

**Vol. II
Number-1**

**ISSN :
Jan.-Dec. 2021**

JOURNAL OF EDUCATIONAL RESEARCH

A Peer Reviewed/Refereed Journal

An International Journal of
Education and Humanities



APH PUBLISHING CORPORATION

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Social Empowerment of Women in India: An Analysis

Dr. Meenakshi Bansal*

ABSTRACT

The concept of empowerment is so broad and it includes every dimension such as social, cultural, economic, political and many others. Here, the author has only focused on the social dimensions because if we improve society then, only we can think about other dimensions. Because people come first and society is made up of people. It is imperative to empower women socially. The main objectives of this paper are to discuss the constitutional provisions for Indian women and to study the different schemes to empower the women socially. The research methodology is explanatory in nature and for data collection; it is confined upto only secondary sources which includes journals, websites, etc. In the conclusion, it has been highlighted that the new India is rising in 21st century. Let's hope it will rise with equal contribution of its women.

Keywords: India, Empowerment, Social, Women.

INTRODUCTION

India is known for its culture and tradition. In Indian society, women are worshipped as deity. There are ample of example from ancient times to present where women are respected by every member of the society. For instance, as per Indian beliefs, women are regarded as Saraswati, the goddess of education, as Lakshmi, the goddess of wealth. They are homemaker, governor, minister, executive, etc. There is no area where you cannot able to find an example of women working there. However, there is a dark side also to this golden past of women.

As everything has its exceptional circumstances, in the same manner, the status of women also have negative shades where they are regarded as things or servants.in the views of Manu, women need to be protected. As per Indian tradition, women are responsibility of her father at the time of her birth and after marriage she becomes the liability of her husband and remains so till her death. Now, the question is why society has made such a pitiful approach towards women. When there are examples where women are worshipped then, why there are instances where they are tortured. The pathetic thing is that women get most of the pain from their own people. Not only from male but also from the female members. In the name of tradition, the society force women to live a subjugated life with no privileges or rights.

But thanks to the modern days where feminist movements have gained so much momentum. These movements and the voices raised by women towards their malign condition have helped them in improving their life. In the 21st century, things have started become better gradually. The word empowerment has emerged so popularly and for women it is like a life saver. In literally sense, the word empowerment refers to providing power to someone and when it is associated with women then, it becomes women empowerment which means empowering women in every possible manner by giving them ways and opportunities.

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After independence, the Indian constitution was formed and the best part is rights which are equally provided to both men and women. As per the article 14 of Indian constitution, there is equality before law and article 15 prohibits discrimination of every kind. Besides these there are many other articles and provisions which are given to improve the life of Indian women.

Although, the concept of empowerment is so broad and it includes every dimensions such as social, cultural, economic, political and many others. But here, the author has only focused on the social dimensions because if we improve society then, only we can think about other dimensions. Because people come first and society is made up of people. It is imperative to empower women socially.

OBJECTIVES

The main objectives of this paper are given below:

- To discuss the constitutional provisions for Indian women
- To study the different schemes to empower the women socially

RESEARCH METHODOLOGY

The research methodology is explanatory in nature and for data collection, it is confined upto only secondary sources which includes journals, websites, etc.

Limitations: There is a large scope for doing research on other dimensions of women empowerment in India as the author has limited her research only to social dimension.

ANALYSIS

In this section, the different ways of empowering Indian women (especially socially the one) are discussed

Constitutional Provisions

The constitution of India in its preamble has provided social, economic and political justice, liberty of thoughts and equality to all citizens. Major provisions made by Indian constitution for the empowerment of women are mentioned below:

- Article 14: It guarantees equality before law and equal protection of law with in the territory of India.
- Article 15: It prohibits discrimination on the basis of religion, race, caste, sex, place of birth. According to article 15(3), State can make special provisions for the benefit women and children.
- Article 16: Equality of opportunity for all citizens in matter relating to employment. No citizen can be denied employment on grounds of religion, race, cast, sex, decent, place of birth residence or any of them.
- Article 39: Article 39(a) provides for an adequate means of livelihood for all citizen. Article 39 (b) has provisions for equal pay for equal work for both men and women. Article 39 (c) has provisions for securing the health and strength of workers, men and women, and not to abuse the tender age of children.
- Article 42: It guarantees just and humane condition of work and maternity relief. Article 42 is in accordance with Article 23 and 25 of Universal Declaration of Human Rights.
- Article 325 and 326: They guarantee political equality, equal right to participate in political activity and right to vote, respectively.

- Article 243 (D): It provides for the political reservation to women in every panchayat elections. It has extended this reservation to elected office as well.¹

Ministry of Women and Child Development

The department of Women and Child Development was set up in the year 1985 as the part of Human Resource Development to provide a boost to women and child development. In the year 2006, this department was upgraded to the status of ministry and now, it called Ministry of Women and Child Development. If we look at the policy initiatives of this ministry then, it follows holistic approach with effective coordination and monitoring of various sectoral programmes which are run through Non-governmental organisations also. The major policies taken in the recent past are universalization of ICDS and Kishori Shakti Yojana. The enactment of Protection of Women from Domestic Violence Act is also a commendable step.²

Women Empowerment Schemes³

The following are the schemes adopted by Ministry of Women and Child Development to strengthen women and child development:

1. Beti Bachao Beti Padhao Scheme
2. One Stop Centre Scheme
3. Women Helpline Scheme
4. UJJAWALA : A Comprehensive Scheme for Prevention of trafficking and Rescue, Rehabilitation and Re-integration of Victims of Trafficking and Commercial Sexual Exploitation
5. Working Women Hostel
6. Ministry approves new projects under Ujjawala Scheme and continues existing projects
7. SWADHAR Greh (A Scheme for Women in Difficult Circumstances)
8. Support to Training and Employment Programme for Women (STEP)
9. NARI SHAKTI PURASKAR
10. Awardees of Stree Shakti Puruskar, 2014 & Awardees of Nari Shakti Puruskar
11. Awardees of Rajya Mahila Samman & Zila Mahila Samman
12. Mahila Shakti Kendras (MSK)
13. NIRBHAYA
14. Mahila police Volunteers
15. Mahila E-Haat

Besides the above mentioned schemes, there are many others schemes also. Some of them are discussed below:

Mother and Child Tracking System (MCTS)

It was launched in 2009 to help monitor the health care system. The basic aims of this system are to “ensure that all mothers and their children have access to a range of services, including pregnancy care, medical care during delivery, and immunizations. The system consists of a database of all pregnancies registered at health care facilities and birth since 1 December 2009”.⁴

Pradhan Mantri Matritva Vandana Yojana

This schemes was initiated in October, 2010 and it provides money to women to help them having good health and proper nutrition “Indira Gandhi Matritva Sahyog Yojana (IGMSY), Conditional

Maternity Benefit (CMB) is a scheme sponsored by the national government for pregnant and lactating women age 19 and over for their first two live births”⁵

- Rajiv Gandhi Scheme for Empowerment of Adolescent Girls – Sabla

This scheme was started in 2012. This scheme targeted the girls between the age of 10 to 19 years. “The programme offers a variety of services to help young women become self-reliant, including nutritional supplementation and education, health education and services, and life skills and vocational training.”⁶

- Rashtriya Mahila Kosh

Money is needed to empower. With keeping this point in mind, this kosh was created by the Government of India in 1993. It is also known as The National Credit Fund for Women. Its purpose is to provide lower income women with access to loans to begin small businesses.”⁷

National Policy for the Empowerment of Women (2001)

In the year 2001, to provide a momentum to the empowerment of women, the national policy was formed with the following goals:

- To create an environment through positive economic and social policies for full development of women
- To ensure equal access to participation and decision making of women in social, political and economic life of nation
- To strengthen the legal system
- To provide equal access to women to health, care, quality education. Safety, social security, employment, equal remuneration, etc.
- To change societal attitudes and community practise by active participation
- To ensure gender mainstreaming in the development process
- To build and strengthen partnership with civil society, and women’s organisations.

Barriers to Women Empowerment in India

- Negative Attitude of society towards women empowerment
- Low Educational status of women
- Lack of Awareness among Indian women
- Lack of access to financial measures
- Financial dependency on men
- Prevailed social taboos, customs and traditions
- Preference to male child
- Girls are considered as liability and Boys as assets
- Social insecurity to women
- Lack of political participation of women in Indian
- Masculinization of Indian society

CONCLUSION

“Social empowerment is understood as the process of developing a sense of autonomy and self-confidence, and acting individually and collectively to change social relationships and the institutions and discourses that exclude poor people and keep them in poverty.”⁸ Women are the poorest creatures among them. The need of the hour is to give proper attention towards their empowerment. Because society cannot march ahead without its women. As Pandit Jawaharlal Nehru once said: “If you educate a man you educate an individual, however, if you educate a woman you educate

a whole family. Women empowered means mother India empowered".⁹ The new India is rising in 21st century. Let's hope it will rise with equal contribution of its women.

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Attitude of Secondary School Students Towards Mathematics in Bargarh District

Mr. Yudhisthir Mishra* and Dr. RSS Nehru**

ABSTRACT

Mathematics lays the foundation for the study of all subjects and it is too early for a child to decide about the profession. Mathematics as an optional subject would make choice of Profession very narrow. The knowledge of mathematics is a vital role for the society. In particular Mathematics knowledge is necessary for secondary school students, it is very useful for higher education. At secondary level, attitude of mathematics is very important role for the learning mathematical concept with interest. So researcher conduct the study to take 60 secondary school of class Ninenth 1200 students of bargarh district which is consist of rural and urban area, government and private sector, English and odia medium school.

INTRODUCTION

Attitude towards Mathematics plays a crucial role in the teaching learning processes of Mathematics. A effects the students achievement in Mathematics. The teaching method the support of the structure of the school, the family and students' attitude towards school affect the attitude towards mathematics. Usually the way that Mathematics is represented in the class room and perceived by students, even when teachers believe they are presenting it in authentic and context dependent way stands to alienate many students from mathematics. (Bartou 2000; Furinghetti and Pekhonen,2002).

According to Indian Education Commission (1964-66)- "Mathematics should be taught on a compulsory basis to all pupils as a part of general education during the first ten years of schooling".

The knowledge of mathematics is an essential tool in our society (Bishop, 1996). The world of today, which leans more and more heavily on science and technology, demands more and more mathematical knowledge on the part of more and more people. And the world of tomorrow will make still greater demands on a person to be "well educated" in the technological society of today, and as such he or she should have some degree of mathematical literacy. The pace of Mathematical discovery and intervention has accelerated amazingly during the last few decades. It has been said that mathematics is the only branch of learning in which theories of two years old are still valid. Mathematics lays the foundation for the study of all subjects and it is too early for a child to decide about the profession. Mathematics as an optional subject would make choice of Profession very narrow. The knowledge of mathematics is a vital role for the society. In particular Mathematics knowledge is necessary for secondary school students, it is very useful for higher education. At secondary level, attitude of mathematics is very important role for the learning mathematical concept with interest.

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NCF 2005 gives stress on Mathematics to be dynamic, expanding body of knowledge, covering new domains of knowledge. In the progressive society Mathematics plays a vital role and liberating role for escaping poverty, ignorance and blind beliefs. For achieving the goals on the way of life of the learner Mathematics curriculum must be valid on various criterion like cognitive validity, content validity, process validity, ethical validity etc. NCF 2005 caters the needs of the individual, society and the nation as whole.

As per NCF 2005 Mathematics is a compulsory subject in Secondary Stages. The attitudes of students towards mathematics impact the achievement of students towards Mathematics is concerned.

Mathematics is a mathematical application of matter. It is so said because the subject makes a man methodical or systematic. Mathematics makes our life orderly and prevents chaos. Certain qualities that are nurtured by mathematics are power of reasoning, creativity, abstract, or spatial thinking, critical thinking, problem solving ability and even effective communication skills.

Mathematics is the cradle of all creations, without which the world cannot move an inch. Be it a cook or a farmer, a carpenter, or a mechanic, a shopkeeper, or a doctor, an engineer or a scientist, a musician or a magician, everyone needs mathematics in their day-to-day life. Even insects use mathematics in their everyday life for existence. Snails make their shells, spiders design their webs, and bees built hexagonal combs. There are countless examples of mathematical pattern in nature's fabric. Anyone can be a mathematician if one is given proper guidance and training in the formative period of one's life. A curriculum of mathematics is helpful in effective teaching and learning of the subject. Experience says learning mathematics can be made easier and enjoyable if our curriculum includes mathematical activities and games. Maths puzzles and riddles encourage and attract an alert and open minded attitude among youngsters and help them develop clarity in their thinking. Emphasis should be laid on development of clear concept in mathematics in a child, right from the primary classes.

Another very effective means of spreading the knowledge of mathematics among children is through peer-teaching. Once a child has learned a concept from his teacher, the latter should ask him to explain the same to fellow students. Moreover, in the process all the children will be able to express their doubts on the topic and clear them through discussion in a group.

PLACE OF MATHEMATICS IN SCHOOL CURRICULUM

Plato advocated the inclusion of Mathematics as compulsory subject in the school curriculum but some people objected the inclusion of Mathematics as compulsory subject in the school curriculum on the following grounds.

- (i) Mathematics is mainly taught for its disciplinary values. In the hands of an able and resourceful teacher, teaching of any subject. Hence there is no need to make the learning of Mathematics compulsory for the sake of disciplinary values.
- (ii) Learning of Mathematics requires special aptitude and favourable disposition. Therefore, it is not fair to make the students, who have neither the aptitude nor the interest, learn the subject.
- (iii) Mathematics forms the basis for the higher education in Mathematics and for many others professional courses. But very few students pursue their higher education in mathematics and optional for professional courses. In such a case, There is no need for them to learn Mathematics.
- (iv) Mathematics is a very tough subject and is the learning of Mathematics is boring and dis-interesting. Compulsory learning of such a subject can adversely affect the students attitude towards schooling and performance in other subjects.

- (v) Mathematics is taught because it is the “Arithmetic of everyday life”,. The amount of mathematics that is necessary or even marginally useful in everyday life is progressively diminishing and it can be taught most children before the age of eight or nine. Much of mathematics which is taught in secondary schools has no obvious justification in everyday life.

However it can be inferred that critics are too prejudice to see the positive aspects of Mathematics to be made a compulsory subject in the school curriculum. But Mathematics made compulsory in the school curriculum for the following reasons:

1. Mathematics is the only subject that encourages and develops logical thinking and logic employed is simple, exact, accurate true and useful.
2. Mathematics does not require special ability for successful performance, but it needs general intelligence.
3. A teacher of Mathematics can make the learning very interesting and exciting. Thus, change the attitude and outlook of the students.
4. Mathematics lays the foundation for the study of all other subjects.
5. Even if a child discontinues his education before completing the high school, The mathematics that he has learnt, opens up a fairly good number of vocations.
6. Even from a purely utilitarian value, mathematics is immensely useful for an individual in his day-to-day life.
7. Mathematics is an essential part of human culture and deserves a place in the curriculum for its own sake.
8. The children of mathematics same way as they enjoy fine arts.

The present Mathematics curriculum should aim at developing problem solving analytical skill.

This can be done when the students.

- I. Enjoy mathematics, realizes the social application and uses of mathematics.
- II. Talk, discuss and work together on mathematical problems.
- III. Pure mathematics related questions and solve mathematical problems and puzzles.

In Odisha, Board of secondary Education has made Mathematics a compulsory subject in secondary schools which can be seen from table 1.1

Table-1: Subjects and their weight-age in the secondary school curriculum of odisha (class viii, ix and x)

SUBJECT	FULL MARK	PASS MARK
First Language (odia)	100	30
Second Language (English)	100	30
Third Language (sans/hindi)	100	30
Mathematics	100	30
Science	100	30
Social science	100	30
Total	600	180

From table 1.1, it is evident that the secondary school curriculum of odisha comprises of subjects like odia, English, Sanskrit, Mathematics, Science, and Social science and all these subjects are compulsory. The subject “Mathematics” comprises of two parts -first part is algebra (bija ganit) and second part is Geometry (Jyamiti).

Need of the Study

Mathematics provides us inductive and deductive knowledge to enrich our imagination and modes of thinking and even behavior to excel in life. The material progress of the present day world is the work of our mathematicians to improve the quality of life by reducing time, distance and human effort.

Modern civilization is the gift of mathematics. For scientists, technologists, engineers, doctors, specialists and others, mathematics is there to have catalytic impact upon their understanding in order to enrich their performance to serve mankind all over the globe, productively and usefully.

The material progress of the present day world is perplexing and at times unbelievable but all this is the work of our mathematicians to improve the quality of human life by reducing time, distance and human effort. For instance, computer, the new magic of mathematics, has a wonderful contribution towards human growth and development. Weather forecasts, locating diseases, revolutionizing agriculture etc. are modern gifts to people everywhere, simplified by the mathematical understanding and application. Computer has become, according to V. K. Jain “the Magic lamp of 20th century to assist humanity in this task of collecting, memorizing and analysing the information”.

Mathematics is a tool that can be used to solve the problems in daily life. Due to this mathematics has been considered as one of the most important allied subjects in a secondary school curriculum. Napoleon also remarked that “The Progress and improvement of mathematics is linked to the prosperity of the State”. So the mathematics curriculum is a vast curriculum because it is the basis of all sciences, arts and much related to daily life. The number of failures in mathematics in secondary school level examination is more comparable to that of other subjects because mathematics is a highly abstract subject. If secondary students have a positive attitude towards mathematics, their achievement in mathematics is very well otherwise very low. So their attitude is the main role of learning mathematics. So the researcher conducted a study to study the attitudes towards mathematics of secondary school students.

STATEMENT OF THE STUDY

The researcher worked as a Mathematics teacher in Secondary Schools for four years and assessed the mathematics performance and potential of students. The researcher identified that the attitude is one of the factors of learning mathematics for secondary school students. Therefore the researcher had planned the statement of the problem “Attitude towards mathematics of secondary school students in Bargarh District”.

DEFINITION OF THE TERMS USED

Attitude

Attitude is a central part of human identity. Everyday people love, hate, like, dislike, favour, oppose, agree, disagree, argue, persuade etc. All these are evaluative responses to an object. Hence attitudes can be defined as a summary evaluation of an object or thoughts. (Bohner & Wanke, 2002).

Attitude is referred to as the tendency to react favourably/ positively or unfavourably/ negatively towards a mathematics subject.

Secondary School

The Secondary School consists of IX and X standard students in the Odisha educational system. It was followed by the Board of Secondary Education Odisha Syllabus. The present study only selected IX standard students.

Mathematics

Mathematics as compulsory subject in secondary stage. This consist 100 mark in the examination and pass mark is 30. Mathematics has the four fundamental operations of addition, subtraction, Multiplication and division. Mathematics subject covers the topics set, set operation, real number system, algebra, logarithm, mensuration, construction, trigonometry etc. at secondary level.

Objectives of the Study

The following objectives have been formulated related to the study:

1. To study the attitude towards mathematics for secondary school students.
2. To find out the difference between Government and Private Secondary School Students attitude towards mathematics.
3. To find out the difference between boys and girls secondary students attitude towards mathematics.
4. To find out the difference between Odia and English Medium Secondary School students attitude towards mathematics.

Hypotheses of the Study

The following null hypotheses were formulated by the above objectives.

1. There is no significant difference between Government and Private Secondary School students attitude towards mathematics.
2. There is no significant difference between boys and girls secondary students attitude towards mathematics.
3. There is no significant difference between urban and rural secondary students towards mathematics.
4. There is no significant difference between Odia and English Medium Secondary students towards mathematics.

Variables of the Study

- Dependent variable - Attitude Sale towards Mathematics
- Independent Variable :
 - Gender, Boys and Girls
 - Medium, English and Odia
- Type of School :
 - Government
 - Private
- Location of Student-urban and rural

Limitation of the Study

- The researcher selected 1200 secondary school students in Bargarh District.
- The researcher selected Class IX students only.
- The researcher selected 60 secondary school of Bargarh District.

Method of the Study

According to objectives and hypotheses of the study, the researcher had selected the narrative survey method for the present study.

Sample of the Study

- The random sampling technique was adopted the present study.
- The researcher selected Class IX students for the sample 1200 in Bargarh District of Odisha.

Table- 01

Type of School	No. of School	Medium	No. of students	Gender		Location of students	
				Boys	Girls	Urban	Rural
Government	20	Odia	400	250	150	200	200
Government Aided	20	Odia	400	250	150	200	200
Private	10	Odia	200	120	80	80	120
	10	English	200	120	80	80	120
Total	60		1200	740	460	560	640

TOO USED FOR THE STUDY

Researcher use the Modified Fennemasherman Attitude scale (Modified by Diana Doepken, Ellen Lawsky, and Linda Padwa) for collection of data for measuring the Attitude towards Mathematics of Secondary School Students.

Statistical Techniques use for the Study

Researcher use the mean, standard deviation and t-test, anova will use for analysis the data.

FINDINGS OF THE STUDY

The following are the important findings of the present study:

1. The forty percentage secondary school students have a better attitude towards mathematics.
2. The secondary school female students have a better attitude towards mathematics than that of male students.
3. The urban secondary school students have a better attitude towards mathematics than that of rural students.
4. The private secondary school students have a better attitude towards mathematics than that of government students.
5. The English medium secondary school students have a better attitude towards mathematics than that of odia medium secondary school students.

CONCLUSION

The sixty percentage secondary school students have a neative attitude towards mathematics. The secondary school female students have a positive attitude towards mathematics but the male students have negative attitude towards mathematics. The urban secondary school students have

a better attitude towards mathematics than that of rural students. The private secondary school students have a better attitude towards mathematics than that of government students. The English medium secondary school students have a better attitude towards mathematics than that of odia medium secondary school students.

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युवा नेतृत्व और राजनीतिकरण

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प्रस्तावना

हम सब जानते हैं की भारत एक प्रजातांत्रिक देश हैं। आज भारत में दुसरे देशो से सबसे ज्यादा युवा बसते हैं। युवा वर्ग होता हैं जिसमे 14 वर्ष से लेकर 40 वर्ष तक के लोग सामिल हैं। आज भारत देश में इस आयु के लोग सबसे बड़ी संख्या में मौजूद हैं। यह एक ऐसा वर्ग हैं जो शारीरिक एवं मानशिक रूप से सबसे ज्यादा ताकतवर हैं। जो देश और अपने परिवार के विकास के लिए हर संभव प्रयत्न करते हैं। आज देश में 75% युवा पढ़ना लिखना जानता हैं। आज भारत का युवा वर्ग ऊँचाइया को छूना चाहता हैं परन्तु वह यह भूलता जा रहा हैं की उन ऊँचाइया को छूने के लिए वह स्वयं अपनी जड़ें खुद काट रहा हैं। आज के युवा हर एक क्षेत्र में नेतृत्व कर रहे हैं। आज की राजनीति में युवा नेतृत्व का होना अतिआवश्यक हो गया हैं। आज के राजनीति में युवा वर्ग को देश की भिन्नभिन्न तरीके की समस्याओं के सामने लड़ना, अपनी बात रखने का अवसर दिया जाना चाहिए। राजनीति में युवा नेतृत्व की भूमिका जानना जरूरी हैं।

नेतृत्व के मायने

नेतृत्व के मायने एवं परिभाषा एलन कीथ गेनेटेंक ने दी जिसके अधिक अनुयायी थे “नेतृत्व वह हैं जो अंततः लगे के लिए एक ऐसा मार्ग बनाना जिसमे लोग अपना योगदान दे कर कुछ असाधारण कर सके.

ओसवालड स्पैंग्लर ने अपनी पुस्तक “मैन एंड टेक्निक्स (Man and Techniques) में लिखा हैं की “इस युग में केवल दो प्रकार की तकनीक ही नहीं हैं वरन दो प्रकार के आदमी भी हैं। जिस प्रकार प्रत्येक व्यक्ति में कार्य करने तथा निर्देशन देने की प्रवृत्ति हैं उसी प्रकार कीच व्यक्ति इसे हैं जिनकी प्रकृति आग्न्या मानने की हैं। यहीं मनुष्य जीवन का स्वाभाविक रूप हैं। यह रूप युग परिवर्तन के साथ कितना ही बदलता रहे किन्तु इसका अस्तित्व तब तक रहेगा जब तक यह संसार रहेगा।”

नेतृत्व का अर्थ

पिंजर (Pinjor) ने नेतृत्व को इस प्रकार परिभाषित किया हैं— “नेतृत्व व्यक्ति और पर्यावरण के सम्बन्ध को स्पष्ट रखने वाली एक धारणा है, यह उस स्थिति का वर्णन करती है जिसमें एक व्यक्ति ने एक विशेष पर्यावरण में इस प्रकार स्थान ग्रहण कर लिया हो की उसकी इच्छा भावना और अन्तर्दृष्टि किसी सामान्य लक्ष्य को पाने के लिए दुसरे व्यक्तिओ को निर्देशित करती हैं तथा उन पर नियंत्रण रखती हैं।”

*रिसर्च स्कॉलर

राजनीति के मायने

राजनीति वह निति या पध्दति जिसके अनुसार किसी राज्य का प्रशासन किया जाता या होता है।

गुटों, वर्गों आदि की पारस्परिक स्पर्धावाली तथा स्वार्थपूर्ण निति।

नागरिक स्तर पर या व्यक्तिगत स्तर पर कोई विशेष प्रकार का सिद्धांत एवं व्यवहार राजनीति (पोलिटिक्स) कहलाती हैं। अधिक संकीर्ण रूप से कहें तो साशन में पद प्राप्त करना तथा सरकारी पद का उपयोग करना राजनीति हैं। राजनीति में बहुत रास्ते ओंआये जाते हैं जैसे—राजनैतिक विचारों को आगे बढ़ाना, कानून बनाना, विरोधियों के विरुद्ध युद्ध आदि शक्तिओं का प्रयोग करना। राजनीति बहोत से स्तरों पर हो सकती हैं—गाँव की परम्परागत राजनीति से लेकर, स्थानीय सरकार, सम्प्रभुत्वपूर्ण राज्य या अन्तरास्त्रिय स्तर पर।

राजनेता की मनोवैज्ञानिक भूमिका

नेता को अधिकतर लोगों के बिच वह कार्यकर्ता के संपर्क में रहना चाहिए उन्हें देश में एक इकाई के रूप में मानना चाहिए। इससे आपसी मतभेद, धूना, द्वेष आदि को कम किया जा सकता है। नेता भी कार्यकर्ता वह जनता कि तरह एक संभ्रांत व्यक्ति होता है, उसकी भी अपनी मान प्रतिष्ठा होती है। नेता को अपनी जनता की जरूरते और उनकी समस्या के समाधान के लिए कार्य करना होता है। नेता को अपने पार्टी के कार्यकर्ता का भी ध्यान रखना पड़ता है जैसे की उनको पार्टी की टिकेट देने के बाद समय समय पर उनके स्थान पर भाषण देने हेतु एवं राजनैतिक व्यूह की रचना हेतु भी उनको योग्य मार्गदर्शन देना चाहिए जिससे पार्टी के कार्यकर्ता में नयी ऊर्जा का संचार किया जा सके।

सफल युवा राजनेता के गुण

1. समर्थता एवं नेता में यह कौशल हो की वह अपने कार्यकर्ता से काम ले सके।
2. नेता में भाषण देने का अथार्त लोगों को अपने किये गए कार्यों को सचाई और प्रमाणिकता से समजाने का कौशल होना चाहिए।
3. नेता में लोगों को अपने प्रति विश्वास प्रतिपादित करने का कौशल होना चाहिए जिससे वह लोगों को अपने पार्टी के नेता वह पार्टी को वोट करने हेतु जागृत कर सके।
4. सफल नेता अपने विचारों से एवं आचरण से शुद्ध होना जरुरी है जिससे वह लोगों के बिच अपनी अच्छि छबि पेश कर सके।
5. सफल नेता को हमेशा अपने जनता की छोटी छोटी समस्या को जानना चाहिए और उस पैर तुरंत सुजाव के रूप में काम करना चाहिए।
6. सफल नेता में अपने क्रोध पैर नियंत्रण करने की क्षमता होनी चाहिए।
7. सफल नेता प्रशिक्षित होना चाहिए।
8. परिस्थिति का सामना करने की योग्यता होनी चाहिए।

सफल युवा राजनैतिक गुण में ब्लूम के सिद्धांत

ब्लूम ने पांच सिद्धांत का वर्णन किया है। उनके अनुसार सफल नेता को निम्न सिद्धान्तों अंतर्गत कार्य करना चाहिए—

1. किये गए कार्य का उचित मूल्यांकन
2. कार्यकर्ता का पर्याप्त मात्रा में प्रतिनिधित्व
3. समस्त जनता व कार्यकर्ता के साथ सामान्य व उचित व्यवहार।
4. जब कभी कार्यकर्ता व जनता मिलना चाहे तो उसे अपना समय देना।
5. जनता की समस्याओं का प्रबंधको और कार्यकर्ताओं से विस्तार में विचार—विमर्श करना।

युवा राजनेता को ध्यान में रखने के कार्य की सूची

1. जनता की समस्या कि और ध्यान देना
2. सामूहिक बैठक
3. निश्चित हेतु की जानकारी देना
4. कार्यक्षमता के मापदंड सूचित करना
5. उचित निर्णय
6. प्रेरणा देना

युवा राजनीति की आचारसंहिता की सूची

1. समस्याओं को धैर्यपूर्वक सुनना
2. सोच समझकर निर्णय लेना
3. जनता व कार्यकरता को हतोत्साहित न करना
4. आज के युवा नेता कम से कम संवेदनशील व सवेंगशील हो
5. नेता स्वयं गलत वादविवाद से बचा रहे
6. सफल युवा नेता कार्यकर्ता की प्रशंसा

युवा नेतृत्व की राजनीति में आवश्यकता के संदर्भ

आज के बदलते युग में राजनीति एक अहम हिस्सा है। राजनीति में केवल बूढ़े नेता का जोर जहा बढ़ता जा रहा है लोगो में बूढ़े नेता के प्रति कार्य न करने की समझ बढ़ती जा रही है। आज की राजनीति में युवा नेता की मांग बढ़ती जा रही है, देश में विविध स्तर पर अधिकतर पार्टी के शोषण की बातें सामने आ रही हैं उससे प्रभावित हो के युवा दल राजनीति में प्रवेश करने हेतु जागृत हो रहे हैं। देश में प्रवर्तमान समस्याएं जैसे की—

- शिक्षण में फी व अनामत की स्थिति
- रोजगारी की अलिप्तता

- पाक के कम दाम
- विविध चीजों पर अमान्य टैक्स
- अनियंत्रित व्यापारी लोन

निष्कर्ष

आधुनिक राजनीति के दौरान इस विषय के निष्कर्ष में यही कहा जा सकता है की राजनीति में सफल नेतृत्व व प्रजा के प्रति प्रवर्तमान समस्या के तहत हमें युवा नेतृत्व की आवश्यकता खल रही है व इच्छनीय कड़ी कहा जा सकता है। उस फल स्वरूप आज के समय में हम युवा राजनैतिक नेता दल देख प रहे हैं और अधिकतर लोग अपनी समस्या के तहत आवाज उठाते नजर आ रहे हैं चाहे वो कन्हैलाल हो, हार्दिक पटेल अनामत की दोद लिए हो या अल्पेश ठाकोर शराब के ठेके को विफल बनाने की दोद लिए हो।

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Tribal Social Movements in Odisha: A Brief Sketch

Dr. Sanjukta Padhi*

Numerous uprisings of Tribals have taken place in different parts of the country before and after Independence. The history of tribal social movements in India is very old. These social movements have impacted tribal culture and tradition in multiple ways. Initially most of these movements were local and largely reformatory in character. But as interaction of tribals with outside forces, culture and tradition increased the nature, magnitude and intensity of social movements also increased. In contrary to the past, gradually these movements shifted from the issue of social transformation in their culture and lifestyle to their dignity, honour, human rights and so on. Of late, electronic media and civil society organizations have provided significant space to these movements, both at the local level and at national and international level. Hence, the support base, either passive or active, of these movements has substantially increased during last couple of decades. In many cases these movements have halted, slowed or forced the change agents to rethink on the model of development introduced in tribal areas.

Studies have found that social issues are major cause of poverty and deprivation. Traditional social systems are used as powerful means of exploitation of labour and women and specially alienation of resources. The social customs have contributed to indebtedness, landlessness and bondage of marginalized sections.

Odisha is not just a State with maximum percentage of people below poverty line but also a socially backward State that lags behind all social and human development indicators. There are existence of middle age, feudal social practices in the name of culture and tradition with huge illiteracy and lack of basic healthcare facility. Inequality and irrational ideas are being enforced in modern form and being exhibited vulgarly by some section of media.

Odisha, the storehouse of natural beauty, the mine of precious metals and land of bumper crop, was not only famous for her trade and commerce, culture, art and architecture but also known for its revolutionary freedom movement, brave resistance and sacrifices. It had attracted foreign rulers who occupied Odisha; ruled the people of Odisha forcibly; enforced their laws and regulations on them; implemented oppressive revenue system and interfered in their traditional privileges and imposed new socio-economic and political order. Above activities of the foreign rulers especially during the regime of the British Government grew unrest among the masses including the tribals who were deeply humiliated by the oppressors. The British Government policies had

disintegrated the tribal society, culture and politics. To protect their interest, the tribals launched relentless rebellions and movements against the oppressors under the tribal leaders who challenged the Zamindars; formed alliances against the kings; conspired to overthrow the British and demonstrated ample courage while fighting caste supremacism. We can never forget the gems of the tribals who have glittered our politics, society and culture.

TRIBAL LEADERS OF ODISHA AND SOCIAL MOVEMENTS

Laxman Nayak: An eminent tribal leader, a civil rights activists, freedom fighter, a folk-hero and a cult figure among its tribals belonged to Bhuyan tribe of Odisha. This tribal leader of Koraput sacrificed his life on the gallows. His name would remain alive for ages to come in the history of

*Odisha.

Indian freedom struggle. India and Odisha in particular is proud of **Chakara Bisoi** of Ganjam and others who fought tooth and nail against the British Raj. **Bhima Bhoi**, the Kondh genius, was a poet of the first order for his poems that proclaim of self sacrifice and human brotherhood. Thus we are highly indebted to the tribals of Odisha for their contribution to the Indian society, politics and culture. Although the movements initially began on social and religious issues and against the oppression of the outsiders, in course of time, they merged with the national movement and with the non-tax campaign. However, most of the movements were ruthlessly suppressed by the government. The government forced the tribals to adopt British Policies and introduced protective administration in tribal areas. In this paper, the role of tribal leaders who had participated in different movements and result of these movements are highlighted.

A notable feature of freedom movement in Odisha was the participation of tribal people. Tribals provided the backbone of the resistance movement against British authority in Odisha as well as in other parts of India.

Initially they were not aware of the objectives of the freedom movement here but it had gradually picked up with the INC undertaking a membership drive in 1929, noted Gopinath Pradhan, a research scholar from Council for Analytical & Tribal Studies (COATS) at Koraput.

Radhakrushna Biswasray, a prominent leader of Koraput acted on the advice of Gopabandhu Choudhury and quit his government job to join the national movement and he led the salt satyagraha here in 1930 in the district. Radhakrushna Biswasray, Radhamohan Sahu and Sadasiva Tripathy played a significant role in Koraput district.

Laxman Naik and other tribal leaders played a significant role to popularise the Congress and Naik was made president of the primary Congress committee of his native place Tentuligumma. Constructive work played an important role in the Gandhian strategy of the Indian National Movement. It was primarily organized around the promotion of Khadi, spinning and village industries, National education, struggle against untouchability and social uplift of the Harijans and Tribals and boycott of foreign cloth and liquor. In December 1937, a training camp was inaugurated at Nuaput near Jeypore by Gopabandhu Choudhury, Pradhan said. Acharya Harihar Das, Godabarish Mishra and Gokulananda Mohanty visited Nuaput, stayed there and supervised the training programmes. These trained workers became the chief coordinators between the Orissa congress and the residence of Koraput. The Quit India Movement in Odisha developed in the later part of August 1942.

This revolution took a very remarkable form in the Koraput district. On 2 August, 1942, the district Congress Committee met in full session and decided to start a movement in the lines of civil disobedience under the guidance of Mahatma Gandhi. But, the government declared the Congress an unlawful organisation and arrested all leaders as a result of which the popular outburst in the district. Several movements like Umerkote and Raighar movement, Gunupur movement, Padwa Movement, Nandapur Movement, Nabarangpur Movement, Jeypore firing and Malkangiri movement raised their head.

In the history of India's freedom movement, Laxman Naik occupies a very distinguished place. He was among the few tribal leaders in the country to organise the tribal people for the revolt against the British Raj.

On 21 August 1942, Laxman Naik took the leadership to hoist the Tricolour atop the Mathili Police Station. The police lathi charged the mob and Laxman Naik was hit by a police on his face and was lying in a small drain in front of Police Station.

According to government report, five persons were killed and 17 injured in the police firing. In this incident the forest guard G. Ramaya was found dead. Laxman Naik was falsely accused of beating the forest guard to death. Laxman Naik was arrested and sent to Koraput district Jail and thereafter sent to Berhampur Jail from 16 November 1942 to 28 March 1943.

Tribal resistance movement was an integral part of Freedom movement of Odisha. In this historic movement the heroic role played by some distinguished tribal leaders like **Laxman Naik** of Koraput, **Ratan Naik** of Keonjhar, **Dora Bisoyee** and **Chakra Bisoyee** of Ghumsur and **Veer Surendra Sai** of Sambalpur. The tribal movements which started against British in 19th and 20th Century, were very significant in the history of modern Odisha. In the latter half of 19th Century they exhibited their active role in exposing socio-economic and political maladies of the Government. They directly challenged the authorities both on economic and political front in 20th Century. They rose into rebellion against the British Policies more violently than any other community.

The second decade of the 19th Century was very significant in the history of modern Odisha. Kandhas of the Ghumsur Zamindar started a vigorous revolt under the leadership of Dora Bisoyee and Chakra Bisoyee in 1835 which continued till 1866.

There are few important aspects of the tribal resistance movement which deserve mention. One is that the tribals have their own social, cultural and religious identity, their own taboos, make beliefs and peculiar compulsion of life style and therefore, any attempt of the administration of an alien rule to make an inroad into the tribal society by way of reformatory and correctional changes, however laudable, is bound to be resisted by the tribals with all their individual and collective might². This is what precisely happened to the *Khonds* of Ganjam during 1836 – 1861 who rose against what they considered to be a foreign incursion into some of their age – old rites like offering human sacrifice on turmeric fields to propitiate the goddess of mother earth, with the make belief that such offering caused redness of turmeric, female infanticide based more on deep rooted social prejudices against women rather than on the relative utility of male offerings vis-a-vis female ones, etc³. The *Khonds* of Ghumsur protested the British, as the latter tried to stop the heinous practices by the formers. The British could not dare to enter into the remote hilly areas of the *Khonds*, because, the latters launched guerilla warfare. The *Khond* Chief Dora Bisoyee was the main target of the English soldiers⁴. The British declared handsome reward to arrest the Chief. The *Khonds* killed a group of British troops, as the farmers were misbehaved and troubled by the latters. Chakra Bisoyee another tribal leader of Ghumsur dared to fight against the British troops. Although the British offered him pardon, if he would surrender but

there was no positive response⁵. The British could not capture Chakra, as he escaped from place to place such as Angul to Ghumsur, then Sonpur, Kandhmal, Ganjam and Parlakhemundi. There is a long and illustrious list of tribal resistance movement that took place in different parts of Odisha. But nothing could be more inspiring and edifying than the saga of heroic struggle and sacrifice of one single tribal leader of Koraput whose feats and exploits till today are without a parallel. This great tribal leader is noother than Laxman Naik of Koraput⁶. Laxman Naik was born on 22nd November, 1899 in Tentuligumma of Malkangiri. His father was Padlam Naik. He belonged to a *Bhuyan* tribe. He fought single-handed against the oppressive foreign rulers with consummate skill and rare passion and fervour of a fighter. He was the very fountain of grit, courage, and strength to countless followers and co-workers and shone by rare brilliance. He sacrificed all worldly comforts and did not bow down before the pressure of the British Imperialism⁷. This tribal hero was not well educated, yet full aware about the national movement. He was crying dyeing for the freedom of this country. He became more active, when Gandhi's message reached Koraput. He became an active member of the congress in enrolling as Four "*anna*" or "*charanna*" member of the Indian National Congress. He played a key role to popularize congress programme in Koraput. The people of Koraput and its surrounding areas like Malkanagiri, Tentulipada, accepted him as the real hero and devoted themselves for the cause of national Freedom. He promoted *Khadi* and made people aware of the congress plan of action. He took the charge of President of the Congress Primary Committee at Mathili in Koraput in 1942. He managed to mobilize the tribal people for various development works

like constructing roads, building bridges and establishing schools. He asked the villagers not to pay the taxes. During the Quit India Movement 1942, Laxman Naik was nominated to represent Mathili. He also offered individual *Satyagraha* with other seven friends in 1941 in Mathili Police Station area. He used non-violence as a main weapon against colonial power. The tribal people called him "Gandhi of Malkanagiri⁹". The Bonda tribes of this region were violent and belligerent and seized Mathili Police Station under the leadership of Laxman Naik. The angry demonstrators raised patriotic slogans. The police lathicharged on the innocent tribal people of this area and as Laxman Naik was their leader he was involved in a murder case of a Forest guard Gantta Ramayya. He along with his sons and Congress workers were sent to Koraput Jail. His trial was taken by the Additional Sessions Judge V. Ramnathan of Koraput session court. He sentenced Laxman Naik to death under Section 302 of I. P. C¹⁰.

He was then sent to Berhampur Jail for execution. At the break of dawn on March 29, 1943, by 5.30 a.m. Laxman Naik gallantly marched towards the gallows¹¹. In this way, this great tribal leader resisted against the British Imperialism and

sacrificed his life. The resistance movement led by Veer Surendra Sai of Sambalpur against the British imperialism is a landmark in the history of Freedom struggle of Odisha. He was born in the *Chauhan* family of Rajpur – Khinda. His father, Dharam Singh was descendant of Anirudha Sai, son of Madhekara Sai, the Fourth Chauhan *Raja* of Sambalpur. Surendra Sai had six brothers, namely Udant, Dhruva, Ujjala, Chhabila, Jajjala and Medini. All of them took active part in the rebellion¹².

The battle fought between **Veer Surendra Sai** and his compatriots on the one side and the agents of the British Imperialism on the other for nearly four decades falls in this category. It was an unequal battle fought by Surendra Sai and his brother Udanta Sai and a band of dedicated follower-fighters under the most adverse and excruciatingly painful circumstances. They did not have regular and trained armed force, they did not have the equipments and ammunition which the British had in their possession in abundance¹³. Besides, the British had the formidable authority of a paramount sovereign power at their command. As against this Surendra Sai and his brother Udant Sai had practically nothing. But they were master strategists and adept in the art of guerilla warfare. They were thoroughly conversant with the topography and geography

of Sambalpur and adjoining tracts. Almost all the tribal *Zamindars* and the village headmen of the district were on their side. The manner in which they escaped from Hazaribagh Jail after long seventeen years of detention, the fortitude with which they braved the hazards of intractable forests and hills with an extreme and inhospitable climate and the manner in which they withstood all the onslaughts unleashed by the British are matters of history¹⁴. In 1857, the *Sepoys* rose in Hazaribagh. They broke open the jails and liberated the prisoners including Surendra Sai and Udanta. After that, the Sai brothers proceeded to their native district to reorganize the tribal people and the *Zamindars*. Captain Leigh¹⁵, the senior Assistant Commissioner of Sambalpur, got alarmed at the approach of Surendra Sai and immediately brought some new forces from Cuttack to meet the situation. The rebellion of Sambalpur in 1857 was mainly a tribal rebellion. The tribal *Zamindars* of Ghens, Kolabira, Kodabaga, Lakhanpur, Loisinga, Laida, Patkhulanda, etc. had joined it espousing the cause of Surendra. They gave up their comforts and resorted to jungle life. Some of them lost their estates, some were killed in the battle, some were arrested and hanged and many were imprisoned. The tribal people were noted for their sacrifice and heroism. Surendra could challenge the mighty British Power relying solely on their strength and support. Surendra Sai organized the rebels into several groups. One group under Udanta stayed at Jharghaty Pass where they cut off the connection of Sambalpur with Hazaribagh and Ranchi. Another group under the Zamindar of Loisinga of Loisinga was in charge of Barhapati

Pass where they obstructed the road to Cuttack. The *Zamindar* of Ghens, Madho Singh, guarded the Singhora Pass on the road to Nagpur. Although Madho Singh, who had guarded Singhora Pass on the road to Nagpur, was hanged in the later part of 1858, but his 3 brave sons Kamal Singh, Nilambar Singh, and Khageswar Singh extended their support to Surendra and remained in charge of Debrigarh, Barhpati, Papanga, Paharsingira etc., the strategic centres of the rebels¹⁶. These strategic posts were further fortified by constructing high and thick walls with mud and boulders and advance guards were posted in each place to watch the movement of enemy. The walls were so built as to facilitate the troops from beyond the top most wall to correctly visualize the lower walls. All the trees lining the pass were removed so that there was no obstruction in spotting the enemy within the firing range. It bears eloquent testimony to the sound organizational ability.

