemed to fulfill the requirements of inclusion but the rest seemed below average in terms of quality responses although the student had made an attempt. However, there was a realization that they need to do something different but the ideas for accommodations were not so appropriate.

On the whole the expert analysis indicated that the students had tried and the responses could be broadly classified as realizable, responsible and redundant ideas for inclusion. Distinction in strategies for LD and general teaching methods needed clarity. Need to revisit the questions, separate process questions and evaluation was necessary. Better still using a complete inclusive lesson plan that demands teachers to write the entire process in a holistic manner has been suggested.

The study strongly indicates that competencies of teacher educator's in this area in the general B.Ed colleges need upgrading. Overall, the three year experiences created readiness in the institution and faculty members to integrate training for inclusion within the B.Ed course. It developed confidence in teacher educators to address inclusion in lesson planning. In short, the practice impacted the student teacher, the teacher educator and the process of teaching and learning in a very deep way.

The strengths of the current research was it was need based, it was practical, and most important collaborative., teacher educators from general and special dialogue with each other, student teachers who worked as co teachers and an expert to raise fundamental questions on inclusion.

CONCLUSION

The new B.ED two year curriculum seems to have the space for inclusion to succeed. A new paper on inclusion has been introduced. But what we really need is a framework in teacher education to bridge the gap between special educators and regular educators to improve regular classroom teachers' ability to handle an increasingly, diverse student population within their classrooms. A collaborative and partnership model and institutional readiness seems to be the answer.

REFERENCES

- Ainscow, M. (1999) Understanding the development of inclusive schools. London: Falmer
- Gately, Frank J., Jr.; Gately, Susan E. (1993), Developing Positive Co-Teaching Environments: Meeting the Needs of an Increasingly Diverse Student Population, Paper presented at the Annual Meeting of the Council for Exceptional Children (71st, San Antonio, TX,)
- Hang, Q & Rabren., K., An Examination of Co-Teaching: Perspectives and Efficacy Indicators: Remedial and Special Education September 1, 2009 30: 259-268
- Jha, M.M. (2002) School without Walls: Inclusive Education for All. Oxford: Heinemann
- Lipsky D. K. and Garther, A., 1998. Factors for successful inclusion: learning from the past, looking toward the future. In S. J. Vitello and D. E. Mithaug (eds.) Inclusive schooling. National and international perspectives. New Jersey: Lawrence Erlbaum Associates
- UNESCO (1994). The Salamanca Statement and Framework on Special Needs Education. Paris:

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 - * **Malik, A.P. (1998).** *Education Policy and Perspective*. New Delhi: Allied Publishers.
 - * **Majumdar, Ramesh (1997)** "The Role of the Society", *Journal of Educational Views*, 1 (3 & 4), July-October, pp. 1-11.
 - * **Ganeshan, P.R. (1989).** "Educational Finances in a Federal Government", Seminar on Mobilisation of Additional Resources for Education. New Delhi: National Institute of Economic Planning (mimeo).
 - * **Saley, Hans (1996).** "Perspective of Education: An Internal View", in Abdul Raza (ed.) *Educational Policy: A Long Terms Perspective*. New Delhi: Concept, for the National Institute of Law and Administration, pp. 70-92