The revolution of 1857-58 marked the end of the regime of the East India Company and the consequent assumption of the direct administration of this country by the Crown. It is a matter of pride and distinction that although the Indian rebellion rightly described by many as the First War of Indian Independence collapsed by the end of 1858, Veer Surendra Sai and his band of followers carried on the relentless fight against the imperialist forces with heavy odds. When the agents of British imperialism found that Surendra Sai was determined to fight them till the last in the face of all tribulations they in connivance with the Rulers of some of the ex-states like Sonepur, Rairakhol, Sundergarh, Balangir Patna and few *Zamindars* adopted a policy of isolation of Sai from the sympathy and support of these interests reinforced by a policy of coercion and torture of sympathizers of the rebels. As his supporters swelled in number he pursued his cause from 1858 to 1862, like Tantia Tope¹⁸, with a rugged tenacity. For the first time, he could successfully mobilize the resources of the tribal people of Sambalpur the *Gonds*, the *Sauras*, the *Birjhals* and others against the British. The master strategist in him always got the better of his adversaries and as a matter of fact, he often eluded and baffled them. It was simply incredible. Bereft of the placidity of home life and family life and living amidst the harshness of a hilly terrain, like Rana Pratap, Sai and his followers had also undergone untold suffering. His brother was killed in enemy action. But he was unruffled. In April 1861, Major Impey was appointed Deputy Commissioner of Sambalpur in place of Col. Forster. On studying the situation Impey believed that conciliatory measures and not military operations would only induce the rebels to surrender. The policy of Major Impey was at last crowned with success. Mitrabhanu, the only son of Surendra Sai, was the first man in the Sai family to lay down arms. In the summer of 1862, Veer Surendra Sai cried halt after nearly three and half decades of relentless fight. He alongwith his close followers was put under arrest two years after grant of amnesty. He was lodged in the Fort of *Asirgarh* on the Satpura hill range in Madhya Pradesh, where he breathed his last on 28th February 1884, after a long and agonizingly painful detention of 20 years¹⁹. History of Odisha has recorded scores of instances of such unequal battles that became inevitable when imperialist forces came out with their mad craze for acquiring other's territories through the use of brute force, destroying the sovereignty and freedom of free people and bringing in the process a holocaust to the lives of innumerable men, women and children. It is a battle between the evil designs of expansionism and the powerful instinct of self-presentation. The second aspect of the resistance movement could be attributed to immigration of a chain of resourceful peasants, money-lenders, and scribes from the coastal plains to the tribal hinterland and the process of forced assimilation of the tribals with the economic policies pursued by the immigrants such as improvement of land, introduction of improved agricultural practices in places of the primitive agricultural system pursued by tribals. Alienation of land ownership of tribal *ryots* and eviction of tribal tenants was the direct and inevitable outcome of this process of invasion of crafty and unscrupulous traders and moneylenders and prosperous peasants from the plains into tribal areas and forced induction of the tribals into their ways.

The most dominant characteristic of the tribal resistance movement was that it was essentially an uprising against the foreign rulers and in that sense could be constructed to be the precursor of the national liberation movement which took a definite shape and gathered momentum under the inspiring leadership of Mahatma Gandhi nearly one century later. The new policy introduced brought a radical change in the concept of land ownership. Tradition had conferred ownership or title to land on the basis of membership of a clan or tribe. The new policy put an end to this; it also put an end to attempts at land-grabbing by the leaders of a clan or tribe by force. *Prima facie* fair and equitable, this policy caused the replacement of the clan leader by a new elite as an intermediary between the tribesmen and the alien government; it destroyed the traditional balance between the tribals and non-tribals. It also destroyed the traditional tribal economy and shattered the bonds which knit the different segments of a tribal society together. Such an unfortunate situation could have been avoided, had the foreign rulers pursued an enlightened and equitable land reforms policy which would have assured land to the tiller and protected his proprietary rights while discouraging rack renting and absentee landlordism. Instead, the land revenue policy of the British Govt. based on frequent settlement and revision of rent provided a phillip to the process of tribal land alienation, pauperization of the tribal peasantry and resultant unrest and violence in the tribal society. If alienation of tribal lands in favour of non-tribal immigrants constituted an important factor of tribal unrest and uprising in the early part of the nineteenth century, it is no less today. It has no doubt enacted laudable legislative enactments like the Tribal Land Alienation Regulation of 1956 to arrest the process of grabbing of land of tribals by non – tribals but the process is going on unabated and often unnoticed. The crafty and resourceful members of the non – tribal community are responsible for such land – grabbing. Land alienation coupled with denial of a fair and equitable return on the products of their hard labour have been responsible for misery and privation of members of the scheduled tribe community on an increasing scale.

These injustices or deprivations could possibly have been compounded if industrialization of tribal areas on a scale or manner commensurate with their needs and conducive to their interests could have taken place by paying them just and fair compensation for acquisition of their land and by providing employment to them and their family members in the industrial establishments. Unfortunately the reverse has happened leading to the total detriment of social and economic interests of tribals. This can be illustrated with few examples. An area is given for prospecting and mining lease and the tribal loses his surface rights on the land he was used hitherto to cultivate for his own biological survival. His habitat is destroyed and he is pushed to the background to work under the mining contractor, under conditions Quinn to bondage. These contractors usurp the tribal property, outrage the modesty of tribal women and destroy the very foundation of a quiet and placid tribal existence. These above acts force peace-loving tribals of Odisha to raise the banner of revolt to assert their rights for a better and fairer deal in the hands of development agencies. Time has come and it is the duty of government, NGOs and all people of Odisha to make sincere, planned and intensive efforts to bring out silent transformation in the lives of the tribal community through peaceful and constitutional means and must not allow these “Children of God”²⁷ to be used as pawns in the hands of divisive and destructive forces.

CONCLUSION

To conclude all the tribal leaders of Odisha who took the commanding charge of tribal resistance movements united tribals, non-tribals and peasants against the oppressive policies of the British, the Hindu Kings and the Zamindars. These uprisings were the first organized assaults on the British, against their Kings as well as on the Caste Supremacists. They had no loyalty towards the kings and no interest in releasing the royal families from British domains. They organized economic war

against their oppressions. All the tribal leaders of these movements were the bravest and most courageous who had started struggle against land grabbers both foreign and domestic and against socio-economic injustice. However the legendary heroes who fought selflessly for the sake of their tribes, for their homeland and for the country are always remembered for their heroism, sacrifice and devotion. They were the chief architects of the tribal movements in Odisha and tried their best to protect, their people from exploitation. Their contributions have been recorded in the annals of history.

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Right to Religion and Environmental Protection

Dr. Rakesh Kumar*

INTRODUCTION

India is a welfare State governed by the Constitution which holds a place of pride in the hearts of its citizens. It lays a special emphasis on the protection and well-being of the weaker sections of the society and seeks to improve their economic and social status on the basis of Constitutional guarantees spelled out in its provisions. It recognizes that every person is entitled to a quality of life consistent with his human personality and the State has to provide at least the minimum conditions ensuring human dignity.¹ The right to life cannot be restricted to mere animal existence. It includes the right to live with human dignity and all that goes along with it, namely, the bare necessities of life such as adequate nutrition, clothing and shelter over the head and facilities of reading, writing and expressing oneself in diverse forms, freely movement and mixing and commingling with fellow human beings.²

PREAMBLE OF THE CONSTITUTION AND ENVIRONMENTAL PROTECTION

Constitution has not ignored the individual but has endeavored to harmonise the individual interest with the paramount interest of the community. The preamble is an epitome of those features set out in the the Constitution. It has the stamp of deep deliberation and is marked by precision.³ Our Constitution has shown profound concern for the workers and given them a pride of place in the new socio-economic order envisaged in the Preamble and the Directive Principles of State Policy. The Preamble declares that India shall be a Socialist Democratic Republic where social and economic justice will inform all the institutions of national life and there will be equality of status and opportunity for all and every endeavour shall be made to promote fraternity ensuring the dignity of the individual.⁴

The preamble of the Constitution of India envisions social justice as its arch to ensure life to be meaningful and livable with human dignity. The Constitution commands justice, liberty, equality and fraternity as supreme values to usher in the egalitarian social, economic and political democracy. Social justice, equality and dignity of person are corner stone of political democracy. The concept 'social justice' which the Constitution of India engrafted, consists of diverse principles essential for the orderly growth and development of personality of every citizen. "Social justice" is thus an integral part of "justice" in generic sense. Justice is the genus, of which social justice is one of its species. The aim of social justice is to attain substantial degree of social, economic and political equality which is the legitimate expectations.⁵ "Social Justice is one of the disciplines of justice and the discipline of justice relates to the society."⁶

Directive Principles of State Policy, Fundamental Duties and Environment Protection

The Directive Principles of State Policy enunciated in the Part-IV of the Indian Constitution is nothing but principles of 'Raj Dharma'. They are fundamental principles of Governance of the country means the path or duty of the government.⁷ Directive Principles are active obligations of State to secure social order to which social, economic, and political justice shall inform all the institutions of national life. The Directive Principles represent the socio-economic goals which our nation has to achieve.

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The Directive Principles of State Policy are not enforceable but nevertheless fundamental in the governance of the country and State is bound to apply the mandates contained therein while making law.⁸ Directive principles are intended to build the edifice of welfare State. Protection of environment is a matter of constitutional priority. Entitlement to a clean environment is one of the recognized basic human rights and human rights jurisprudence cannot be permitted to be thwarted by status quoism on the basis of unfounded apprehensions.

Initially, the Constitution contained no direct provision relating to environmental protection, But through the Constitution (Forty –second Amendment)Act, 1976, Article 48-A in the 'Directive Principal of State Policy' and a new Part IVA namely the 'Fundamental Duties' which contains Article 51-A (g), were inserted in the Constitution. Art.48-A provides that " the state shall endeavour to protect and improve the environment and to safeguard the forests and the wildlife of the country". Art. 51-A(g) says " It shall be duty of every citizen of India- to protect and improve the natural environment including forest., lakes, rivers and wildlife and to have compassion for living creatures". The Directive Principles of State Policy contained in Part IV of the constitution contains many useful provisions having close nexus and direct bearing on the environment protection.

Our judiciary while dealing with environmental issues has sought inspirations from the Directive Principles to resolve the complex problems. In *Sri Sachidanand Pandey v. State of W. B.*⁹ a plot of land to the extent of four acres out of the land of the Zoological Gardens, Calcutta was allotted by the Government to the Taj Groups of Hotels on lease for construction of Five Star Hotel. The final decision was challenged on the ground that hotel would disturb the migrant birds visiting the region. The Supreme Court approved the Government's decision as reasoned decision with observation:

"Where an administrative action or order of the Government involves the problem of environment and the Government is alive to the various considerations requiring thought and deliberation and has arrived at a conscious decision after taking them into account. It may not be for the Court to interfere in the absence of malafides. On the other hand, if relevant considerations are not borne in mind and irrelevant considerations influence the decision, the Court may interfere in order to prevent a likelihood of prejudice to the public.... When the Court is called upon to give effect to the Directive Principle and the fundamental duty, the Court is not to shrug its shoulders and say that priorities are a matter of policy so it is a matter for the policy-making authority. The least that the Court may do is to examine whether appropriate considerations are borne in mind and irrelevancies excluded. In appropriate cases, the Court may go further but how much further must depend on the circumstances of the case."¹⁰

Our Constitution contains no provision conferring right to wholesome environment within ambit of fundamental right. But the attempt of the Court should be to expand the reach and ambit of the fundamental rights rather than to attenuate their meanings and content by process of judicial constitution.¹¹ Principle of interpretation requires that constitutional provision must be construed, not in narrow and constricted sense, but in a wide and liberal manner so as to anticipate and take account of changing conditions and purposes so that the constitutional provision does not get atrophied or fossilized but remain flexible enough to meet the newly emerging problems and challenges, applied with greater force in relation to a fundamental right enacted by the Constitution. The Supreme Court for the first time recognised the right to wholesome environment in *Doon Quarrying case*¹² by observing that this is the first case of this kind in the country involving issues relating to environment and ecological balance and the question arising for consideration are of grave moment and significance not only to the people residing in the Mussoorie Hill range, but also in their implications to the welfare of generality of people living in the country.¹³

"Our national dimensions of human rights, right to life, pollution free air and water is guaranteed by the Constitution under Articles 21, 48-A and 51-A(g), it is the duty of the State to take effective steps to protect the guaranteed constitutional rights. These rights must be integrated and illumined by the evolving international dimensions and standards, having regard to our sovereignty... The laws so made may

provide for conditions for granting licence to Transnational Corporations, prescribing norms and standards for running industries on Indian soil ensuring the constitutional rights of our people relating to life, liberty, as well as safety to environment and ecology to enable the people to lead a healthy and clean life.”¹⁴

Right to Freedom of Religion and Environment Protection

The Constitution of India ensures “Liberty of thought, expression, belief, faith and worship”¹⁵ and thus, concept of secularism is implicit in it. Secularism is neither ante-God nor pro-God, as it treats alike the devout, agnostic and the atheist.¹⁶ It guarantees equality in the matter of all individuals and groups irrespective of their faith emphasizing that there is no religion of the State itself.¹⁷ Articles 25 and 26 should be read together. The right guaranteed by Article 25 is an individual right as distinguished from an organised body like the religious denomination or any section thereof dealt with by Article 26. Both these articles protect matters by religious doctrine or belief as well as acts done in pursuance of religion - rituals, observances, ceremonies, and mode of worship. These Articles embody the principles of religious tolerance and the secular nature of Indian democracy.¹⁸

Article 25 of the Constitution provides freedom of conscience and free profession, practice and propagation of religion which is subject to public order, morality, and health and to the other provisions of Part III of the Constitution. Article 26 confers certain rights on religious denominations. The word ‘denomination’ means a collection of individuals classed together under the same name; a religious sect or body having a common faith and organization and designated by a distinctive name. In order to constitute a religious denomination, therefore, three conditions are i.e. (a) it must be a collection of individuals who have a system of beliefs or doctrines which they regard as conducive to their spiritual well-being; (b) a common organisation; and (c) designation by a distinctive name. Every religious denomination has right to manage religious affairs which include every practice which is regarded by the community as part of its religion. Such practice must be essential and integral part of the said religion.¹⁹ A religious denomination enjoys complete autonomy in matter of laying down essential and integral part of the said religious organisation.²⁰

Judicial Approach

Religious freedom and environmental protection are two different concepts. The Constitution of India provides all citizen the right to freedom of speech and expression²¹ with the reasonable restrictions²². If this article is interpret with respect to religious freedom even no religion prescribed that prayer should be performed by disturbing the piece of other nor it preach that they should be through voice amplifiers or beating of drums. So, the right to religion is subject to “public order, morality and health” and no religion prescribes or preaches that prayers are required to be performed through voice amplifier or beating drums. It is well-settled that the right to propagate one’s religion means the right to communicate a person’s belief to another or to expose the tenets of that faith. In *Maulana Mufti Syed Md. Noorur Rehman Barkati V State of West Bengal*²³ the question was whether the right to propagate religion includes the right to use loudspeakers and microphones for the purpose of chanting religious tenets or religious texts and/or the indiscriminate use of microphones or loudspeakers during religious performance in the society? The Calcutta High Court observed:

“Azan is certainly an essential and integral part of Islam but use of microphones and loudspeakers are not an essential and an integral part. Microphone is a gift of technological ages, its adverse effect is well felt all over the world. It is not only a source of pollution but it is also a source which causes several health hazards. Traditionally and according to religions order, Azan has to be given by the Imam or the person in-charge of the Mosques through their own voice, this is sanctioned under religious order. Azan is not a form of propagation but it is an essential and integral part of religion to meet at the prayer from a call being made through Azan.”²⁴

In *Chairman, Guruvayur Devaswom Managing Committee, Guruvayur V Superintendent of Police, Thrissur*²⁵ the court allowed the use of horn type loudspeakers to control and regulate the movement of devotees and pilgrims during the Sabarimala season subject to the condition laid down by the Pollution Control Board. The Court preferred cone-type loudspeakers because its efficiency is limited to human speech. The only restriction stated was that loudspeakers should be maintained at a height of 3 meters above the ground level, because there would be no noise pollution in using the horn type loudspeaker so far as Guruvayur Temple premises was concerned.²⁶

In *Bijayananda Patra V District Magistrate, Cuttak*²⁷ the Orissa High Court held that Art. 25 of the Constitution protect the freedom of conscience and free profession, practice and propagation of religion. This right is made subject only to public order, morality and health. Since this right is subject to health, the noise caused by loudspeakers can be prohibited in the interest of health, but, then again, the nexus between noise and health will have to be judicially established. But these reasonable restrictions do not curtail the fundamental right of the people. But at this point, it would be pertinent to mention that right to use sound amplifiers or loud speaker is not fundamental right either within ambit of Art. 19(1)(a) or Art. 25 of the Constitution.

In *Church of God (Full Gospel) in India V. K. K. R. Majestic Colony Welfare Association*²⁸ the Supreme Court has frowned upon the noise pollution in the name of religion. A Bench, comprising Justice M. B. Shan and Justice S. N. Phukan, dismissed the appeal of Chennai based Church of God(Full Gospel) in India against the Madras High Court order that directed necessary action against vehicles honking loudly and making the church “to keep the noise level of speakers at a lower pitch. A residents’ welfare association had sought the high court direction to the local police and the pollution control authorities to restrain the church from using loudspeakers, drums and other sound producing instruments while reciting prayers. Such activities, the petition said, caused noise pollution and disturbance in the normal life. The question involved was that in a country having multiple religious and numerous communities or sects, whether a particular community or sect of that community can claim right to add to noise pollution on ground of religion? The Supreme Court held:

“Undisputedly no religion prescribes that prayers should be performed by disturbing the peace of others nor does it preach that they should be through voice-amplifiers or beating of drums. In our view, in a civilized society in the name of religion, activities which disturb old an infirm persons, students, or children having their sleep in the early hours or during day-time or other persons carrying on other activities cannot be permitted.”²⁹

The Important question rose before the court was - whether the appellants could be permitted to violate the provisions of the Environment (Protection) Act, 1986 and add to the noise pollution? The Court held that:

“..... to claim such a right itself would be unjustifiable. In these days, the problem of noise pollution has become more serious with the increasing trend towards industrialization, urbanization and modernization and is having many evil effects including danger to the health. It may cause interruption of sleep, affect communication, loss of efficiency, hearing loss or deafness, high blood pressure, depression, irritability, fatigue, gastro-intestinal problems, allergy, distraction, mental stress and annoyance etc. This also affects animals alike. The extent of damage depends upon the duration and the intensity of noise. Sometimes it leads to serious law and order problem. Further, in an organized society, rights are related with duties towards others including neighbors.”³⁰

Conclusion

Undoubtedly, right to the freedom of speech and expression is not absolute fundamental right. Nobody can create nuisance in the name of fundamental right. While one has a right to speak at

the same time other has a right to leisure. Nobody can be compelled to listen and nobody can claim that he has a right to make his voice trespass into the ears or mind of others. If anyone increases his volume of speech and that too with the assistance of artificial devices so as to compulsorily expose unwilling persons to hear a noise raised to unpleasant or obnoxious levels then the person speaking is violating the right of others.

In the absence of an adequate regulatory framework specific to noise pollution, the status quo has been determined partly by the interpretation of other laws. Important among these have been **Article 19** of the **Constitution**, which guarantees the fundamental right to freedom of speech and expression, and **Article 25**, which protects the free profession of one's religion. The use of a loudspeaker, or setting off fire-crackers, has assumed the status of a fundamental right by virtue of these two articles. Municipal bye-laws regulating their use have been enacted, but must take care not to limit the freedoms afforded by the articles. Also, unless the connections between noise and health are first judicially established, prohibitions against their use are difficult to pass. The judiciary has nonetheless weighed in on questions of noise pollution.

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Education and Human Rights

Shiv Bir Singh Yadav*

INTRODUCTION

Education confers dignity to a man. It is considered as a basic human right. 'Education' is the 'transmission of civilization'². It is "a debt due from present to future generations"³. It is the very foundation of good citizenship. Today, it is principal instrument in awakening the child to cultural value, in preparing him for later professional training and in helping him to adjust normally to his environment"⁴. That is why, it is said that a child is the future of the nation. A true democracy is one where education is universal; where people understand what is good for them and nation and know how to govern themselves. Education means knowledge and Knowledge itself is power. It is the bad rulers who are afraid of spread of education and knowledge among section of people. Hitler railing against universal education said: 'Universal education is the most corroding and disintegrating poison that liberalism has ever invented for its own destruction'⁵. Education is the most powerful weapon which can be used to change the world⁶. It is the most potent mechanism for the advancement of human beings. Education emancipates the human beings and leads to liberation from ignorance. Education is a constant process of development. It is said that in the 21st Century, 'a nation's ability to convert knowledge into wealth and social good through the process of innovation is going to determine its future.' Accordingly the 21st Century is termed as the 'century of knowledge'.

INTERNATIONAL ASPECT

The role of international organizations regarding the implementation of the right to education undertake the operational programmes assuring, access to education of refugees, migrants, minorities, indigenous people, women and the handicaps. India is under an obligation to implement such provisions. Thus, education should aim at promoting human rights by importing knowledge and skill among the people of the nation States. The right to education is codified in the Universal Declaration of Human Rights, 1948. The Preamble to the Universal Declaration of Human Rights states:

1. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.⁷
2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.⁸
3. Parents have a prior right to choose the kind of education that shall be given to their children.⁹

The same concept has been repeated in the UN Declaration of the Rights of the Child, which seeks to ensure right to free and compulsory education at least in the elementary stages and education to promote general culture, abilities, judgment and sense of responsibility to become a useful member of society and opportunity to recreation, and play to attain the same purpose as of education.

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International Convention on Economic, Social and Cultural Rights states

- “1. The States Parties to the present Covenant recognize the right of everyone to education. They agree that education shall (directed to the full development of the human personality and the sense of its dignity, and shall strengthen the respect for human rights and fundamental freedoms. They further agree that education shall enable all persons to participate effectively in a free society, promote understanding, tolerance and friendship among all nations and all racial, ethnic or religious groups and further the activities of the United Nations for the maintenance of peace.
2. The States Parties to the present Covenant recognize that, with a view to achieving the full realization of this right
- (a) Primary education shall be compulsory and available free to all;
 - (b) Secondary education in its different forms, including technical and vocational secondary education, shall be made generally available and accessible to all by every appropriate means, and in particular by the progressive introduction of free education;
 - (c) Higher education shall be made equally accessible to all, on the basis of capacity, by every appropriate means, and in particular by the progressive introduction of free education;
 - (d) Fundamental education shall be encouraged or intensified as far as possible for those persons who have not received or completed the whole period of their primary education;
 - (e) The development of a system of schools at all levels shall be actively pursued, an adequate fellowship system shall be established, and the material conditions of teaching staff shall be continuously improved.
3. The States Parties to the present Covenant undertake to have respect for the liberty of parents and, when applicable, legal guardians to choose for their children schools, other than those established by the public authorities, which conform to such minimum educational standards as may be laid down or approved by the State and to ensure the religious and moral education of their children in conformity with their own convictions.
4. No part of this article shall be construed so as to interfere with the liberty of individuals and bodies to establish and direct educational institutions, subject always to the observance of the principles set forth in paragraph 1 of this article and to the requirement that the education given in such institutions shall conform to such minimum standards as may be laid down by the State.”¹⁰

International Covenant on Civil and Political Rights (ICCPR), International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and Convention on the Rights of the Child (CRC). The international community reaffirmed the right to education at the World Education Forum in 2000. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has, therefore, placed the right to education at the affordable, given strong international commitment and resolve.

The constitution of UNESCO expresses the belief of its founders in full and equal educational opportunities for all”. The Dakar Framework for Action committed governments to strengthening national and regional mechanisms to ensure that EFA was on the agenda, inter alia, of every national legislature. It also emphasized that at the national level concrete measures are to be taken so that legal foundations of the right to education are strengthened in national systems. To make poverty history the international community realized that there is a need to provide financial support to develop poverty stricken states for complete removal of poverty. A target has been fixed to achieve this goal by the UN General Assembly and the UN Millennium Declaration was adopted in September 2006 in which

states agreed to Endeavour their best to eradicate poverty, promote human dignity and equality and thereby, achieve peace, democracy and environmental sustainability.⁷ In particular, the international community committed, in the Millennium Development Goals, to cut extreme poverty by half by 2015 and to banish extreme poverty by 2025.⁸ The international community has set a target that by 2015 children everywhere, both boys and girls, will be able to complete a full course of primary schooling.

Indian Perspectives

Having briefly analyzed the International Conventions, it is pertinent to refer to the provisions contained in the Constitution, which provides for the significance and need for education. The preamble of the Constitution promises to secure justice “social, economic and political” for the citizen. The preamble embodies the goal which the State has to achieve in order to establish social justice and to make the masses free in the positive sense. The objectives flowing from the preamble cannot be achieved and shall remain on paper unless the people in this country are educated. It is only the education which equips a citizen to participate in achieving the objectives enshrined in the preamble. The preamble assures the dignity of the individual and the Constitution seeks to achieve this object by guaranteeing fundamental rights to each individual.

The Founding Fathers of the nation, recognizing the importance and significance of the right to education, made it a constitutional goal, and placed it under Chapter-IV Directive Principles of State Policy of the Constitution of India. The Constitution in Chapter IV namely the Directive Principles State Policy recognizes an individual’s right to education although a citizen cannot enforce the provisions contained therein. Dr. Ambedkar said in that respect: “In enacting this Part of the Constitution, the Assembly is giving certain directions to the future legislature and the future executive to show in what manner they are to exercise the legislature and the executive power they will have. Surely it is not the intention to introduce in this Part these principles as mere pious declarations. It is the intention of the Assembly that in future both the legislature and the executive should not merely pay lip service to these principles but that they should be made the basis of all legislative and executive action that they may be taking hereafter in the matter of the governance of the country¹¹.”

The directive principles which are fundamental in the governance of the country cannot be isolated from the fundamental rights. Both are supplementary to each other¹². The State is under a constitutional obligation to create conditions in which the fundamental rights guaranteed to the individuals could be enjoyed. The important Articles are:

“38. State to secure a social order for the promotion of welfare of the people.- (1)The State shall strive to promote the Welfare of the people by securing and protecting as effectively as it may a social order in which justice, social, economic and political, shall inform all the institutions of the national life.

(2) The State shall, in particular, strive to minimize the inequalities in income, and endeavour to eliminate inequalities in status, facilities and opportunities, not only amongst individuals but also amongst groups of people residing in different areas or engaged in different vocations.”

“39. Certain principles of policy to be followed by the state.-The State shall, in particular, direct its policy towards securing-

(a) that the citizens, men and women equally, have the right to an adequate means to livelihood;

(b) that children are given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment.”

“41. Right to work, to education and to public assistance in certain cases.- The State shall, within the limits of its economic capacity and development, make effective provision for securing the right to work, to education and to public assistance in cases of unemployment, old age, sickness and disablement, and in other cases of underserved want.”

“45. Provision for free and compulsory education for children.- The State shall endeavour to provide, within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of fourteen years.”

Article 45 of the Constitution requires the State to make provisions within 10 years for free and compulsory education for all children until they complete the age of 14 years. Article 46 declares that the state shall promote with special care the educational and economic interests of the weaker sections of the people. By establishing the obligations of the State, the responsibility is vested in the State to formulate a programmes in order to achieve the constitutional goals.

“Right to life” is the compendious expression for all those rights which the Courts must enforce because they are basic to the dignified enjoyment of life. It extends to the full range of conduct which the individual is free to pursue. The right to education flows directly from right to life. It says:

“Protection of life and personal liberty.-No person shall be deprived of his life or personal liberty except according to procedure established by law.”¹³

The Government of India by Constitutional (86th Amendment Act) Act, 2002 had added a new provision in the Constitution which provides that “the state shall provide free and compulsory education to all children of the age of 6 to 14 years in such manner as the State may, by law determine”¹⁴. The right to life and the dignity¹⁵ of an individual cannot be assured unless it is accompanied by the right to education. The State Government is under an obligation to make endeavor to provide educational facilities at all levels to its citizens¹⁶. In *Bandhua Mukti Morcha vs. Union of India*¹⁷ Supreme Court held as under-“This right to live with human dignity enshrined in Article 21 derives its life breath from the Directive principles of State Policy and particularly clauses (e) and (f) of Article 39 and Articles 41 and 42 and at the least, therefore, it must include protection of the health and strength of workers men and women, and of the tender age of children against abuse, opportunities and facilities for children to develop in a healthy manner and in conditions of freedom and dignity, educational facilities, just and humane conditions of work and maternity relief. These are the minimum requirements which must exist in order to enable a person to live with human dignity and no State - neither the Central Government nor any State Government - has the right to take any action which will deprive a person of the enjoyment of these basic essential.”

CONCLUSION

No doubt Article 21 which declares that no person shall be of his life or personal, liberty except according to the procedure bed by law, is worded in negative terms, but it is now well established that Article 21 has both a negative and an affirmative dimension. It is also well bed that the provisions of Part-III and Part-IV are supplementary and complementary to each other.¹⁸

In order to strengthened Article 21A a new Article 51-A (k) was added which provides for those who are a parent or guardian to provide opportunities for education to his/her child or ward between the age of 6 and 14 years. On the basis of the Constitutional mandate provided under Articles 41, 45, 46, 21-A, 51-A(k) and various judgments of the Supreme Court, both the Government of India, as well as the Court has taken several steps to eradicate illiteracy, improve the quality of education. Some of these programmes are the National Technology Mission, District Primary Education Programme, and Nutrition Support for Primary Education, National Open School, Mid-Day Meal Scheme, Sarva Siksha Abhiyan and other state specific initiatives. Besides this, several

States have enacted legislations to provide free and compulsory primary education such as: The Right of Children to Free and Compulsory Education Act, 2009, The Kerala Education Act 1959, The Punjab Primary Education Act 1960, The Gujarat Compulsory Primary Education Act 1961, U. P. Basic Education Act 1972, Rajasthan Primary Education Act 1964, Tamil Nadu Right of Children to Free and Compulsory Education Rules, 2011 etc. are important legislations.

Illiteracy is one of the major problems faced by the developing nations. In Africa and South East Asia, it has been identified as a major cause of socio economic and ethical conflicts that frequently surfaced in the region. Therefore, literacy has now become part of the Human Right dialogue. Now most of the nations of the world have also accepted their obligation to provide at least free elementary education to their citizens. Education is thus, viewed as an integral part of national development and held as an instrument by which the skills and productive capacities are developed and endowed. Literacy forms the cornerstone for making the provision of equality of opportunity a reality.

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Some Bilinear and Bilateral Generating Functions for $G_n^{(u;h)}(x)$

A.K. Agarwal*

Agarwal and Agarwal [1] defined a new class of polynomials :

$$G_n^{(u;h)}(x) = G_n^{(u;h)}(x : (a); (b); (c) : (d); (e); (f))$$

$$= \frac{(-1)^n x^u \Gamma((d)u + (f)n + (e))}{\Gamma((a)u + (b)n + (c))} \Delta_{u,h}^n \frac{\Gamma((a)u + (b)n + (c)) x^u}{\Gamma((d)u + (e))}$$

where $\Delta_{u,h} f(u) = f(u+h) - f(u)$

and

$$\Gamma((a)u + (b)n + (c)) = \Gamma(a_1 u + b_1 n + c_1) \dots \Gamma(a_A u + b_A n + c_A),$$

which for particular values of parameters reduced to well known polynomials

and proved a number of properties of $G_n^{(u;h)}(x)$.

In the present note we derive some bilinear and bilateral generating functions for $G_n^{(u;h)}(x)$ and also discuss some of their special cases.

1. By use of $\Delta_{u,h} = E_{u,h} - 1$, $E_{u,h} f(u) = f(u+h)$

and definition of $G_n^{(u;h)}(x)$, we have

$$\sum_{n=0}^{\infty} \frac{t^n \Gamma((d)u + (e)) \Gamma((d')v + (e'))}{n! \Gamma((d)u + (f)n + (e)) \Gamma((d')v + (f')n + (e'))}$$

$$= G_n^{(u;h)}(x : (a); (b); (c) - (b)n : (d); (e); (f))$$

$$= G_n^{(v;k)}(y : (a'); (b'); (c') - (b')n : (d'); (e'); (f'))$$

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$$\begin{aligned}
 &= e^t \sum_{n=0}^{\infty} \frac{((a) u + (c))_{(a)hn} ((a') v + (c'))_{(a')kn}}{((d) u + (e))_{(d)hn} ((d') v + (e'))_{(d')kn}} \cdot \frac{(x^h y^k t)^n}{n!} \\
 &\quad \cdot \sum_{r=0}^{\infty} \frac{((a) u + (a) hn + (c))_{(a)hr}}{((d) u + (d) hn + (e))_{(d)hr}} \cdot \frac{(-tx^h)^r}{r!} \\
 &\quad \cdot \sum_{s=0}^{\infty} \frac{((a') v + (a') kn + (c'))_{(a')ks}}{((d') v + (d') kn + (e'))_{(d')ks}} \cdot \frac{(-ty^k)^s}{s!} \\
 &= e^t \sum_{n=0}^{\infty} \frac{\infty((a) u + (c))_{(a)hn} ((a') v + (c'))_{(a')kn}}{((d) u + (e))_{(d)hn} ((d') v + (e'))_{(d')kn}} \cdot \frac{(x^h y^k t)^n}{n!} \\
 &{}_{(a_1 + \dots + a_A)h} F_{(d_1 + \dots + d_D)h} \left[\begin{matrix} \Delta((a) h; (a) u + (a) hn + (c)); \\ \Delta((d) h; (d) u + (d) hn + (e)); \end{matrix} \quad - Htx^h \right] \\
 &{}_{(a'_1 + \dots + a'_A)k} F_{(d'_1 + \dots + d'_D)k} \left[\begin{matrix} \Delta((a') k; (a') v + (a') kn + (c')); \\ \Delta((d') k; (d') v + (d') kn + (e')); \end{matrix} \quad - Kty^k \right] \quad (1.1)
 \end{aligned}$$

where $\Delta(m; v)$ is taken to abbreviate the sequence of m factors $v/m, (v + 1)/m, \dots, (v + m - 1) / m ; m \geq 1$.

$$H = \frac{a_1^{a_1 h} \dots a_A^{a_A h} \cdot h^{(a_1 + \dots + a_A)h - (d_1 + \dots + d_D)h}}{d_1^{d_1 h} \dots d_D^{d_D h}} \quad (1.2)$$

and

$$K = \frac{a_1^{a_1 k} \dots a_{A'}^{a_{A'} k} \cdot k^{(a_1 + \dots + a_{A'})k - (d_1 + \dots + d_{D'})k}}{d_1^{d_1 k} \dots d_{D'}^{d_{D'} k}}$$

2. Starting from the definition of $G_n^{(u; h)}(x)$ and using well known formula

$$\Delta_{u, h}^n f(u) = \sum_{r=0}^n (-)^{n-r} \binom{n}{r} f(u + rh); \tag{2.1}$$

after some simplification, we get the following bilateral generating function

$$\begin{aligned} & \sum_{n=0}^{\infty} \frac{(w)_n G_n^{(u; h)}(x : (a); (b); (c) - (b) n : (d); (e); (f))}{n | \Gamma((d) u + (f) n + (e)) \Gamma((d') v + (f') n + (e'))} \\ & \cdot G_n^{(v; k)}(y : (a'); (b'); (c') - (b') n : (d'); (e'); (f')) t^n \\ & = \frac{(1 - t)^{-w}}{\Gamma((d) u + (e)) \Gamma((d') + v (e'))} F^{(3)} \left[\begin{matrix} w : : \Delta((a) h; (a) u + (c)); \\ - : : \Delta((d) h; (d) u + (e)); \\ - ; \Delta((a')k; (a') v + (c'); - ; - ; - ; \\ - ; \Delta((d')k; (d') v + (e'); - ; - ; - ; \end{matrix} \frac{HKtx^{hy^k}}{1 - t}, \frac{Htx^h}{t - 1}, \frac{Kty^k}{t - 1} \right] \tag{2.2} \end{aligned}$$

3. Multiplying both side of generating relation [1]

$$\begin{aligned} & \sum_{n=0}^{\infty} \frac{t^n \Gamma((d) u + (e)) e^{-t}}{n | \Gamma((d) u + (f)n + (e))} G_n^{(u; h)}(x : (a); (b); (c) - (b) n : (d); (e); (f)) \\ & = (a_1 + \dots + a_\lambda)h F_{(d_1 + \dots + d_\nu)h} \left[\begin{matrix} \Delta((a) h; (a) u + (c)); \\ \Delta((d) h; (d) u + (e)); \end{matrix} - Htx^h \right] \tag{3.1} \end{aligned}$$

by $\Gamma((p) + v) / \Gamma((q) + v)$ and replacing t by tE_v ,

and after some simplification putting $v = 0$, gives

$$P + (a_1 + \dots + a_\lambda)h F_{Q + (d_1 + \dots + d_\nu)h} \left[\begin{matrix} (p), \Delta((a)h; (a) u + (c)); \\ (q), \Delta((d)h; (d) u + (e)); \end{matrix} - Htx^h \right]$$

$$= \frac{\Gamma((d)u + (e))((p))_n t^n}{\Gamma((d)u + (f))n + (e)((q))_n} {}_pF_Q \left[\begin{matrix} (p) + n; \\ (q) + n; \end{matrix} -t \right]$$

$$\cdot G_n^{(u;h)}(x : (a); (b); (c) - (b)n : (d); (e); (f)). \tag{3.2}$$

In particular, if in (3.2) we replace (p) by p , $\Delta((d)h; (d)u + (e); (q))$ by $\Delta((a)h; (a)u + (c))$ and Ht by t , we obtain an interesting relation

$$(1 + x^{ht})^{-p} = \sum_{n=0}^{\infty} \frac{\Gamma((d)u + (d)hn + (e))(p)_n t^n}{n! \Gamma((d)u + (f))n + (e)((a)u + (c))_{(a)hn}}$$

$$\cdot G_n^{(u;h)}(x : (a); (b); (c) - (b)n : (d); (e); (f))$$

$$\cdot {}_{1+(d_1+\dots+d_\lambda)h}F_{(a_1+\dots+a_\lambda)h} \left[\begin{matrix} p + n, \Delta((d)h; (d)u + (d)hn + (e)); \\ \Delta((a)h; (a)u + (a)hn + (c)); \end{matrix} \frac{-t}{H} \right] \tag{3.3}$$

4. **Particular Cases :** By giving different values to parameters in the above results, a number of known and unknown bilinear and bilateral generating functions of well known polynomials can be obtained. Here we shall quote only a few of them :

(i) The substituting in (1.1), (2.2), (3.2) and (3.3)

$$A = D = 1, a_1 = 0, b_1 = 0, c_1 = d_1 = e_1 = f_1 = 1, u = a, h = 1,$$

$$A' = D' = 1, a_1' = b_1' = 0, c_1' = d_1' = e_1' = f_1' = 1, v = b \text{ and } k = 1,$$

we get following bilinear and bilateral generating relations involving

Laguerre polynomials :

$$\sum_{n=0}^{\infty} \frac{n!}{(a+1)_n (b+1)_n} L_n^{(a)}(x) L_n^{(b)}(y) t^n$$

$$= e^t \sum_{n=0}^{\infty} \frac{(xyt)^n}{n | (a + 1)_n (b + 1)_n} {}_0F_1 \left[\begin{matrix} - ; \\ a + n + 1; \end{matrix} -xt \right] {}_0F_1 \left[\begin{matrix} - ; \\ b + n + 1; \end{matrix} -yt \right]$$

[2, (15), p.134], (4.1)

$$\sum_{n=0}^{\infty} \frac{n | (w)_n}{(a + 1)_n (b + 1)_n} L_n^{(a)}(x) L_n^{(b)}(y) t^n$$

$$= (1 - t)^{-w} F^{(3)} \left[\begin{matrix} w :: - ; - ; - : - ; - ; - ; \frac{xyt}{1-t}, \frac{xt}{t-1}, \frac{yt}{t-1} \\ - :: a + 1 ; - ; b + 1 : - ; - ; - ; \end{matrix} \right] \quad (4.2)$$

[2, (9), p.132],

$$\sum_{n=0}^{\infty} \frac{((p))_n t^n}{((q))_n (a + 1)_n} L_n^{(a)}(x) {}_pF_q \left[\begin{matrix} (p) + n; \\ (q) + n; \end{matrix} -t \right]$$

$$= {}_pF_{q+1} \left[\begin{matrix} (p); \\ a + 1, (q); \end{matrix} -xt \right] \quad (4.3)$$

and

$$(1 + xt)^p = \sum_{n=0}^{\infty} (p)_n L_n^{(a)}(x) t^n {}_2F_0(a + n + 1, p + n; - ; - t). \quad (4.4)$$

(ii) Now by taking $A = D = A' = D' = 1, a_1 = b_1 = d_1 = e_1 = f_1 = a_1' = b_1' = d_1' = f_1' = h = k = 1,$
 $c_1 = b + 1, c_1' = d + 1, u = a, v = c, x = (1 - x) / 2, y = (1 - y) / 2$ in above equations
 (1.1), (2.2), (3.2) and (3.3), we get following bilinear and bilateral generating
 relations involving Jacobi polynomials :

$$\sum_{n=0}^{\infty} \frac{n | t^n}{(a + 1)_n (b + 1)_n} P_n^{(a; b-n)}(x) P_n^{(c; d-n)}(y)$$

$$= e^t \sum_{n=0}^{\infty} \frac{(a+b+1)_n (c+d+1)_n}{(a+1)_n (c+1)_n} \left[\frac{(1-x)(1-y)t}{4} \right]^n$$

$${}_1F_1 \left[\begin{matrix} a+b+n+1; & t(x-1) \\ a+n+1; & 2 \end{matrix} \right] {}_1F_1 \left[\begin{matrix} c+d+n+1; & t(y-1) \\ c+n+1; & 2 \end{matrix} \right], \quad (4.5)$$

$$\sum_{n=0}^{\infty} \frac{n! (w)_n t^n}{(a+1)_n (b+1)_n} P_n^{(a; b-n)}(x) P_n^{(c; d-n)}(y) = (1-t)^{-w}$$

$${}_3F_3 \left[\begin{matrix} w :: a+b+1; -; c+d+1 : -; -; -; t(1-x)(1-y) & t(1-x) & t(1-y) \\ - :: a+1; -; c+1 : -; -; -; & 4(1-t) & 2(t-1) & 2(t-1) \end{matrix} \right]$$

(4.6)

$$\sum_{n=0}^{\infty} \frac{((p))_n t^n}{(a+1)_n ((q))_n} P_n^{(a; b-n)}(x) {}_pF_q \left[\begin{matrix} (p) + n; & -t \\ (q) + n; \end{matrix} \right]$$

$$= {}_{p+1}F_{q+1} \left[\begin{matrix} a+b+1, (p); & t(x-1) \\ a+1, (q); & 2 \end{matrix} \right] \quad (4.7)$$

and

$$\left[1 + \frac{(1-x)t}{2} \right]^{-p} = \sum_{n=0}^{\infty} \frac{((p))_n t^n}{(a+b+1)_n} P_n^{(a; b-n)}(x) {}_2F_1 \left[\begin{matrix} p+n, a+n+1; & -t \\ a+b+n+1; \end{matrix} \right]$$

(4.8)

(iii) If in (1.1) and (2.2) $A=D=A'=D'=1$, $a_1=0$, $b_1=0$, $c_1=d_1=e_1=f_1=h=a_1'=b_1'=e_1'=f_1'=k=1$, $c_1'=c+1$, $u=a$, $v=b$ and $y=(1-y)/2$, then we can easily show that

$$\sum_{n=0}^{\infty} \frac{n! t^n}{(a+1)_n (b+1)_n} L_n^{(a)}(x) P_n^{(b; c-n)}(y) = e^t \sum_{n=0}^{\infty} \frac{(b+c+1)_n}{(a+1)_n (b+1)_n n!}$$

$$\left[\frac{x(1-y)t}{2} \right] {}_0F_1 \left[\begin{matrix} -; \\ a+n+1; \end{matrix} -xt \right] {}_1F_1 \left[\begin{matrix} b+c+n+1; t(y-1) \\ b+n+1; \end{matrix} \frac{t(y-1)}{2} \right] \quad (4.9)$$

and

$$\sum_{n=0}^{\infty} \frac{n! (w)_n}{(a+1)_n (b+1)_n} L_n^{(a)}(x) P_n^{(b; c-n)}(y) t^n = (1-t)^{-w}$$

$$.F^{(3)} \left[\begin{matrix} w : -; -; b+c+1 : -; -; -; tx(1-y) & tx & t(1-y) \\ - : a+1; -; b+1 : -; -; -; 2(1-t) & t-1 & 2(t-1) \end{matrix} \right] \quad (4.10)$$

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Developing a Research Tool to Measure the Attitude Towards Mathematics of Primary School Students

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ABSTRACT

The main aim of this article is to develop the research tool to measure the level of attitude towards mathematics among the primary school students. So many attitude towards mathematics tools are available at outside but all these are useful to secondary school students only, for this reason the attitude towards mathematics tool for primary school students were prepared and validated by the research supervisor and researcher. The sample consists of 150 primary school students were selected for the investigation. The researcher has used normative survey method for the study. To improve the learning of mathematics, it is important to study student's attitudes towards mathematics. For preparing attitude towards mathematics scale, first step was to identify the different situations in the class room environment.

Keywords: attitude towards mathematics, primary school students, learning of mathematics

INTRODUCTION

Various studies discuss the definition of attitude. Allport (1935) outlined perspective as a "mental and neural state of readiness, union through expertise, exerting a directive or dynamic influence upon the individual's response to any or all objects and situations with which it is related". This definition implies that an attitude is a response to certain experience and is formed through life's experiences. Allport's definition denotes the roles that experiences play in the shaping of attitudes. Thus one's repertoire of experiences can be regarded as the basic building blocks of his/her attitude. Thus Allport's view of the function of experience in attitude formation makes his definition immanent for this investigation. Eagly and Chaiken (1993) outlined perspective as "A psychological tendency that's expressed by evaluating a selected entity with some extent of favour or disfavour". This definition appears to focus on the manifestation of attitude. Philips (2003) stated that attitude is protean and based on individuals' beliefs, feelings and values. Thompson (1993) outlined perspective as a pattern perceptions developed through one's reaction with the surroundings. The on top of definitions imply that perspective represents one's feeling and reactions to things. Several studies deal with learners' attitudes towards mathematics. Choudhury & Das (2012), Mahanta, (2014) they show that perspective to arithmetic is littered with numerous factors like role stereotyping and beliefs & perceptions concerning arithmetic and have an effect on study habits of students.

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OBJECTIVE

- To develop a research tool to measure the attitude towards mathematics of primary school students

DEVELOPMENT OF THE TOOL- ATTITUDE TOWARDS MATHEMATICS SCALE (ATMS)

The tool ATMS was developed and standardized by the researcher. While developing the tool, researcher had taken care in each step. Based on the objectives of the study the tool was constructed.

Construction of the Tool

Keeping in view of the objectives and nature of the study, the items for tool - ATMS for the students were constructed. Initially there were 50 items prepared by the researcher. It was revised and evaluated by the experts. The initial draft of the tool was given to six experts in the field of education. Experts were requested to critical evaluation of the tool. Researcher edited and corrected the tool after the evaluation. There were 24 items made for the second draft of the tool. It was carried out with pilot testing.

Description of the Tool

Researcher developed a tool - Attitude towards Mathematics for the students. It was constructed and standardized by the researcher to study the attitude towards mathematics among primary school students. The researcher reviewed a lot of literature and consulted experts to frame the items in the tool. It consists of 24 items, including 15 positive statements and 9 negative statements. It is shown in the table-1

Table-1: shows the positive and negative statements included in the tool

S. No	Statement	Items	Number of items
1	Positive statements	1, 3,5,8,9,10,11,13,14,15,16,18,21,22,24	15
2	Negative Statements	2, 4, 6, 7, 12, 17, 19,20,23.	9
		Total	24

Each item is anchored by 3 ratings such as Agree (A), Undecided (UD), Disagree (DA). The tool-ATMS for students comprised with 3 dimensions such as 3 Dimension wise items included in the tool is shown in the table-2

Table-2: Shows the dimension with item numbers in the tool-ATMS.

S. No	Dimension	Item. Nos.	Number of items
1	Interests	1,2,3,4,5,6,7,8,9,10	10
2	Usefulness	11,12,13,14,15,16,17,18.	8
3	Anxiety	19, 20,21,22,23,24.	6
		Total	24

PILOT STUDY

For first tryout, the tool was administered on 10 students from 5 different schools. This tryout helped the researcher in method of administration and in correcting the items. The tool with 24 items was administered to 150 primary school students for second tryout. This tryout was considered for item analysis.

ITEM ANALYSIS

In order to determine the discriminative power and significance of items for the scale the Chi-Square values for each of the statements were calculated. The items Chi-Square values ≤ 13.82 at the 0.001 level for $df = 2$ were discarded, others were retained. The details of the chi-square values of each item is presented in the table-3

(Description: Chi-square value table value with $df = 2 = 13.82$ at 0.001 ; The calculated value less than the table value were deleted (Deleted items: four only: 12, 17, 18, and 20))

Table-3: Shows the chi-square values of the each item of ATMS

Item	Agree	UD	Disagree	Chi-Square	Remarks
ATMS1_1	16	16	18	138.720	Retained
ATMS 1_2	39	49	62	55.067	Retained
ATMS 1_3	28	51	71	18.520	Retained
ATMS 1_4	38	31	81	29.320	Retained
ATMS 1_5	27	39	84	36.120	Retained
ATMS 1_6	44	23	83	37.080	Retained
ATMS 1_7	60	21	69	26.040	Retained
ATMS 1_8	18	32	100	76.960	Retained
ATMS 1_9	27	47	76	24.280	Retained
ATMS 1_10	13	43	94	67.080	Retained
ATMS 2_11	25	27	98	69.160	Retained
ATMS 2_12	51	42	57	2.280	deleted
ATMS 2_13	20	37	93	58.360	Retained
ATMS 2_14	15	42	93	60.176	Retained
ATMS 2_15	29	26	95	60.840	Retained
ATMS 2_16	33	27	90	109.733	Retained
ATMS 2_17	38	45	67	9.160	deleted
ATMS 2_18	42	42	66	7.680	deleted
ATMS 3_19	72	19	59	30.520	Retained
ATMS 3_20	36	63	51	7.320	deleted

Item	Agree	UD	Disagree	Chi-Square	Remarks
ATMS 3_21	29	39	82	31.720	Retained
ATMS 3_22	15	45	90	57.000	Retained
ATMS 3_23	39	30	81	29.640	Retained
ATMS 3_24	26	56	68	18.720	Retained

SCORING PROCEDURE

The respondent is provided with three alternative to give his or her response on point scale agree undecided and disagree with numerical weights 3, 2, 1 respectively for positive statements. It is reversed for the negative statements. High score in attitude towards mathematics indicates good attitudes towards mathematics. Low score in attitude towards mathematics indicates poor attitude towards mathematics.

Final Draft of the Tool

All the 24 scale items of ATMS were analyzed with Chi-square values. The item, which is significant at the 0.001 level were retained. Those items, which were not significant at 0.001 levels discarded. Finally 20 items were retained and 4 were deleted (items 12, 17, 18, and 20) in this analysis. Dimension wise deleted and retained items are shown in the table-4

Table-4: Shows dimension wise deleted and retained items in item analysis of ATMS

S. No	Dimension	Item. Nos.	Deleted items	Retained items
1	Interests	1,2,3,4,5,6,7,8,9,10	0	1,2,3,4,5,6,7,8,9,10
2	Usefulness	11,12,13,14,15,16,17,18.	12,17,18	11,13,14,15,16
3	Anxiety	19, 20,21,22,23,24.	20	19,21,22,23,24

Standardization of the Tool

The total 20 items constituted the final form of the tool ATMS for students. It was further standardized by the validation of the test by establishing reliability and validity. The tool was administered on a sample of 150 for the standardization.

Reliability

To establish the reliability of the tool, researcher used Split half method and Cronbach alpha method. Researcher administered the tool on a sample of 150 students. The methods and reliability coefficient of the tool-ATMS is shown in the table-5.

Table-5: Reliability Statistics of the tool - ATMS

S. NO	Methods of the reliability	reliability coefficient	No of Items	Remarks
1	Cronbach alpha	0.696	20	Good
2	Split half method	0.662	20	Good

Table-5 reveals that the reliability coefficient of the tool according to test-retest method is 0.696, which indicates the good reliability of the tool; the same table-5 shows the reliability coefficient according to Cronbach's method 0.662, which indicates good reliability of the tool.

Validity of the Tool

Validity of the tool was established by determining its coefficient (Validity= square root of Reliability) i.e. 0.83, which indicates good validity. Item validity of the tool was also established by using item total correlation matrix.

CONCLUSION

This Attitude towards Mathematics tool focuses on collecting information of primary school students and also identifies the level of Attitude towards Mathematics among the primary school students. Attitude towards Mathematics plays a very important role in academic performance of students. Students begin to develop an attitude towards Mathematics as soon as they are exposed to Mathematics; These attitudes can have an effect on students learning of mathematics.

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Subtraction of Integers: A Learning Process

Dr. S.K. Samsul Alam*

ABSTRACT

The crucial concept: integers in number system has been introduced at the upper primary level (class-VI to VIII) in our country. But it is a matter of pity that a large number of learners face the troubles to learn the basic ideas of integers. To overcome this unwanted situation, activity-oriented learning is needed to develop the learners' natural process of reasoning on it. So, the researcher has already emphasized to present this crucial idea through activity-oriented learning. He has already done few works in this direction.

In view of this, in this paper, five activities on 'subtraction of integers' have been developed and presented sequentially for the target group i.e. the learners, considering their ages, grades and ability levels. The collection of text books, analysis of text books/text book scanning, developing the activities, sequencing of activities, sequencing of the steps of the activities and experts' opinions are the materials and methods which have been adopted for this study. Two activities out of five have partially been considered in the prescribed text books of mathematics in West Bengal Board of Secondary Education (W. B. B. S. E.) and one by National Council of Educational Research and Training (N. C. E. R. T.). But these activities have also been developed by the researcher in a new look. All these activities will definitely help the learners to get the relish for learning the 'subtraction of integers'.

Keywords: Subtraction of integers, upper primary level, activity-oriented learning, calibrated beaker, peer group, developing the activity, text book scanning, experts' opinions.

2010 AMS Mathematics Subject Classification: 97A99, 97B50, 97C70, 97D40, 97H20

INTRODUCTION

Today's civilization is a civilization of science and technology and mathematics is the root of its. Again, mathematics is built on number system. Considering the importance of the subject (mathematics), it has been introduced at the beginning of upper primary level i.e. class-VI at the age of 11-12 years in our country. But it is a matter of pity that the learners' performance in mathematics at school level is poor. Even, the performance in integer is worrisome. As a result, a phobia towards mathematics among the learners is being started on account of it. Now, the question is-why do the learners face the troubles to achieve the learning competencies on mathematics as well as integer? Many causes are responsible for the above-mentioned unwanted situation. Improper teaching strategy is one of them. Research has documented that activity-based learning strategy is more effective than all other strategies for learning mathematics at school level. For adopting this strategy, more activities are needed. Although, at present, some activities have been introduced in the prescribed text books of mathematics in West Bengal Board of Secondary Education and National Council of Educational Research and Training both. But

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these are not sufficient according to the target population/group i.e. the learners and their ages, grades and ability levels.

Not only that these should be from real life activities as well as natural facts and phenomena. But, the deficiency of it in the text books is appeared.

In this context, the author has already done some works on several major concepts of mathematics [26-34]. Even, the activities on acquaintance with integers, addition of integers, multiplication of integers, division of integers have been done [25-27, 30-34]. But the activities on 'subtraction of integers' have not yet been done by the researcher.

Therefore, in this paper, five activities on 'subtraction of integers' have been developed and presented sequentially which will help the learners to get the relish for learning the same.

OBJECTIVE OF THE STUDY

The aim of this study is to develop various types of learning activities on 'subtraction of integers'.

MATERIALS AND METHODS

Materials and methods have been discussed below.

Collection of Text Books

The prescribed text books of mathematics from class-I to class-X standard of West Bengal Board of Primary Education (W. B. B. P. E.), W. B. B. S. E. and N. C. E. R. T. and other available books from the market were collected at first. [1-5, 8-11, 13-22, 36]

Analysis of Text Books/Text Book Scanning

These books were analysed to identify the activities of the 'subtraction of integers' in algebra.

Developing the Activities

The activities for verifying the 'subtraction of integers' were developed considering the psychological order of learners and the learners' ability level.

Sequencing of Activities

The developed activities were sequenced keeping in view the logical order of the subject matter and the psychological order of learners. The gaps in activities if any detected by the researcher were filled in by him at the initial stage.

Experts' Opinions

Experts' opinions were taken on the developed activities.

Finally, the sequential form of the activities on 'subtraction of integers' incorporating the experts' opinion was developed.

Salient Points of the Study

Learners will acquire the knowledge about the 'subtraction of integers' through their active participation with the real-life situation and natural facts. Here, the 'teacher' will play a role as a 'facilitator'.

Here five activities for 'subtraction of integers' have sequentially been developed by the researcher. Each activity has two stages i.e. Stage-I and Stage-II. Each stage-II of each activity has four parts i.e. Part-1, Part-2, Part-3 & Part-4. Here, all activities on 'subtraction of integers' have sequentially been presented with illustrations of last part i.e. Part-4 only of each activity due to economy of space.

SUBTRACTION OF INTEGERS

Subtraction of integers using the concept of more or less.

Activity-1: Subtraction of two integers using two wooden/plastic scale of numbers.

Requirements: Two wooden/plastic scale of numbers, exercise book, pen/pencil.

Mode: Pair group. **Strategy:** Learning through activities.

Objective of the development: Cognitive development.

Stage-I: The facilitator will do the following activity involving the learners.

1. The facilitator will ask the learners what will be the result if 3 is subtracted from 8.

Stage-II: The learners will do the following activities with the help of facilitator, if needed.

Part-1

Each pair group:

1. Takes two wooden/plastic scale of numbers.
2. Subtracts (+3) from (+8) i.e. $(+8) - (+3)$ using these wooden/plastic scales and following these directions.
 - i. Fixes the first scale.
 - ii. Sets '0' of the second scale at (+3) of the first scale.
 - iii. Finds the number of the second scale at (+8) of the first scale.
 - iv. Tells the result.
3. Writes the result in mathematical form.

Part-2

Each pair group:

1. Takes two wooden/plastic scale of numbers.
2. Subtracts (-3) from (+8) i.e. $(+8) - (-3)$ using these wooden/plastic scales and following these directions.
 - i. Fixes the first scale.
 - ii. Sets '0' of the second scale at (-3) of the first scale.
 - iii. Finds the number of the second scale at (+8) of the first scale.
 - iv. Tells the result.
3. Writes the result in mathematical form.

Part-3

Each pair group:

1. Takes two wooden/plastic scale of numbers.
2. Subtracts (+3) from (-8) i.e. $(-8) - (+3)$ using these wooden/plastic scales and following these directions.

- i. Fixes the first scale.
 - ii. Sets '0' of the second scale at (+3) of the first scale.
 - iii. Finds the number of the second scale at (-8) of the first scale.
 - iv. Tells the result.
3. Writes the result in mathematical form.

Part-4

Each pair group:

1. Takes two wooden/plastic scale of numbers.
2. Subtracts (-3) from (-8) i.e. $(-8) - (-3)$ using these wooden/plastic scales and following these directions.
 - i. Fixes the first scale.
 - ii. Sets '0' of the second scale at (-3) of the first scale.
 - iii. Finds the number of the second scale at (-8) of the first scale.
 - iv. Tells the result.
3. Writes the result in mathematical form.

THE WORK IS ILLUSTRATED BELOW

Part-4

Each pair group subtracts (-3) from (-8) i.e. $(-8) - (-3)$ using two wooden/plastic scale of numbers and as per direction of part-4 of stage-II which is furnished below in figure-1.

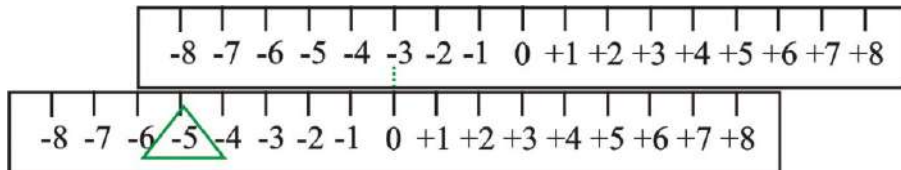


Fig.-1: Subtraction (-3) from (-8) using two wooden/plastic scale of number line. The subtraction (-3) from (-8) is (-5). $-(-8) - (-3) = (-5)$

Subtraction of integers using the concept of additive inverse

Activity-2: Subtraction of integers using calibrated beaker.

Requirements: A cup, a calibrated beaker, a water filled bucket, pen/pencil, exercise book.

Mode: Pair group. **Strategy:** Learning through activities.

Objective of the development: Cognitive development.

Activity Follows

Stage-I: The facilitator will do the following activities involving the learners.

1. The facilitator will ask the learners what will be the result if 3 is subtracted from 8.

2. The facilitator will show a water filled bucket, a cup and one calibrated beaker where there is a measuring scale of integers on its lateral surface vertically which are shown below in figure-2, figure-3 and figure-4 respectively.



Fig.-2: Water filled bucket



Fig-3: Cup

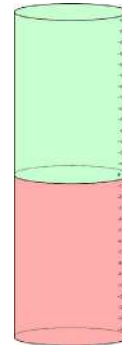


Fig.-4: Calibrated beaker

In the beaker, 0 represents the normal water level of the beaker.

Here, one cup of water is equal to the one-unit height of the beaker.

Stage-II: The learners will do the following activities with the help of facilitator, if needed.

Part-1

Each pair group:

1. Takes a water filled bucket, one cup and one calibrated beaker of which water is filled up to the normal level (i.e. '0' level).
2. Subtracts (+3) from (+8) i.e. $(+8) - (+3)$ using the above cup, beaker and a water filled bucket.
3. Tells the result.
4. Writes the result in mathematical form.

Part-2

Each pair group:

1. Takes a water filled bucket, one cup and one calibrated beaker of which water is filled up to the normal level (i.e. '0' level).
2. Subtracts (-3) from (+8) i.e. $(+8) - (-3)$ using the concept of additive inverse and above cup, calibrated beaker and water.
3. Tells the result.
4. Writes the result in mathematical form.

Part-3

Each pair group:

1. Takes a water filled bucket, one cup and one calibrated beaker of which water is filled up to the normal level (i.e. '0' level).
2. Subtracts (+3) from (-8) i.e. $(-8) - (+3)$ using the concept of additive inverse and above cup, calibrated beaker and water.
3. Tells the result.
4. Writes the result in mathematical form.

Part-4**Each pair group:**

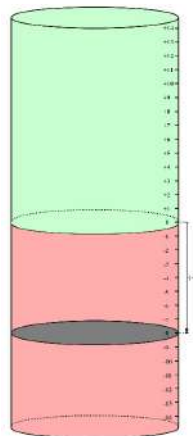
1. Takes a water filled bucket, one cup and one calibrated beaker of which water is filled up to the normal level (i.e. '0' level).
2. Subtracts (-3) from (-8) i.e. $(-8) - (-3)$ using the concept of additive inverse and above cup, calibrated beaker and water.
3. Tells the result.
4. Writes the result in mathematical form.

THE WORK IS ILLUSTRATED BELOW**Part-4**

Each pair group takes a water filled bucket, one cup and one calibrated beaker of which water is filled up to the normal level (i.e. '0' level) which are shown below in figure-5, figure-6 and figure-7 respectively.

**Fig.-5: Water filled bucket****Fig.-6: Cup****Fig.-7: Normal water level of the beaker**

Then, they pick up 8 cups of water from the beaker, then the water level of the beaker will reach at (-8) which is shown below in figure-8.

**Fig.-8: Water level of the beaker is (-8)**

Here, $(-8) - (-3)$ is same as $(-8) + (+3)$, as the additive inverse of (-3) is $(+3)$.

So, they pour 3 cups of water into the beaker, then the water level of the beaker will reach at (-5) which is shown below in figure-9.

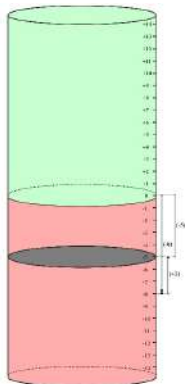


Fig.-9: Beaker after pouring the water

$$\therefore (-8) - (-3) = (-8) + (+3) = (-5)$$

Activity-3: Subtraction of two integers using an instrument made of a wooden scale of numbers and an indicator running over an attached wire.

Requirements: Instrument made of a wooden scale of numbers and an indicator running over an attached wire, exercise book, pen/pencil.

Mode: Pair group. **Strategy:** Learning through activities.

Objective of the development: Cognitive development.

Activity Follows

Stage-I: The facilitator will do the following activity involving the learners.

1. The facilitator will ask the learners what will be the result if 3 is subtracted from 8.

Stage-II: The learners will do the following activities with the help of facilitator, if needed.

Part-1

Each pair group:

1. Takes an instrument made of a wooden scale of numbers and an indicator running over an attached wire.
2. Subtracts $(+3)$ from $(+8)$ i.e. $(+8) - (+3)$ using this instrument.
3. Tells the result.
4. Writes the result in mathematical form.

Part-2

Each pair group:

1. Takes an instrument made of a wooden scale of numbers and an indicator running over an attached wire.

2. Subtracts (-3) from $(+8)$ i.e. $(+8) - (-3)$ using the concept of additive inverse and this instrument.
3. Tells the result.
4. Writes the result in mathematical form.

Part-3

Each pair group:

1. Takes an instrument made of a wooden scale of numbers and an indicator running over an attached wire.
2. Subtracts $(+3)$ from (-8) i.e. $(-8) - (+3)$ using the concept of additive inverse and this instrument.
3. Tells the result.
4. Writes the result in mathematical form.

Part-4

Each pair group:

1. Takes an instrument made of a wooden scale of numbers and an indicator running over an attached wire.
2. Subtracts (-3) from (-8) i.e. $(-8) - (-3)$ using the concept of additive inverse and this instrument.
3. Tells the result.
4. Writes the result in mathematical form.

THE WORK IS ILLUSTRATED BELOW

Part-4

Each pair group subtracts (-3) from (-8) i.e. $(-8) - (-3) = (-8) + (+3)$ (using the concept of additive inverse) using the wooden scale of number line and an indicator running over an attached wire which is furnished below in figure-10.

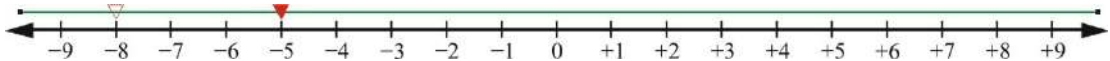


Fig.-10: Subtraction (-3) from (-8) instrument

The subtraction (-3) from (-8) is (-5) .

$$\therefore (-8) - (-3) = (-8) + (+3) = (-5)$$

Activity-4: Subtraction of two integers using two wooden/plastic scale of numbers.

Requirements: Two wooden/plastic scale of numbers, exercise book, pen/pencil.

Mode: Pair group. **Strategy:** Learning through activities.

Objective of the development: Cognitive development.

Stage-I: The facilitator will do the following activity involving the learners.

1. The facilitator will ask the learners what will be the result if 3 is subtracted from 8.

Stage-II: The learners will do the following activities with the help of facilitator, if needed.

Part-1**Each pair group:**

1. Takes two wooden/plastic scale of numbers.
2. Subtracts (+3) from (+8) i.e. $(+8) - (+3)$ using these two wooden/plastic scales.
3. Tells the result.
4. Writes the result in mathematical form.

Part-2**Each pair group:**

1. Takes two wooden/plastic scale of numbers.
2. Subtracts (-3) from (+8) i.e. $(+8) - (-3)$ using the concept of additive inverse and these two wooden/plastic scales.
3. Tells the result.
4. Writes the result in mathematical form.

Part-3**Each pair group:**

1. Takes two wooden/plastic scale of numbers.
2. Subtracts (+3) from (-8) i.e. $(-8) - (+3)$ using the concept of additive inverse and these two wooden/plastic scales.
3. Tells the result.
4. Writes the result in mathematical form.

Part-4**Each pair group:**

1. Takes two wooden/plastic scale of numbers.
2. Subtracts (-3) from (-8) i.e. $(-8) - (-3)$ using the concept of additive inverse and these two wooden/plastic scales.
3. Tells the result.
4. Writes the result in mathematical form.

THE WORK IS ILLUSTRATED BELOW**Part-4**

Each pair group subtracts (-3) from (-8) i.e. $(-8) - (-3) = (-8) + (+3)$ (using the concept of additive inverse) using two wooden scale of numbers which is furnished below in figure-11.

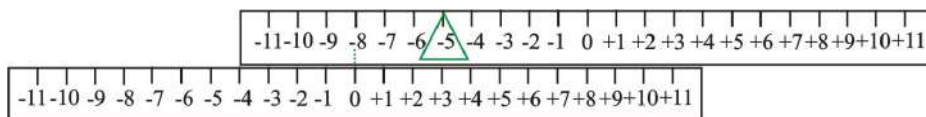


Fig.-11: Subtraction (-3) from (-8) using two wooden/plastic scale of numbers

The subtraction (-3) from (-8) is (-5) .

$$\square (-8) - (-3) = (-8) + (+3) = (-5)$$

Activity -5: Subtraction of integers with help of a number line.

Requirements: Instruments of a geometrical box, pen/pencil, exercise book.

Mode: Pair group. **Strategy:** Learning through activities.

Objective of the development: Cognitive development.

Activity Follows

Stage-I: The facilitator will do the following activity involving the learners.

1. The facilitator will ask the learners what will be the result if 3 is subtracted from 8.

Stage-II: The learners will do the following activities with the help of facilitator, if needed.

Part-1

Each pair group:

1. Draws a number line of integer on exercise book.
2. Subtracts $(+3)$ from $(+8)$ i.e. $(+8) - (+3)$ on this number line using the concept of additive inverse.
3. Tells the result.
4. Writes the result in mathematical form.

Part-2

Each pair group:

1. Draws a number line of integer on exercise book.
2. Subtracts (-1) from $(+8)$ i.e. $(+8) - (-1)$ on this number line using the concept of additive inverse.
3. Tells the result.
4. Writes the result in mathematical form.

Part-3

Each pair group:

1. Draws a number line of integer on exercise book.
2. Subtracts $(+3)$ from (-8) i.e. $(-8) - (+3)$ on this number line using the concept of additive inverse.
3. Tells the result.
4. Writes the result in mathematical form.

Part-4

Each pair group:

1. Draws a number line of integer on exercise book.
2. Subtracts (-3) from (-8) i.e. $(-8) - (-3)$ on this number line using the concept of additive inverse.
3. Tells the result.
4. Writes the result in mathematical form.

The work is illustrated below

Part-4

After drawing a number line, each pair group subtracts (-3) from (-8) i.e. $(-8) - (-3) = (-8) + (+3)$ (using the concept of additive inverse) on it which is furnished below in figure-12.

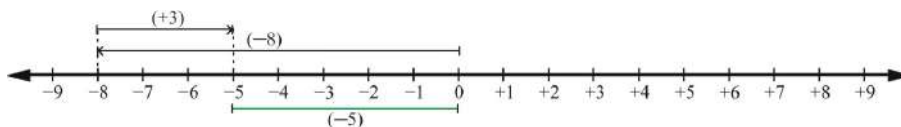


Fig.-12: Subtraction (-3) from (-8) on a number line

The subtraction (-3) from (-8) is (-5) .

$$\therefore (-8) - (-3) = (-8) + (+3) = (-5)$$

CONCLUSION

- i. This paper contains five activities on 'subtraction of integers' in a new look and they have been presented sequentially. Two activities (Activity-4 and Activity-5) out of five have partially been considered in the prescribed text books of mathematics in West Bengal Board of Secondary Education (W. B. B. S. E.) and National Council of Educational Research and Training (N. C. E. R. T.) has been taken into consideration one activity (Activity-5). But they have been developed in different approach.
- ii. This study will help the facilitator and the learners to understand about subtraction of integers through activity-oriented learning.
- iii. Collection of multiple numbers of activities for acquaintance with subtraction of integers will help the facilitator to choose the appropriate activity for the learners considering the learners' ability levels, time limits, availability of working materials and class room ambience etc.
- iv. This study will also help to prepare a proper syllabus, to develop a good text book and to improve the quality of teaching-learning process on subtraction of integers of mathematics.
- v. These types of activities will help the children to enjoy learning mathematics so that the phobia in mathematics will be reduced and stop the drop out of learners who leave from institution on account of anxiety for mathematics learning.
- vi. Special interest towards mathematics can be enhanced which will be helpful for entire science education.
- vii. As these activities are presented step by step i.e. in an iterative sequential form. This can be appropriate in preparing text material through computer-based learning.

IMPLEMENTATION

This study may be implemented in the text books of mathematics at school level. It could also be used in the teaching-learning process.

FURTHER STUDY

All activities of subtraction of integers may be applied on large number of samples of class-VII/VIII.

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Adjustment Problem of Speech and Hearing Impaired Children in Relation to their General Well – Being

Dr. P. Perumal Devi*

ABSTRACT

Adjustment is generally explained in terms of conformity to the environmental demands. Adjustment demands a satisfying contract with the other members of his group. The main objective of the study is to understand the nature of relationship between speech and hearing impaired children's adjustment problem and their general well being. A total of 250 children were selected from the special schools located in Tirunelveli and Tuticorin districts at random. The method employed to select the sample was simple random sampling technique. To collect data, two standardized and revalidated psychological tools namely mooney problem checklist and general health questionnaire were used. Results showed that there is positive and significant correlation between speech and hearing impaired children adjustment problems and their general well being.

INTRODUCTION

Adjustment is the process of meeting lifes problems. As stated by Combs and Snygg (1959) that an adjusted person has essentially a positive attitude towards self and others. The person, according to them, has feelings of dignity and integrity worth and self actualization. Adjustment is the behaviour according to Spencer and Jeffry (1992), that permits to meet the demands of the environment. As an attempt to meet the demands of the environment, individuals either try to change the environments or change their own attitude. This is achieved by individuals only when they possess a preferable environment.

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General well – being refers to how people experience the quality of their lives and includes both emotional reactions and cognitive judgements. Frennd (1958) states that happiness is a combination of life satisfaction and the relative frequency of positive and negative effect. General well – being hence encompasses moods and emotions as well as evaluations of one's satisfaction with general and specific areas of one's life. In personal adjustment an individual's subconscious mind plays a vital role. There are a very few persons who have an insight of their objectives and adjustment. Psychologist say that those who do not get adjusted properly fail to understand their life generally.

Psychologist have assembled a long lists of personality traits and adjustment variables. While looking back the historical developments of adjustment, Sawrey and Telford (1971) have conceptualized adjustment in terms of six dimensions namely selective awareness, tolerance, autonomy, personal integration, self – esteem and self realization. Dutt (1987) says there are four main aspects of adjustment with which people are concerned. They are physical, psychological, social and moral. The process of adjustment is the characteristic of life and development of all the individuals. The present study is designed to understand the association between speech and hearing impaired children's' adjustment problems and their subjective well – being.

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OBJECTIVE OF THE STUDY

- To understand the nature of relationship between speech and hearing impaired children's adjustment problems and their general well – being.
- To see the influence of speech and hearing impaired children's parents education.
- To see the influence of speech and hearing impaired children's present life condition on their adjustment.

Hypotheses

- There is no relationship between speech and hearing impaired children's adjustment problems and their general well being
- Education of speech and hearing impaired children's parents does not influence their adjustment problems.
- Speech and hearing impaired children's present life condition does not influence their adjustment problems.

Methodology

The method employed in the study is the normative survey method. A total of 250 speech and hearing impaired children studying in various special schools of Tirunelveli and Thoothukudi districts represent the sample. These children were selected based on simple random sampling techniques. Two standardized and revalidated psychological tools namely Mooney problem checklist and General health questionnaire were used to collect data. The dependent variable is adjustment problems and the independent variables are general well-being, parents education and present life conditions.

Results

Table: Shows the relationship between adjustment problems and general well-being.

Variables	N	r	t	Significant
Adjustment	250	0.74	17.37	0.01
General well-being				

The Co-efficient of correlation between speech and hearing impaired children's adjustment problems and general well – being is 0.74 and the corresponding t- value is 17.3.7 which is statistically significant. This indicates that speech and hearing impaired children's adjustment depends upon their general well – being. Speech and hearing impaired children who expressed that their general well-being is good are better in their adjustment.

Table- 2: Shows difference in the adjustments of speech and hearing impaired children based on their fathers and mothers education.

Group	N	Mean	SD	SEm	t- value	Significance
Educated fathers	112	67.31	10.46	0.98	0.61	Not Significance
Illiterate fathers	138	68.08	9.37	0.79		
Educated mothers	94	62.66	11.08	1.14	8.19	0.01
Illiterate mothers	156	73.19	10.35	0.82		

Table 2 indicates difference in the adjustments of speech and hearing impaired children. Speech and hearing impaired children of educated fathers and illiterate fathers do not differ in their adjustment problems ($t=0.61$). Whereas speech and hearing impaired children of educated mothers and illiterate mothers do differ in their adjustment problems ($t=8.19$). Speech and hearing impaired children of educated mothers better adjusted than the other groups.

Table- 3: Shows difference in the adjustments of speech and hearing impaired children based on their present life conditions.

Present life condition	N	Mean	SD	SEm	t- value	Significance
Good	163	61.73	10.34	0.81	7.62	0.01
Poor	87	72.64	11.04	1.18		

Table 3 Shows difference in the adjustments of speech and hearing impaired children. Speech and hearing impaired children who felt that their present life condition is good are better in their adjustment than those who expressed that their present life condition is poor.

CONCLUSIONS

- There is a significant relationship between speech and hearing impaired children's adjustment problems and general well-being.
- Fathers' education does not influence speech and hearing impaired children's adjustment problems.
- Mothers' education has influenced speech and hearing impaired children's adjustment problems.
- Speech and hearing impaired children present life condition has influenced their adjustment.

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A Study of the Cognitive Preference Styles of Intermediate Students

Dr. Cherukuri Narayanamma*

ABSTRACT

The present research work was undertaken to study the Cognitive Preference Styles of Intermediate students in Guntur district. The study was conducted on a sample of 400 Intermediate students of Guntur in Andhra Pradesh. Cognitive Preference Style Test (P. C. P. S. T.) which has been standardized by A. K. Saxena was used. Intermediate students differ in the Cognitive Preference Styles of principle, questioning, recall, application.

Keywords: Cognitive Preference Style, Intermediate students

INTRODUCTION

Science is a great human enterprise not only endless and faceless but also stable and fluid. It is a self accumulating, self growing, self pervading, self accelerating and self correcting enterprise which originated in the collective curiosity of man since time immemorial. It attempts to provide a body of knowledge, through procedures that are demonstrably objective but often done in a subjective context. It moves forward on wheels of dogmatism, dynamism and discovery at the same time open mindedness arousal and maintenance of curiosity, bringing in to questions the basic of all things, collection of data, demand for verification and proofs statistical reasoning, suspended judgment acceptance of warranted conclusions and willingness to change one's opinion in the light of new evidence are the ferments which characterize the scientific enterprise.

One of the things a science teacher has to do is to familiarize his pupils with theories, helping them to develop concepts, and to appreciate the structure which connects them. Content to be taught at a particular level should be carefully selected. It is a hard task. Scientific knowledge keeps on increasing day by day. If our students are to keep pace with the increasing knowledge we should teach them what they usually need at a particular level.

One of the principal goal of science education should be to 'create man who are capable of thinking for themselves'. The need of the hour is to make a philosophical and psychological study of science education. We need to take into account the cognitive, affective and psychomotor points of view.

COGNITIVE STYLE

Cognition is a difficult term to define, while its basics meaning is closest to knowledge or understanding, it also includes such process as perceiving, recognizing, inferring, concluding judging and reasoning. Clearly the cognitive process include a number of human functions which are important regardless of the type or level of the task to be mastered. The issue, therefore, is the degree to which the various cognitive process are involved in learning.

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Cognition includes the perception of thinking, reasoning, understanding problem solving studies and cognitive style originated in attempts to understand individual differences in this processes. There is no universally agreed definition of cognitive style but most researchers have emphasized three features.

1. Styles are intellectual characteristics of individuals.
2. They describe process which are relatively stable over time.
3. Intra individual stabilities across tasks having similar requirements.

The concept of cognitive style differs from others used to explain the range of intellectual difference – unlike intelligence which refers specially to difference in the effectiveness with which individuals perform mental tasks.

Cognitive Preference Style

Some researchers regard cognitive preference as variants of cognitive styles. Cognitive styles as usually conceived are habits that are spontaneously applied without conscious choice in a wide variety of situations (Messick, 1970). They constitute a kind of cognitive style that deals with the attributes of special relevance to the learning of science and science related subject matter. This construct was introduced by Heath (1964) is an effort to evaluate science curricula. He articulated, “The interest is not in whether a student can identify correct and correct information, but rather what he/she is likely to do with the information intellectually”.

Following four different modes that were identified by Heath.

1. **Recall (R):** Acceptance of scientific information for its own sake.
2. **Principles (P):** Representation or explanation of fundamental scientific principles or relationships.
3. **Questioning (Q):** Critical questioning of information for completeness, general validity or limitations.
4. **Application (R):** Application of information in problem solving in real life situations.

Need for the Study

Most significant aspect of learning and teaching is the inclusion of cognitive style in educational practices. It has been observed that cognitive style also influences the ways in which teachers and students interact. Teachers who are similar in cognitive style for instance tend to view each other, with greater esteem than do those who are dissimilar. Such findings lead naturally to the notion of matching teacher and students in terms of cognitive style and of choosing instructional methods that are mutually congenial.

Cognitive style approach to academic development of the students to the process of learning and teaching and to the interaction of students and teachers has been taken as an effective approach to solve the problem of education. Cognitive styles are also intimately inter woven with affection - temperamental and international structures as part of the total personality. Thus this study aims to find out the manner in which a student acquires knowledge and his characteristic modes of processing information.

The findings of this study might reveal a significant process approach also in the form of technology of education. The findings of this study focus on the pervasive influence of the technique. It might supply a guide line for the development of a technology which involved a proper and defined use of questioning technique. It is a general agreement with regard to conceptual development of this study that technological innovations are expected from the findings of this study. Analysis with

regard to questioning, recall, application of principle may also evolve a novel process approach for the better learning of students.

Objectives of the present study

- (a) To study the levels of cognitive preference styles of intermediate students with respect to principal.
- (b) To study the levels of cognitive preference styles of intermediate students with respect to questioning.
- (c) To study the levels of cognitive preference styles of intermediate students with respect to recall.
- (d) To study the levels of cognitive preference styles of intermediate students with respect to application.

Limitations of the study

1. The present study is confined to Guntur District in Andhra Pradesh only.
2. The study is confined to science stream Intermediate students only.

Sample

Sample consists of 400 science stream Intermediate students from Guntur District.

Statistical Techniques Used

Arithmetic mean, Standard deviation, t-test, Coefficient of correlation.

Tool used

Cognitive Preference Style Test (P. C. P. S. T.) which has been standardized by A. K. Saxena was used.

ANALYSIS AND INTERPRETATION OF DATA

Testing of Hypothesis

Hypotheses: I

- (a) ***Intermediate students differ in their levels of Cognitive preference styles with respect to principles.***

To test this hypothesis scores, obtained on principles of cognitive preference styles for the total sample that is 400 were considered. Mean and S. D s were calculated. They were 49.51 and 6.15 respectively. To categorized, the sample into low, moderate and high categories the following procedure is adopted. One standard deviation is subtracted from the mean. The obtained value is 43.36. The number of students whose scores are less than this score are arrived at and converted into percentage. Similarly, one S. D is added to the mean. The arrived value is 55.65. The students whose scores are greater than this value, is arrived at and converted into percentage. The number of students, whose scores are in between the above two values, is arrived at and converted into percentage these details with appropriate verbal descriptions are presented in the following table.

The levels of Cognitive preference styles with respect to principles- intermediate students

Score	N	%	Variable Description
< 43	39	09.75	Low Category
43 to 55	304	76.00	Moderate
> 55	57	14.25	High Category

Interpretation

From the above table it is seen that intermediate students differ in their cognitive preference styles with respect to principles. Around 10 percent of students fall under low category, while 14.25 % of the students fall under high category. The remaining 75 % belong to moderate category.

(b) Intermediate students differ in their levels of Cognitive preference styles with respect to questioning

To test this hypothesis, scores obtained on questioning of cognitive preference styles for the total sample, that is, 400 were considered. Mean and S. D were calculated. They were 49.67 and 5.93 respectively. To categorize the sample into low, moderate and high categories, the following procedure is adopted. One standard deviation is subtracted from the mean. The obtained value is 43.73. The number of students whose scores are less than this score are arrived at the converted into percentage. Similarly one S. D is added to the mean the arrived value is 55.6. The students whose scores are greater than these value is arrived at and converted into percentage. The number of students whose scores are in between the above two values, is arrived at and converted into percentage.

These details with appropriate verbal descriptions are presented in the following table.

Score	N	%	Variable Description
< 43	37	9.25	Low Category
43 to 55	310	77.5	Moderate
> 55	53	13.25	High Category

Interpretation

From the above table it is seen that intermediate students differ in their cognitive preference styles with respect to questioning 9.25% of the students fall under low category while 13.25 % of the students fall under high category. The remaining 77.5 %of students belong to moderate category.

(c) Intermediate students differ in the levels of Cognitive Preference Styles with respect to recall

To test this hypothesis scores obtained on recall of cognitive preference styles for the total sample that is 400 were considered mean and S. D were calculated. They were 49.4 and 5.87 respectively to categorized the sample into low, moderate and high categories, the following procedure is adopted. One standard deviation is subtracted from the mean, the obtained value is 43.5. The number of students whose scores are less than this score are arrived at the converted into percentage. Similarly one S. D is added to the mean the arrived value is 55.2. The students whose scores are greater than these value is arrived at

and converted into percentage the number of students whose scores are in between the above two values, is arrived at and converted into percentage.

These details, with appropriate verbal descriptions are presented in the following table.

Score	N	%	Variable Description
< 43	40	10	Low Category
43 to 55	306	76.5	Moderate
> 55	54	13.5	High Category

Interpretation

From the above table it is seen that intermediate students differ in their cognitive preference styles with respect to recall 10 % of the students fall under low category while 13.5 % of the students fall under high category. The remaining 76.5 % of students belong to moderate category.

(d) Intermediate students differ in the levels of Cognitive Preference Scale with respect to application

To test this hypothesis scores obtained on recall of cognitive preference styles for the total sample that is 400 were considered. Mean and S. D were calculated. They were 49.36 and 5.92 respectively. To categorized the sample into low, moderate and high category the following procedure is adopted. One standard deviation is subtracted from the mean. The obtained value is 43.44. The number of students whose scores are less than this score are arrived at the converted into percentage. Similarly one S. D is added to the mean the arrived value is 55.28. The students whose scores are greater than this value is arrived at and converted into percentage. The number of students whose scores are in between the above two value is arrived at and converted into percentage.

These details with appropriate verbal descriptions are presented in the below table.

Score	N	%	Variable Description
< 43	42	10.5	Low Category
43 to 55	309	77.25	Moderate
> 55	49	12.25	High Category

Interpretation

From the table it is seen that intermediate students differ in their cognitive preference styles with respect to application 10.5 % of the students fall under low category while 12.25 % of the students fall under high category. The remaining 77.25 % of students belong to moderate category.

FINDINGS OF THE STUDY

- (a) Intermediate students differ in the levels of cognitive preference styles with respect to principle.
- (b) Intermediate students differ in the levels of cognitive preference styles with respect to questioning.

- (c) Intermediate students differ in the levels of cognitive preference styles with respect to recall
- (d) Intermediate students differ in the levels of cognitive preference styles with respect to application.

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Muslim Law

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ABSTRACT

The contribution of the Supreme Court to the development of Muslim Law over the five decades of its existence has not been negligible. This contribution might have been even greater had there been a more sensitive relationship between the judges of the court and significant sections of Islamic scholars and progressive thinkers, as well as with Parliament. The unnatural ascendancy of archconservative diehards among the Muslim politicians has created problems for everybody. This ascendancy came to a head during the protest over Shah Bano which will be dealt with presently. Over enthusiasm among some lawyers and judges, for early implementation of the constitutional directive for a common civil code, has also sometimes complicated the issue.

There has been engendered, perhaps undeservedly, the feeling among certain ulema and their supporters, that their cherished institutions have not been adequately appreciated by the legal fraternity at large. This has obstructed the mental process of such elements and warped their appreciation of the wise, and sometimes admirable, pronouncements of certain judges and lawyers. It is a paradox that while the Muslim world as a whole has been moving forward to a far-reaching reformation, such reformation has barely touched the fringes of Muslim Law in India. Partly, this is on account of ill-educated moulvis and, partly, insensitivity and ignorance among the bulk of the lawyers and judges regarding the real needs and aspirations of the Muslim people. Nevertheless, important issues have been settled by the courts and significant progress has been made. This is evident from the law reports. On the whole, it may be said that the courts, and in particular the Supreme Court, have succeeded in maintaining the traditional view of Muslim Personal Law, occasionally ventilating its ancient and hallowed archives with much-needed currents of fresh air from contemporary life. This author wrote elsewhere regarding Muslim Law that the Tomes of the Law are Grey but the Tree of Life is Green.

MUSLIM LAW

Development of closer rapport between the judges and lawyers serving the highest court in the land and enlightened elements among a sensitive minority like the Indian Muslims, conformably to the Indian concept of secularism, requires the greatest clarity of mind, erudition and goodwill on both sides. There must be the fullest trust engendered in the minority group that the court has no desire to ride roughshod over its cherished institutions. Unfortunately, this has not always been the perception conveyed to the Muslims. No doubt the courts must strive to update those institutions, to meet the needs of modern life within the parameters available wherever they are susceptible of such updating. In a recent case, Venkatachaliah, CJ, laid down the round norm on this topic. Presiding over a constitution bench in Ismail Faruqui he said the concept of secularism is one facet of the right to equality woven as the Central Golden Thread into the fabric of our Constitution. The purpose of law in a plural society is not the progressive assimilation of the minorities in the majoritarian milieu

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In a pluralist secular society law is the great integrating force. Secularism is more than a passive attitude of religious tolerance. It is a positive concept of equal treatment of all religions. What is material is that it is a constitutional goal and a Basic Feature of the Constitution. The significance of this pronouncement is that it rejects the concept of progressive assimilation of the minorities in the majoritarian milieu, which has caused such havoc in our country but, alas, remains the favourite of some enthusiasts.

This concept, admirably formulated and set in modern constitutional prose by Venkatchaliah, CJ, has a respectable pedigree in ancient Indian tradition. This concept of pluralism rejects the Nazi concept of Gleichshaltung that wrought such havoc in the land of its birth. Harmonized by enlightened constitutional jurisprudence, this concept is especially applicable in the field of religion, culture and language. It is sometimes referred to as Indian secularism, and is vital for preserving the unity and integrity of India. A reference may be made to some landmark judgements rendered by the Supreme Court. In *Mohd. Tunus v Syed Unnissa Shah, J*, laid down an important rule regarding the construction of section 2 of the Muslim Personal Law Application Act, 1937.

The section provided that Not with standing any custom or usage to the contrary, in all questions, regarding intestate succession, special property of females, including personal property inherited or obtained under contract or gift or any other provision of personal law, marriage, dissolution of marriage, including talaq, ıla, zihar, khula, and mubarraat, maintenance, dower, guardianship, gifts, trusts and trust properties, and wakfs the rule of decision in cases where the parties are Muslims shall be the Muslim Personal Law. In the graphic phrase used by Shah, J, this enactment was a mandate to the court, in the matters enumerated. He held that the Act must be given a liberal construction and applied to all suits and proceedings pending even in appeals on the date when the Act became law. Another decision of the constitution bench which needs mention is *Sardar Syedna Tahir Saifitddin v State of Bombay*? It considered the constitutionality of social reform legislation known as the Bombay Prevention of Excommunication Act, introduced by Morarji Desai in the early years of the Republic. This Act sought to prohibit the practice existing in some religious communities- of allowing untrammelled powers of excommunication of their members to the arbitrary discretion of the religious head.

The Bombay High Court upheld this statute, particularly taking note of local conditions. It seemed to be a necessary and valid piece of social reform legislation. J. C. Shah, J, later an eminent Chief Justice of India, M. C. Chagla CJ, and Bhagwati, J, who considered the matter, were familiar with the prevalent ignorance and superstitious bent of the people at large, particularly the trading community, and their submissiveness to oppression engendered by a long period of feudal autocracy and colonial rule. Unfortunately, the Supreme Court, by a majority decision, overruled the Bombay High Court ruling, and held that under article 25(2) read with article 25(b) the Act was ultra vires. This was a disappointment to progressive elements among the Daudi Bohras, a small group mainly settled on the west coast of India.

Fundamental Islamic belief holds that ultimately every human being is answerable on the day of judgement to God, and to God alone. General Islamic norms do not bestow papal authority on any head priest to excommunicate. The Quran ordains that there shall be no compulsion in religion. Though certain sects with a limited following admitted this practice, it is in bad odour among the public at large. The case before the court related to a group which allegedly allowed this authority to their head priest, known as Dai-ul Multaq, who claims what may be loosely described as papal powers. In *Katheesa Umma v Narayana Kathamma*, the Supreme Court, speaking through Hidayatullah, J, made a valuable contribution, by way of an accurate, erudite and elaborate summary of the law relating to the important topic of Hiba among family members. The three necessary elements declaration by donor, acceptance by donee and delivery of possession are admirably and lucidly

explained in the judgement of Hidayatullah, J, running into several pages, with which Sarkar, CJ, and Shah, J, concurred. Another important decision of the court was given in Board of Muslim Waqfs, Rajasthan v Radha Kishen, decided by Jaswant Singh, Pathak and Sen, JJ. The question before the court was interpretation of the expression, any person interested therein occurring in section 6(1) of the Waqf Act, 1954.

This barred challenge to the findings of the Waqf Commissioner by certain persons regarding land comprised in Waqf properties. The court held that the respondents were not barred from filing a civil suit to establish their rights and title, if any, to the disputed properties. As this writer commented at that time, this judgement must be commended as a good and practical solution of reconciling conflicting claims and social needs. It upheld the jurisdiction of the Waqf Commissioner and the Waqf Board to make and publish a survey of Waqfs and Waqf properties, while limiting the finality and conclusiveness of their findings differentially respectively to the persons interested in the Waqf and to outsiders. It has given the Waqf Act a reasonable scope of operation and usefulness without making it oppressive to non-Muslims. In Sana Mudgal v Union of India, Kuldip Singh, J, sitting with Sahai, J, made a constructive and valuable contribution to a problem that has long vexed Indian society. That problem is the path of escape from matrimonial obligations chosen by certain men married under the Hindu Law by "**Conversion**" to another religion, usually Islam, which seemingly offers them such indulgence.

This happens in cases where marriages have broken down irretrievably or where, under some influence, there is an urge to change partner. Crown, Is Kuldip Singh, J, drew a valuable conclusion. These were all cases where the woman had converted. It had been held that such conversion did not dissolve the marriage tie. Kuldip Singh, J, held that the same rule would apply to a case of conversion by a Hindu man to another religion. What is sauce for the goose is sauce for the gander. That, as Kuldip Singh, J, rightly held, is the traditional position that has not been changed by legislation. Thus when two persons are married under the Hindu Law, the apostasy from Hinduism of one spouse or his or her conversion to any other religion does not dissolve the marriage. The judge, in effect, further held that the continued subsistence of the earlier Hindu marriage occupies the jural space that would be required to accommodate a second marriage by the same person under any other system.

The view of Kuldip Singh, J, so understood, does not in any way conflict with or detract from the freedom of religion, a fundamental right of every citizen under article 25 of the Constitution. No doubt it is the fundamental right of every Hindu to convert to Islam if he so desires. But such conversion cannot displace existing jural obligations. A man can give up his rights but not his obligations. The finding of Kuldip Singh, J, does not conflict in any way with Islamic law and harmonizes therewith. By virtue of section 4 of the Dissolution of Muslim Marriages Act, 1939. The renunciation of Islam by a married Muslim woman or her conversion to a faith other than Islam shall not by itself operate to dissolve her marriage Provided that the provision shall not apply to a woman converted to Islam from some other faith who re-embraces her former faith.

Under Islamic law, conversion to Islam must be for the sake of Islam, not for the sake of a woman, as the Prophet himself laid down in a famous and undisputed Hadith. The ruling and declaration of the law by Kuldip Singh, J, is by virtue of article 141 of the Constitution, binding on all the courts in the territory of India. Henceforth no such marriage solemnized by a Hindu who, for this purpose, has become a Muslim, shall be held legally valid. Parties indulging in such practice shall be liable to prosecution under the Indian Penal Code, section 494. This decision has met a long standing demand of Hindu women. It should be welcomed by all sections of Muslims as it conforms to the dictum of the Prophet. This ruling will be conducive to communal harmony and prevent misuse of Islam. It is unfortunate that, Kuldip Singh, J, has encumbered his otherwise admirable judgement with observations irrelevant to the matter before him, regarding the desirability of a uniform civil code.

This was, perhaps, playing to the gallery, overlooking the impact of these remarks on a concerned section of the people.

The task of regulating the pace of statutory reform of our laws has, wisely, been committed, by the framers of our Constitution to our sovereign Parliament and the state legislatures. In this sensitive field, it would have been in conformity with judicial wisdom for the court to abstain from advising the legislators about any law reform they may, in their wisdom, in future undertake. Shah Bano has excited much public attention. Many are surprised why so seemingly small an issue as a maintenance order of a few hundred rupees monthly in favour of an elderly divorcee should arouse such extreme passions in such diverse quarters. Some future legal historians may consider this case to be the greatest contribution made by the Supreme Court to the development of Muslim law. Others may differ. The contentions advanced on behalf of the divorcee in the Supreme Court were modest, based on section 127 of the Code of Criminal Procedure, buttressed by the Quranic verse, as interpreted by the ruling of the canonized jurist, Imam Shafe'i. The latter had held that this Quranic verse imported a legally binding obligation upon the divorcing husband to make a reasonable provision for his divorcee wife.

This reference to Islamic law was necessary because the Muslim Personal Law Board, which had intervened in the case, had challenged the constitutionality of section 127, on the ground of its alleged repugnance to the fundamental right of a Muslim under article of the Constitution to practise his religion. The omission in the judgement of the Supreme Court of any reference to Imam Shafei may or may not have been accidental but it led many to believe that the Supreme Court was overturning the age-old rule applied to Islamic law that only the rulings of particular canonized jurists could be looked at by the courts and that the Quran could not be directly looked at or interpreted. This understanding, or misunderstanding, was the nub of the issue that aroused so much heat among the orthodox throughout India.

A combination of politicians, pontiffs, and conservatives rushed through Parliament the so-called **Muslim Women Act, 1986**, that took away from unfortunate Muslim divorcees their right to relief under section 125 of the Code of Criminal Procedure, while professing to give them other rights whose value is still uncertain. That Act is not the subject-matter of the present discussion. Reverting to Shah Bano it is best to state the decision of the Supreme Court in the words of the learned judges themselves. After setting out Ayats of the Holy Quran, the court said these Ayats leave no doubt that the Quran imposes an obligation on the Muslim husband to make provision for or to provide maintenance to his divorced wife. The contrary argument does less than justice to the teachings of the Quran. As observed by Mr. M Hidayatullah, in his introduction to Mulla's Mahom. ed.nn Law, the Quran is Al Furqan, that is, one showing truth from falsehood and right from wrong.

The judgement of the constitution bench seemed a direct challenge to an old standing rule of interpretation of the Islamic Law. The old rule had held the field for over a thousand years. This rule was evolved in the Abbasid period when the early Islamic Caliphate had yielded its republican form to a dynastic monarchy and empire. The purpose of this rule was to minimize the apprehended mischiefs that an autocrat or his appointed judges could do to the law and Islamic society, and to ensure that any such damage would be limited within narrow bounds. It also insulated the autocrats against radical and republican jurists, of whom there was no dearth. It was then laid down, allegedly by consensus, that the judges and the legislative authority of the caliph could only operate within the parameters of the rulings of the canonized masters of the law who had each, in one way or another, passed the test of their integrity to the satisfaction of the public and the ruler.

Their rulings were acceptable to the autocrats and the public. This rule was accepted and recognized by the Privy Council in Aga Mohammed. They do not care to speculate on the mode in

which the text quoted of the Koran, which is to be found in Sura II, vv 241-2, is to be reconciled with the law as laid down in the Hedaya and by the author of the passage quoted from Baillie's Imameea. But it would be wrong for the Court on a point of this kind to attempt to put their own construction on the Koran in opposition to the express ruling of commentators of such great antiquity and high authority. By their deft juristic reasoning the Privy Council pleased the conservative elements. This rule had however, outlived its usefulness. South Asia's Islamic Erasmus, Sir Syed Ahmad Khan, strongly disapproved the continuance of this old rule, sometimes called taqlid. According to him, it had long outlived its usefulness. The real reason for the decline of the Muslims, according to Sir Syed Ahmad Khan, was that they have not yet realized that the present age demands a totally new legal system which should deal with social, political and administrative affairs. He held that the unwarranted seal of infallibility put upon the compilations of the ancient jurists had led to dire consequences.

According to Sir Syed Ahmad. The people were led wrongly to believe that the religion of Islam is directly related to all worldly matters and that, there-fore, nothing can be done without obtaining a religious sanction. If the laws and regulations, which the jurists had formulated in the context of the material and social conditions obtaining in those days, were accepted as the private judgements of certain learned personages, there would have been no harm. But unfortunately they came to be identified with Islam itself. Hence any attempt to modify or replace them by better laws came to be looked upon as heresy. Due to these reasons, the books of the jurists were regarded as incorporating infallible truth and so sufficient for the guidance of our affairs. Civil and criminal, commercial and revenue codes were thought unnecessary and redundant. Sir Syed, therefore, called upon the Muslims 'to formulate a new legal code suited to present needs. In this work of Reconstruction, we cannot neglect or ignore the stupendous work done by the early jurists but we cannot be bound by it. We must go back to the original sources, the Quran and the Sunna. Dr Sir Mohammed Iqbal also took the same view.

He observed I know the uiuma of Islam claim finality for the popular schools of Mahomedan Law, though they never found it possible to deny the theoretical possibility of a complete ijtihad. Since things have changed and the world of Islam is confronted by new force. I see no reason why this attitude should be maintained any longer. Did the founders of our Schools ever claim finality for their reasoning and interpretations? Never. The claim of the present generation of Muslim liberals to re-interpret the foundations of legal principles, in the light of their own experience and the altered conditions of modern life, is in my opinion, perfectly-justified. The teaching of the Quran that life is as a process of progressive creation necessitates that each generation, guided but unhampered by the work of its predecessors, should be permitted to solve its own problems.

This old rule of Islamic jurisprudence was outdated. Whatever may have been the merits of this old rule when it was evolved in the Islamic world, and in the turbulent period following, when the Muslim masses and intelligentsia were kept out of power and had little say in the decisions of autocrats and imperialists there is no doubt that this rule placed Islamic juristic and political thinking in a straitjacket very far from what the Prophet had envisaged. Despite the wide consensus among the intelligentsia that this old rule must go, such was its entrenched strength that for the first six decades of the twentieth century only halting and cautious moves were made to soften it. In 1936-39 the efforts and inspiration of the late Maulana Ashraf Ali Thanvi led to a consensus of the ulema that may be considered a halfway house. At the time of enactment of the Dissolution of Muslim Marriages Act, 1939 the ulema agreed that, in cases in which the application of the Hanafi law causes hardship, it is permissible to apply the provisions of the Maliki, Shafei or Hanbali Law.

THE LEARNED JUDGES CONCLUDED

A civil court has jurisdiction to follow the law as laid down in the Quran disregarding any other law on the subject, if contrary thereto, even though laid down by earlier jurists or commentators of great antiquity and high authority and though followed for a considerable time. Under the Hindu law clear proof of usage can outweigh the written text of the law. But it is not so in the case of Islamic law. For it is an article of faith of a Muslim that he should follow without questioning what has been revealed in the Quran and disobedience thereof is a sin. Then followed a discussion and interpretation of the verse in Quran II. 241, where the court reaches the same conclusion as did the Supreme Court of India in Shah Bano as earlier set out, and ruled We hold that a person after divorcing his wife is bound to maintain her on a reasonable scale beyond the period of iddat for an indefinite period, that is, till she loses the status of divorcee by marrying another person. This valuable judgement of the High Court Division has unfortunately been overruled by the Appellate Division on the technical ground that the appellant therein did not receive adequate notice.

The learned judges of the Bangladesh Supreme Court have at the same time recorded their obiter dicta criticizing the judgement on merits which, with due respect to them, may not be the last word on the subject. The Chief Justice delivering the decision of the Appellate Bench, however, appeared to favour a fair, just and reasonable legislation to remove the extreme hardship of divorced women in our society. Such statutory recognition of benefits and privileges for a divorced woman will not conflict with Muslim law. It is to be observed that in the case the Indian Supreme Court was considering an application for maintenance of a divorced Muslim woman filed under section 125 of the **Code of Criminal Procedure 1973** and particularly the provision in the said section which read 125(1)(a) If any person neglects or refuses to maintain. his wife unable to maintain herself emphasis added by his Lordship.

In considering the defence taken by the husband and the interveners on the basis of the aforesaid Personal Law of the Muslims the Court observed, We are of the opinion that the application of these statements of the law must be restricted to that class of cases in which there is no possibility of vagrancy or destitution arising out of the indigence of the divorced wife. We are not concerned here with the broad and general question whether a husband is liable to maintain his wife in all circumstances and in all events. That is not the subject matter of section 125. The Indian Supreme Court then considered the aforesaid Ayats 241 and 242 of the Sura Baqara and observed, These Ayats leave no doubt that the Quran imposes an obligation on the Muslim husband to make provision for or to provide maintenance to the divorced wife. The contrary argument does less than justice to the Quran. The Shah Bano decision was thus a limited one given in the context of Section 125 of the Cr. P. C. It is unfortunate that such advice was not given to the Indian ulema, in 1985-86. Resistance by section of the Indian ulema to the idea of a reasonable provision for divorced Muslim women is now much weakened. This is partly due to the impact of international Muslim opinion.

CONCLUSION

Women's organizations, including those of Muslim women, are demanding immediate relief for Muslim divorcees, enabling resort to section 125 of the Code of Criminal Procedure, notwithstanding the Muslim Women's Act of 1986. The intelligentsia and the women's movement, particularly Muslims, should complete the task of demolition of the old and injurious ideas that Sir Syed Ahmad Khan and Dr Sir Mohd Iqbal denounced. We must notice a recent judgement of the Mumbai High Court, interpreting section 3 of the **Muslim Women Act, 1986**. The court held that this section conferred a right on a divorced woman to claim a reasonable provision. The court held that this provision must take into account the needs for her future beyond the iddat period.

This is consistent with the view taken by the author of the celebrated Arabic Lexicon, Lissanul Arab, written seven hundred years ago, which said that mataa has no time limit because Allah has not fixed a time limit for the same. He has only enjoined the payment. The unrealistic view of certain ulema, that because Islam provides remarriage as a remedy for the divorcees, maintenance is unnecessary, must be rejected. In Indian conditions where such remarriages are infrequent, and polygamy is frowned upon, the divorcee's plight is pitiable. It is notable that in Egypt, which is perhaps the leading country governed by the Hanafi doctrine, the law provides Many, even among the most conservative ulema, hold that although provision for the divorced wife under Quran II 241 is not ipso facto, by the force of that text alone, legally enforceable, such provision if provided for by positive legislation is not inconsistent with Islam and indeed promotes Islamic norms of justice. This question will be a challenge for the Supreme Court of India.

Its outcome will be one that all women, including conscious Muslim women, and many men, will anxiously await. The Supreme Court of India, speaking through Chandrachud, CJ, in Shah Bano, and earlier through Krishna Iyer, J, roused the conscience of the world public to the plight of divorced Muslim women. Since the wrong is long standing, in some Hanafi jurisdictions only, its remedy, whether by legislation or judicial decision, may take time, but will assuredly be achieved.

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Foreign Policy of the Narendra Modi Government

Dr. Wijeesh Ronit Saimon*

The foreign policy of the Modi government (also referred to as the Modi Doctrine) concerns the policy initiatives made towards other states by the current Modi government after he assumed office as Prime Minister of India on 26 May 2014. The Ministry of External Affairs, headed by External Affairs Minister Subrahmanyam Jaishankar is responsible for carrying out the foreign policy of India. Modi's foreign policy is currently focused on improving relations with neighbouring countries in South Asia, engaging the extended neighbourhood in Southeast Asia and the major global powers. In pursuit of this, he has made official visits to Bhutan, Nepal and Japan within the first 100 days of his government, followed by the United States, Myanmar, Australia, and Fiji. While CM of Gujarat, and under sanction from Western states like the United States, Modi made several foreign trips to foster his business links with major Asian economic powers. This included meeting Japanese Prime Minister, Shinzo Abe twice in 2007 and 2012 and building a personal rapport. He also reached out for investment deals with China and Israel, who sought to increase economic ties beyond defence and agriculture, according to outgoing Israeli Ambassador Alon Ushpiz. He was widely appreciated for his endeavour to organise Vibrant Gujarat, a biannual international business summit, to welcome investment in his home state which also helped build a pro-development and business friendly image.

Though Modi made no major foreign policy speeches during the general election campaign in 2014 except calling out China's potential aggression along the border with India [9] and making "illegal immigration" from Bangladesh an election issue specially during the later part of his campaign in eastern states like Assam and West Bengal. He also asserted that Hindus outside the country would be able to seek asylum in India should they require it. But time and again he had emphasized the fact that he (born in 1950) was going to be the first post-independence-born Prime Minister of India therefore it would be natural to expect a shift in the world view from his predecessors. He also pledged to have a "strong" foreign policy, including engaging with China. He had asked for External Affairs Ministry to focus more on trade deals instead of other geopolitical initiatives.

Modi's first foreign policy outlook were revealed during the run up for the Prime Ministerial candidature in his party in 2013 when he in a Network 18 program called 'Think India, dialogue forum' had outlined the following points

Improving relations with immediate neighbours would be his priority as peace and tranquillity in South Asia is essential for realizing his development agenda.

Significantly he pledged to introduce the concept of para diplomacy in India where each states and cities would have liberty to forge special relation with countries or federal states or even cities of their interest.

Bilateral trade going to dominate the relations with most countries except few important global powers with which India shares a strategic partnership.

Modi further re sponded to the many congratulatory messages and phone calls from most world leaders that he received in the aftermath of his historic election victory.

Even before he formally took charge of office Modi, Prime Minister elect, had made his maiden foreign policy statement by inviting all the heads of state/heads of government of India's neighbours

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and doing so he had undone his criticism as being a hardliner. Modi's swearing-in ceremony featured nearly all the SAARC leaders along with Navin Ramgoolam of Mauritius who holds an observer status at the grouping. Guests list included Afghanistan's Hamid Karzai, Bhutan's Tshering Tobgay, Maldives' Abdulla Yameen, Nepal's Sushil Koirala, Pakistan's Nawaz Sharif, Sri Lanka's Mahinda Rajapaksa, Mauritius's Navin Ramgoolam. As Bangladeshi Prime Minister Sheikh Hasina was travelling, parliamentary Speaker Shirin Sharmin Chaudhury came instead. Significantly Lobsang Sangay, the Prime Minister of Tibetan Government-in-Exile, was also spotted seating in the spectators gallery. The media reacted positively to this in response to their own criticism of his foreign policy.

Soon after the new Government took over the office, important world leaders expressed their willingness to work with Modi Government to strengthen their relations with India as it provides them a big market. All 5 permanent member state of United Nations Security Council sent their envoys to India within the first 100 days from inauguration which is significant, given India's long standing bid to get a permanent membership at UNSC.

China To take the early movers advantage China was first to send its envoy to India after Modi government came into power, Chinese Foreign Minister Wang Yi visited new Delhi on 8 June and held bilateral talks in with his counterpart and also called on PM Modi. In other reactions, China indicated a willingness to reach a final settlement over the contested border disputes.

Russia Russian Deputy Chairman Dmitry Rogozin visited India on 18–19 June 2014 to reach out the new government led by Narendra Modi. Where the two sides discussed the cooperation in joint defence production which is one of Modi's top agenda. Later Modi met President Vladimir Putin in July on the sidelines of 6th BRICS summit in Brazil.

France French Foreign Minister Laurent Fabius made an official visit to India from 29 June to 2 July and held high level talks with both External Affairs Minister and Prime Minister. Strategic and defence cooperation was top on his agenda and he expressed hope of speedy completion of Dassault Rafale Jet deal as part of the much delayed Indian MMRCA project under the new government.

United Kingdom British Foreign Secretary William Hague visited India on 7–8 July. During his meeting with Modi he lobbied hard again for Eurofighter Typhoon as a last minute alternative for Dassault Rafale which is yet to be signed.

United States Prior to his India trip U. S. Secretary of State John Kerry emphasized the importance of US-India in twenty first century and borrowed "Sabka saath, Sabka vikaas", a Hindi slogan from Modi's campaign meaning "together with all, development for all" (or simply, inclusive growth) and said America shared this goal and willing to work in full cooperation with the new government to realize it. He arrived in New Delhi on 1 August and held bilateral talks with his Indian counterpart to make the groundwork ready for Modi's upcoming USA visit and also bided a strong lobby to gain support from India for sanctions on Russia amidst the 2014 Ukraine crisis. Swaraj said in regards to the appeal: "There is no change in our policy. We think that foreign policy is in continuity. Foreign policy does not change with the change in the government."

Former National Security Adviser & Foreign Secretary Shivshankar Menon, an academic at Brookings, opined that the Modi Government's foreign policy is one of "strategic incoherence", executed without an "overarching conceptual framework". There has been many policy initiatives since that has been taking the headlines:

ACT EAST POLICY

From the very beginning the Modi led government made it ample clear that India would focus more and more on improving relations with ASEAN and other East Asian countries as per India's Look East policy which was formulated during PM Narasimha Rao's government in 1992 for better

economic engagement with its eastern neighbours but successive government later successfully turned it into a tool for forging strategic partnership and security cooperation with countries in that region in general and Vietnam and Japan in particular. In her recent visit to Hanoi, Vietnam Sushma Swaraj has stressed on the need for an “Act East Policy” that she said should replace India’s over two decade-old “Look East Policy” emphasizing a more proactive role for India in this region.

Neighbourhood first policy

One of the major policy initiatives taken by Modi government is to focus back on its immediate neighbours in South Asia. Gujral doctrine was important approach where india made its relation with its neighborhood which is stand on five important principal. Even before becoming the Prime Minister, Narendra Modi hinted that his foreign policy will actively focus on improving ties with India’s immediate neighbours which is being termed “neighbourhood first: policy in the media” and he started well by inviting all heads of state/heads of government of South Asian countries in his inauguration and on the second day on office he held bilateral talks with all of them individually which was dubbed as a mini SAARC summit by the media. Later during a launch event at ISRO he has asked Indian scientists to take the endeavour to develop a dedicated SAARC satellite to share the fruits of the technology like tele-medicine, e-learning etc. with the people across South Asia to complement the currently operating Indian Technical and Economic Cooperation Programme program in the region.

INDIAN OCEAN OUTREACH

The Indian Ocean region (IOR), which has long been considered as India’s nautical backyard, is steadily turning into a hotspot thanks to growing Chinese strategic presence over the region’s numerous strategically located archipelagos. To counter the recent moves made by China on the name of President Xi’s pet Maritime Silk Road project, India started to reach out its maritime neighbours in the IOR with proposals of enhanced economic and security cooperation. The policy towards IOR started to unfold during Sri Lankan president’s visit to New Delhi in early February 2015. Following that Modi embarks on a three nations Yatra (travel) to Mauritius, Seychelles and Sri Lanka, although Maldives was also initially part of this outreach but recent political turmoil in that country led to last-minute cancellation of the scheduled visit. Ahead of Modi’s scheduled visit to Beijing in May 2015, India wanted to project that it commanded a strategic supremacy over the IOR and that its relations with its maritime neighbours were far more cordial than that of China’s with particular reference to South China sea.

On the back of growing Chinese naval activity in the Indian Ocean region, which India considers its area of responsibility, the Modi administration have introduced Project Mausam, which is believed to rival the Chinese Maritime Silk Road (MSR) initiative. Mausam (Hindi: मौसम) which means weather or season in many South and Southeast Asian languages is highlighted because of its profound role in cultural exchanges in region as in ancient time maritime trade used to depend on seasonal monsoon winds. The project which is still in the evolving phase, is being worked on with the Cultural Ministry, will focus on the ancient trade and cultural linkages and emphasize on future maritime cooperation in the Indian Ocean region stretching from Southeast Asia to East Africa with the central location of India, from where the ocean derived its name.

COOPERATION WITH PACIFIC ISLANDS

Modi chose to visit Fiji soon after democracy was re-established in the island country after 8 years. There apart from bilateral meeting, he also met heads of state/government from 14 pacific

island states to enhance India's engagement in the region and proposed a 'Forum for India- Pacific Islands Cooperation' (FIPIC) be held on a regular basis. He conveyed there India's keenness to work closely with Pacific Island nations to advance their development priorities in this regard a number of measures to strengthen India's partnership in the region were proposed which include setting up of a 'special fund of \$1 billion' for adapting climate change vis-a-vis clean energy, establishing a 'trade office' in India, 'Pan Pacific Islands e-network' to close the physical distance between the islands by improving digital connectivity, extending visa on arrival at Indian airports for all the fourteen Pacific Island countries, 'space cooperation' in space technology applications for improving the quality of life of the islands, 'training to diplomats' from Pacific Island countries to increase mutual understanding. He also expressed his willingness to host the leaders in any of India's coastal town for the next summit in 2015. It was quite significant to see Chinese President Xi following Modi's trail visited Fiji on 21 November (just 2 days after Modi's trip) to meet a similar gathering of leaders indicating a struggle for influence between the two Asian giants in the island countries of south pacific.

FAST-TRACK DIPLOMACY

On completion of the first 100 days of Modi government the External Affairs Ministry published a booklet called "Fast Track Diplomacy" show-casing the achievement made in the foreign policy arena. In her first media interaction the minister Sushma Swaraj said the catchphrase for her tenure was "fast-track diplomacy" and said it had three faces – proactive, strong and sensitive.[59] Since taking office the External Affairs Minister held round-table meeting with all Indian heads of missions to the SAARC region, ASEAN region and Middle East separately as a follow up measure to carry forward the leads gained by high-profile visits and exchanges.

Para Diplomacy

One of the innovative idea of Modi government is the introduction of elements of para diplomacy in India's foreign policy where each states and cities would be encouraged to forge special relation with countries or federal states of another country or even cities of their interest in order. During the upcoming visit of Chinese President Xi Jinping Town twinning agreement between Mumbai and Shanghai, Ahmedabad and Guangzhou and a similar 'sister states' agreement between Gujarat and Guangdong province of China will likely to be signed. Earlier Varanasi signed partnership agreement with Kyoto, Japan.

East Asia policy

From the very beginning the Modi led government made it ample clear that India would focus more and more on improving relation with ASEAN and other East Asian countries as per India's Look East policy which was formulated during Narasimha Rao's government in 1992 for better economic engagement with its eastern neighbours but successive government later successfully turned it into a tool for forging strategic partnership and security cooperation with countries in that region in general and Vietnam and Japan in particular. In her recent visit to Hanoi, Vietnam Sushma Swaraj has stressed on the need for an Act East policy that she said should replace India's over two decade-old Look East Policy emphasizing a more proactive role for India in this region. East Asia being the major focus area of his foreign policy, Modi and his foreign minister chose several Asian countries for their initial bilateral visits. He has made state visits to Bhutan and Nepal and Japan within the first 100 days of his government followed by visits of Myanmar and Australia and also hosted Asia

leaders like Australian Prime Minister Tony Abbott, Chinese President Xi Jinping and Vietnamese Prime Minister Nguyễn Tấn Dũng apart from inviting SAARC leaders in his inauguration ceremony. External Affairs Minister Swaraj has also made official visits to several Asian capitals like Dhaka, Bangladesh, Kathmandu, Nepal, Naypidaw, Myanmar, Singapore, Hanoi, Vietnam, Manama, Bahrain, Kabul, Afghanistan, Dushanbe, Tajikistan, Male, Maldives, Abu Dhabi, United Arab Emirates Seoul, South Korea and Beijing, China.

South China Sea disputes

Though India's exclusive economic zone does not extend into the South China Sea, the region is geopolitically important to India as a high volume of its trade passes through the South China Sea. Modi intends India to act as a stabilizing force in the Indo-Pacific Region as a part of Modi's underlying Act East foreign policy initiative.

South Asia policy

Even before becoming the Prime Minister Narendra Modi hinted that his foreign policy will actively focus on improving ties with India's immediate neighbours which is being termed as "neighbourhood first" policy in the media and he started well by inviting all heads of state/heads of government of South Asian countries in his inauguration and on the second day on office he held bilateral talks with all of them individually which was dubbed as a mini SAARC summit by the media. Later during a launch event at ISRO he has asked Indian scientists to take the endeavour to develop a dedicated SAARC satellite to share the fruits of the technology like tele-medicine, e-learning etc. with the people across South Asia to complement the currently operating Indian Technical and Economic Cooperation Programme program in the region.

West Asia policy

Indian External Affairs Ministry refers the region of 'Middle east' as West Asia and not as Middle East which is a more popular attribution, particularly in the western countries. The region plays a vital role in India's economy as it supplies nearly two third of India's total oil import, bilateral trade is also flourishing in recent years particularly with UAE and other gulf states. Over the years millions of Indian mostly working class have migrated to the gulf looking for jobs and they account for a sizeable share in the total remittances received from abroad.

Link West policy

In an attempt to strengthen ties with India's western neighbours specially the gulf countries, Modi proposed this policy to complement his Act East policy concerning East Asia. Although it is called 'Link West' (West of India) which gives it a bigger geographical connotation, it is most likely to focus on the middle-east and some of the India's strategic thinkers are calling it as Modi's middle-east policy. The West Asia Approach of India is working successfully and its relations with Middle East are improving since Modi came in power. The "West Asia Approach" of India is now its key strategy to win Middle East. Indian foreign policy makers say that India's interests in the GCC countries are intimately linked with its energy security, trade, employment for Indians and remittances while Middle Eastern foreign policy experts believe that India has showcased itself as "Security Partner" during Modi's visit to UAE. Given the economic and human security interests, the stability and security of the GCC countries is crucial for India because huge flow of remittances comes from GCC to the Indian economy.

During the run-up to the general election there was wide-ranging scepticism regarding future of the strategic bilateral relation under Modi's premiership as in 2005 he was, while Chief Minister of Gujarat, denied a U. S. visa during the Bush administration for his alleged poor human rights records. However sensing Modi's inevitable victory well before the election, the US Ambassador Nancy Powell had reached out to him as part of greater re-approachment from the west. Moreover, following his 2014 election as the Prime Minister of India President Obama congratulated him over telephone and invited him to visit the US. U. S. Secretary of State John Kerry visited New Delhi on 1 August to prepare the grounds for Modi's first ever US visit as Prime Minister. In September 2014, days before visiting the US in an interview to CNN's Fareed Zakaria, Modi said that "India and the United States are bound together, by history and culture" but acknowledged that there have been "ups and downs" in relations. Modi travelled to US from 27–30 September 2014, beginning with his maiden address in the United Nations general assembly followed by attending a gala public reception by the Indian American community in New York's Madison Square Garden before heading Washington, D. C. for the bilateral talk with Obama. While there, Modi also met several American business leaders and invited them to join his ambitious Make in India program in a bid to make India a manufacturing hub. Later President Obama greeted Modi by calling him a "Man of Action" during their brief interaction at the Gala dinner hosted by Myanmar's President on the eve of ninth East Asia Summit this was their second meeting since Obama hosted a rare dinner for Modi at the White House on 29 September 2014. On 9 December 2014 US Senate confirmed Richard Rahul Verma as the US Ambassador to India, the first Indian American to hold the office, signalling the Obama administration's will to elevate the relation with India to a newer height. He assumed office in the US Embassy in New Delhi on 19 December 2014.

Modi invited President Obama to be the first US President to grace the 66th Republic Day celebration as Chief guest, an honour typically reserved for India's closest ally. President Obama was the first US President to visit India twice in office and the two leaders now scheduled to hold back to back summits within six months which is being referred as Modi's diplomatic coup by the media. "This Republic Day, we hope to have a friend over... invited President Obama to be the 1st US president to grace the occasion as chief guest."- Modi tweeted.

On 26 June 2017, Modi met with U. S. President Donald Trump in Washington, DC where they discussed trade, specifically airplanes and natural gas, and terrorism.

Modi in his maiden speech at the BRICS, a group of emerging economies comprising Brazil, Russia, India, China and South Africa, called for brotherhood among the member states citing Vasudhaiva Kutumbakam, an ancient Indian concept meaning the entire world is one family, to unitedly face the global challenges.

India together with its BRICS partner working toward launching of a financial institute rivalling the western dominated World Bank and IMF which was first proposed during the New Delhi summit in 2012 by the then Indian Prime Minister Manmohan Singh. In the 6th BRICS summit held on 14–26 July in Fortaleza, Brazil the group have agreed to establish the bank with a corpus of US\$100 billion. The bank would be named the New Development Bank as suggested by the Indian side but Modi government has failed to bag the bank's headquarter for New Delhi which would be located in Shanghai, China.

Later at an event in Brasilia BRICS leaders met the UNASUR heads of state/heads of government. At the same time, the Ministry of External Affairs added Spanish to its list of available languages, which the Hindustan Times read as "indicative of the government's intent to go beyond Europe, Asia and the US to forge diplomatic and trade ties with Latin American nations." He travelled there via Germany.

Modi delivered his maiden speech in the sixty-ninth session of the United Nations General Assembly on 27 September 2014, where he called for reform and expansion of United Nations Security Council including India's long standing demand of a permanent membership. He expressed his concerns over the relevance of a 20th-century setup in 21st century and the need to evaluate UN's performance in the past 70 years. He had also argued why UN should serve as "G-All" for global governance instead of several parallel sub-groupings like G7, G20 etc. In the wake of ISIS threat in West Asia and similar in other parts of the globe he urged for immediate implementation of 'Comprehensive on International Terrorism' by the UN and offered India's pro-active role in it citing India as a victim of terrorism for decades. Prior to his speech he along with External Affairs Minister Swaraj met UN Secretary General Ban Ki-moon and discussed UN governance relating issues. Ridiculing the possibility of any multilateral intervention, a demand Sharif has made in his address at the UNGA on 26 September, on Kashmir related matter he stated that his government is ready for 'bilateral talk' to Pakistan provided Pakistan should cultivate suitable environment for talks by giving up terrorism policy against India. Modi commented briefly on climate change and use of clean energy, in this regards he also asked world leaders and UN officials for observing International Yoga Day, emphasizing the importance of incorporating Yoga in modern-day life style.

At the sidelines he held bilateral meetings with Bangladeshi Prime Minister Sheikh Hasina, Sri Lankan President Mahinda Rajapaksa and Nepali Prime Minister Sushil Koirala taking his 'neighbourhood first' policy forward even in New York City. But there was no meeting with Pakistani Prime Minister Nawaz Sharif following the recent low in the relation. Later he also met where Benjamin Netanyahu, in a first meeting in 11 years between the two heads of government, the Israeli Prime Minister who had highlighted the potential of the bilateral relation saying "sky is the limit".

Relations with the immediate neighbours in South Asia, which have allegedly long been neglected by the previous governments, became a priority feature in Modi's foreign policy. He started well by inviting all the heads of states/governments of the neighbouring countries at his inauguration and then pushed for of an early summit to encourage cooperation in many regional issues like trade, connectivity, infrastructure, transit facility among the member states. In his maiden SAARC summit in Nepalese capital Kathmandu he had focused on greater people to people contacts, better connectivity, commercial linkages within the region.

China, which holds an observer status in the group, was represented by Vice Foreign Minister Liu Zhenmin seen actively promoting a more active role for itself in the region including infrastructure funding through its proposed Asian Infrastructure Investment Bank (AIIB) and extending its ambitious Maritime Silk Road project to South Asian nations. Pakistan, China's all weather friend, also vouched for a more participatory role for the observer nations in the summit process, indirectly advocating for a more Chinese involvement. Although no such proposal was accepted because of India's reservation.

India had earlier advanced three proposal to boost connectivity in the region and those were the 'Regulation of Passenger and Cargo Vehicular Traffic amongst SAARC Member States' for seamless vehicular movement beyond the national borders the 'SAARC Regional Agreement on Railways' for international rail service and the 'SAARC Framework Agreement for Energy Cooperation (Electricity)' for energy trade in the subcontinent which is often regarded as world's most energy starved region. Pakistan which is the second largest economy in the block threatened to jeopardise the entire summit by not agreeing any of the three proposed agreements. Indian Foreign Minister Sushma Swaraj had a brief interaction with Sartaj Aziz, Pakistan's foreign affairs advisor which was seen as possible ice-breaker but later the Indian side termed it as 'courtesy call'. The Nepalese delegation including Prime Minister Koirala, the summit host, tried hard to mediate between India

and Pakistan to rescue the summit from total failure which led to a hand-shake between Modi and Sharif at the end. Finally all the sides agreed to sign the 'SAARC Framework Agreement for Energy Cooperation (Electricity)' only as a face saving measure for the Kathmandu summit.

In the sidelines of the main summit Modi also held bilateral meetings with leaders of Afghanistan, Bangladesh, Bhutan, Nepal, Maldives and Sri Lanka with a notable exception of Pakistan due to ongoing stand-off between the two countries.

As of October 2019, Narendra Modi has made 56 foreign trips, visiting 60 countries including the visits to USA to attend the UN General Assembly, to Asian countries, following his neighbourhood first and act east policies.

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India and US Strategic Partner: Future Prospects

Dr. Wijeesh Ronit Saimon*

During the run-off to the 2014 Indian general election, there was wide-ranging scepticism regarding the future of the India–U. S. strategic relationship. Narendra Modi, whose US visa had been revoked while he was the Chief Minister of Gujarat, had been boycotted by US officials for almost a decade for his alleged role in the 2002 Gujarat riots. However, sensing Modi's inevitable victory well before the election, the US Ambassador Nancy Powell had reached out to him. Moreover, following his 2014 election as the Prime Minister of India President Obama congratulated him over telephone and invited him to visit the US. US Secretary of State John Kerry visited New Delhi on 1 August to prepare the grounds for Modi's first ever US visit as Prime Minister. In September 2014, days before visiting the US in an interview to CNN's Fareed Zakaria, Modi said that "India and the United States are bound together, by history and culture" but acknowledged that there have been "ups and downs" in relations. Modi travelled to US from 27–30 September 2014, beginning with his maiden address in the United Nations general assembly followed by attending a gala public reception by the Indian American community in New York's Madison Square Garden before heading Washington, D. C. for the bilateral talk with Obama. While there, Modi also met several American business leaders and invited them to join his ambitious Make in India program in a bid to make India a manufacturing hub.

India-U. S. bilateral relations have developed into a "global strategic partnership", based on shared democratic values and increasing convergence of interests on bilateral, regional and global issues. The emphasis placed by the Government in India on development and good governance has created opportunity to reinvigorate bilateral ties and enhance cooperation under the motto --- "ChaleinSaathSaath: Forward Together We Go", and "SanjhaPrayas, Sab ka Vikas" (Shared Effort, Progress for All) adopted during the first two summits of Prime Minister Modi and President Obama in September 2014 and January 2015 respectively. The summit level joint statement issued in June 2016 called the India-U. S. relationship an "Enduring Global Partners in the 21st Century".

Regular exchange of high-level political visits has provided sustained momentum to bilateral cooperation, while the wide-ranging and ever-expanding dialogue architecture has established a long-term framework for India-U. S. engagement. Today, the India-U. S. bilateral cooperation is broad-based and multi-sectoral, covering trade and investment, defence and security, education, science and technology, cyber security, high-technology, civil nuclear energy, space technology and applications, clean energy, environment, agriculture and health. Vibrant people-to-people interaction and support across the political spectrum in both countries nurture our bilateral relationship.

The frequency of high-level visits and exchanges between India and the U. S. has gone up significantly of late. Prime Minister Modi visited the U. S. on 26-30 September 2014; he held meetings with President Obama, members of the U. S. Congress and political leaders, including from various States and cities in the U. S., and interacted with members of President Obama's Cabinet. He also reached out to the captains of the U. S. commerce and industry, the American civil society and think tanks, and the Indian-American community. A Vision Statement and a Joint Statement were issued during the visit.

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The visit was followed by President Obama's visit to India on 25-27 January 2015 as the Chief Guest at India's Republic Day. During the visit, the two sides issued a Delhi Declaration of Friendship and adopted a Joint Strategic Vision for Asia-Pacific and the Indian Ocean Region. Both sides elevated the Strategic Dialogue between their Foreign Ministers to Strategic and Commercial Dialogue of Foreign and Commerce Ministers. Prime Minister Modi again visited the U. S. on 23-28 September 2015, during which he held a bilateral meeting with President Obama, interacted with leaders of business, media, academia, the provincial leaders and the Indian community, including during his travel to the Silicon Valley. In 2016, Prime Minister visited the U. S. for the multilateral Nuclear Security Summit hosted by President Obama in Washington D. C. on 31 March-1 April. This was soon followed by an official working visit by Prime Minister on 6-8 June, during which he held bilateral discussions with President Obama, and also addressed a Joint Session of the U. S. Congress. Prime Minister Modi was the sixth Indian Prime Minister to address the U. S. Congress. There is frequent interaction between the leadership of the two countries, including telephone calls and meetings on the sidelines of international summits. President Trump and Prime Minister Modi have spoken thrice over phone since the former's election in November 2016. A hotline has been established between the Prime Minister's Office and the U. S. White House.

HISTORY OF RELATIONS

The first Prime Minister of India Jawaharlal Nehru likened American Imperialism to that of British. He propounded and propagated the Non-Alignment Principle whereby India refused to join either the capitalistic US or the communist Soviet Union.

India's socialistic economic principles and deep scepticism to the US hegemony resulted in its predilections towards USSR much to the ire of the West. As the ideological Cold War ended after a myriad of international convergences and divergences, India was forced to look West given the paradigm shift in the geopolitics of the world and in Francis Fukuyama's words "End of History". Today both India and US are among the most vibrant foreign cohorts and strategic partners.

- The birth of Indian Republic was accompanied by Pakistan's occupation of Kashmir. Nehru's efforts to garner support from the international community was fruitless.
- India declined the American offer to accept a seat at the United Nations Security Council and rather pushed for the membership of the People's Republic of China which it has immediately recognized as a sovereign nation. (Reference – TheHindu)
- In the year **1950**, India abstained from a US-sponsored resolution calling for UN's military involvement in the Korean War. India even voted against UN forces crossing the 38th Parallel and naming China as an aggressor.
- **1955**: Pakistan officially aligned with the United States via the South East Asian Treaty Organization (SEATO) and Central Treaty Organization (CEATO) also known as Baghdad Pact. Meanwhile, India, being the chief proponent of Non-Alignment Movement (NAM), held the first Afro-Asian Conference at Bandung, Indonesia.
- The rogue state of Pakistan became an important ally to the US in the containment of the Soviet Union, giving rise to strategic complications with India.
- In the Sino-Indian war of **1962**, the US extended help to India against China's belligerence by sending an American carrier- The Enterprise- to the Bay of Bengal. China, however, had declared unilateral ceasefire the next day. Indian leaders and public welcomed American intervention.

- **1966:** In response to India's criticism of the US intervention in Vietnam, President Lyndon B. Johnson restricted the supply of grain shipments to India under Public Law 480 programme.
- **1967:** A predominantly Anti-American worldview led India to reject a founding membership in the Association of Southeast Asian Nations (ASEAN).
- **1968:** India rejected the Non-Proliferation Treaty (NPT) proposed by the world's leading nuclear powers.
- **1971:** The USA had maintained a studious silence on Pakistan's repressive policies in East Pakistan. The then Secretary of State Henry Kissinger visited Delhi to make India comply to not support liberation movements in East Pakistan. Indira Gandhi's intransigence was met with diplomatic muscle-flexing. Next month, India signed a Treaty of Friendship, Peace and Cooperation with the Soviet Union, seen as a blatant shift from India's Non-Alignment policies. US President Richard Nixon in a retaliatory move chose to explicitly tilt American policy in favour of Pakistan and suspended \$87 million worth of economic aid to India. American naval fleet USS Enterprise traversed the Bay of Bengal, issuing mild threats. India won the Bangladesh Liberation War as the Pakistani Army embarrassingly surrendered more than 90,000 troops.
- **1974:** India conducted its first nuclear weapon test at Pokhran, and it came as a major jolt to the USA who made plans to upgrade its presence at Diego Garcia, a British-controlled island in the Indian ocean.
- **1975:** India faced considerable domestic turmoil and entered into a state of Emergency.
- **1977:** The Emergency ended and the US immediately eased restrictions it has placed on World Bank loans to India and approved direct economic assistance of \$60 million.
- **1978:** US President Jimmy Carter and Indian Prime Minister Desai exchanged visits to each other's nations.
- **The 1980s:** Large amounts of military aid was pumped into Pakistan by the USA in order to fight a proxy against the Soviet Union in Afghanistan. This created significant repercussions in the internal security of India as the Pakistani mujahedeen fighters infiltrated into Kashmir as militants.
- **1988:** Prime Minister Rajiv Gandhi made a historic visit to China which led to normalization of relations between India and China.
- **1990:** India hesitatingly provided a brief logistical support for American military operations in the Gulf War.
- **Post-1991:** The Soviet Union disintegrated into independent nations and the United States emerged as the single largest hegemon, making the world unipolar. It coincided with India opening doors to foreign private capital in its historic Liberalization, Privatization, and Globalization move.
- Trade between India and the US grew dramatically and is flourishing today.

INDIA MATTERS TO THE USA?

- India is an indispensable partner for the United States. Geographically, it sits between the two most immediate problematic regions for U. S. national interests. The arc of instability that begins in North Africa goes through the Middle East, and proceeds to Pakistan and Afghanistan ends at India's western border.
- The Indian landmass juts into the ocean that bears its name. With the rise of Asian economies, the Indian Ocean is home to critical global lines of communication, with perhaps 50 percent

of world container products and up to 70 percent of ship-borne oil and petroleum traffic transiting through its waters.

- India's growing national capabilities give it ever greater tools to pursue its national interests to the benefit of the United States. India has the world's third-largest Army, fourth-largest Air Force, and fifth largest Navy. All three of these services are modernizing, and the Indian Air Force and Indian Navy have world-class technical resources, and its Army is seeking more of them.
- India is an important U. S. partner in international efforts to prevent the further spread of weapons of mass destruction.
- India's broad diplomatic ties globally (most importantly in the Middle East), its aspirations for United Nations (UN) Security Council permanent membership, and its role in international organizations such as the International Atomic Energy Agency makes New Delhi an especially effective voice in calls to halt proliferation.
- India's position against radicalism and terrorism corresponds with that of the United States.
- India's English-speaking and Western-oriented elite and middle classes comfortably partner with their counterparts in U. S. firms and institutions, including more than 2.8 million Indian Americans. The U. S. higher education system is an incubator of future collaboration, with more than 100,000 Indian students in American universities.
- As India modernizes and grows it will spend trillions of dollars on infrastructure, transportation, energy production and distribution, and defence hardware. U. S. firms can benefit immensely by providing expertise and technology that India will need to carry out this sweeping transformation.
- India-USA cooperation is critical to global action against climate change.
- India is genuinely committed to a world order based on multilateral institutions and cooperation and the evolution of accepted international norms leading to accepted international law.
- Indian culture and diplomacy have generated goodwill in its extended neighbourhood. New Delhi has positive relations with critical states in the Middle East, in Central Asia, in Southeast Asia, and with important middle powers such as Brazil, South Africa, and Japan—all of the strategic value to the United States. India's soft power is manifest in wide swaths of the world where its civil society has made a growing and positive impression.
- Indian democracy has prospered despite endemic poverty; extraordinary ethnic, religious, and linguistic diversity; and foreign and internal conflicts.

United States matters to India?

- America remains the critical stabilizing force in Asia through its military and diplomatic power projection and commitments to the region.
- The twentieth century bore witness to a multigeneration U. S. efforts to prevent the emergence of any hostile hegemon on the Eurasian landmass, a function that the United States continues to fulfil today with the help of its Asian partners.
- China has chosen episodically to ignore global nonproliferation norms, a pattern of behaviour that the United States has assiduously sought to curtail. Though no nation can a priori prevent future Chinese proliferation activities, only a U. S.-led international effort has any chance of success.
- India will be better able to protect its national interests in Pakistan and Afghanistan in coordination with the United States.
- The United States will continue to be important for India's economic success. India's economy has been built around unleashing domestic consumption rather than relying on exports.

- The United States has also remained one of the top sources of foreign direct investment in India, bringing important managerial expertise, capital, and technology with it to the dynamic Indian market.
- The United States has a long-term commitment to maintain security and freedom of navigation on the high seas, something critical to India as a net energy importer.
- Washington retains unparalleled power and influence in global governance institutions.
- As India seeks a larger role in the UN Security Council and international monetary institutions, U. S. support for India will be critical to reforms that benefit New Delhi's national interests.
- The United States retains a sizable technological edge on many commercial, aerospace, and defence technologies, the access to which benefits Indian national interests as well as Indian firms and customers.

India-USA: Strategic Partnership

1. Strategic Issues
2. Energy and Climate Change
3. Science and Technology
4. Health and Innovation
5. Education and Development

India-US Civil Nuclear Deal

The deal is seen as a watershed in India-USA relations and introduces a new aspect to international nonproliferation efforts. Since July 18, 2005, the deal lifts a three-decade U. S. moratorium on nuclear trade with India. It provides U. S. assistance to India's civilian nuclear energy program and expands India-USA cooperation in energy and satellite technology.

TERMS OF THE DEAL

1. India agrees to allow inspectors from the International Atomic Energy Association (IAEA), the United Nations' nuclear watchdog group, access to its civilian nuclear program. By March 2006, India promised to place fourteen of its twenty-two power reactors under IAEA safeguards permanently.
2. India commits to signing an Additional Protocol (PDF)-which allows more intrusive IAEA inspections of its civilian facilities.
3. India agrees to continue its moratorium on nuclear weapons testing.
4. India commits to strengthening the security of its nuclear arsenals.
5. India works toward negotiating a Fissile Material Cutoff Treaty (FMCT) with the United States banning the production of fissile material for weapons purposes. India agrees to prevent the spread of enrichment and reprocessing technologies to states that don't possess them and to support international nonproliferation efforts.
6. US companies will be allowed to build nuclear reactors in India and provide nuclear fuel for its civilian energy program.

An approval by the Nuclear Suppliers Group lifting the ban on India has also cleared the way for other countries to make nuclear fuel and technology sales to India. India would be eligible to buy U. S. dual-use nuclear technology, including materials and equipment that could be used to enrich uranium or reprocess plutonium, potentially creating the material for nuclear bombs. It would also receive imported fuel for its nuclear reactors.

Ashley Tellis of the Carnegie Endowment for International Peace—who was intimately involved in negotiating the civil nuclear agreement with India as a senior adviser to the U. S. undersecretary of state for political affairs—said in congressional testimony in 2005 that the deal recognizes this growing relationship by engaging India, which has proven it is not a nuclear proliferation risk. (Reference: Council on Foreign Relations)

Five developments in the India-US relations since the deal

1. The US has removed many high technology sanctions imposed on India since 1974. If Delhi was prevented by law from importing anything for its nuclear programme over the last few decades, it is boosting atomic power generation in India through imported uranium and is negotiating with multiple vendors for the purchase of new reactors.
2. The US has become India's largest trading partner in goods and services, and the two sides have set an ambitious goal of half a trillion dollars for future trade. The growing commercial engagement has been reinforced by an intensification of people-to-people contact and the presence of the 3 million strong Indian diasporas in America.
3. Cooperation on counter-terrorism and intelligence-sharing have expanded rapidly over the last decade. The US has become one of India's major suppliers of arms, and the two sides are discussing ideas that would once have been dismissed as inconceivable — for example, US support in the development of India's next-generation aircraft carrier.
4. In refusing to extend the civil nuclear initiative to Islamabad, Washington removed the hyphen in its relations with Delhi and Islamabad. Since 2005, America has also discarded the idea of mediating between India and Pakistan, especially on the Kashmir question.
5. While traditional differences between Delhi and Washington on global issues have endured, the two sides are now avoiding confrontation in multilateral fora dealing with trade and climate change.

Controversial issues with the deal

In March 2006, the U. S. Congress also took up the agreement and formally made it into legislation (Hyde Act) after the committee level deliberations and conciliations in terms of words by both the House and the Senate.

On 1 August 2007, U. S. and Indian negotiators concluded a separate technical agreement under section 123 of the U. S. Atomic Energy Act, which spells out the precise terms, conditions, responsibilities, obligations and promises that each party undertakes.

As the Hyde Act had imposed restrictions on how India could utilize U. S. nuclear supplies, the implementation of the agreement has received a setback because of the opposition by the Communist parties that supported India's UPA government from outside. Leaders of almost all the political parties of India had categorically expressed their dislike and apprehensions for provisions that provided for cutting off aid if India conducts any future nuclear tests and the return of the all nuclear material or equipment provided by U. S. suppliers.

Section 17b in the Civil Liability for Nuclear Damage Bill, 2010 according to which the Operator cannot seek recourse in case of nuclear accidents because of patent or latent defects in the material, equipment and even in the services provided. The US defies it to be against international norms whereas India says that it is according to Convention on Supplementary Compensation.

THE CIVIL LIABILITY FOR NUCLEAR DAMAGE BILL, 2010

- The Civil Liability for Nuclear Damage (CLND) Bill, 2010 fixes liability for nuclear damage and specifies procedures for compensating victims.
- The Bill fixes no-fault liability on operators and gives them a right of recourse against certain persons. It caps the liability of the operator at Rs 500 crore. For damage exceeding this amount, and up to 300 million SDR, the central government will be liable.
- All operators (except the central government) need to take insurance or provide financial security to cover their liability.
- For facilities owned by the government, the entire liability up to 300 million SDR will be borne by the government.
- The Bill specifies who can claim compensation and the authorities who will assess and award compensation for nuclear damage.
- Those not complying with the provisions of the Bill can be penalized.

ANALYSIS OF THE BILL AND FURTHER ISSUES

- The liability cap on the operator:
 - (a) may be inadequate to compensate victims in the event of a major nuclear disaster;
 - (b) may block India's access to an international pool of funds;
 - (c) is low compared to some other countries.
- The cap on the operator's liability is not required if all plants are owned by the government. It is not clear if the government intends to allow private operators to operate nuclear power plants.
- The extent of environmental damage and consequent economic loss will be notified by the government. This might create a conflict of interest in cases where the government is also the party liable to pay compensation.
- The right of recourse against the supplier provided in the Bill is not compliant with international agreements India may wish to sign.
- The time-limit of ten years for claiming compensation may be inadequate for those suffering from nuclear damage.
- Though the Bill allows operators and suppliers to be liable under other laws, it is not clear which other laws will be applicable. Different interpretations by courts may constrict or unduly expand the scope of such a provision.

The understanding reached with the United States on January 25, 2015, during the visit of President Obama to India

India and the United States have reached an understanding on the issues related to civil nuclear liability and finalized the text of the Administrative Arrangement to implement the September 2008 bilateral 123 Agreement. This will allow us to move towards commercial negotiations on setting up reactors with international collaboration in India and realize the significant economic and clean energy potential of the civil nuclear understanding of 2005-2008.

There is no proposal to amend the Civil Liability for Nuclear Damage Act of 2010 Act or the Rules.

How have U. S. concerns over the CLND Act then been resolved?

During the course of the discussions in the Contact Group, using case law and legislative history, the Indian side presented its position concerning the compatibility of the Civil Liability for Nuclear

Damage (CLND) Act and the Convention on Supplementary Compensation for Nuclear Damage (CSC). The idea of the India Nuclear Insurance Pool as a part of the overall risk-management scheme for liability was also presented to the U. S. side. Based on the presentations by the Indian side, and the discussion thereon, there is a general understanding that India's CLND law is compatible with the CSC, which India has signed and intends to ratify.

India-US Trade Relations

- There are more than 50 bilateral dialogue mechanisms between the two governments.
- India-USA bilateral trade in goods and services increased from \$104 billion in 2014 to \$114 billion in 2016.
- Both countries have made a commitment to facilitate actions necessary for increasing the bilateral trade to \$500 billion.
- In June 2016, Prime Minister Modi and President Obama pledged to explore new opportunities to break down barriers to the movement of goods and services, and support deeper integration into global supply chains, thereby creating jobs and generating prosperity in both economies.
- The U. S. is the fifth largest source of foreign direct investments into India.
- Among large Indian corporations having investments in the U. S. include Reliance Industries Limited, Tata Consultancy Services, Wipro, Essar America, Piramal, Mahindra, Lupin, Sun Pharma, etc.
- There are several dialogue mechanisms to strengthen bilateral engagement on economic and trade issues, including a Ministerial Level Economic and Financial Partnership and a Ministerial Trade Policy Forum. For greater involvement of private sector in the discussions on issues involving trade and investment, there is a bilateral India-USA CEO's Forum.
- India and the US have set up a bilateral Investment Initiative in 2014, with a special focus on facilitating FDI, portfolio investment, capital market development and financing of infrastructure.
- US firms will be lead partners in developing Allahabad, Ajmer and Vishakhapatnam as Smart Cities.

India-US Defence Cooperation

- Defence relationship has emerged as a major pillar of India-USA strategic partnership with the signing of 'New Framework for India-U. S. Defense Relations' in 2005 and the resulting intensification in defence trade, joint exercises, personnel exchanges, collaboration and cooperation in maritime security and counter-piracy, and exchanges between each of the three services.
- India participated in Rim of the Pacific (RIMPAC) exercise in July-August 2016.
- The agreements signed during the past one year include:
 1. Logistics Exchange Memorandum of Association (LEMOA)
 2. Fuel Exchange Agreement
 3. Technical Agreement (TA) on information sharing on White (merchant) Shipping
 4. Information Exchange Annexe (IEA) on Aircraft Carrier Technologies

PENDING AGREEMENTS ARE

- Communication and Information Security Memorandum of Agreement (CISMOA)
- Basic Exchange and Cooperation Agreement (BECA)

India-US: Cooperation in Energy and Climate Change

- The India-USA Energy Dialogue was launched in May 2005 to promote trade and investment in the energy sector.
- There are six working groups in oil and gas, coal, power and energy efficiency, new technologies and renewable energy, civil nuclear co-operation and sustainable development under the Energy Dialogue.
- As a priority initiative under the PACE (Partnership to Advance Clean Energy), the U. S. Department of Energy (DOE) and the Government of India have established the Joint Clean Energy Research and Development Center (JCERDC) designed to promote clean energy innovations by teams of scientists from India and the United States, with a total joint committed funding from both Governments of US\$ 50 million.

India-US: Cooperation in Education

India is learning from the U. S. experience in community colleges in order to meet our demands for skill-development. It has been agreed to collaborate with U. S. institutions in the area of Technology Enabled Learning and Massive Open Online Courses (MOOCs) to extend the reach of education in India. Under the Global Initiative of Academic Networks (GIAN) launched by India, up to 1000 American academics will be invited and hosted each year to teach in Indian universities at their convenience. The two sides are also collaborating to establish a new Indian Institute of Technology in Ahmedabad.

The 3.5-million-plus strong Indian American community is an important ethnic group in the U. S., accounting for about 1% of the total population in the country. Indian American community includes a large number of professionals, business entrepreneurs and educationalists with increasing influence in the society. The two countries have been working together to facilitate travel of their respective citizens, and to this end, an MOU has been signed in June 2016 to facilitate India's joining of the Global Entry Programme for expedited immigration for eligible Indian citizens at U. S. airports.

It appears highly likely that in strategic, political, security, defence and economic terms, relations between India and the USA will continue their upward trajectory under President Trump. Impact of USA's relations with Pakistan over India is likely to be beneficial and positive. Geopolitical manoeuvres can have significant impact on India-USA relations, however, it would remain to be multi-faceted and an "indispensable partnership"

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भारत की चीन-पाक नीति

Dr. Wijeesh Ronit Saimon*

अपने विदेश नीति में प्रधानमंत्री नरेंद्र मोदी ने भारत के पड़ोसी देशों की तुलना में चीन और पाकिस्तान के साथ संबंधों को अधिक महत्त्व देने की बात कही है। चीन के साथ संबंधों के संदर्भ में मोदी ने कहा कि दोनों देशों के बीच मतभेदों को दूर करने के लिये नए अवसर पैदा हुए हैं। सभी विषयों पर अपने पड़ोसियों से बातचीत करना भारत की नीति रही है और भारत बातचीत करने के लिये सदैव तैयार है। उन्होंने जोर देकर कहा कि आतंकवाद बंद होना चाहिये क्योंकि बम की आवाज़ में बातचीत सुनाई नहीं देती। भारत सीमा-पार आतंकवाद पर लगातार दबाव बनाए हुए है। आज आतंकवादियों को मदद करने वाला पाकिस्तान अलग-थलग पड़ गया है और आतंकी घटनाओं में भी कमी आई है।

भारत-पाक संबंध

नरेंद्र मोदी की सरकार ने भारत के पड़ोसी देशों को अपनी विदेश नीति में शीर्ष प्राथमिकता पर रखा है। गौरतलब है कि पाकिस्तान के साथ भारत का विभिन्न मुद्दों पर विवाद है, जैसे- कश्मीर, सियाचिन, सिंधु नदी जल विवाद, कच्छ का रण या सरक्रीक विवाद। वर्ष 2015 में भारतीय प्रधानमंत्री ने लाहौर की यात्रा की, किंतु पठानकोट हमला और सीमा-पार आतंकवाद के कारण संबंधों में गतिरोध उत्पन्न हुआ। इसी क्रम में 'सर्जिकल स्ट्राइक' और भारत ने पाकिस्तान में आयोजित 'सार्क सम्मेलन' का बहिष्कार किया। चीन ने पाकिस्तान में 'ग्वादर पत्तन' का निर्माण किया है। चीन के द्वारा 'वन रोड वन बेल्ट' परियोजना के अंतर्गत 'चीन पाकिस्तान-आर्थिक' गलियारा का निर्माण किया जा रहा है, जो पाकिस्तान अधिकृत कश्मीर से होकर जा रहा है, जिसे भारत अपना क्षेत्र मानता है।

इस क्षेत्र में चीनी अधिकारियों और सैनिकों को तैनात किया जा रहा है जो भारतीय सुरक्षा के लिये गंभीर खतरा साबित हो सकता है। इसके अतिरिक्त चीन-रूस संबंधों के कारण पाकिस्तान की रूस के साथ भी नजदीकियाँ बढ़ रही हैं। चीन-पाकिस्तान-रूस संबंधों के कारण भारतीय हित प्रभावित हो रहे हैं। मई 2014 में एक अभूतपूर्व कदम उठाते हुए भारत के प्रधानमंत्री ने अपने शपथ ग्रहण समारोह में मॉरीशस के साथ दक्षिण एशिया एसोसिएशन फॉर रीजनल कोऑपरेशन (SAARC) देशों के सात अन्य नेताओं को आमंत्रित किया। अगले दिन पाकिस्तान के प्रधानमंत्री नवाज शरीफ ने भी शिरकत की।

प्रधानमंत्री मोदी की नज़र में पड़ोसी देशों की अहमियत स्पष्ट है। पिछले नेताओं के विपरीत वह घरेलू व्यापार में वृद्धि और विकास के लिये विदेशी निवेश, व्यापार और प्रौद्योगिकी हासिल करने के साधन के रूप में विदेश नीति का उपयोग करने के लिये उत्सुक हैं। लेकिन यह एक कठिन और जटिल कार्य होगा, विशेष रूप से भारत के दो शक्तिशाली परमाणु-शस्त्र संपन्न पड़ोसी देशों, पाकिस्तान और चीन के साथ भारत के संबंध राजनीतिक और सैन्य गतिरोधों के कारण तनावपूर्ण रहे हैं।

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वर्तमान में पाकिस्तान, भुगतान संतुलन जैसे संकट का सामना कर रहा है और पाकिस्तान पर ऋण का बोझ बढ़ता जा रहा है। पाकिस्तान के पुनर्निर्माण एवं आर्थिक विकास में भारत सहयोगी की भूमिका निभा सकता है। हाल ही में पाकिस्तानी प्रशासन ने 'करतारपुर कॉरिडोर' बनाने का ऐलान किया है जिसका भारत ने समर्थन किया। इससे पर्यटन को बढ़ावा मिलने के साथ ही नागरिकों के मध्य संपर्क अर्थात् 'पीपुल टू पीपुल कांटेक्ट' होगा तथा संबंधों में मधुरता तथा विश्वास बढ़ने की उम्मीद है। भारतीय उपमहाद्वीप में विभाजन के साथ कट्टर प्रतिद्वंद्विता के कारण पाकिस्तान का निर्माण हुआ और यह ऐतिहासिक आधार भारत-पाकिस्तान के संबंधों को आज भी प्रभावित कर रहा है। जहाँ भारत का निर्माण लोकतांत्रिक पंथनिरपेक्ष एवं बहुलवादी राज्य के रूप में हुआ, वहीं पाकिस्तान का निर्माण धार्मिक आधार पर हुआ तथा इसने भारत विरोधी नीति को मूल आधार बनाया।

दोनों देशों के बीच विवाद के प्रमुख मुद्दे हैं-

कश्मीर मुद्दा: भारत के विभाजन के बाद कश्मीर देशी रियासत का भारत में विलय हो गया, परंतु पाकिस्तान के द्वारा इसे स्वीकार नहीं किया गया तथा सामरिक और सैन्य दृष्टिकोण से कश्मीर के महत्त्व को देखते हुए पाकिस्तान इसे अपना भाग बनाने का प्रयास करता रहा, जबकि भारत शुरु से ही कश्मीर को अपना अभिन्न अंग मानता आया है। इस संदर्भ में 1994 में भारतीय संसद के द्वारा प्रस्ताव भी लाया गया जिसमें स्पष्ट उल्लिखित है कि पाक अधिकृत कश्मीर भारतीय कश्मीर का भाग है।

सिंधु नदी जल विवाद मुद्दा: 1960 में सिंधु नदी समझौते के अंतर्गत सिंधु, झेलम और चिनाब को पाकिस्तान की नदियों के रूप में जबकि सतलुज, रावी एवं व्यास पर भारत के नियंत्रण को स्वीकार किया गया। इस समझौते के द्वारा भारत को पाकिस्तान की नदियों पर जल के सीमित प्रयोग का अधिकार दिया गया।

पाकिस्तान की आपत्ति: पाकिस्तान के द्वारा यह आरोप लगाया जाता है कि भारत, पाकिस्तान के हिस्से के पानी का प्रयोग कर रहा है।

भारत का तर्क: भारत के अनुसार ग्लेशियर कम होने से और बरसात कम होने के कारण सिंधु नदी में पानी का प्रवाह कम हो रहा है तथा सिंधु नदी के पानी का मुद्दा उठाकर पाकिस्तान सीमापार आतंकवाद से ध्यान भटकाना चाहता है।

सियाचिन विवाद: सियाचिन, पाकिस्तान नियंत्रित गिलगित और बालटिस्तान के समान अत्यधिक ऊँचाई पर होने के साथ ही काराकोरम दर्रे के निकट है जो भारत के जम्मू व कश्मीर राज्य को तिब्बत या चीन से जोड़ता है, इसलिये यह भारत और पाकिस्तान दोनों के लिये सामरिक महत्त्व रखता है। पाकिस्तान द्वारा 1984 में इस पर नियंत्रण करने का प्रयत्न किया गया, जिसके जवाब में भारत के द्वारा ऑपरेशन मेघदूत प्रारंभ किया गया और उसके बाद से यह क्षेत्र भारत के कब्जे में है।

आतंकवाद का मुद्दा: पाकिस्तान द्वारा कश्मीर में आतंकवाद, अलगाववादी व उग्रवादी संगठनों को बढ़ावा देने के साथ-साथ भारत के विरुद्ध छद्म युद्ध भी चलाया जा रहा है, जिसमें 2001 में भारतीय संसद पर हमला, 2008 में मुंबई हमला तथा हाल ही में पठानकोट आतंकी हमला प्रमुख हैं। पाकिस्तान उन आतंकी संगठनों (जैसे- लश्कर-ए-तैयबा, जैश-ए-मुहम्मद) को प्रशिक्षण व वित्तीय सहायता उपलब्ध कराता है जो कश्मीर के साथ-साथ भारत के विरुद्ध हिंसात्मक घटनाओं में शामिल होते हैं।

सरक्रीक विवाद: सरक्रीक भारत के कच्छ और पाकिस्तान के सिंध प्रांत की विभाजक रेखा है जिसके निकट कराची पत्तन स्थित है। पाकिस्तान का तर्क है कि कच्छ के क्षेत्र में स्थित सरक्रीक का विभाजन 24° समानांतर होना चाहिये, जबकि भारत इस तर्क को स्वीकार करने के लिये तैयार नहीं है और भारत के अनुसार मिड चैनल के आधार पर रेखा का विभाजन होना चाहिये।

चीन-पाक आर्थिक गलियारा: यह आर्थिक कॉरिडोर चीन के जिगजियांग क्षेत्र के काश्गर क्षेत्र को पाकिस्तान के बलूचिस्तान राज्य में स्थित ग्वादर पत्तन से जोड़ता है। यह कॉरिडोर पाकिस्तान अधिकृत कश्मीर से होकर गुजर रहा है और वैधानिक रूप से भारत का भाग है, जो भारतीय सुरक्षा के लिये एक बड़ी चुनौती है।

उपरोक्त बिंदुओं को देखते हुए हम कह सकते हैं कि भारत-पाक के बीच सहयोग की बजाय विवाद के मुद्दे अधिक हैं जिससे समूचा दक्षिण एशिया प्रभावित है।

भारत-चीन संबंध

प्रधानमंत्री मोदी को इस बात का एहसास है कि तेज़ी से आर्थिक विकास के अपने घरेलू एजेंडे को स्थिर और अनुकूल पड़ोसियों को साथ लिये बिना पूरा नहीं किया जा सकता है। दक्षिण एशिया में चीन की बढ़ती पैठ को लेकर भी भारत सतर्क है। हालाँकि इस क्षेत्र में चीन की उपस्थिति भारत द्वारा पूरी तरह से टालने योग्य या अवांछनीय नहीं है, लेकिन भारत की कुछ रणनीतिक चिंताएँ ज़रूर हैं। चीन ने 'वन बेल्ट वन रोड' जैसी परियोजनाओं के माध्यम से दक्षिण एशियाई देशों में अपनी सॉफ्ट पॉवर को बढ़ाया है।

भारत के चारों ओर रणनीतिक स्थानों तथा हिंद महासागर के महत्वपूर्ण संचार मार्गों पर चीन लगातार बुनियादी ढाँचे, विशेष रूप से बंदरगाहों का निर्माण कर रहा है और दक्षिण एशिया में भारत को घेरने का प्रयास कर रहा है जिसे अक्सर घेरने की रणनीति या 'मोटियों की माला' कहा जाता है। चीन ने पाकिस्तान के सदाबहार मित्र के रूप में उभरने के अलावा, भारत के अधिकांश पड़ोसियों पर गहरी पकड़ बनाई है। चीन ने हाल ही में जिबूती में सैनिक अड्डे का निर्माण किया है। भारत के द्वारा चीन के साथ 'डीलिकिंग' की नीति को अपनाया गया है, जिसके तहत आर्थिक संबंधों और सीमा विवाद को अलग-अलग देखने का प्रयास किया गया है। वर्तमान में भारत-चीन द्विपक्षीय व्यापार लगभग 76 बिलियन डॉलर का हो गया है। भारत का सबसे बड़ा द्विपक्षीय भागीदार चीन है हिंद महासागर में चीन के बढ़ते प्रभाव को प्रतिसंतुलित करने के लिये भारत ने सामरिक और प्रैग्मैटिक नीति के तहत 'मालाबार सैन्य अभ्यास' में जापान को सम्मिलित किया, तो वहीं क्वैड (अमेरिका, जापान, आस्ट्रेलिया, भारत) में शामिल हुआ। दोनों देशों के मध्य अनेक क्षेत्रों में सहयोग की संभावनाएँ हैं। हाल की वार्ताओं में दोनों देश इस बात पर सहमत हुए हैं कि भारत-चीन संबंधों को नया आयाम दिया जाए।

पाकिस्तान : एक कठिन चुनौती

आज़ादी के बाद भारत और पाकिस्तान के बीच तीन युद्ध कश्मीर को लेकर और एक बांग्लादेश को लेकर लड़े गए। 1998 में जब दोनों देशों ने परमाणु हथियार हासिल कर लिये तब से यह कम तीव्रता वाले सैन्य टकराव में बदल गया। विवादित कश्मीर क्षेत्र को विभाजित करने वाली नियंत्रण रेखा (LOC) पर पाकिस्तान

द्वारा हिंसा और गोलीबारी के कारण द्विपक्षीय शांति वार्ता को अंजाम तक ले जाना मोदी सरकार के लिये बहुत मुश्किल है। पाकिस्तान के आतंकी संगठनों लश्कर-ए-तैयबा (LeT) या जैश-ए-मोहम्मद (JeM) ने 2008 में जिस तरह से मुंबई हमले को अंजाम दिया था वैसे हमले पाकिस्तान स्थित आतंकवादी समूह ही कर सकते हैं। भारतीय सुरक्षा प्रतिष्ठानों का मानना है कि इस तरह के किसी भी हमले की योजना पाकिस्तानी सुरक्षा प्रतिष्ठान द्वारा विशेष रूप से अपने शक्तिशाली खुफिया संगठन, इंटर-सर्विसेज इंटेलिजेंस (ISI) द्वारा बनाई जाती है।

मोदी ने पाकिस्तान के प्रति भारत के रुख को सख्त कर दिया है। उन्होंने भारत में पाकिस्तानी उच्चायुक्त और कश्मीरी अलगाववादी हुरियत संगठन के बीच अगस्त 2014 में निर्धारित विदेश सचिव स्तर की वार्ता को रद्द कर दिया। इसके साथ ही भारत ने भी जान-बूझकर नियंत्रण रेखा और अंतर्राष्ट्रीय सीमा पर फायरिंग तेज़ कर दी है। हालाँकि इससे भारत को अधिक लाभ नहीं मिला है। पाकिस्तान के साथ क्षेत्रीय सहयोग बढ़ाने तथा आपसी विश्वास हासिल करने के लिये भारत को कुछ हट कर सोचने की ज़रूरत है। पाकिस्तान की नागरिक सरकार को मजबूत करने के साथ-साथ भारतीय प्रधानमंत्री को पाकिस्तान की सेना के साथ जुड़ने की ज़रूरत है ताकि यह पता लगाया जा सके है कि भारत के प्रति उसकी मंशा क्या है।

पाकिस्तान की आर्मी भारत के साथ शत्रुता की नीति को नहीं त्यागना चाहती है और कायरतापूर्ण हमले रोकने की इच्छुक नहीं दिखाई देती लेकिन जब तक ऐसी दुर्भावनाओं को रोका नहीं जाता, सार्थक वार्ता हो पाना संभव नहीं है। सरकार ने अब तक के कार्यकाल में संबंधों को पटरी पर लाने के लिये उचित प्रयास किये हैं। प्रधानमंत्री लाहौर तक गए लेकिन पाकिस्तान की जो नकारात्मक नीति है वह पारंपरिक है और चली आ रही है। 2016 में पठानकोट और उसके बाद उड़ी में आतंकी हमलों का कारण पाकिस्तान ही है।

ऐसे में प्रधानमंत्री का यह कहना कि बम की आवाज़ में बातचीत की प्रक्रिया नहीं हो सकती, उचित ही है। आतंकवाद और वार्ता दोनों एक साथ नहीं हो सकती। आतंकवाद को लेकर पाकिस्तान पर दबाव बनाने का असर अंतर्राष्ट्रीय मंचों पर आतंकवाद के मुद्दे को प्रमुखता से रखना भारतीय विदेश नीति की प्राथमिकता में रहा है। इन मंचों में पाकिस्तान पर दबाव बनाने की बात की गई है जिसका असर विगत वर्षों में देखने को मिला है।

अगर द्विपक्षीय स्तर पर देखें तो आतंकवाद के मुद्दे पर सभी देश भारत के साथ आना चाहते हैं यानी भारत के साथ खड़े हैं। पाकिस्तान के जो खास मित्र देश हुआ करते थे उनको भी भारत समझाने में सफल हुआ है कि जब तक पाकिस्तान आतंकवाद का साथ नहीं छोड़ेगा तब तक पाकिस्तान और भारत के बीच संबंध सुधर नहीं सकते।

इससे कहीं-न-कहीं 'टर्म्स ऑफ़ इंगेजमेंट' में बदलाव आया है और पाकिस्तान अपने आपको अलग-थलग महसूस करने लगा है। पिछले ब्रिक्स सम्मेलन में पाकिस्तान आधारित आतंकी संगठनों को लेकर उद्घोषणा की गई थी। पाकिस्तान को कूटनीतिक रूप से अलग-थलग करने की मोदी सरकार की नीति उतनी सफल नहीं हो पा रही है क्योंकि इस्लामाबाद ने बीजिंग, मास्को और तेहरान को शामिल करने के लिये अपने राजनयिक प्रयास बढ़ा दिये हैं।

‘नेबरहुड फर्स्ट नीति’ (Neighbourhood First Policy)

तेज़ी से बदलते परिदृश्य के साथ बाहरी मामलों से निपटने के लिये नीतियाँ भी बदलती रहती हैं। अतः भारत भी समय-समय पर अपनी विदेश नीति में ऐसे बदलाव करता रहता है ताकि समयानुसार स्थितियों का सर्वाधिक लाभ प्राप्त किया जा सके। भारत ने वैश्वीकरण के वर्तमान दौर में दक्षिण एशिया में क्षेत्रीय एकीकरण की आवश्यकता को संबोधित करने के लिये ‘नेबरहुड फर्स्ट नीति’ (Neighbourhood First Policy) को वर्ष 2015 में प्रारंभ किया।

‘नेबरहुड फर्स्ट नीति’ का अर्थ अपने पड़ोसी देशों को प्राथमिकता देने से है अर्थात् ‘पड़ोस पहले’ (Neighbourhood First)। इस नीति के तहत सीमा क्षेत्रों के विकास, क्षेत्र की बेहतर कनेक्टिविटी एवं सांस्कृतिक विकास तथा लोगों के आपसी संपर्क को प्रोत्साहित करने पर ध्यान केंद्रित किया गया। उल्लेखनीय है कि यह सॉफ्ट पॉवर पॉलिसी का ही एक माध्यम है।

इस नीति के तहत शामिल महत्वपूर्ण बिंदु इस प्रकार हैं-

- ◆ इस नीति के माध्यम से भारत अपने पड़ोसी देशों तथा हिंद महासागर के द्वीपीय देशों को राजनीतिक एवं कूटनीतिक प्राथमिकता प्रदान करने का इच्छुक है।
- ◆ इसका उद्देश्य पड़ोसी देशों को संसाधनों, सामग्रियों तथा प्रशिक्षण के रूप में सहायता प्रदान कर समर्थन देना है।
- ◆ भारत की इस नीति का उद्देश्य भारत के नेतृत्व में क्षेत्रवाद के ऐसे मॉडल को प्रोत्साहित करना है जो पड़ोसी देशों के भी अनुकूल हो।
- ◆ वस्तुओं, लोगों, ऊर्जा, पूंजी तथा सूचना के मुक्त प्रवाह में सुधार हेतु व्यापक कनेक्टिविटी और एकीकरण।
- ◆ साथ ही सांस्कृतिक विरासत के माध्यम से पड़ोसी देशों के साथ संपर्क स्थापित करना।

पाकिस्तान की नई सरकार बदलाव लाने में कितनी सक्षम?

आतंकवाद को लेकर भारत की चिंताओं पर कुछ ठोस ज़मीनी क़दम उठाए बिना पाकिस्तान भारत के साथ रिश्ते को आगे नहीं बढ़ा सकता है। आतंकवाद पर पाकिस्तान की नीयत की असली परीक्षा यह होगी कि वह घोषणाओं की बजाय कुछ कदम उठाए। अब तक ऐसा कुछ नहीं हुआ है जिससे यह संकेत मिलता हो कि पाकिस्तान भारत के खिलाफ़ चल रहे जिहाद को बंद करने के लिये झूठे वादों से आगे बढ़कर कुछ करना चाहता है।

सवाल यह है कि क्या इमरान खान भारत और पाकिस्तान के रिश्तों में कोई बदलाव ला सकेंगे? या क्या वह कोई बदलाव लाने के प्रति गंभीर भी हैं? इन दोनों ही सवालों का जवाब नकारात्मक ही है।

सबसे महत्वपूर्ण बात यह है कि भारत के बारे में कोई फ़ैसला लेने की शक्ति उनके पास नहीं है। असल खिलाड़ी तो पाकिस्तान की सेना है। इमरान खान जैसे किसी व्यक्ति के पाकिस्तान का प्रधानमंत्री बन जाने भर से भारत के खिलाफ़ भरी हुई नफ़रत समाप्त नहीं हो जाएगी। विशेषज्ञों का मानना है कि इमरान खान की सरकार पूर्ववर्ती सरकारों से कमज़ोर है। इसलिये इमरान खान से बहुत अधिक उम्मीद रखना ठीक

नहीं होगा। पाकिस्तान की सेना का रवैया वैसा ही है जैसा कि पहले था, वह धार्मिक चरमपंथी सरकार की सोच को आकार देने में महत्वपूर्ण भूमिका निभा रही है तथा पाकिस्तान की भारत के प्रति शत्रुता पहले की ही तरह लगातार बढ़ रही है।

निष्कर्ष

प्रधानमंत्री मोदी अपने पड़ोसी देशों के साथ मज़बूत संबंध स्थापित करने के पक्षधर हैं और पड़ोसी देशों के साथ मधुर संबंध भारत की विदेश नीति का केंद्रीय तत्त्व रहा है। पाकिस्तान के सामने अब बड़ी चुनौती वहाँ फँसे आतंकवाद से निपटने की है। चीन को भी सबक लेना चाहिये कि अगर वह किसी भी रूप में आतंकवाद का समर्थन करता है तो यह उसके लिये भी अच्छा नहीं होगा। चीन यह भी भली-भाँति जानता है कि भारत पिछले तीन दशक से आतंकवाद का जो दंश झेल रहा है, उसके पीछे पाकिस्तान का ही हाथ है और दूसरी ओर वह भारत से दोस्ती की भी बात कहता है। हालाँकि सभी प्रयासों के बाद भी हाल-फ़िलहाल शांति स्थापित होने की संभावना नहीं है।

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A Study of Frustration Among B.Ed. Trainees in Relation to their Social Maturity

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ABSTRACT

The Present paper is an attempt to study the relationship between frustration and social maturity of B. Ed. trainees. A sample of 120 B. Ed. trainees (60 male and 60 female) was selected randomly of Patiala district of Punjab state. Reaction to Frustration Scale by B. M. Dixit and Dr. D. N. Srivastava and Social Maturity Scale by Dr. R. P. Srivastva were used to collect the data. The study reveals that there is no significant difference between frustration of male and female trainees, there is significant difference between Social Maturity of male and female trainees, there is low positive correlation between the variable frustration and Social maturity of trainees, there is very low positive correlation between frustration and Social maturity of male trainees, there is positive correlation between frustration and Social maturity of female trainees.

Keywords: Frustration, Social maturity and B. Ed. trainees.

INTRODUCTION

Modern time is characterized by an era of tension, stress, depression, anxiety, frustration owing to cut throat competition and increasing consumerism. In the present scenario frustration seems to be in the air. Ask any man, if he is feeling happy, contented; generally the answer is in negative. In this era, explosion of population and changing dimensions have brought a rapid change in socio-economic scenario of human life. The educators are worried about the growing indiscipline in the society and in the educational institutions which has caused deterioration in education. Some of the educationists are of the view that this indiscipline is indication of frustration in various forms among trainees. Social Maturity has to do with how well people understand the nature of social world they live within. Social Maturity is what enables us to function as healthy adults. Without it, we end up difficult times to ourselves and causing a lot of difficult times for other people. A high degree of Social Maturity has something to do with a high degree of social skills. Maturity develops not only in physical, mental and emotional behaviour but also in the social behaviour.

FRUSTRATION

Frustration is one of the most dominating factor influencing the individual behaviour. The sources of frustration are many and diversified. The specific situations that bring about frustration are endless but they can generally be put in to three categories i.e. physical environment, Man's biological limitations and psychological make-up. Many psychologists have pointed out the importance of frustration towards constructive side. The frustration may spur individual to greater and more

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well organized efforts determined to achieve ultimate success and satisfaction. It may increase the strength of the motive and to redouble the efforts to go ahead with the blocked line of activity.

Modes of Frustration

Frustration has four modes of reactions to a situations or objectives responses :

- (1) Aggression indicates frustration dynamics in futile situation.
- (2) Resignation is the extreme escapism from reality.
- (3) Regression is the condition to go back.
- (4) Fixation is the compulsive type of behaviour.

Subjective Responses to frustration can be classified as

- **Extrapunitive-** In this type of conscious reaction the individual directs his reactions towards outward situation and other persons. He expresses his anger towards other people and blames them for his misfortunes.
- **Intropunitive-** In this type of reaction the individual experiences humiliation and guilt. He holds himself irresponsible and may conceive of himself as inferior and unworthy and feels helpless or depressed.
- **Impunitive-** In this type of reaction person feels embarrassed and shameful. No other person or event is blamed.

There is some driving force or motivation behind all behaviour, which activates the individual for achieving the goal, when motivated behaviour is blocked by an obstacle, tension is produced and it lasts as long as the barrier is present. But frustration occurs only when the organism meets hindrances which are difficult or impossible to overcome (Malavia, 1977). Frustration is an important phenomenon because of its close relation for the understanding of normal and abnormal behaviour, its inevitability in human life, its role in human adjustment and its growing importance in the modern times.

SOCIAL MATURITY

Social maturity means attaining maturity in social relationships. Maturity in social relationships means to establish good relations with family members, neighbours, friends, playmates, class-fellows, teachers and other members of the society. Social maturity is also evidenced by an individual's capacity for making and keeping friends.

Oxford Advanced Learners Dictionary (2000), 'Social maturity refers to degree of growth in social and vocational abilities'.

According to Dictionary of Education (2007) by Lohithakshan, 'Social maturity means social development level characterized by independence from parental and adult control in social situations'. It is characterized by the individual's ability to mix with people in social situations and manage social dealings without anybody's assistance.

Social maturity is used to measure how well a person fits into the actions and expectations of the society. A person is said to be socially mature if he is skilled, self directed and has ability to take stress, communicate, cooperate, tolerate and openness to change. Man is basically a social animal. His existence without social set up can hardly be imagined. He is born, develops, works and progresses in a society. There are various social factors (Parents, family members, classmates, friends, neighbours, peer group, etc.) as well as psychological factors which contributes in the social maturity of an individual. Apart from social factors there are several psychological factors such as mental health, stress, depression, frustration, motivation, Intelligence and emotional intelligence,

which determine the level of social maturity and his success in forming and maintaining good social relations. Socially mature individual has the capability to make adjustment with himself and with his environments and circumstances.

OBJECTIVES OF THE STUDY

The present study is carried out with the following objectives:-

1. To study the frustration among male and female trainees.
2. To study the Social maturity among male and female trainees.
3. To study the correlation between frustration and Social maturity of trainees.
4. To study the correlation between frustration and Social maturity of male trainees.
5. To study the correlation between frustration and Social maturity of female trainees.

HYPOTHESIS

1. There is no significant difference in the frustration among male and female trainees.
2. There is no significant difference in the Social maturity among male and female trainees.
3. There is no significant correlation between frustration and Social maturity of trainees.
4. There is no significant correlation between frustration and Social maturity of male trainees.
5. There is no significant correlation between frustration and Social maturity of female trainees.

RESEARCH METHOD

Keeping in view the nature and main purpose of the study, survey method was considered to be the most appropriate for undertaking this study.

SAMPLE OF THE STUDY

In the present investigation simple random sampling technique was used for the selection of the sample. The sample size consist of 120 (60 male and 60 female) B. Ed. trainees of Patiala district of Punjab state. The age range of subjects was 18-25 years.

TOOLS USED

The following standardized tools were used for the collection of data:

1. Frustration Test: Reaction to Frustration Scale by B. M. Dixit and Dr. D. N. Srivastava.
2. Social Maturity test: Social Maturity Scale by Dr. R. P. Srivastva.

Statistical technique used

The major statistical techniques used

- Mean and standard deviation
- Pearson's product moment correlation
- t-test

DATA ANALYSIS AND INTERPRETATION

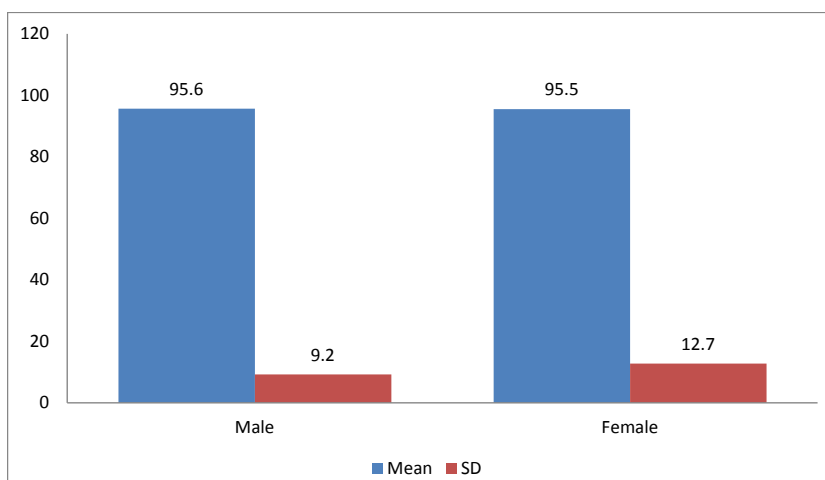
Null Hypothesis: 1

There is no significant difference in the frustration among male and female trainees.

Table-1: Difference on variable frustration among male and female trainees

Gender	N	Mean	SD	t-value	Level of significance
Male	60	95.6	9.20	0.0656	Not Significant
Female	60	95.5	12.7		

Table 1 shows that the mean value for male and female trainees are 95.6 and 95.5 and SDs are 9.20 and 12.7 respectively. t-value came out to be 0.0656, which is not significant at 0.05 level of significance, when we compared it with the table value. Therefore, the null hypothesis, "There is no significant difference between frustration of male and female trainees" is accepted.



Null Hypothesis: 2

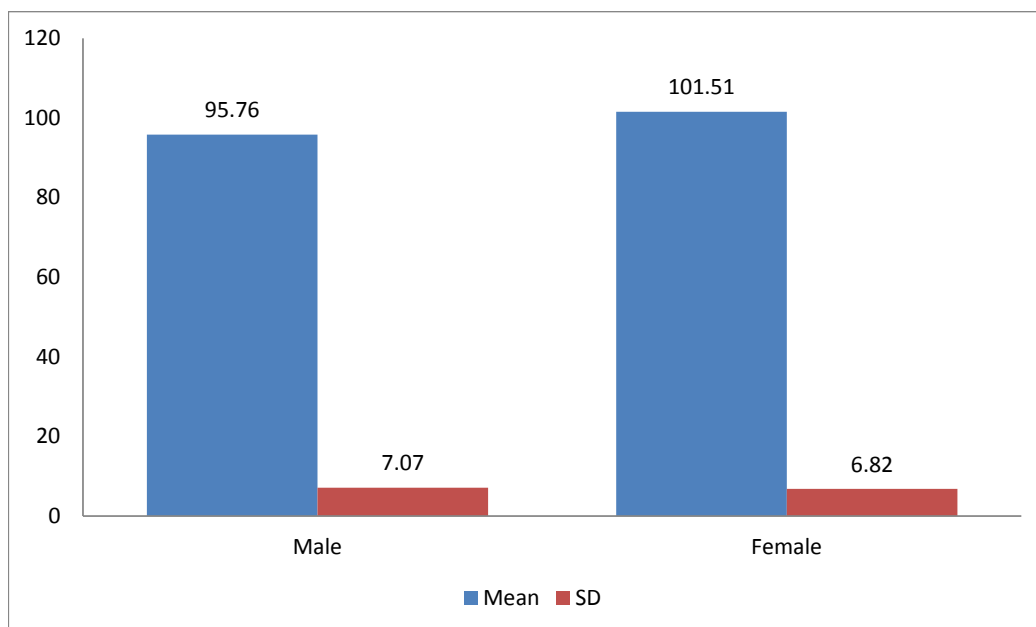
There is no significant difference in the Social maturity among male and female trainees.

Table-2: Difference on variable Social maturity among male and female trainees

Gender	N	Mean	SD	t-value	Level of significance
Male	60	95.76	7.07	4.5315**	Significant
Female	60	101.51	6.82		

**Significant at 0.01 level.

Table 2 shows that the mean value for male and female trainees are 95.76 and 101.51 and SDs are 7.07 and 6.82 respectively. t-value is came out to be 4.5315, which is significant at 0.01 level of significance, when we compared it with the table value. Therefore, the null hypothesis, "There is no significant difference between social maturity of male and female trainees" is rejected. The mean score of female trainees is higher than male trainees. Hence we can conclude that female trainees are more socially mature than male trainees.



Null Hypothesis: 3

There is no significant correlation between frustration and Social maturity of trainees.

Table No: 3 Relationship between Frustration and Social Maturity of Trainees

Variable	N	Mean	SD	r	Level of significance
Frustration	120	95.56	11.07	0.1338	Not Significant
Social Maturity		98.64	7.498		

It can be clearly seen from the Table 3 that the value of coefficient of correlation came out to be 0.1338 for the frustration and social maturity of trainees, which is not significant at 0.05 level of significance, when we compared it with the table value. Therefore, the null hypothesis is accepted. Hence we can conclude that there is non significant positive relationship exist between frustration and Social maturity of trainees.

Null hypothesis: 4

There is no significant correlation between frustration and Social maturity of male trainees.

Table No: 4 Relationship between Frustration and Social Maturity of male Trainees

Variable	N	Mean	SD	r	Level of significance
Frustration	60	95.63	12.74	0.0106	Not Significant
Social Maturity	60	95.76	7.074		

It is noticeable from the Table 3 that the value of coefficient of correlation is 0.0106 for the frustration and social maturity of male trainees, which is not significant. Thus, the null hypothesis is accepted in the case of male trainees. Hence we can conclude that there is non significant positive relationship exist between frustration and Social maturity of male trainees.

Null hypothesis: 5

There is no significant correlation between frustration and Social maturity of female trainees.

Table No: 5 Relationship between Frustration and Social Maturity of female Trainees

Variable	N	Mean	SD	r	Level of significance
Frustration	60	95.5	9.204	**0.3477	Significant
Social Maturity	60	101.51	6.823		

**Significant at 0.01 level.

It is noticeable from the Table 5 that the value of coefficient of correlation came out to be 0.3477 for the frustration and social maturity of female trainees, which is significant at 0.01 level of significance. Thus, the null hypothesis is rejected in the case of female trainees. Hence we can conclude that there is a significant positive relationship exist between frustration and Social maturity of female trainees.

MAIN FINDINGS OF THE STUDY

1. There is no significant difference between frustration of male and female trainees.
2. There is significant difference between Social Maturity of male and female trainees.
3. There is low positive correlation between frustration and Social maturity of trainees.
4. There is very low positive correlation between frustration and Social maturity of male trainees.
5. There is low positive correlation between frustration and Social maturity of female trainees.

CONCLUSION

Male and female trainees have equal frustration level. Social maturity of male and female trainees was not found to be same. Frustration and Social maturity of trainees were found to be correlated. In case of male trainees, very low positive correlation was found between the two variables under study. A low positive correlation between frustration and Social maturity of female trainees.

EDUCATIONAL IMPLICATIONS OF THE STUDY

The most outstanding characteristics of any research are that it contributes something new to the development of the area concern. Individual differences in frustration are of great practical importance in learning. Knowing frustration and Social maturity level is also vital for educational guidance and counseling. By the use of this study, a teacher can guide tainees for better achievement in learning. This study is also helpful for the teacher in teaching effectively.

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Value Patterns Perceived by College Students Emotional Intelligence

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ABSTRACT

The Kothari Commission rightly referred to college students as national builders. The all-round development of the students is influenced by the colleges. The study has been conducted to investigate the levels of value patterns and emotional intelligence among college students. It also examines the relationship between the value patterns and emotional intelligence of the college students. The study was conducted on a random sample of 1100 college students in Chennai City. The tools used in the study include the Value pattern scale constructed and standardized by the investigator and Emotional intelligence scale Standardized by Anukool Hyde and Sanjyot Pethe. The study reveals the fact that the level of value pattern and emotional intelligence are at moderate levels. Further, it is noted that there is negligible amount of correlation between value pattern and emotional intelligence among the college students.

INTRODUCTION

Values

Value literally by mean something that has a price, something precious, dear and worth while; hence something one is ready to suffer and sacrifice for. In other words values are a set of principles or standards of behaviour. Values are regarded desirable; important and held in high esteem by a particular society in which a person lives. Thus values give meaning and strength to a person's character by occupying a central place in his life. Values reflect one's personal attitude and judgments, decisions and choice, behaviour and relationship, dreams and vision. They influence our thoughts, feelings and acts. They influence our thoughts, feelings and acts. They guide us to do right things. Values are the guiding principles of life which are conducive to all round development. They give direction and firmness to life and bring joy, satisfaction and Peace to Life. Values are like the rails that keep a train on the track and help it move smoothly, quickly and with direction. They bring quality to life.

Emotional Intelligence

Expressing our emotion has an effect in all aspects of our lives. Thus our emotional intelligence is of utmost importance in each individual's life. "Emotional intelligence", means our capacity to deal with our feelings wisely as well as have the ability to reason for our vital well being. It deals with our self-concepts, to social skills, creativity, and our ability to understand our emotion as well of other, "Emotional intelligence" dose it strike a cord! Probably not we are use to thinking about intelligence as reasoning & logic while we tend to ignore our emotions. However intelligence & emotion are very

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closely interrelated. For example people who are unable to understand their own emotions could get into situations where they may not know how to handle their feeling & thus feel distressed. Where as people who have a good balance of IQ & EQ are often more successful in their life. EQ is not about tactics or diplomacy. It deals with how we learn, acknowledge & express our feeling, but also how we effectively respond to others when it comes to dealing with it. It is a set of skills that not only leads to better academic and professional functioning, but also good social interactions and a healthy living which leads to personal satisfaction. We can say that fifty percent of our EQ is inherited through our genes & and the other fifty percent is obtained from our interaction with the environment. There is a difference between EQ & IQ. IQ can be defined as individuals ability to get along with other people and handle social situation. Thus both of ours should be treated equally. (baron, R., 2001).

NEED FOR THE STUDY

Previous research and document evidence obtainable in popular media has consistently reported that students' moral standing and general conduct in the wider society does not reflect acquisition and practice of values learnt through the schooling, teaching or parenting. This has caused complaints among those stakeholders in education who are concerned that the moral well being of the youth is on a downward trend. This suggests that either the teaching of values is defective or the Indian education system as a whole does not contain relevant elements that could enable students acquire relevant moral skills. Another possibility could be the existence of a discrepancy between the school program objectives and the instructional practices meant to achieve them. From the literature that was reviewed, it was evident that the nature of this discrepancy had not yet been established for effective intervention strategies to be put in place. The purpose of this study was to determine possible reasons for the status of various values among the college students with respect to their Emotional Intelligence

OBJECTIVES OF THE STUDY

- To find out there is any significant difference among the college students with low, average and high Emotional Intelligence in their perception of Value patterns.
- To find out there is any significant difference among the college students with low, average and high Emotional Intelligence in their perception of Value patterns with regard to gender.
- To find out there is any significant correlation between the Dependent Variable, Perceived Value Patterns and Independent variables, and Emotional Intelligence.

HYPOTHESIS OF THE STUDY

- There is no significant difference among the college students with low, average and high Emotional Intelligence in their perception of Value patterns.
- There is no significant difference among the college students with low, average and high Emotional Intelligence in their perception of Value patterns with regard to gender.
- There is no significant correlation between the Value Patterns and Emotional Intelligence.

METHODOLOGY OF THE STUDY

The objective of the study is to analyse the Value patterns adopted by the college students studying in different disciplines of different institutions with regard to their Emotional Intelligence. To cover the objective of the study the systematic random sampling technique is adopted to collect the necessary information from the students. With the help of these standardized tools the necessary data were collected from the students of different disciplines and the responses of the students were

scrutinized with the help of the scoring key and appropriate statistical techniques were applied to realize the objectives and hypotheses of the study.

DESIGN OF THE STUDY

The design of the study is cross sectional in approach, descriptive survey type in nature that aims to elicit information by applying systematic random sampling technique. The data were collected from the students studying in different disciplines with the help of standardized research tools.

SAMPLE OF THE STUDY

The sample of population consisted of 1100 college students studying in Government, Government Aided and Private colleges in various streams of courses in Chennai City. Colleges from the Chennai City have been chosen randomly for the study. In the sample of 646 students were drawn from Government colleges, 120 students from Government Aided colleges and the remaining 334 from Private colleges. 166 students belong to the Medical, 90 belong to the Law, 331 belong to Engineering, 258 belong to Teacher Education and 255 belong to the Arts and Science Colleges. Out of the sample of students 482 were boys and 618 were girls.

TOOLS USED FOR THE STUDY

To verify the different types of hypotheses formed, the following Tools are used.

1. **VAPAT** – Value Patterns Tool Constructed and Standardized by the Investigator.
2. **Emotional Intelligence**: Standardized by Anukool Hyde and Sanjyot Pethe.

The data was collected as per the procedures mentioned for the administration of the tests. The tests were administered with a sample size of 1100 college students. The study was conducted during the month of March and April 2010. The tests mentioned above have been administered in a single session.

RESULTS

Hypothesis – 01

“There is no significant difference among the college students with low, average and high Emotional Intelligence in their perception of Value patterns”.

Table- 1: Difference in Value Patterns Perceived by College Students with Low, Average and High Emotional Intelligence

Value	Emotional Intelligence	Mean	SD	SSb	SSw	Calculated 'F' Value	Table Value	Remark
Personal	Low	61.96	19.52	341648.34	434958.64	430.83	3.00	S
	Average	82.71	19.70					
	High	106.31	20.43					
Family	Low	34.76	10.02	4057.39	112986.80	19.70	3.00	S
	Average	36.93	10.12					
	High	39.58	10.28					

Value	Emotional Intelligence	Mean	SD	SSb	SSw	Calculated 'F' Value	Table Value	Remark
National	Low	31.05	8.33	3261.65	80972.95	22.09	3.00	S
	Average	32.57	8.73					
	High	35.28	8.65					
Social	Low	34.72	10.15	4282.02	113283.16	20.73	3.00	S
	Average	37.29	10.26					
	High	39.71	10.07					
Religious	Low	25.68	6.57	894.59	47153.45	10.41	3.00	S
	Average	26.92	6.48					
	High	27.96	6.62					
Total	Low	188.18	23.67	639948.37	516899.88	679.07	3.00	S
	Average	216.42	10.70					
	High	248.85	27.78					

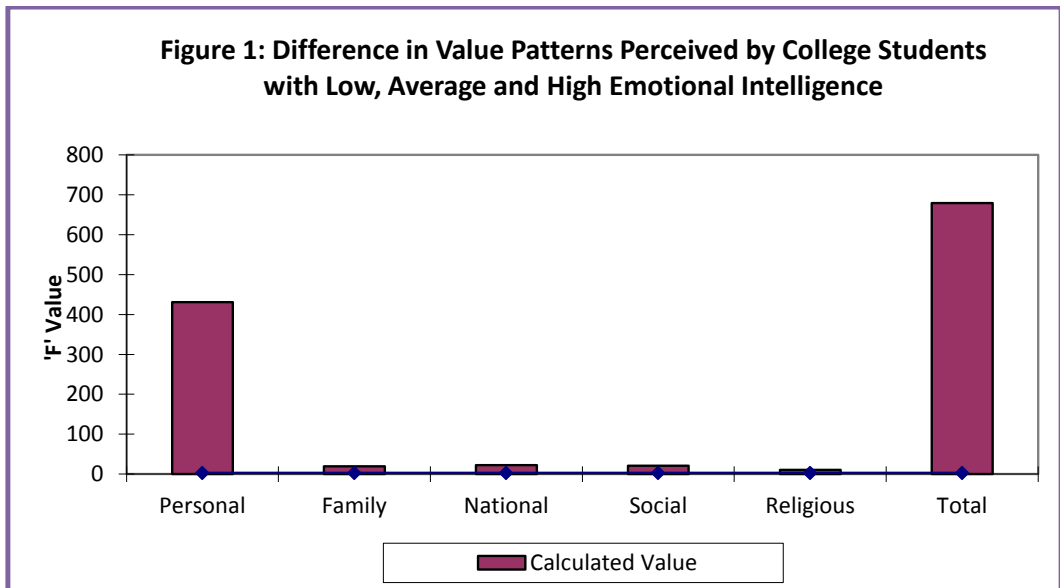
(df = 2, 1097)

From the above table, it is found that the calculated 'F' value are greater than the table value for 2, 1097 degrees of freedom at 5% level significance. Hence, the null hypothesis is rejected.

It is found that there is significant difference among the college students with low, Average and high Emotional Intelligence in their perception of value patterns in total, personal, family social, national and religious values.

Hence, the null hypothesis is rejected with regard to value patterns in total and personal, family, national, social and religious values.

It is concluded that the college students have High level of Emotional Intelligence in their perception of value patterns.



Hypothesis – 02

“There is no significant difference among the college students with low, average and high Emotional Intelligence in their perception of Value patterns with regard to gender”.

Table- 2: Difference in Value Patterns Perceived by Male College Students with Low, Average and High Emotional Intelligence

Value	Emotional Intelligence	Mean	SD	SSb	SSw	Calculated 'F' Value	Table Value	Remark
Personal	Low	58.44	13.10	143778.90	177931.38	193.53	3.01	S
	Average	82.38	19.97					
	High	102.65	22.35					
Family	Low	33.83	9.27	1697.98	45991.00	8.84	3.01	S
	Average	37.06	9.96					
	High	38.58	10.02					
National	Low	30.93	8.68	1558.22	34246.51	10.90	3.01	S
	Average	32.13	8.34					
	High	35.28	8.40					
Social	Low	34.07	10.08	1512.65	47565.90	7.62	3.01	S
	Average	36.80	10.24					
	High	38.60	9.56					
Religious	Low	24.99	6.68	567.89	21698.19	6.27	3.01	S
	Average	27.46	6.80					
	High	27.39	6.70					
Total	Low	182.27	12.60	266785.00	202812.30	315.05	3.01	S
	Average	215.82	11.34					
	High	242.50	30.99					

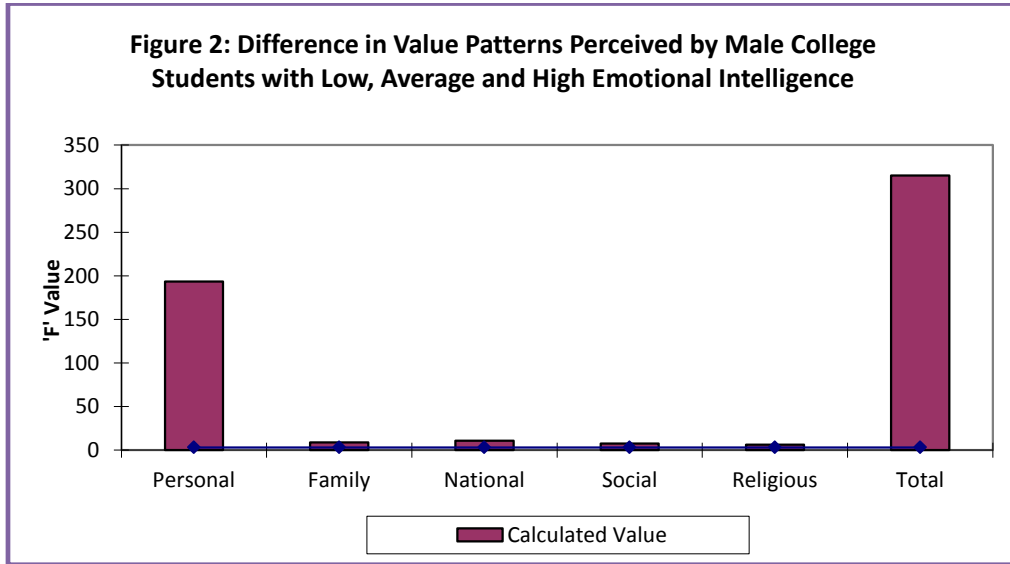
(df = 2, 479)

From the above table, it is found that the calculated 'F' value are greater than the table value for 2, 479 degrees of freedom at 5% level significance.

It is found that there is significant difference among the male college students with low, Average and high Emotional Intelligence in their perception of value patterns in total, personal, family social, national and religious values.

Hence, the null hypothesis is rejected for Male college students.

It is concluded that the male college students have High level of Emotional Intelligence in their perception of value patterns.



Hypothesis – 3

“There is no significant correlation between the Value Patterns and Emotional Intelligence”.

Table- 3: Correlation between Value Patterns of College Students and Emotional Intelligence

Dependent Variable Vs Independent Variables	N	“r” value	Level of Significance	Remark
Value Patterns Vs Emotional Intelligence	1100	0.682	P<0.01	Substantial Positive Correlation

From the Pearson Correlation table it is found that, The calculated ‘r’ value (0.682), there is 0.01 level of significance between the Dependent variable, Value Patterns of College students and Independent Variable, Emotional Intelligence. It indicates that there is significant Substantial level of Positive Correlation between the Perceived Value Patterns of college students and their Emotional Intelligence.

Hence, the null hypothesis is rejected for Correlation between the Value Patterns of college students and their Emotional Intelligence.

FINDINGS

There is no significant difference between the Male and Female college students related to the Personal and Social values, but there is significant difference between them in Family, National and Religious values.

There is significant Substantial level of Positive Correlation between the Perceived Value Patterns of college students and their Emotional Intelligence.

CONCLUSION

There are no shortcuts for achieving the desired goals. A happy home, better learning atmosphere and conditions in the Colleges will enhance the Value Patterns of the College students. This will also contribute to the development of personality of the students. There should not be any suppression of the feelings, rights, freedom of students in the Colleges, which will adversely affect the academic atmosphere, psychological and sociological development of the students. Religious beliefs and abiding faith in God help in tolerance and stability of emotions. Inspirational subjects like Art, Literature, Poetry and Music help in developing an appreciation of the beautiful and sublime emotions in life. The findings of the study without any doubt show that there is strong Significant Relationship between the Value Patterns and Emotional Intelligence of the College students So let us all show enough attention and sensitiveness to the findings of this study. With coordinated efforts of Administrators, Educators, Educationists, Psychologists, Sociologists, Government and Non-Governmental Voluntary Agencies, the Value Patterns and Emotional Intelligence of College students can be improved. This will definitely enhance the all round development of the college students physically, mentally, emotionally, spiritually, psychologically, sociologically, academically and make them better citizens of our Nation.

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Interest in Basic Science Programme Among Higher Secondary Students

J. Vinitha* and Dr. A. Veliappan**

ABSTRACT

The term 'Interest' refers to a permanent mental disposition. It refers to the expression of one's preference for an object, a person, or a work which one proposes to have in a life situation. The investigator designed to find out the influence of interest in the basic science programme of higher secondary (XI) students. The sample consists of 300 higher secondary students. Interest in the basic science programme tool was used to get the data from the students. Percentage analysis, Pearson product moment correlation coefficient-test, F-test and chi-square test were used for analyzing the data. There are only four dimensions of interest in science, interest in physics, interest in biology and interest in chemistry. The study reveals that the higher secondary (XI) students have more interest in physics than the other subjects.

Keywords: Interest, Basic science, Higher secondary students

INTRODUCTION

The interest concept is used in different ways in the literature on science education. The renaissance of interest is also supported by constructivist thinking emphasizing a new understanding of the subject in interaction with the physical, social, and cultural environment. Because of its focus on specific content, the concept of interest seemed to be appropriate to understand tendencies of students or adults to engage in certain themes or contexts or to withdraw from them. It was reasonable that studies on attitudes towards science and technology took up the concept of interest (Gardner, 1975; Ormerod & Duckworth, 1975), examining the 'swing from science' in the 1970s. During the past two decades, research in different areas of science education has substantially contributed to the informed discussion about the role of interest in learning and human development in modern societies. The recognition of interest as a component of scientific literacy in the framework for programmed for higher secondary students provides an opportunity to broaden our knowledge in this area.

SIGNIFICANCE OF THE STUDY

School students are naturally curious, which makes science an ideal subject for them to learn. Science allows students to explore their world and discover new things. It is also an active subject, containing activities such as hands-on labs and experiments. This makes science well-suited to active younger children. Science is an important part of the foundation for education for all children. While most feel that Science in education is a necessity, they tend to use it as a tool for reaching a specific target or personal mark, after which there is no further need to seek greater

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education. Hence the investigator wants to study the interest in basic science programme among higher secondary students.

STATEMENT OF THE PROBLEM

The performance of science subjects in secondary schools in recent two decades has been rapidly dropping in the trend shows there is speed downfall of performance in science subjects especially in secondary schools. And the failures in science subjects may results into shortage of science experts like doctors, engineers, and teachers. Therefore there is a need to investigate on what are the root causes and factors influences poor performance in science subjects, and how to eradicate the problem. Hence the investigator wants to study the interest in basic science programme among higher secondary students in Tirunelveli district, Tamilnadu.

OBJECTIVES

1. To find out the level of interest in basic science programme among higher secondary students with regard to gender
2. To find out the level of interest in basic science programme among higher secondary students with regard to locality of the school

HYPOTHESES

- H_0 1: There is no significant difference in the interest in basic science programme among higher secondary students with regard to gender
- H_0 2: There is no significant difference in the interest in basic science programme among higher secondary students with regard to locality of the school.

METHOD OF THE STUDY

The investigator was adopted the survey method to study the interest in basic science programme among higher secondary students in Tirunelveli district. The investigator has used stratified random sampling technique for collecting the data.

TOOL USED

Interest in Basic Science programme Scale was develop and validated by the investigator (2019). The minimum and maximum scores were 25 and 125 respectively.

Population and Sample

The populations consist of all the higher secondary student who are studying in Tirunelveli district. The investigator has selected 300 sample size from the population. The investigator used the following statistical techniques such as percentage analysis, t-test and F-test.

DATA ANALYSIS

Percentage analysis

To find out the level of interest in basic science programme among higher secondary students with regard to gender

Table- 1: Level of Interest in Basic Science Programme among Higher Secondary Students with regard to Gender

Dimensions	Gender	Low		Moderate		High	
		N	%	N	%	N	%
Interest in Science	Female	37	21.1	101	57.7	37	21.1
	Male	21	16.8	78	62.4	26	20.8
Interest in Physics	Female	40	22.9	99	56.6	36	20.6
	Male	27	21.6	74	59.2	24	19.2
Interest in Biology	Female	40	22.9	104	59.4	31	17.7
	Male	34	27.2	73	58.4	18	14.9
Interest in Chemistry	Female	35	20.0	115	65.7	25	14.3
	Male	23	18.4	81	64.8	21	16.8
Basic science(Total)	Female	45	25.7	86	49.1	44	25.1
	Male	29	23.2	68	54.4	28	22.4

From the table reveals that above three-fifth of the male higher secondary students have moderate level of interest in science, physics, biology, chemistry and interest in basic science programme among higher secondary students with regard to gender.

To find out the level of interest in basic science programme among higher secondary students with regard to locality of the school

Table- 2: Level of Interest in Basic Science Programme among Higher Secondary Students with regard to Locality of the School

Dimensions	Category	Low		Moderate		High	
		N	%	N	%	N	%
Interest in Science	Rural	52	21.7	141	58.8	47	19.6
	Urban	6	10.0	38	63.3	16	26.7
Interest in Physics	Rural	57	23.8	141	58.8	42	17.5
	Urban	10	16.7	32	53.3	18	30.0
Interest in Biology	Rural	65	27.1	133	55.4	42	17.5
	Urban	9	15.0	44	73.3	7	11.7
Interest in Chemistry	Rural	44	18.3	160	66.7	36	15.0
	Urban	14	23.3	36	60.0	10	16.7
Basic Sciece(Total)	Rural	63	26.2	126	52.5	51	21.2
	Urban	11	18.3	28	46.7	21	35.0

The above table reveals that above three-fifth of the rural students have moderate level of interest in science, physics, biology, chemistry and interest in basic science programme among higher secondary students with regard to locality of the schools.

Differential analysis

There is no significant difference in the interest in basic science programme among higher secondary students with regard to gender

Table- 3: Significance of difference in the Interest in Basic Science Programme among Higher Secondary Students with regard to Gender

Dimensions of Basic Science programme	Gender	N	Mean	S. D	Calculated "t" value	"p" value
Interest in Science	Male	125	32.29	4.654	0.271	0.786 ^{NS}
	Female	175	32.13	5.120		
Interest in Physics	Male	125	17.16	4.387	0.613	0.540 ^{NS}
	Female	175	17.48	4.501		
Interest in Biology	Male	125	18.80	3.040	1.561	0.120 ^{NS}
	Female	175	19.31	2.641		
Interest in Chemistry	Male	125	24.54	4.970	0.521	0.603 ^{NS}
	Female	175	24.23	4.924		
Basic Science (Total)	Male	125	92.78	13.618	0.239	0.811 ^{NS}
	Female	175	93.16	13.254		

(* 5% level of significance) (NS – Not Significance)

From the above table, since the p value (=0.811) is higher than the table value 0.05, the null hypothesis is ACCEPTED at 5% level of significance. It shows that there is no significant difference in interest in basic science programme among higher secondary students with regard to gender.

There is no significant difference in the interest in basic science programme among higher secondary students with regard to locality of the school.

Table- 4: Significance of Difference in the Interest in Basic Science Programme among Higher Secondary Students with regard to Locality of the School

Dimensions of Basic Science programme	Locality	N	Mean	SD	Calculated "t" value	"p" value
Interest in Science	Rural	240	31.86	5.069	2.369	0.018 ^S
	Urban	60	35.53	4.065		
Interest in Physics	Rural	240	17.04	4.387	2.427	0.016 ^S
	Urban	60	18.58	4.518		
Interest in Biology	Rural	240	19.02	2.867	0.972	0.332 ^{NS}
	Urban	60	19.42	2.625		
Interest in Chemistry	Rural	240	24.40	4.849	0.251	0.802 ^{NS}
	Urban	60	24.22	5.317		
Basic Science (Total)	Rural	240	92.32	13.298	1.783	0.076 ^{NS}
	Urban	60	95.75	13.497		

(* 5% level of significance) (NS – Not Significance)

It is inferred from the above table that there is no significant difference between rural and urban school students in the dimensions of biology, chemistry and interest in basic science programme but there is significant difference in the dimensions of interest in science and physics.

In the above table, since the p value ($=0.016$) is less than the table value 0.05, the null hypothesis is NOT ACCEPTED at 5% level of significance. It shows that there is significant difference in interest in basic science programme among higher secondary students with regard to locality of the school. The mean scores show that urban school students more interest in basic science programme than rural school students.

MAJOR FINDINGS

1. No significant difference was found between male and female higher secondary school students in their interest in basic science programme. The mean scores shows that the female students (mean = 93.16) are better than the male students (mean = 92.78) in their interest in basic science programme.
2. Significant difference was found between rural and urban area higher secondary school students in their interest in basic science programme. The mean scores shows that the urban area students interest in physics (mean =35.53) are better than rural area students interest in science (mean =31.86) in their interest in basic science programme.
3. Significant difference was found between rural and urban area higher secondary school students in their interest in basic science programme. The mean scores shows that the urban area students interest in science (mean =18.58) are better than rural area students interest in physics (mean =17.04) in their interest in basic science programme.

RECOMMENDATIONS OF THE STUDY

- The scientist and experts create an awareness of basic science career opportunities among students, teachers and parents.
- The government takes necessary steps to develop the laboratory facilities in the rural schools for the development of sustainable learning in the field of basic science.
- The school management provides opportunity to deliver seminar expert's speech symposium to the higher secondary students to face the common entrance examinations.
- The teachers who are working in rural schools are creating their students in basic science knowledge and skills by using various resources.

CONCLUSION

The achievement of basic science goals is dependent on the teacher, learner, the school and sometimes the parents. The teacher is the most important pivotal role therefore there should be quality teacher training and development, periodical enrichment of teacher practices through in-service trainings, conferences, seminars and workshop to keep them updated with recent developments in the field of sciences. The school management should provide modern teaching-learning resources so as to encourage students to engage in inquiry centered science learning. Teachers should be friendlier and parents should stop career imposition on their children so that they won't develop a negative attitude towards the learning of science.

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Impact of Training and Development on Employees' Personal Growth and Productivity (A Case Study of Cement Manufacturing Companies in Andhra Pradesh)

Dr. Neeraja M.* and Dr. Anand Bethapudi**

ABSTRACT

The cement industry is one of the booming sectors in the India. India is the second largest cement producer in the world after China. Cement production capacity stood at 502 million tonnes per year (MTPY) in 2018.

The Objective of the research paper is to investigate impact of training and development programmes on employee performance, productivity and personal growth in selected cement manufacturing companies located in the rayalaseema region of Andhra Pradesh.

The study was based on set of hypothesis that H₀: hypothesized no relationships between variables, while H₁, H₂ hypothesized the existence of relationship between stated variables. A quantitative approach is used and relevant data was collected through structured questionnaire. The study consists of 359 employees which constituted 60% of the total population of 600 people.

SPSS version 20 has been used for data analysis. Both descriptive and inferential statistics were used for data analysis. The statistical tools were aligned with the objective of the research. For this purpose, frequency tables, percentages, means and standard deviations were computed and substantively interpreted. Inferential statistic test like Pearson's chi-square test was used to determine if there is a significant positive relationship existed between the independent variables (training and development) and dependent variables (personal growth and productivity).

The findings indicated that training and development claimed statistically significant relationship with personal growth and productivity. Analysis and interpretations were made at 0.05 level of significance. The study concluded that training and development have utmost impact on employee personal growth and productivity. Therefore, it was recommended that effective training programs are carefully set development plans in such a way to enhance employee skills and knowledge. Finally, foreseeable future research can be conducted to cover other variables like (gender, capabilities, involvement so on) which might affect performance and productivity.

Keywords: Training, Development, Employees, Training methods, Performance, personal growth, Productivity, Cement manufacturing Companies.

INTRODUCTION

The cement industry is one of the booming sectors in the India. India is the second largest cement producer in the world after China. Cement production capacity stood at 502 million tonnes

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per year (MTPY) in 2018. Capacity addition of 20 million tonnes per annum (MTPA) is expected in FY19- FY 21.

OVER VIEW OF THE CEMENT INDUSTRY IN ANDHRA PRADESH

Andhra Pradesh is the second biggest cement producing centre next to Madhya Pradesh. The Andhra Pradesh cement industry has been continuously increasing its capacity as well as production from its inception in 1939 because this state is having all the necessary natural resources required by the cement industry.

The cement industry in Andhra Pradesh dates back to the second quarter of this century. The first attempt to manufacture cement was initiated in 1939 by Associated Cement Company's plant 'Krishna Cements' at Tadepalli, Guntur District and one more plant 'Andhra Cements' at Vijayawada. As on 14 march 2019, Andhra Pradesh hold 14 cement companies (as per cement information system, department of industrial policy and promotion, govt of India, Ministry of commerce and industry)they are bhavya, hemadri, kakatiya cement and sugar industries, koseram cement, mancherial cement, panyam, parasakthi, RVR exports and imports, Rani, sagar, sree jayajothi, srichakra, sri kalahasti, Vikatsagar. According to the sources of the industry, Andhra Pradesh cement industry's average growth rate is 12 per cent as against the Indian Cement Industry's 8-9 per cent. The Andhra Pradesh cement industry accepts the fact of this type of growth rate occurred because of the state government's implementation of various developmental programmes like Janmabhoomi, Canal lining, Information Technology Park, infrastructural development activities etc

Training and development (T & D)

Training and development plays a vital role in any given organizations in the modern day. It is aimed at preparing employees for current or future jobs. The efficiency and productivity of the firm can be increased considerably with right training methods. This is the reason why HR department gives training and development such a huge importance. so it is essential to conduct studies and experiments to improvise training methods. The motive behind this study is to find out the perspectives of the employees about training & development programs in their work place. To understand company's training programs and its impact on the employees and to measure the effectiveness of training programs.

Problem statement

The intention of this research is to analyze and evaluate the effectiveness of training and development programmes on employee performance, productivity and personal growth in selected cement manufacturing companies located in the Rayalaseema region of Andhra Pradesh.

Objectives of the Study

- To assess the employee perspectives about training & development programs in their work place.
- To measure the effectiveness of training & development programmes on employee performance.
- To determine the impact of training & development programs on employee productivity and personal growth.

Hypotheses of the study

Hypothesis -1

- H_0 : There is no significant relationship between training methods and employee personal growth.
- H_1 : There is a significant relationship between training methods and employee personal growth.

Hypothesis - 2

- H_0 : There is no association between employee productivity and training methods.
- H_1 : There is significant association between employee productivity and training methods.

Literature review

For the purpose of this study, the researcher is going to use certain terms/concepts which will help in guiding his research work such as training, development, employee performance, personal growth and productivity

Training has significant impact and positive relationship with employee performance and development areas. They also added that this would be helpful for human resources professionals in pharmaceutical industry in Karachi Pakistan to understand and knows the importance of the impact that training improves employee's performance in different performance & development areas, working in various departments of pharmaceutical companies in Karachi (U. Hafeez and W. Akbar (2015). Training and development has become an issue of strategic importance. Although many scholars have conducted research on training and development practices in organizations in both developing and developed economies, it is worth mentioning that most of the research has concentrated on the benefits of training in general. There is however, limited focus on evaluation of training and development practices in organizations Henry Ongori (2011), Jennifer Chishamiso Nzonzo,

According to Bates and Davis (2010), Usefulness of training programme is possible only when the trainee is able to practice the theoretical aspects learned in training programme in actual work environment. They highlighted the use of role playing, cases, simulation, mediated exercises, and computer based learning to provide exposure to a current and relevant body of knowledge and real world situations

According to Iftikhar Ahmad and Sirajud Din (2009), Training and development is adopted by organizations to fill the skill gap of employees. Training evaluation must be appropriate for the person and situation. Evaluation will not ensure effective learning unless training is properly designed. Successful evaluation depends upon whether the means of evaluation were built into the design of the training program before it was implemented.

Training can be defined as a process which is planned to facilitate learning so that people can become more effective in carrying out aspects of their work (Barau, 2008). Development usually means programmes that attempt to improve the technical, human relations and conceptual skills of managers (Barau, 2008). Productivity is a measured relationship between the quantity and quality of results produced and the quantity of resources required for production. Productivity is in essence, a measure of the work efficiency of an individual, work unit, or entire productivity (Hartzell, 2006).

According to Ananth (1998), He pointed out different problems faced by the organization in handling the corporate finance such as the time of procurement and investment of funds. He

suggested that the organization must relate itself with the needs of changing environment by taking good decisions through professionally trained people.

Research Methodology

This study utilized the survey research design method and quantitative approach. For this purpose, structured questionnaire that contain relevant questions regarding training, development, employee performance, personal growth and productivity was designed. The target population is 600, and it includes all full time employees of the cement manufacturing companies located in rayalaseema region, Andhra Pradesh. The population comprises managers, technical officers, supervisors, administrative staffs, supporting staffs were targets of the study. The target population characteristics are summarized as shown in Exhibit (1).

Exhibit (1): The Target Population Characteristics

Sequence	Name of the company	Population	Percentage
1	A	126	21.2
2	B	101	16.8
3	C	107	17.8
4	D	163	27.1
5	E	103	17.1
TOTAL		600	100

Source: prepared by the researcher 2019

STUDY SAMPLE SIZE

From the above target population, sample of 60% of the respondents were selected from within each company in proportion that each company bears to the study population. Therefore, the sample size of the study reached to 359 respondents. 359 structured questionnaires were distributed to employees on job location. Unfortunately 297 questionnaires were returned. Only 110 were successfully completed (entirely) and suitable for statistical analysis.

RESEARCH INSTRUMENT

Primary data is collected through the use of well structured questionnaire that contain relevant questions regarding training, development, employee performance, personal growth and productivity in these companies. secondary sources include all relevant available data that have been prepared, collected, and analyzed by others which include research publications, periodicals, essays, standard records, evaluation reports and other relevant documentaries.

DATA ANALYSIS TOOL

Data analyzed and validated by used SPSS version 20 to compute various statistical values wherever it is necessary. Suitable diagrams are used to exhibit the analyzed data.

DATA ANALYSIS AND INTERPRETATIONS**Respondents' demographic profile****Table-1: Respondents' demographic profile**

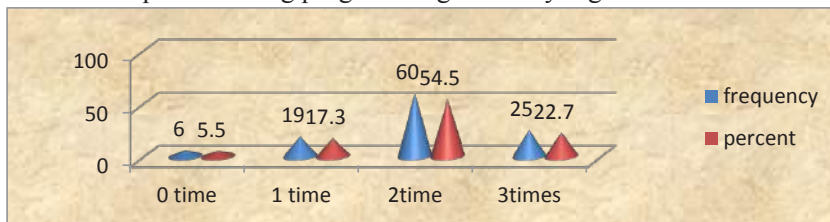
Sequence	Demographic Item	Category	Frequency	percent
1	Gender	Male	103	93.6
		Female	7	6.4
2	Age	25-35	27	24.5
		36-45	62	56.4
		46-55	21	19.1
		More than 55 y	0	0
3	Marital status	Married	93	84.5
		Un married	17	15.4
4	Educational qualification	Secondary	13	11.8
		Diploma	34	30.9
		Bachelors	30	27.3
		Masters	27	24.5
		Others	6	5.5
5	Occupational status	Managers	27	24.5
		Technical officers	19	17.3
		Supervisors	27	24.5
		Administrative staffs	34	30.9
		Supporting staffs	3	2.7
6	Income level	Less than / = 10,000	26	23.6
		11k -20 k	26	23.6
		21k -30k	18	16.4
		31k -40k	35	31.8
		Above 41 k	5	4.5
7	Experience with current employer	1-3 y	19	17.3
		4-6y	60	54.5
		7-10y	25	22.7
		Above 10y	6	5.5

Source: primary data

Table-1 above gives the following statistical demographic indications : **with respect to gender** it is evident that, majority of the respondents are male (93.6%) and remaining were female (6.4%). Most of respondents (56.4%) age is between 36-45years & 24.5 % respondents age is between 25-35years. 84.5% respondents are married. only 15.4 % were unmarried. **With respect to educational qualification**, most respondents 30.9 % had diplomas, 27.3% had bachelor degree, and 27% had master degrees. 30.9% of the employees are administrative staffs, 24% managers, supervisors; 17.3% technical officers; 2% supporting staff. **With respect to experience**, 54% of employees have 4-6 years experience, 22% have 7-10years experience, 17% have 13 years experience. **With respect to earnings**, majority 54% of employees earns 31k -40k, 23.6% earn 11-20k, and 16% earn 21-30k.

How many training programme organized by your organization in the year?

Graph2: Training programs organized by organization



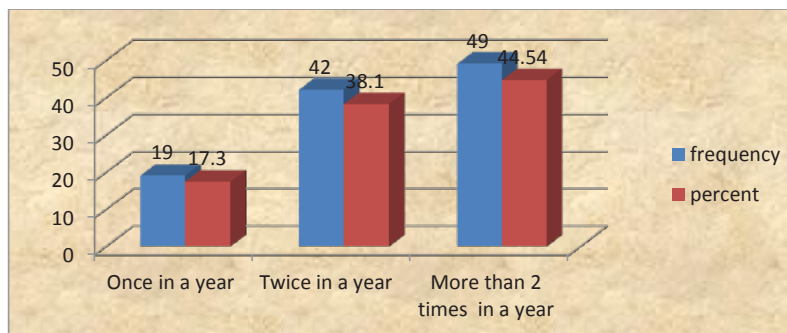
Form the above graph-2 it is found that, 54.5% of employees said that training was organized twice in a year. 22.7% of employees says it is organized thrice in a year and 17.3 % says once in a year. *From the above findings, it can be said that clear that majority of employees are aware of training programs of the organization and training schedules as well.*

How many training programme you have attended in organization?

From the graph-3 it is evident that, 44.5 % of respondents attended training more than twice in a year. 38.1% attended twice in a year and 17.3 % attended once in a year.

From the above view, we can conclude that almost (45%) respondents attended two training programs.

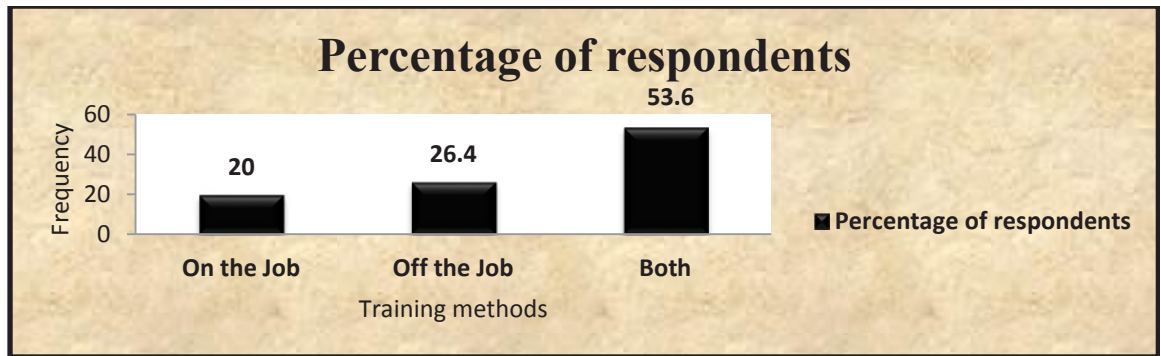
Graph 3 employees are attended training programme



Which methods of training followed by your organization?

Graph-4 depicts that 53% rated both, 26% off the job, 20% on the job. From this, it is clear that organizations are following both on the job and off the job as training method for employee growth and productivity.

Graph- 4: Training methods received

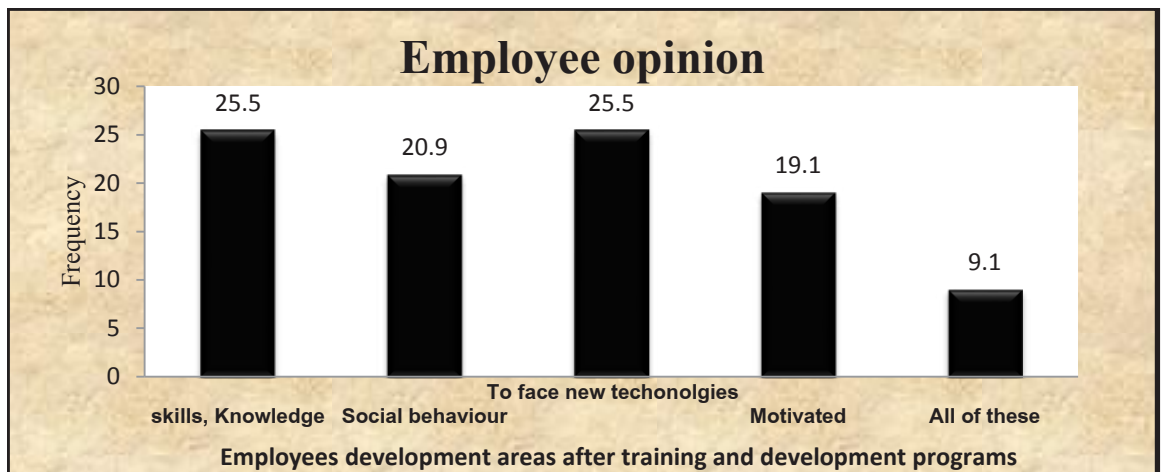


Source: primary data

Employee's development areas after training and development programs

25.5% of the employees revealed that, they developed their skills and knowledge after T& D programs, 20.9 % of the employees said they developed in their social behavior, 25.5% of the employees said that they got the ability to face new technology factors and 19.1 % of the employees are developed motivational factors and remaining employees preferred all topics helps them to develop in the organizations (as can be seen in graph -5).

Graph- 5: development areas after training and development programs



Source: primary data

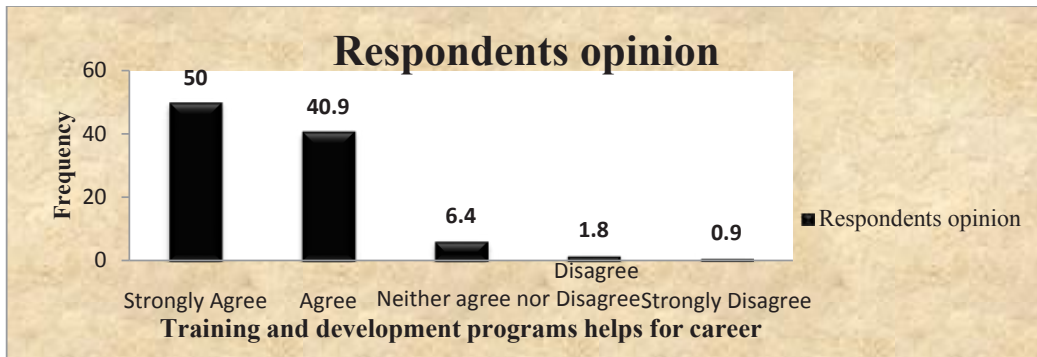
Training Effectiveness & Employee Opinion

Table- 2: Training Effectiveness & Employee Opinion

Variable	T& D helps for career	T& D increase the productivity	Work becomes easy after T& D	T& D help to build confidence in the actual process	T& D helps in personal growth
Mean	3.9541	4.0746	3.8731	4.0016	4.4395

The overall satisfaction of employees training and development programme effectiveness on their performance and productivity is positive 4.0746 mean value (From table -2). According to graph -6, majority(50%) of the employees are strongly agreed that training program helps them to improve their career growth in the organization.

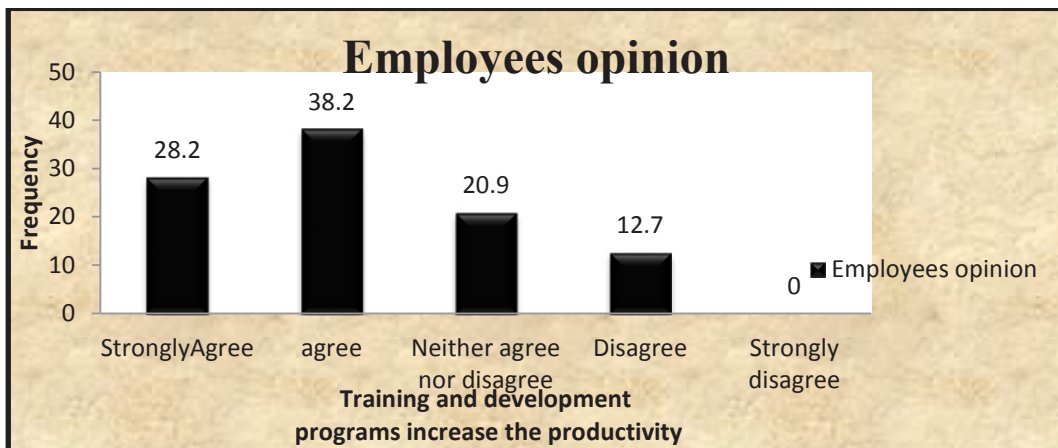
Graph- 6: Training programs help for career



Source: primary data

Training programs increase the productivity

Graph -7: Training programs increase the productivity



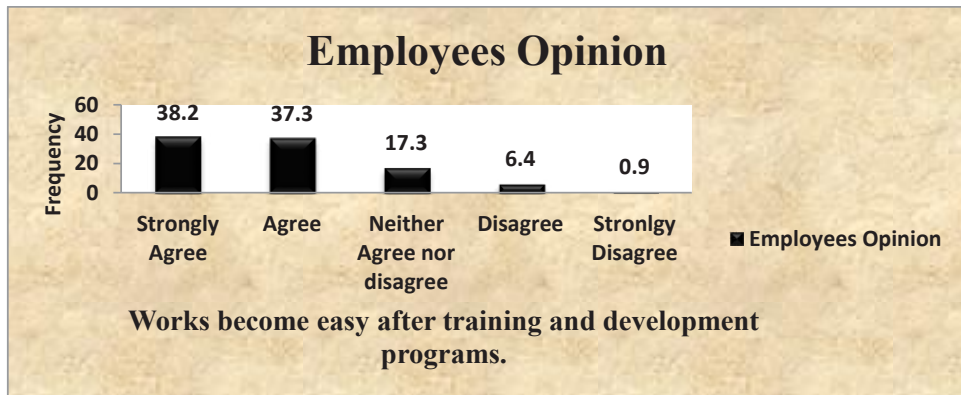
Source: primary data

From Graph -7 it is clear that, 38.2% of the employees agreed the training programs increase the productivity of the company, 28.2% of the employees strongly agreed, 20.9% of the employees are neutral and remaining 12.7% of the employees disagreed the statement.

Works become easy after training and development programs.

38.2% of the employees strongly agreed that work becomes easier after training and development programs, 37.3 %of the employees agreed, 17.3% of the employees are neutral, 6.4% of the employees are disagreed and 0.9% of the employees saying strongly disagree as can be seen in graph-8.

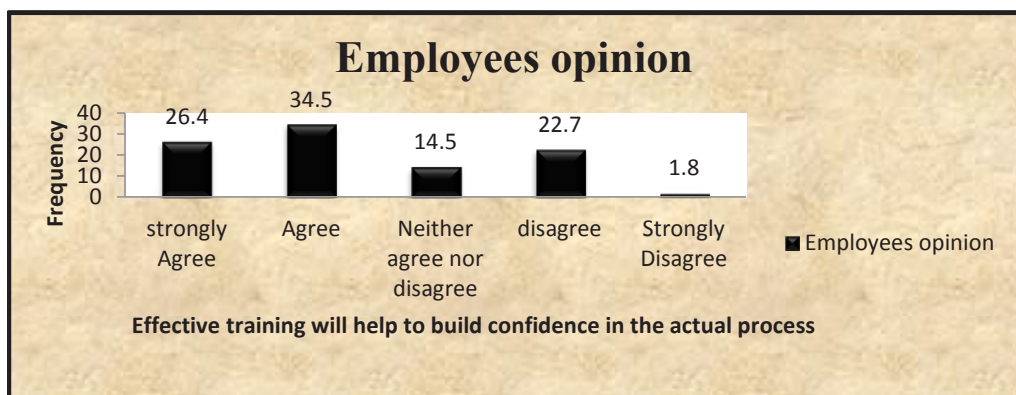
Graph -8: Works become easy after training and development programs



Source: primary data

Effective training will help to build confidence in the actual process

Graph- 9: Effective training will help to build confidence in the actual process



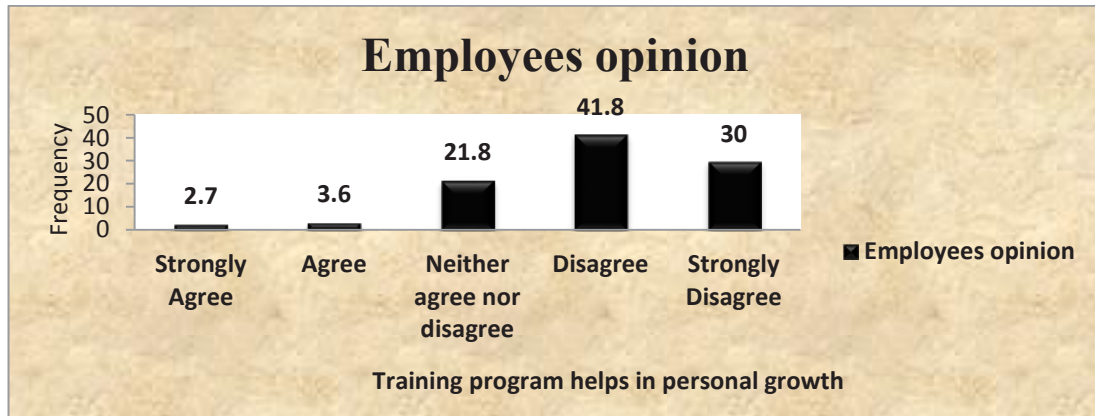
Source: primary data

Graph-9 shows that, 34.4% of the employees agreed that training program helps to improve the confidence levels of the employees. 26.4% of the employees are strongly agreed, 14.5% of

the employees are having neutral opinion, 22.7% of the employees disagreed and rest 1.8% of the employees are strongly dis agreed the statement.

Training program helps in personal growth

Graph -10: Training program helps in personal growth



Source: primary data

From the above responses, 41.8 % of the employees are agreed that the training programs helps to increase the personal growth of the employees, 30% of the employees strongly agreed, 21.8% of the employees are having neutral opinion, 3.6% of the employees are disagreed the statement and remaining 2.7% of the employee are strongly disagreed.

HYPOTHESES

Hypothesis -1

- H_0 : There is no significant relationship between training methods and employee personal growth.
- H_1 : There is a significant relationship between training methods and employee personal growth.

Table -3: Chi-square

Test Statistics		
	What method of Training have you received?	Training program helpful in personal growth.
Chi-Square	21.073 ^a	63.000 ^b
Df	2	4
Asymp. Sig.	.000	.000
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 36.7.		
b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 22.0.		

INTERPRETATION

- From the above chi square table -3 it is clear that, There is a significant relationship between training methods and Employee personal growth.
- It rejects the null hypothesis., we observe that, the significant value 0.00 is less than the $P = 0.05$, so we reject the null hypothesis and accept alternative hypothesis.

Hypothesis: 2

- **HO:** There is no association between Employee productivity and the training methods.
- **H1:** There is a association between employee productivity and training methods

Table- 4: Chi-square

Test Statistics		
	What method of Training have you received?	The training program helped to increase the firm productivity
Chi-Square	21.073 ^a	15.455 ^b
Df	2	3
Asymp. Sig.	.000	.001
a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 36.7.		
b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 27.5.		

INTERPRETATION

- From the above chi square table-4 it is clear that, There is a significant relationship between Training methods and increase the productivity of the firm..
- It rejected the null hypothesis., we observed that the significant value 0.01 is less than the $P = 0.05$, so reject the null hypothesis. So there is a relationship between two variables.

CONCLUSION

The findings indicated that training and development claimed statistically significant relationship with employee performance, personal growth and productivity. Analysis and interpretations were made at 0.05 level of significance. The study concluded that training and development have utmost impact on employee performanc, personal growth and productivity. Therefore, it was recommended that effective training programs are carefully set development plans in such a way to enhance employee skills and knowledge. Finally, foreseeable future research can be conducted to cover other variables like (gender, capabilities, involvement so on) which might affect performance and productivity.

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Correlation Between Interpersonal Intelligence and Academic Achievement Among Higher Secondary School Students

Aswathy D. V.*

ABSTRACT

The aim of the study was to know the correlation between Interpersonal Intelligence and Academic Achievement among Higher Secondary School Students. To gather necessary data various tools such as Interpersonal Intelligence Inventory prepared by the investigator and Academic Achievement of Plus Two students. The study were conducted on a representative sample of 300 Higher Secondary Students of Ernakulam district. The normative survey method was selected for the study. Interpersonal Intelligence were taken as independent variable and Academic Achievement among Plus Two students were taken as dependent variable. The result of the study showed that the Interpersonal Intelligence and Academic Achievement of Higher Secondary School Students were correlated significantly and also showed gender differences. The statistical techniques used in this study are Karl Pearson's Coefficient of Correlation and t-test for significance of Correlation.

Keywords: Interpersonal Intelligence

INTRODUCTION

In 1983, Howard Gardner, an American psychologist proposed a theory of multiple intelligences. For far too long, intelligence had been measured by IQ with standardized tests. And Gardner didn't agree with the traditional methods of measuring intelligence were cutting it. According to him human intelligence was multidimensional. On that point of view he developed his **theory of multiple intelligences**. Interpersonal Intelligence is one of those intelligences.

NEED AND SIGNIFICANCE OF THE STUDY

Interpersonal Intelligence is the ability of a person to communicate well with people and manage his relationships. It enables an individual to understand the needs and motivations of people around them, which helps to strengthen their overall influence on others. People with Interpersonal Intelligence seem to stand out in a crowd as people with lots of friends and can easily adapt to social situations. They communicate effectively and enjoy participating in discussions and debates. Individuals with Interpersonal Intelligence are characterized by their sensitivity to other's moods, feelings, temperaments, and motivations.

When communication is effective, it enables effective interactions in classrooms. Effective communication makes learning easier and helps students to achieve their goals. It also increases

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opportunities for extended learning, strengthens the bond between student and teacher and creates an overall positive experience.

Statement of the Problem

The present study is entitled as,

Correlation between Interpersonal Intelligence and Academic Achievement among Higher Secondary School Students

Definition of Key Terms

“Interpersonal Intelligence denotes a person’s capacity to understand other people (ie, their intention, motivation, desires, hidden goals etc.) and consequently to work effectively with others.” (Gardner 1999 p. 43)

OBJECTIVE OF THE STUDY

1. To find out correlation between Interpersonal Intelligences with Academic Achievements among Higher Secondary School Students based on sub sample gender.

HYPOTHESES OF THE STUDY

1. There is a significant correlation between Interpersonal Intelligence and Academic Achievement among Higher Secondary School Students based on sub sample gender

METHODOLOGY

Keeping in view the objective of the study normative survey method was appropriate for the study. Interpersonal Intelligence were taken as independent variable and Academic Achievement among Plus Two students from their school records were taken as dependent variable.

SAMPLE

The study were conducted among a sample of 300 Higher Secondary School Students and due weightage is given to gender.

TOOLS

To gather necessary data various tools such as Interpersonal Intelligence Inventory prepared by the investigator and Academic Achievement of Plus Two students taken from their school records.

Statistical Techniques

For the present study investigator use the statistical techniques such as Karl Pearson’s Coefficient of Correlation, and t-test for significance of Karl Pearson’s Coefficient of Correlation.

Data Analysis and Interpretation

Correlation between Interpersonal Intelligence and Academic Achievement for total sample.

Investigator analysed the correlation between Interpersonal Intelligence and Academic Achievement among Higher Secondary School Students. Correlation between Interpersonal Intelligence and Academic Achievement among Higher secondary students are shown in the table 1.

Table- 1: Correlation between Interpersonal Intelligences and Academic Achievement among Higher secondary students for total sample.

Variables Correlated	Coefficient of Correlation r	Calculated t-value	Comment
Interpersonal Intelligence vs Academic Achievement	0.10	1.78	Significant at 0.01 and 0.05 level

Table 1 shows that there is a positive correlation between Interpersonal Intelligence and Academic Achievement, with coefficient of correlation value 0.10. Corresponding t-value is 1.78 which are greater than the table value (0.113 and 0.148) at 0.05 and 0.01 level of significance. It indicates that there is a significant correlation between Interpersonal Intelligence and Academic Achievement among Higher secondary students.

Correlation between Interpersonal Intelligence and Academic Achievement based on gender.

Investigator analysed the correlation between Interpersonal Intelligence and Academic Achievement among the Higher secondary students based on gender are represented in the table 2 and table 3.

Table- 2: Correlation between Interpersonal Intelligences and Academic Achievement among male students.

Gender: Male			
Variables Correlated	Coefficient of correlation r	Calculated t-value	Comment
Interpersonal Intelligence vs Academic Achievement	0.16	2.87	Significant at 0.01 and 0.05 level

The table 2 shows that male Higher Secondary School Students have positive correlation between Interpersonal Intelligence and Academic Achievement with coefficient of correlation 0.16. Corresponding t-values are 2.87 which are greater than the table value (0.113 and 0.148) at 0.05 and 0.01 level of significance. It indicates that there is a significant relationship between Interpersonal Intelligences and Academic Achievement among male Higher Secondary School Students.

Correlation between Interpersonal Intelligence and Academic Achievement among female Higher Secondary School Students are shown in table 3.

Table- 3: Correlation between Interpersonal Intelligence and Academic Achievement among female students.

Gender: Female			
Variables Correlated	Coefficient of correlation r	Calculated t-value	Comment
Interpersonal Intelligence vs Academic Achievement	0.09	1.5	Significant at 0.01 and 0.05 level

The table 3 shows that female Higher Secondary School Students have positive correlation between Interpersonal Intelligence and Academic Achievement with coefficient of correlation values 0.09. Corresponding t-values are 1.5 which are greater than the table value (0.113 and 0.148) at 0.05 and 0.01 level of significance. It indicates that there is a significant relationship between Interpersonal Intelligences and Academic Achievement among female Higher Secondary School Students.

The tables 2 and 3 shows that, male Higher Secondary School Students have highest correlation between Interpersonal Intelligence and Academic Achievement than that of female Higher Secondary School Students.

FINDINGS

The above study proved that the Interpersonal Intelligence and Academic Achievement are correlated significantly. The study also revealed that there are gender differences in relationship between Interpersonal Intelligences and Academic Achievement. The scores shows that male students have Higher correlation between Interpersonal Intelligence and Academic Achievement than female students. So that we the teacher must help the students to become more intelligent by exposing them to a variety of ways of interactive learning and to use teaching strategies that make learning more efficient, successful and enjoyable.

EDUCATIONAL IMPLICATIONS

Teacher should provide the opportunity to promote the interactive skills. Teacher should adopt cooperative and collaborative learning strategies to enhance interactive intelligence among students. Teacher should help to improve students creative thinking. Getting students feedback will help the teachers to tap into the minds and interests of the students. Provide group projects and assignments to improve student interaction. And finally club activities should be organised in every school and they should cover a wide range of activities which ensure interaction of students.

CONCLUSION

Classrooms should offer a platform for students to showcase their rare skill set. Teachers can help the students put into use their skills through a variety of indoor and outdoor activities in schools. Including interactive learning strategies will help the students to enhance their interactive skills.

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Academic Achievement of Girl Students at Primary Level in Tripura

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ABSTRACT

Academic achievement is the most important area of quality education. It is known fact that learning achievement of students of primary level in India is not satisfactory. According to several surveys and reports the academic achievements of the students at primary stage in government schools of rural area are very poor. Over the past years many scholars and researchers have been working on quality of primary education and have contributed to the growth of rich literature in this area. Most of the findings state that the academic achievement of the boys is better than of girls in primary level. Tripura is a small state in North East India and being economically under developed there are many problems on the crucial periods. The study is based on the physical facilities of primary schools and the status of the performance of girl students in different subjects of class V. Multistage random sampling technique has been adopted in this study. Data were collected from 30 primary schools and 740 students were selected from class V for academic achievement test. Total boys were 386 and girls 354. All the relevant statistical measures like percentage, mean, standard deviation, t-test and ANOVA etc have been used to analyze the data. Findings of the study are that the physical facilities were increased significantly after implementation of SSA programme. But the development had no impacts on the transformation of the development quality of education. There is a large difference between the percentage of male and female teachers. Lack of female teachers is a potential barrier to girls' education and the teaching learning process suffer mostly due to large number of untrained teachers. Overall academic achievement level of the students is not up to the mark. It is seen that students on an average scores 50% out of 150 marks altogether in three subjects which is definitely not satisfactory. Comparison of total marks of girls among the three districts also reveals that there is a significant difference in academic achievement of girls at the level of class V among the three districts. Comparison of total marks between boys and girls shows that there is no significant difference in their academic achievement level in three districts.

Keywords: Primary Education, Physical facilities, Girls Academic Achievement, Quality Education

INTRODUCTION

Primary education is more important for life and primary education is more significant than the other stages of education. Every individual has the right to education. So every individual should get equal and suitable opportunities to cultivate their talent and receive education according to their requirements. But girl students have been neglected in India for a long time. We know a girl is a potential human resource. Gender biased education cannot be helpful for all round development. Primary education is

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the cornerstone for the development of a nation. Hence primary education is the foundation stage for the development of basic competencies. This level of education is intended to develop basic learning skills like reading, writing, arithmetic and life skills necessary for the children to survive and improve their quality of life. India and most of the developing countries are giving more importance to the quantitative aspect of primary education ignoring the qualitative aspect in order to achieve the goal of universal primary education. The target of Sarva Shiksha Abhiyan (SSA) a mega educational project and movement, it is not only to expand the scope of elementary education by providing facilities of universal access, enrolment, retention and participation but also to make qualitative improvement in academic achievement. But it is seen that the academic achievement of students in government schools are not satisfactory instead of all the efforts. The UNESCO EFA Global Monitoring Report (2014) also highlights that quality of education is low in India. Ahmed, S. (2014) studied on quality of primary education in Assam. He found that comparative status of academic achievement of boys is better than girls. An analysis of research cell, PBSSM (2010) found that in West Bengal only 44% could achieve marks above 60% and performance level of girls was lower than boys. Salam, S. N., Halder, K. and Maiti, N. (2013) studied on Scholastic Achievement of Primary school children in West Bengal and they found that there were no significant differences between the performance of boys and girls at primary level. It was also observed that the academic achievement of boys is higher than girls (Kulkarni, 1970; Dave, 1988; Sukla, 1994; Halder, K. 2002; Chottopadhyaya, S. 2002). It is a known fact that academic achievement of Indian students is very poor (Annual Status of Education Report 2014, Learning Achievement of class V students – a base line study by NCERT 2006). Therefore the question arises is that: Is the poor academic achievement a common phenomenon at primary level of education among boys and girls in Tripura? An investigation on the academic achievement of girl students at primary level (I-V) of education in Tripura is a need of the present study.

OBJECTIVES OF THE STUDY

1. To find out the infrastructural facilities at primary schools in Tripura.
2. To study the academic achievement of the girls at the class IV level.
3. To compare district wise the academic achievement at the class IV level of girl students.

METHODOLOGY

The descriptive survey method was used in the present study. Multistage stratified random sampling technique was adopted in this study. Three districts were selected randomly out of eight districts in Tripura namely West Tripura, North Tripura and South Tripura. The sample comprising of thirty (30) schools were randomly selected and 740 students were selected from class V for academic achievement test. Total boys were 386 and girls 354. Check list and academic achievement test were used for data collection. Check list were constructed by the researcher and academic achievement test it was constructed by Halder, K. (1996) on the basis of several competencies of primary education in consultation with the items in attainment level test prepared by Indian Statistical Institute in Kolkata. The test consisted of three parts competency of Bengali, Mathematics and Environmental studies. Data were collected from primary source.

DELIMITATIONS OF THE STUDY

The study has been limited to government Bengali medium schools only. The samples have been taken only from rural schools. TTAADC (Tripura Tribal Areas Autonomous Districts Council) was not covered in this study

DATA ANALYSIS

Data were analysed from both quantitative and qualitative point of view. For quantitative analysis of data Percentage, Mean, Standard Deviation, t- test and ANOVA were applied. Qualitative analysis was done on the basis of observation and informal discussion with Head teachers and assistant teachers of the schools while collecting data.

Table-1: Physical facilities of primary education in Tripura

Physical facilities available in the schools	Total no. of school	Number	Percentage
School building pucca	30	30	100%
Head Teachers Room	30	16	53.33%
Boundary wall	30	08	26.66%
Play Ground and Play equipments	30	24	80%
Library	30	00	00%
Text Books	30	30	100%
School Dress	30	30	100%
Teaching aids	30	30	100%
Furniture	30	30	100%
Drinking Water	30	30	100%
Girls Toilet	30	26	96%
Boys Toilet	30	26	96%
Electricity	30	16	53.33%
Medical Facility	30	00	00%
Mid-day meal	30	30	100%

Source: Field Survey

Table 1 it is very clear that in all dimensions there is huge improvement in physical facilities except boundary wall, health check up and library matters.

Table-2: Pupil -Teacher Ratio in Primary Schools Undertaken as Sample

District	Schools	Total Student	Total Teacher	Ratio	District	Schools	Total Student	Total Teacher	Ratio
North	School- 1	357	8	45	South	School- 16	34	4	9
	School -2	188	6	31		School- 17	210	7	30
	School -3	425	10	43		School -18	103	10	10
	School- 4	234	4	59		School -19	133	7	19
	School -5	158	5	32		School -20	236	8	30

District	Schools	Total Student	Total Teacher	Ratio	District	Schools	Total Student	Total Teacher	Ratio
North	School- 6	227	5	45	West	School -21	176	11	16
	School -7	135	7	19		School -22	118	8	15
	School -8	357	5	71		School -23	128	8	16
	School -9	83	4	21		School -24	204	12	17
	School- 10	231	6	39		School -25	154	10	15
South	School -11	95	7	14		School -26	194	10	19
	School -12	74	6	12		School -27	145	9	16
	School- 13	112	4	28		School -28	256	14	18
	School -14	77	6	13		School -29	184	10	18
	School -15	200	12	17		School -30	35	6	6

Source: Field Survey

Table 2 shows that there is a great deal of variation of PTR among the schools of three districts. If we compare the PTR of three districts, we find that PTR in the North Tripura district is high. 50% schools have PTR above 40. Only one school have PTR less than 20. PTR of West Tripura District is better than the other two districts. In West Tripura district the PTR in one school is 6 and in another is 19 and the rest of 8 schools have PTR ranging from 15 to 18.

Table-3: School –wise Trained and Untrained Teachers in Primary Schools

	Schools	Total teachers			Trained Teachers			Untrained Teacher		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
North	1	5	3	8	5	3	8	0	0	0
	2	6	0	6	6	0	6	0	0	0
	3	6	4	10	1	2	3	5	2	7
	4	3	1	4	2	1	3	1	0	1
	5	3	2	5	2	1	3	1	1	2
	6	4	1	5	1	0	1	3	1	4
	7	1	6	7	0	3	3	1	3	4
	8	4	1	5	3	1	4	1	0	1
	9	4	0	4	2	0	2	2	0	2
	10	6	0	6	5	0	5	1	0	1
South	11	4	3	7	4	2	6	0	1	1
	12	3	3	6	3	3	6	0	0	0
	13	3	1	4	3	1	4	0	0	0
	14	4	2	6	2	1	3	2	1	3
	15	8	4	12	5	1	6	3	3	6

	Schools	Total teachers			Trained Teachers			Untrained Teacher		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
	16	4	0	4	4	0	4	0	0	0
	17	7	0	7	4	0	4	3	0	3
	18	5	5	10	2	1	3	3	4	7
	19	3	4	7	3	0	3	0	4	4
	20	7	1	8	2	0	2	5	1	6
West	21	2	9	11	2	3	5	0	6	6
	22	5	3	8	4	3	7	1	0	1
	23	6	2	8	2	0	2	4	2	6
	24	5	7	12	1	0	1	4	7	11
	25	8	2	10	4	1	5	4	1	5
	26	9	1	10	5	1	6	4	0	4
	27	8	1	9	4	1	5	4	0	4
	28	10	4	14	9	4	13	1	0	1
	29	9	1	10	6	1	7	3	0	3
	30	2	4	6	2	2	4	0	2	2
	Total	154	75	229	98	36	134	56	39	95

Source: Field Survey

Table 3 shows that the female teachers' percentage is 32.75 and the male teachers' percentage is 62.24. There is a large difference between the percentage of male and female teachers.

Table-4: Trained and Untrained Teachers in Primary Schools

	Trained teachers		Untrained teacher		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Male	98	63.63636	56	36.36364	154	100
Female	36	48	39	52	75	100
Total	134	58.51528	95	41.48472	229	100

Table 4 shows that the percentage of trained male teachers is more than trained female teachers. The table also reveals that there is large percentage of untrained teachers (male 36.36% and female 52%).

Table 5 shows that out of 740 students, 126 scored 51-60% marks in Bengali, 81 in Mathematics and 152 in Environmental Studies and number of students getting marks above 60% in each of the subjects is less than the respective number mentioned above. Hence it is seen that only 17% students secured 51-60% marks in Bengali, 11% students secured 51-60% marks in Mathematics and 20% secured 51-60% marks in Environmental studies, which is not satisfactory.

Table-5: Academic Achievement in Different Subjects of Primary School Children

Number of Students.				
Percentage of Marks.	Bengali (50 Marks)	Mathematics (50 Marks)	Environmental Studies (50 Marks)	Total (150 Marks)
0 - 10	69	52	22	24
11 - 20	49	84	11	41
21 - 30	74	107	21	68
31 - 40	90	109	73	94
41 - 50	117	86	120	117
51 - 60	126	81	152	148
61 - 70	118	80	127	117
71 - 80	68	66	163	91
81 - 90	26	57	59	39
91 - 100	3	18	10	1
Total:	740	740	740	740

Table-6: Percentage of Academic Achievement scores (All Subjects Together) of Boys and Girls.

Percentage of Marks.	No. of Boys.	Percentage of Boys.	No. of Girls.	Percentage of Girls.
0 - 10	11	3	13	4
11 - 20	26	7	15	4
21 - 30	39	10	29	8
31 - 40	50	13	44	12
41 - 50	64	17	54	15
51 - 60	71	18	77	22
61 - 70	58	15	59	17
71 - 80	45	12	46	13
81 - 90	22	6	17	5
91 - 100	0	0	0	0
Total:	386	100	354	100

Table 6 Shows the percentage of achievement scores of all the subjects taken together of boys and girls, 22% girls obtained 51- 60% marks in aggregate and 18 % boys obtained the same. We also see that percentage of girls obtaining 61-80% marks is higher than that of boys. Though percentage of girls securing 81-90% marks is 1% less than that of boys, overall girls result is comparatively better than the boys.

Table-7: Mean and S.D. of Academic Achievement Scores in different subjects of Boys and Girls

	Bengali (50 Marks)		Mathematics (50 Marks)		Environmental Studies (50 Marks)		All Subjects together (150 Marks)	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
N	386	354	386	354	386	354	386	354
Mean	22.205	23.89	23.109	22.285	28.801	29.887	74.115	76.062
S.D.	11.345	11.174	12.4	12.419	9.952	9.542	30.09	29.725

Table 7 reveals that boys score on an average boys 22.205 (44.41%) out of 50 in Bengali, 23.109 (46.21%) out of 50 in Mathematics, 28.801(57.602%) out of 50 in Environmental Studies and hence 74.115 (49.41%) out of 150 in aggregate. And the girls scored an average 23.89 (47.78%) in Bengali, 22.285 (44.57%) in Mathematics, 29.887 (59.774%) in Environmental Studies and hence 76.062 (50.708%) in total marks. It is seen that girls secured higher marks than boys in average.

Table-8: Mean and S.D. of Academic Achievement scores in different subjects' altogether

	Bengali (50 Marks)	Mathematics (50 Marks)	Environmental Studies (50 Marks)	All together (150 Marks)
N	740	740	740	740
Mean	23.011	22.715	29.32	75.046
S.D.	11.287	12.407	9.766	29.911

Table 8 Shows the mean and standard deviation of academic achievement scores in different subject altogether. It is seen that students on an average scores 50%, altogether in three subjects, which is definitely not satisfactory.

Table-9: District wise and Subject wise Mean, S.D. Scores of Girls.

Subject	Statistics/Parameter	North Tripura	South Tripura	West Tripura
Bengali (50 Marks)	N	106	110	138
	Mean	18.585	24.809	27.232
	S.D.	10.577	10.778	10.48
Mathematics (50 Marks)	N	18.123	24.027	24.094
	Mean	13.396	11.296	11.798
	S.D.			
Environmental Studies (50 Marks)	N	25.264	31.773	31.935
	Mean	10.853	7.657	8.605
	S.D.			
Three Subjects Together (150 Marks)	N	61.972	80.609	83.261
	Mean	31.803	25.679	27.466
	S.D.			

Table 9 Shows that district wise average scores of girls, It is seen that in the North Tripura district on an average girls have scored 61 out of 150 (all the subjects altogether), 80 in South Tripura and 83 in West Tripura. Clearly, girls in West Tripura secured better marks than girls in other two districts.

Table 10 Comparison of Total Marks of Girl students among three districts (One Way ANOVA)

Source	df	SS	MS	F	Sig.
Between Group	2	30470.918	15235.459	19.002	0.000 ***
Within Group	351	281427.715	801.788		
Total	353	311898.633			

Significant codes; ***=> 1%, **=> 5%, *=>10 %

Table 10 shows that comparison of total marks of girls among three districts the calculated F – value was found to be significant at the level of 0.01. So, we can say that there is a significant difference in the academic achievement of girls among three districts.

Table-11: Comparison in marks of different subjects for girls in North districts (One-way ANOVA)

Source	df	SS	MS	F	Sig.
Between Groups	2	3385.893	1692.947	12.415	0.000***
Within Groups	315	42953.745	136.361		
Total	317	46339.638			

Signif. codes: *** => 1%, ** => 5%, * => 10%

Table 11 shows that there is a significant difference in the academic achievement of girls in North Tripura district among the three s subjects.

Table-12: Comparison in marks of different subjects for girls in South districts (One-way ANOVA)

Source	df	SS	MS	F	Sig.
Between Groups	2	4000.17	2000.085	19.841	0.000***
Within Groups	327	32963.227	100.805		
Total	329	36963.397			

Signif. codes: *** => 1%, ** => 5%, * => 10%

Table 12 shows that there is a significant difference in the academic achievement of girls in South Tripura district among the three subjects.

Table 13 Comparison in marks of different subjects for girls in West districts (One-way ANOVA)

Source	df	SS	MS	F	Sig.
Between Groups	2	4298.101	2149.051	19.956	0.000***
Within Groups	411	44260.768	107.69		
Total	413	48558.87			

Signif. codes: *** => 1%, ** => 5%, * => 10%

Table 13 shows that there is a significant difference in the achievement level of girls in West Tripura district among the three subjects.

Table-14: Comparison of total marks between boys & girls (t-test)

t	df	Sig.
-0.885	738	0.376

Table 14 shows the comparison of total marks between the boys and girls and reveals that there is no significant difference in terms of academic achievement among three districts.

CONCLUSION

From the above discussion it may be concluded that the physical facilities i.e. school building, class rooms, furniture, teaching aids, drinking water, toilet facilities for boys and girls, electric connection, Mid-day-meal were increased significantly after the implementation of SSA programme. But impacts of that development did not transform the quality of education. The physical environments of these schools are dirty, unclean and unhygienic. There is a lack of sufficient water for toilet. Schools are even running without regular sweeping. There prevail an unhygienic sanitary condition as there is no provision of sweeper or non-teaching staffs. There is a great deal of variation of Pupil Teachers Ratio among three districts. PTR in the North Tripura district is high, 50% schools have PTR above 40. PTR of West Tripura district is better than the other two districts. There is a large difference between the percentage of male and female teachers. Lack of female teachers is a potential barrier to girls education. There is a large number of untrained teachers, as a result of which the teaching learning process is suffering the most. Maximum of the teachers are following traditional methods of teaching. They are not using the teaching aids for effective learning of the students. So there are developments in quantitative aspect but the qualitative achievement of the students is ignored in order to achieve the goal of universal primary education.

Good administration is also one of the pre-requisites of quality education. Regular monitoring, supervision and inspection of schools by competent authority not only strengthen the education system but also bridge the gap between concerned authorities and teachers. Any sort of difficulties, problems and loopholes can be checked or overcome through regular and judicious administrative intervention. But we observed that maximum schools are running by in-charge Headmasters. So the teachers are very much reluctant to the teaching learning process. The performances of

teachers are not assessed or monitored regularly and properly which adversely impact quality education. As a result academic achievements of students hamper mostly. They are very serious to complete prescribed courses ignoring the need of the students, their interests and standards. Overall academic achievement level of the students was not up to the mark. But overall result of the girls is comparatively better than the boys. It is seen that students on an average scores 50% out of 150 marks altogether in three subjects, which is definitely not satisfactory. It is found that girls in West Tripura district secured better average marks than the girls of the other two districts but in between West and South districts difference is nominal. Comparison of total marks of girls among the three districts also reveals that there is a significant difference in academic achievement of girls at the level of class V among the three districts. The study also reveals that in the comparison of total marks between boys and girls there is no significant difference in their academic achievement level in three districts. Physical facilities were increased significantly and the efforts have yielded results and significant progress have been made in course of the last decade. The number of enrolment of girls has increased considerably but a decreasing trend is observed for the last few years. Even though dropout rate for girls has recorded a downward trend, the academic achievement levels of the students have not changed, especially overall academic achievement of primary level students which is not encouraging. It is true fact that academic achievement of rural students both boys and girls are not satisfactory in Tripura.

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अनुच्छेद 370 अतीत से वर्तमान तक

डॉ. मीनाक्षी बंसल* और मोन्टी साहू**

सारांश

प्रधानमंत्री नरेन्द्र मोदी व अमित शाह की जोड़ी ने जम्मू कश्मीर को भारत का एक अभिन्न अंग बनाने के लिए एक-एक कर रास्ते की सारी रूकावटों को दूर किया। फिर एक ऐसा राजनैतिक माहौल तैयार किया गया। जहां पर संख्या में कम होने के बाद भी सरकार को दो-तिहाई बहुमत मिल गया। अपनी खूबसूरती के लिए भारत का स्वर्ग कहा जाने वाला जम्मू कश्मीर सही अर्थ में भारत का हो गया है। भारत का होने के बावजूद भी भारत से अलग संविधान विधान और अलग निशान से चलने वाला जम्मू कश्मीर अब भारत के संविधान, विधान और निशान के अनुसार क्रियान्वित होगा।

मुख्य शब्द: अनुच्छेद 370ए – जम्मू कश्मीर राज्य, भारत।

भूमिका

भारतीय संविधान के अनुच्छेद-1 में कहा गया है कि “भारत राज्यों का संघ हैं।” इसीलिए भारत के सभी राज्य तथा केन्द्र शासित प्रदेश भारतीय संघ में शामिल माने जाते हैं। जबकि दूसरी तरफ अनुच्छेद 370 विशेष राज्य के संदर्भ में कानून बनता है।

इसके अनुसार – जम्मू कश्मीर राज्य का एक अलग संविधान होगा तथा भारतीय संविधान के नियम व शर्तें जम्मू कश्मीर पर लागू नहीं होंगे। भारतीय संविधान के भाग 21 में अनुच्छेद 370 एक परिवर्तनीय अस्थायी अनुच्छेद है जिसके द्वारा जम्मू कश्मीर को विशेष राज्य का दर्जा दिया गया है। भारत सरकार द्वारा केवल रक्षा, विदेश व संचार संबंधी मामलों में नियम बनाने के अधिकार इस अनुच्छेद में दिए गए हैं। इस अनुच्छेद के द्वारा जम्मू कश्मीर का अपना अलग संविधान, दोहरी नागरिकता तथा अलग झण्डा है। भारतीय संविधान में अनुच्छेद 370 एक ऐसा लेख है जो अतीत में कश्मीर को स्वायत्तता का दर्जा प्रदान करता था। जम्मू कश्मीर की संविधान का निर्माण 26 जनवरी 1950 को किया गया था। इसकी स्थापना के बाद उन लेखों की सिफारिश करने का अधिकार दिया गया जो राज्य में लागू की जानी थी। अनुच्छेद 370 के आधार पर कश्मीर राज्य अपना संविधान स्वयं तैयार कर सकता था। यह अनुच्छेद भारतीय संसद की विधायी शक्तियों को जम्मू कश्मीर पर लागू होने से रोकने का कार्य करता था।

इस अनुच्छेद का मूल मसौदा जम्मू कश्मीर की सरकार के द्वारा तैयार किया गया। इसके पश्चात् अनुच्छेद 306ए (जो अब 370) में संशोधन किया और बदलाव के लिए 27 मई, 1949 को इसे संविधान सभा के द्वारा पारित करवाया गया।

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17 अक्टूबर, 1949 को भारतीय संविधान सभा के द्वारा अनुच्छेद 370 को भारतीय संविधान में जोड़ा गया था। मोदी सरकार ने 5 अगस्त, 2019 को राज्य सभा में एक ऐतिहासिक अधिनियम पेश किया गया जो जम्मू कश्मीर पुर्नगठन अधिनियम है। जिसमें जम्मू कश्मीर राज्य का संविधान हटाने और राज्य का विभाजन जम्मू कश्मीर एवं लद्दाख दो केन्द्र शासित क्षेत्रों के रूप में लागू करने का प्रस्ताव पास किया गया। अब जम्मू कश्मीर एक केन्द्र शासित प्रदेश है। जिसकी अपनी विधान पालिका है तथा लद्दाख बिना विधायिका वाला केन्द्र शासित क्षेत्र है।

अनुच्छेद 370 क्या है

1. अनुच्छेद के प्रावधान के अनुसार संसद को जम्मू कश्मीर में रक्षा, विदेश मामलो और संचासर के बारे में कानून बनाने का अधिकार है परन्तु किसी अन्य विषय पर कानून बनाने के लिए केन्द्र को राज्य सरकार की सहमति जरूरी है।
2. इसके विशेष दर्जे की प्राप्ति के कारण जम्मू कश्मीर राज्य पर संविधान की धारा 356 लागू नहीं हैं।
3. इसी के कारण राष्ट्रपति के पास राज्य में संविधान को समाप्त करने का अधिकार नहीं है।
4. 1976 को शहरी भूमि कानून पर लागू नहीं होता।
5. इस धारा के अन्तर्गत भारतीय नागरिक को विशेष अधिकार प्राप्त राज्यों के अलावा राज्य में किसी भी क्षेत्र में भूमि खरीदने का अधिकार है।
6. भारतीय संविधान की धारा 360 के अनुसार देश में धन सम्बन्धित अधिनियम लगाने का प्रावधान है। वह जम्मू कश्मीर पर लागू नहीं होता।¹

धारा 370 के सम्बन्ध में कुछ महत्वपूर्ण बातें

1. जम्मू कश्मीर में दोहरी नागरिकता का प्रावधान था। यहां का अलग संविधान और ध्वज था।
2. इस धारा का संविधान के भाग में समायोजन है जिसका शीर्षक है। अस्थायी परिवर्तनीय और विशेष प्रावधान।
3. धारा 370 के शीर्षक में शब्द है जो जम्मू कश्मीर के संबंध में अस्थायी प्रावधान है।

अतीत में अनुच्छेद 370

नवम्बर 1965 में जम्मू कश्मीर राज्य में संविधान का काम पूरा हुआ और 26 जुलाई, 1967 को राज्य में विशेष संविधान लागू कर दिया गया।

संविधान का अनुच्छेद 370 दरअसल केन्द्र से जम्मू कश्मीर की रूप-रेखा है। भारत के प्रथम प्रधानमंत्री जवाहर लाल नेहरू और शेख मोहम्मद अब्दुल्ला ने पांच महीनों से इस बारे में हुई चर्चा के आधार पर अनुच्छेद 370 के प्रावधानों के अनुसार रक्षा, विदेश नीति और संचार मामलों को छोड़कर किसी भी अन्य मामले में कानून बनाने और उसे लागू करवाने के बारे में केन्द्र को राज्य सरकार की अनुमति लेनी होगी।

इसी विशेष दर्जे के कारण जम्मू कश्मीर राज्य पर संविधान का अनुच्छेद 356 लागू नहीं होता। अनुच्छेद 356 जो राज्य संवैधानिक तंत्र की विफलता के बारे में बताता है। इस कारण भारत के राष्ट्रपति पास राज्य के संविधान को बर्खास्त करने का अधिकार नहीं है। राज्य के विधानसभा का कार्यकाल 6 वर्षों का होता है। राष्ट्रपति अनुच्छेद 370 के चलते आर्थिक आपातकाल भी नहीं लगा सकता।²

अतीत में अनुच्छेद 370 के दौरान क्या रहा

- प्रदेश से बाहर के लोगों को जम्मू कश्मीर में जमीन खरीदने, सरकारी नौकरी पाने, संस्थानों में दाखिला लेने का अधिकार नहीं होता था।
- जम्मू कश्मीर की विधानसभा का कार्यकाल छह साल का होता है और भारत की संसद को यहां के संबंध में सीमित क्षेत्र में ही कानून बनाने का अधिकार था।
- रक्षा, विदेश मामलों व संचार को छोड़कर अन्य किसी बारे में लागू करवाने के लिए केन्द्र सरकार को राज्य सरकार की मंजूरी प्राप्त होनी चाहिए।
- अगर कोई महिला जो भारत के किसी अन्य राज्य के व्यक्ति से शादी करती है तो उस महिला की जम्मू कश्मीर राज्य की नागरिकता समाप्त हो जाती थी।
- अगर जम्मू कश्मीर की महिला पाकिस्तान के नागरिक से शादी करती है तो उस नागरिकता को जम्मू कश्मीर की नागरिकता मिल जाती है।
- इस धारा के चलते न तो शिक्षा का अधिकार व न ही सूचना का अधिकार था। वहां पर रणबीर दण्ड संहिता लागू थी।
- इस क्षेत्र से बाहर का कोई व्यक्ति चुनाव प्रणाली में किसी भी तरह का अपना योगदान नहीं कर सकता था।
- इस धारा के तहत सुप्रीम कोर्ट का कोई भी फैसला मान्य इस राज्य में नहीं होता था।³

वर्तमान समय में मोदी सरकार के प्रयास

प्रधानमंत्री नरेन्द्र मोदी व अमित शाह की जोड़ी ने जम्मू कश्मीर को भारत का एक अभिन्न अंग बनाने के लिए एक-एक कर रास्ते की सारी रूकावटों को दूर किया। फिर एक ऐसा राजनैतिक माहौल तैयार किया गया। जहां पर संख्या में कम होने के बाद भी सरकार को दो-तिहाई बहुमत मिल गया। अपनी खूबसूरती के लिए भारत का स्वर्ग कहा जाने वाला जम्मू कश्मीर सही अर्थ में भारत का हो गया है। भारत का होने के बावजूद भी भारत से अलग संविधान विधान और अलग निशान से चलने वाला जम्मू कश्मीर अब भारत के संविधान, विधान और निशान के अनुसार क्रियान्वित होगा।

संशोधित किए हुए प्रावधान इस तरह से है

- अब केन्द्रीय आबकारी, नागरी उड्डयन और डाकतार विभागों के कानून और नियम जम्मू कश्मीर पर लागू किए गए।

- भारतीय जनगणना भी जम्मू कश्मीर पर लागू की गई है।
- सर्वोच्च न्यायालय ने जम्मू कश्मीर उच्च न्यायालय के निर्णयों के विरुद्ध अपीलों को स्वीकार किया तथा उसे मान्य भी किया गया।
- श्रमिक कल्याण, संगठन, सामाजिक सुरक्षा तथा सामाजिक बीमा संबंधित सारी सुविधा लागू हुई।
- लोकसभा में प्रत्यक्ष मतदान प्रणाली में निर्वाचित अपना प्रतिनिधि भेजने का अधिकार जम्मू कश्मीर को दिया गया।

अनुच्छेद 370 को हटाये जाने के बाद आया परिवर्तन

- दोहरी नागरिकता, अलग संविधान और अलग ध्वज का प्रावधान समाप्त हो जाएगा। तिरंगे और राष्ट्रीय प्रतीकों का जो अपमान करेगा, उसे अपराधी माना जायेगा।
- देश का कोई भी नागरिक जो पहले वहां पर सम्पत्ति नहीं खरीद सकता था, वो वहां पर सम्पत्ति खरीद सकता है, व्यापार कर सकता तथा शिक्षा भी प्राप्त कर सकता है।
- जैसी विधान सभा दिल्ली की है, वैसी ही विधान सभा जम्मू कश्मीर की होगी और इसका कार्यकाल भी पांच वर्ष का होगा। लद्दाख पूर्ण केन्द्र शासित प्रदेश होगा तथा चण्डीगढ़ की तरह शासन व्यवस्था होगी।
- किसी अन्य राज्य के व्यक्ति से शादी करने के बाद मिला, विशेषाधिकार महिला का समाप्त हो जाएगा।
- राज्य की पुलिस केन्द्र के अधिकार क्षेत्र में होगी। लद्दाख व जम्मू कश्मीर में उप-राज्यपाल का पद होगा।
- अब अनुच्छेद 356 का प्रावधान होगा तथा जो अल्पसंख्यक है, उन्हें भी आरक्षण मिलेगा।
- सूचना व शिक्षा संबंधी अधिकार लागू होंगे तथा भारतीय दण्ड संहिता लागू होगी। जो जम्मू कश्मीर को प्रभावित करेगी।
- भारत का कोई भी नागरिक जो चुनाव में रुचि रखता है, वह अपना चुनाव प्रणाली में योगदान दे सकेगा।
- सर्वोच्च न्यायालय के द्वारा जो फैसले लिए जायेंगे, वो जम्मू कश्मीर में लागू होंगे।

जम्मू कश्मीर भविष्य में किस तरह से करेगा कार्य

- जम्मू कश्मीर का विशेष दर्जा खत्म होने के बाद इसके दो हिस्से केन्द्र शासित होंगे। जम्मू कश्मीर की अपनी विधान सभा होगी, जबकि लद्दाख बिना विधायिका वाला क्षेत्र होगा।
- नए केन्द्र शासित प्रदेश ओर जम्मू कश्मीर में मौजूदा जम्मू कश्मीर क्षेत्र शामिल होंगे।
- राज्यपाल की जगह अब उप-राज्यपाल की होगी।
- **पुंडुचेरी की तरह शासन** :—केन्द्र शासित पुंडुचेरी अनुच्छेद 239—एके अंतर्गत काम करता है, जो अब केन्द्र शासित प्रदेश में भी लागू होगा।

- **विधान सभा की क्षमता :** नई विधान सभा में 107 विधायक होंगे तथा इनमें 24 सीटें हैं जो गुलाम कश्मीर हैं उनके लिए होंगी।
- **वर्तमान में विधान सभा :** वर्तमान विधान सभा के सदस्यों की संख्या 111 है। जिनमें से 87 का चुनाव होता है। दो सदस्यों को मनोनित किया जाता है।
- **मनोनित किए गए सदस्य :** नए कानून के अनुसार उपराज्यपाल को अगर लगता है कि विधानसभा में महिलाओं का प्रतिनिधित्व पर्याप्त नहीं है तो वे दो महिला सदस्यों को मनोनित कर सकता है।
- **लोकसभा किस तरह से :** कश्मीर केन्द्र शासित प्रदेश के लिए पांच और लद्दाख से एक सीट होगी।
- **उपराज्य की सहमति जरूरी :** विधानसभा से पारित विधयेक उपराज्यपाल की सहमति के लिए भेजे जा सकेंगे। वे इसे अपने पास भी रख सकते हैं या फिर राष्ट्रपति के पास इस पर विचार करने के लिए भेज सकते हैं।
- **संसद में दी जाएगी वरीयता :** किसी भी अनियमितता की स्थिति में देश की संसद द्वारा पारित कानून को नई विधानसभा में वरीयता दी जाएगी।
- **मंत्री परिषद् :** विधान सभा के सदस्यों की कुल संख्या के दस प्रतिशत से अधिक मंत्री नहीं बनाए जा सकेंगे।
- **हाई कोर्ट :** जम्मू कश्मीर और लद्दाख का एक ही हाई कोर्ट होगा।⁴

विपक्ष ने की इस फैसले की आलोचना

सरकार ने देश के सिर को काटकर अलग कर दिया तथा देश के साथ गद्दारी की है। कांग्रेस जम्मू कश्मीर से अनुच्छेद 370 के हटाए जाने और राज्य को दो केन्द्र शासित प्रदेश में विभाजित करने पर सरकार की कड़ी निंदा की है। भाजपा की सरकार ने देश के सिफर को अलग कर दिया तथा देश के साथ बड़ी गद्दारी की है।

असंवैधानिक फैसला

आज का दिन “भारतीय लोकतंत्र का एक काला दिन है। अनुच्छेद 370 को खत्म करने का फैसला भारत सरकार का एक तरफा फैसला है जो असंवैधानिक और अवैद्य है। यह फैसला उपमहाद्वीप के लिए भयंकर परिणाम लेकर आएगा।”⁵

— महबूबा मुपती, पी.डी.पी. अध्यक्ष।

परिणाम होंगे भयंकर

“भारत सरकार का एक तरफ आरैर चौकाने वाला निर्णय उस भरोसे के साथ पूरी तरह से विष्वासघात है जो जम्मू कश्मीर के लोगों ने भारत के लिए जताया था। ऐसे फैसले भयंकर परिणाम देने वाले साबित होंगे। ऐसे विनाशकारी फैसलों की तैयारी हाल के हफ्तों में धोखेबाज एवं गोपनीयता को सहारा बनाकर लिया गया है।”⁶

उमर अब्दुल्ला नेका उपाध्यक्ष।

निष्कर्ष

संक्षेप में कहा जा सकता है कि अनुच्छेद 370 के हटायें जाने के बाद धरती का स्वर्ग कहा जाने वाला कश्मीर अब पूर्ण रूप से भारत का हो गया है। अनुच्छेद 370 के निष्क्रिय हो जाने के बाद जम्मू कश्मीर व लद्दाख केन्द्र शासित प्रदेश बन गए। पूरे देश का एक निशान व एक ध्वज हो गया। अब जम्मू कश्मीर में शिक्षा, रोजगार के क्षेत्र को बढ़ावा मिलेगा।

यद्यपि विरोधियों ने इसकी आलोचना भी की है। जिसके चलते कहा गया है कि देश के सिर को अलग कर दिया है। तथापि इसके महत्व को नकारा नहीं जा सकता और उम्मीद की जा सकती है कि भविष्य में सुनहरे भारत के गौरव की ओर अधिक बढ़ाने में योगदान मिलेगा।

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Effects of Personality Factors and Burnoutness on School Teachers of Rural and Urban Areas with Respect to Professional Adjustment

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ABSTRACT

Personality is based on the assumption that the teacher as a person is a significant variable in the teaching-learning process. Personality influences the behaviour of the teacher in diverse ways, such as interaction with students, methods selected, and learning experiences chosen. The word "Adjustment" literally means to fit, to make suitable adopt, arrange, modify, harmonize or make correspondent between two things, we adopt or modify one or more of them to correspond to each other. The extension of ladder by a suitable length to reach an upper story window is a good example of such an Adjustment. In this study 100 teachers serving in Government schools of rural and urban areas of Sadar, Ranchi District, Jharkhand were selected by random technique. S.K. Mangal's Teachers Adjustment Inventory (MTAI) was used and In this study, the statistical techniques mean, standard deviation (SD) & 't' test were used. In this study it is found that there is no significant difference between Male teachers working in Government schools of rural and urban areas in relation to their personal, social and professional adjustment. There is significant difference between teachers working in Government schools of rural and urban areas and also between Female teachers working in Government schools of rural and urban areas in relation to their personal, social and professional adjustment. It means that male teachers working in Government schools of rural and urban areas have same attitude in relation to their personal, social and professional adjustment. A survey of 400 students and collected the sample consisted perusing different professional course in the age range of 18-25 years from urban area of Ranchi city. Purposive sampling was adopted to collect the data. A total of 100 students each from medical, engineering, management and non-professional colleges of Ranchi were taken.

INTRODUCTION

Research on teacher personality is based on the assumption that the teacher as a person is a significant variable in the teaching-learning process. Personality influences the behaviour of the teacher in diverse ways, such as interaction with students, methods selected, and learning experiences chosen. The effective use of a teacher's personality is essential in conducting instructional activities. Personality aids teaching, for communication takes place between the teacher and the learner even in the absence of the spoken word (non-verbal communication). The teacher whose personality helps create and maintain a classroom or learning environment in which students feel comfortable and in which they are motivated to learn is said to have a desirable teaching personality.

The process by which an organism attempts to meet the demands placed upon it by its own nature and by its environment and 'the act of adjusting' or 'adoption of needs' or 'to satisfy specific conditions' is called Adjustment. According to the Dictionary of Psychology, "Adjustment implies

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a greater purposiveness and awareness on the part of the individual faced with environmental demand.” Adjustment had two meanings. In one sense, it is a continuous process of life that affects an individual and changes his behaviour. We also try to keep proper relationships with environment. In the second sense, Adjustment is that conducive situation in which an individual keeps himself happy and free from mental ailment. Adjustment is that condition or state in which one’s need has been fulfilled and one’s behaviour conforms to the requirement of the culture of the society he belongs to. An individual has usually two types of demands-external (social) and internal (biological and psychological) demands. Conflicts among the various demands or needs of a person present special problems of adjustment. These may cause frustration and lead to abnormal behaviour. Psychologists have stated Adjustment in two ways- One, adjustment as a process and other, adjustment as an achievement. The first point of view emphasizes the process by which an individual adjusts in his external environment and the second lays emphasis on the quality or efficiency of adjustment.

Adjustment as a process- The fundamental motive of human behaviour is to seek pleasure and avoid pain. The world is not organized on such a basis where we can always seek pleasure and can have it. The individual has to act in accordance with the Social norms, taboos and mores. The individual cannot fulfil all of his desires the way he likes. So he has to make adjustment, which continues till his/her death.

Adjustment as an achievement- Adjustment as an achievement means how efficiently an individual can perform his duties in different circumstances like business, military, education and other social activities need efficient and well-adjusted man for the progress of nation. If we interpret adjustment as an achievement, then we will have to set the criteria to judge the quality of adjustment. It means that Adjustment is both process and product. An achievement refers to the efficiency of a person for performing his duties in different situations. Education requires well-adjusted pupils and teachers in schools. In easy words we can say Adjustment is “To fit”, “To make correspondent” and “To accommodate”.

Professional Adjustment- Job, professional engagements and progress play an important role in one’s life, because the relative share of waking hours spent on work and preparations for it is big. That is why one might say that work is the main source of personal identity and role definiteness. “Professional adjustment is a long complex process, which starts with entering into manpower and lasts as long as lifetime.. Basing his argument on different German and Russian sources, A. Kutev draws a general conclusion, that the notion “professional adjustment” includes the following three components: adjustment labour to man- it means ergonomic conformity of conditions of work and means of production with man; adjustment man to labour- it includes everything – starting with professional consultation (ascertainment one’s labour and professional suitability for a certain activity) up to one’s professional preparation, training and qualification; adjustment man to man – i.e. activities directed towards favourable forms of c Most burnout research has focussed on environmental correlates, but it is likely that personality factors also play an important part in the development of burnout. Previous meta-analyses, however, have been limited in scope. The present meta-analysis examined the relationship between personality and three dimensions of the **Maslach Burnout Inventory (MBI)**: emotional exhaustion, depersonalization, and personal accomplishment. Consistent with our hypotheses, self-esteem, self-efficacy, locus of control, emotional stability, extraversion, conscientiousness, agreeableness, positive affectivity, negative affectivity, optimism, proactive personality, and hardiness, each yielded significant relationships with burnout. Type A Personality, however, was only related to personal accomplishment. Furthermore, regression analysis found that core self-evaluations, the Five-Factor Model personality characteristics, and positive and negative affectivity explained significant variance in each of the burnout dimensions. Finally, moderator analyses found several instances

in which the strength of personality–burnout relationships depended upon whether burnout was assessed with the Human Services Survey of the MBI or the General Survey version of the MBI. It is concluded that employee personality is consistently related to burnout. Given the practical importance of employee burnout, it is recommended that personality variables be included as predictors in future research on burnoutness cooperation, information and communication during the work process.

In the present competitive age it is reported that students of professional course like Medical, Engineering, Management etc. are found to be more in stress. Selye ,defines stress as “ any external event or any internal drive which threaten to upset the organism equilibrium is stress”. We do get lot of information every day about the suicide, attempted suicide depression ,dropout and many more psychological symptoms among the students. Now parental expectations are very high, but in practice it is become difficult for professionally qualified persons to be placed in suitable job. Therefore it has become a major anxiety-provoking situation. Ross et al. (1999) inferred that daily hassles were more often than major life events with inter personal source of stress being the most frequently reported source of stress. The top five sources of stress are change is sleeping habits, and change in eating habits, increase workload and new responsibility. Adjustment is also a very important aspect for the students of professional courses. Adjustment to the environment requires a workable relationship between the persons need and expectations those of his society. Professional Social adjustment problems was found common among students (DohrenWend 1998). Stress discourse has been concerned with external events that are taxing to individual and exceed their capacity to induce with results in having potential to induce mental or somatic illness. Taking all these factors into account an effort in made to understand the stress and emotional adjustments of students of professional courses. The inference of this study may lead to better adjustment and academic performance of the students.

NEED AND SIGNIFICANCE OF THE STUDY

Today everybody knows that teaching profession is the noblest profession. Teachers constitute an important segment of school education and its administration. The success or failure of the school education depends upon the interests evinced by teachers. The behaviour of students also depends on the overall performance of their teachers. For a rural child, teacher is supposed to be a reference model. The Indian education commission (1964-1966) felt that, “Of all the different factors which influence the quality of education and its contribution to national development, the quality, competence and character of teacher’s is undoubtedly the most significant. Nothing is more important than securing a sufficient supply of high quality recruits to the teaching profession, providing them with the best possible professional preparation and creating satisfactory conditions of work in which they can be fully effective.”

Teachers being such an important factors and the process of education being classroom based, their problems need a detailed examination. The role and responsibility of a teacher are infinite and limitless because he has to play many roles e. g. as instructor, as guarantor of happiness, as a therapist and as an engineer of warm relationship etc. Moreover there is a great responsibility upon him to build up responsible citizen, but only that teacher can effectively discharge his duties properly if he is reasonably satisfied with himself and with his environment. A well adjusted teacher is a source of inspiration to his students and a boon to the society. On the other hand a maladjusted teacher can create a problem to the society. In other words it can be said that success of failure of an educational programme hangs on the degree of the teacher himself. Keeping these views in mind, the researcher decided to choose this topic.

STATEMENT OF THE PROBLEM

“Effects of Personality on School Teachers of Rural and Urban Areas with Respect to Professional Adjustment”

OBJECTIVES OF THE STUDY

1. To study the relative difference between Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment.
2. To study the relative difference between Male Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment.
3. To study the relative difference between Female Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment.

HYPOTHESES OF THE STUDY

H1: There is no significant difference between Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment.

H2: There is no significant difference between Male Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment.

H3: There is no significant difference between Female Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment.

VARIABLES

In this study, following variables have been studied.

(I) Dependent Variables: Personal, social and professional adjustment.

(II) Independent Variables: A comparative study of Male and female teachers working in Government schools of rural and urban areas.

Methods Used: Method used for this research work is generally known as survey method.

Population: All the teachers serving in Government schools of rural and urban areas constituted the population for the present study.

Sample: The sample for the present study selected randomly. Due to the lack of time, the study restricted to 100 teachers serving in Government schools of rural and urban areas.

Tools Used S.K. Mangal's Teachers Adjustment Inventory (MTAI) was used. Statistical Techniques: In this research, the statistical techniques like Mean, S.D. & 't' test technique were used.

RESULTS & ANALYSIS OF DATA

“Analysis is a process which enters in one form or another from the very beginning. It may be fair to say the research consists in general of two large steps the gathering of data and the analysis of this data. But, no amount of analysis can validity extract from the data factors which are not present.” The interpretation of research data cannot be considered in the abstract. In view of the diversity of the research methods used in education and the corresponding diversity of data they seek, the interpretation of seek data is best considered with in the context of each of the methods.

Hypothesis No H1: There is no significant difference between Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment.

Table-1: Mean, SD & 't' value of Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment Groups Total Mean S.D. t-Value Level of Significance

Rural Government Teacher	50
Significant at both levels i.e..	05 & .01
Urban Government Teacher	50
Degree of freedom	= $N_1 + N_2 - 2 = (50+50-2) = 98$, t value of 98 at 0.05 level = 1.98
t value of 98 at 0.01 level	= 2.63

INTERPRETATION

In the above table the researcher analyses the difference between the attitude of rural and urban government teachers. Here the mean of rural and urban government teachers is 47.96 and 44. S.D of rural and urban government teachers is 7.26 and 7.1.

The calculated t value is 2.75, which is more than the tabular t value at 0.05 and 0.01 significant level. Hence the hypothesis framed earlier is rejected. It implies that there is significant difference between the attitude of rural and urban government teachers towards the personal, social and professional adjustment. It shows the attitude of teachers towards the personal, social and professional adjustment in rural and urban government teachers is not similar.

Hypothesis No H2: There is no significant difference between Male Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment.

Table-2: Mean, SD & 't' value of Male Teachers working in Government Schools of rural and Urban areas in Relation to their Personal, Social and Professional Adjustment. Groups total Mean S.D. t-Value Level of Significance

Rural Male Teacher	25
Significant at both levels i.e..	05 & .01
Urban Male Teacher	25
Degree of freedom	= $N_1 + N_2 - 2 = (25+25-2) = 48$
t value at 0.05 significant level	= 2.01
t value at 48 at 0.01 significant level	= 2.68

INTERPRETATION

In the above table the researcher analyses that there is no difference between the attitude of rural and urban male government teachers towards the personal, social and professional adjustment. Here the mean of rural and urban male government teachers is 46.84 and 45.24 but S.D of rural and urban male government teachers is 7.35 and 6.14. The calculated t value is 0.83, which is less than the tabular t value at 0.05 and 0.01 significant level. Hence the hypothesis framed earlier is

accepted. It implies that there is no significant difference between the attitude of rural and urban male government teachers towards the personal, social and professional adjustment. It shows the attitude of teachers towards the personal, social and professional adjustment in rural and urban male government teachers is similar.

Hypothesis No-H3: There is no significant difference between Female Teachers working in Government Schools of rural and urban areas in relation to their personal, social and professional Adjustment.

Table-3: Mean, SD & 'T' Value of Female Teachers working in Government Schools of rural and Urban areas in Relation to their Personal, Social and Professional Adjustment Groups total Mean S.D. t-Value Level of Significance

Rural Female Teacher	25
Significant at both levels i.e..	05 & .01
Urban Female Teacher	25
Degree of freedom	= $N_1 + N_2 - 2 = (25+25-2) = 48$
t value of 48 at 0.05 significant level	= 2.011
t value at 48 at 0.01 significant level	= 2.68

INTERPRETATION

In the above table the researcher analyses the difference between the attitude of rural and urban female government teachers towards the personal, social and professional adjustment. Here the mean of rural and urban female government teachers is 49.08 and 42.76 but S.D of rural and urban female government teachers is 7.00 and 7.74. The calculated t value is 3.02, which is more than the tabular t value at 0.05 and 0.01 significant level. Hence the hypothesis framed earlier is rejected. It implies that there is significant difference between the attitude of rural and urban female government teachers towards the personal, social and professional adjustment. It shows that the attitude of rural and urban female government teachers towards the personal, social and professional adjustment in rural and urban is not similar.

Hypothesis No-H4: Study of Professional and Non-professional Students Group:

Table-1: Mean, Mean difference, SED of the stress variable.

Groups	Mean	Mean difference	SE _D	t value	Sig. level
Professional Students	16.35				
Non-professional students	15.39	0.963	0.560	1.72*	P<0.10

Table 1. indicates Mean & SED of the professional and non-professional group, on stress variable. It is observed the professional and non-professional groups are significantly different from each other at 10% level of significance. Students of professional group mean is 16.35 and non-professional mean is 15.39, mean difference is 0.96, t value 1.72. The results indicate that the average stress of the professional group is significantly higher than non-professional group.

A research had reported that daily hassles, examination pressure and academic factors are common source of stress in medical students at Seth G.S. medical College, Mumbai (Super 1998). Studies supported that for students the major constraints are course work and emotional stability (Monk et al1999).

Table-2: Mean Difference, Standard error of Difference (SED) of the Emotional Adjustment of Subjects.

Groups	Mean	Mean difference	SE _D	t value	Sig. level
Professional Students	11.42				
Non-professional students	10.06	1.360	0.775	1.76*	P<0.10

[Table 2] shows the mean, mean diff, SED and t value of emotional adjustment for the professional and non-professional group. it reveals that the professional (Mean 11.42) and non-professional (Mean 10.06) groups are found to be significantly different on emotional adjustment at 10% level of significance. Mean difference is 1.36, SED is 0.78 and t value is 1.76.

INTERPRETATION

The sample consisted 400 students perusing different professional course in the age range of 18-25 years from urban area of Ranchi city. Purposive sampling was adopted to collect the data. A total of 100 students each from medical, engineering, management and non-professional colleges of Ranchi were taken.

Eight state Questionnaire developed by Kapoor & Bhargav (1990, India adaptation) was used for measuring the stress and Hindi adaptation of Bells Adjustment Inventory by S. Hussain (1969) modified version (1987) was applied to asses level of adjustment t test was applied for statistical treatment.

Main Findings

1. The researcher analyses the difference between the attitude of rural and urban government teachers. Here the mean of rural and urban government teachers is 47.96 and 44. S.D of rural and urban government teachers is 7.26 and 7.1. The calculated t value is 2.75, which is more than the tabular t value at 0.05 and 0.01 significant level. Hence the hypothesis framed earlier is rejected. It implies that there is significant difference between the attitude of rural and urban government teachers towards the personal, social and professional adjustment. It shows the attitude of teachers towards the personal, social and professional adjustment in rural and urban government teachers is not similar.
2. The researcher analyses that there is no difference between the attitude of rural and urban male government teachers towards the personal, social and professional adjustment. Here the mean of rural and urban male government teachers is 46.84 and 45.24 but S.D of rural and urban male government teachers is 7.35 and 6.14. The calculated t value is 0.83, which is less than the tabular t value at 0.05 and 0.01 significant level. Hence the hypothesis framed earlier is accepted. It implies that there is no significant difference between the attitude of rural and urban male government teachers towards the personal, social and professional adjustment. It shows the attitude of teachers towards the personal, social and professional adjustment in rural and urban male government teachers is similar.

3. The researcher analyses the difference between the attitude of rural and urban female government teachers towards the personal, social and professional adjustment. Here the mean of rural and urban female government teachers is 49.08 and 42.76 but S.D of rural and urban female government teachers is 7.00 and 7.74. The calculated t value is 3.02, which is more than the tabular t value at 0.05 and 0.01 significant level. Hence the hypothesis framed earlier is rejected. It implies that there is significant difference between the attitude of rural and urban female government teachers towards the personal, social and professional adjustment. It shows that the attitude of rural and urban female government teachers towards the personal, social and professional adjustment in rural and urban is not similar.
4. According to scoring pattern of Bells Adjustment Inventory higher scores indicated poor adjustment thus it can be said that the professional (Mean 11.42) group have poor adjustment in comparison to non-professional (Mean 10.06) group of students.

CONCLUSIONS

On the basis of interpretation of data, it may be concluded that there is no significant difference between Male teachers working in Government schools of rural and urban areas in relation to their personal, social and professional adjustment. There is significant difference between teachers working in Government schools of rural and urban areas and also between Female teachers working in Government schools of rural and urban areas in relation to their personal, social and professional adjustment. It means that Male teachers working in Government schools of rural and urban areas have same attitude in relation to their personal, social and professional adjustment. Professional groups are well adjusted than non-professional groups.

EDUCATIONAL IMPLICATIONS

The present study has its implications for the teachers working in Government schools of rural and urban areas in relation to their personal, social and professional adjustment. Findings of the study indicates that the teacher working in Govt. Schools of Rural and Urban areas have different ideology on the basis of their Personal, social and professional adjustment. Only one who is well adjusted on his working place with his fellow beings can improve his efficiency to the better work. Therefore, in field of education, suggestions given by them should give right weightage to improve the standard of education to minimize the differences regarding their ideology.

SUGGESTIONS FOR FURTHER STUDIES

Any research work cannot say the final word of a problem, because it is very difficult for a researcher to touch all the aspects of a problem. So the researcher recommends the following studies for further research:-

1. A similar type of study can be undertaken on a large sample for more comprehensive results and better generalization.

2. A comparative study of teacher working in government schools and public schools in relation to their personal, social and professional adjustment could be taken.
3. A comparative study of teacher working in government schools and Government aided schools in relation to their personal, social and professional adjustment could be taken.
4. A comparative study of teacher working in Air Force schools and central schools in relation to their personal, social and professional adjustment could be taken.
5. A study of personal, social and professional adjustment among Primary, Middle and Secondary level school teachers could be taken.

6. A comparative study of teacher working in government aided schools and public schools in relation to their personal, social and professional adjustment could be taken.
7. Professional efficiency is always superior than non-professional person a comparative study may be conducted.

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The Historical Development of Christian Missionaries in Chhotanagpur Region in the Field of Education in Modern Era

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ABSTRACT

The beginnings of the historical development of Chhotanagpur Mission, The origin of the Chhotanagpur mission dates back to July 1869 when Fr. Stockman came to Chaibasa from Calcutta where ten years earlier in 1859 the first two Belgian and one English Jesuit missionaries had begun the Bengal Mission. In 1875, he moved into the Chhotanagpur plateau especially at Burudi-Kochang, the very first mission station. The credit for establishing the first degree college in Chhotanagpur and one of the oldest colleges in Bihar goes to it. In those days it was unthinkable to start a college at a place like Hazaribag. Christianity in Chhotanagpur emerged as a mass movement. Village after village got converted. Chhotanagpur Mission of this period was too challenging time: connecting within the Christian Community the old traditional tribal system with the evolving Indian reality and that again in the context of an emerging globalising world. It needed a Camil Bulcke who redefined boundaries and reached out beyond the tribal set-up. Proust, Van Troy, the future bishops Pius Kerketta and Philip Ekka and Frs. Samuel Barla, Victor Tucker, and many other schoolmen built on the past and laid the foundation of a solid educational network. The Dublin Mission attempted and succeeded. Early in 1899, the Mission started a college then known as Dublin University Mission College, affiliated to the Calcutta University. The development of Christian missionaries in eastern India was started from East India Company which was came to visit in India for Business purposes. Then company had started to interfere in royal administration that is last emperors of Mughals Dynasty.

INTRODUCTION

A village school was already at Sitagarha. It was looked after by Rev. Murray. Rev. (Dr.) Kennedy set up a boys' school at Dumar, in place of a German Mission school which had been closed down recently. A decision was made to start a normal class 187 to prepare teachers. Miss Smith left in October, 1893 and early in 1894 Miss Dyer again opened the European Girls' school with eleven students. A school for Bengali girls was opened at Hazaribag in 1895 under Miss Beale. On 15 April 1895, a High School for boys, known as Dublin University Mission School 188, was opened against heavy odds, at Hazaribag with Rev. C. W. Darling as Principal and Rev. P.L. Singh as Head Master. It had seven students and seven teachers. Rev. Hamilton set up a school in 1897 for the Hindu and Muslim boys of the Hazaribag town. It was later on known as Hamilton Free School. 189 It became very popular. The Dublin University Mission is known more for its College. The credit for establishing the first degree college in Chhotanagpur and one of the oldest colleges in Bihar goes to it. In those days it was unthinkable to start a college at a place like Hazaribag. The Dublin Mission attempted and succeeded. Early in 1899, the Mission started a college then known

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as Dublin University Mission College, affiliated to the Calcutta University. It taught up to First Arts Standard. There were 8 students in the first year and 14 students in the second year. Most of the second year students had failed three or four times in other colleges. In the words of Mr. Pedlar, the then Director of Public Instruction, they were “the insoluble residues of other colleges” 191 • The teaching staff consisted at Rev. J.A. Murray, the Principal, who taught English and Logic, Mr. C.N. De, who taught Mathematics and Science, Rev. P.L. Singh who taught History, and Mr. B.D.S. Choudhary who taught Indian languages. The classes were held in a rent free bungalow attached to the Post Office. A donation of Rs. 3,000 was given by Raja Ram Narayan Singh of the Ramgarh Estate. The University results of the first batch of the unpromising students were nothing short of a miracle, for eight out of fourteen passed very creditably the First Arts Examination in 1900. It was very encouraging, as the average in other Indian colleges seldom rose.

In the period of 1869–1885: The beginnings of the historical development of Chhotanagpur Mission, The origin of the Chhotanagpur mission dates back to July 1869 when Fr. Stockman came to Chaibasa from Calcutta where ten years earlier in 1859 the first two Belgian and one English Jesuit missionaries had begun the Bengal Mission. In 1875, he moved into the Chhotanagpur plateau especially at Burudi–Kochang, the very first mission station. More missionaries came and later four mission stations (the “quadrilateral”) were established in the area inhabited mainly by the Munda Tribes (Adivasis). It was a period of hard labour of direct evangelisation with however little success in terms of response from the people. The situation of the tribal population at that time of history was pathetic. Many Tribes lost their ancestral land and were oppressed by both landlords and tax-collectors. It was a crisis like situation - a time of transition. It was a time in which messianic expectations, hope for a Liberator, were high. Some Tribes took to armed struggle which was brutally suppressed and others took to religious revival movements; while many migrated to the tea gardens in Assam. The English colonisers did not understand the tribal culture and customs and their harmonious community system. Outsiders, thus, exploited them limitlessly.

1885–1893; The Emergence of Fr. Constant Livens; Chhotanagpur Mission, Fr. Constant Livens appeared on the scene in 1885. He studied the plight of the tribes and realised the unprecedented land alienation and the helplessness of their religion to give the right answers. He promised a two-fold liberation: freedom from without by getting their land back, and the freedom from within by the removal of superstitious beliefs. Inspired by a deep love for the poor and total commitment to their welfare, he found new ways of bringing the Gospel and freedom to the tribes. It was a real spirit of creativity and love that led him to discover the right approach to work among the Adivasis then. Fr. Livens told the people, “I have come here, among you, for your eternal happiness. But in this life too, I can make you happy. Confide your difficulties to me. I shall help you as much as the law allows.” This new method – legal help, solidarity with the afflicted, offering inner freedom – generated deep trust among the tribes and they poured in like a flood. They got their land restored and their fear of evil spirits, landlords and the police was removed. It was all due to Fr. Livens and his generous Jesuit companions. Christianity in Chhotanagpur emerged as a mass movement. Village after village got converted. People themselves came to the Jesuits before the Jesuits could set foot in the villages. Fr. Sylvain Grosjean, the Mission Superior, backed Livens to the full against the external and internal detractors. Fr. Livens is rightly called “The Apostle of Chhotanagpur” and, as the title of a recent biography written by Fr. Agapit Tirkey SJ is aptly called, “Livens, the Liberator of a People”. His poor health forced him to return to Belgium in 1892, a year before his death in 1893.

1892–1914; Father Jan-Baptist Hoffmann: Giving Structure and Legal form Chhotanagpur Mission After the departure of Livens there was, for a short while, a setback from within: human fear got the better of faith and trust in God. But soon the work for justice continued and it got further consolidated. Some strong pillars and a firm structure were built. Fr. Hoffmann won the confidence of

the British officials and made them understand and respect the tribal way of life. He truly incarnated the Gospel message into the tribal culture. He gave legal form to Fr. Livens' charismatic approach. He was the pioneer who established the Catholic Cooperative Credit Society which helped the people to get out of the clutches of the moneylenders. He wrote almost single-handedly the Chhotanagpur Tenancy Act, 1908 [CNT] by which tribal land cannot be sold legally to non-tribes. These two pillars stand upright till today and continue to be a tremendous boon for the tribes. The beginnings were marked by creativity, option for the poor and concern for the spiritual need. These went hand in hand.

1914–1927, 'Fire must burn' had been the inspiration of Father Livens and indeed it continued to burn. Some great workers, builders, evangelisers, missionaries, Fathers, Brothers, Sisters, Catechists and other lay collaborators were hugely responsible for bringing about a consolidation of the beginning and for a steady expansion. Cordon, de Grijse, Van Robays, Van der Linden, and many others spread out into Barway, Biru, Gangpur and Udaipur, laying the foundations of future flourishing mission territories and local churches. They instilled new confidence and self-respect among the tribal people who found a new way and a new meaning within their traditional, social and cultural set up. Silent heroes indeed!

1927–1944; During this period, a massive expansion of Primary and Middle School Education, spearheaded by the future Bishops Van Hoeck and Oscar Sevrin, brought about a deepening and interiorisation. This turned a limited Christian group into a progressive Tribal Community. Predominantly Belgian/Flemish Jesuit missionaries hand in hand with their Indian Jesuit tribal companions were instrumental for the rise of a whole people to a different level. One result of this process was a flood of priestly and religious vocations. A symbolic crowning point of this intense period was the start of St Xavier's University College in Ranchi in 1944, another act of trust and courage which has borne immense fruit since then.

1944–1975; Chhotanagpur Mission of this period was too challenging time: connecting within the Christian Community the old traditional tribal system with the evolving Indian reality and that again in the context of an emerging globalising world. It needed a Camil Bulcke who redefined boundaries and reached out beyond the tribal set-up. Proust, Van Troy, the future bishops Pius Kerketta and Philip Ekka and Frs. Samuel Barla, Victor Tucker, and many other schoolmen built on the past and laid the foundation of a solid educational network. It needed a set of fervent missionaries in the Madhya Pradesh part of the Chhotanagpur Mission, freed since 1947 of the shackles of the raj-system. It was in 1956 that this Chhotanagpur Mission became independent from the Calcutta Mission and became a Jesuit Province. The process of separation had started in 1935. In due time, new Jesuit administrative units of Hazaribag, Jamshedpur were created. Later, they also became the Rourkela (OR), Kunkuri, Ambikapur (CG), Hazaribag, Jamshedpur, dioceses.

The martyrdom of Fr. Hermon Rasschaert on 24th March 1964 is considered the symbol of total commitment. He sacrificed his life in an attempt to save the lives of a group of Muslim families of Gerda village and became a martyr of Peace and brotherhood. The people of Kutungia, where Father Rasschaert was their pastor at the time of his death, remembered this event this year with a beautiful two-day long celebration. To mark the occasion, a public function was arranged in Ranchi by the India Desk and the Sadbhavna Manch (Inter-religious Forum for Harmony). A group of prominent personalities expressed their admiration for the Martyr of Peace, Justice and Harmony. Fr. Louis Francken wrote a short inspiring biography: "Fr. Herman Rasschaert S.J. Man of God, Man of Humanity." Herman was a person of total commitment and was ever ready to take risks in the line of the early pioneers.

1975–2000; This period in the Mission saw the emergence of a well-evolved local church and religious leadership at all levels. Mere 100 years of toils brought to fruition a fully evolved indigenous church. It also saw the emergence of highly educated tribes rising in different levels of the educational

and administrative field. It was also a time of a concerted effort to bring together all tribes on the basis of their common cultural and historical background in the face of anti-Christian forces who tried to divide the tribal community for their own purposes. It saw a spate of secondary education and new Jesuit social ventures.

The reaction of many a visitor from abroad in this regard is symptomatic: "We didn't know what to expect when coming to visit the Ranchi Mission. We never dared to expect what we really saw: solid institutions at all levels, a flourishing local church, deep faith, a vibrant community. The word 'tribal' got a new meaning for us. And that too in a relatively short time! How did you do it?" An apt answer to this may be the two following sentences. "If it is God's work, it will be realised (Fr. Livens)," and "We did not fail, it was God's work (Fr. Hoffmann)." God's work and human endeavour going hand in hand! From 1859 to 1969, 597 young men from Belgium/Holland joined the Bengal Mission: an average of more than 5 young men a year! Presently there are 369 Jesuits in the Ranchi Province of which 98% are tribes. Small wonder then, that the Christian tribes of Chhotanagpur remain deeply grateful. When recently one tribal Father Walter stood in Moorslede (Belgium), the birthplace of Father Livens, he spontaneously said: "Here I was born." The rebirth of a people from oppression to a new freedom: externally and internally.

A Mission has not reached its full maturity till it has its own missions. Besides continuing the process of coming into its own as described above, it was during this period that tribal Jesuit missionaries from the Chhotanagpur Mission went as missionaries into other territories: to the Assam mission in India itself. They went to take care, on the priority basis, of the neglected Adivasi's working in the tea gardens. Besides being in a similar mission in the Andaman's; they also went to help in Cambodia, Egypt and British Guyana. Missionaries from Chhotanagpur teach and help in the Common Formation houses of the Society in India and in Rome. There is much scope for work in this new challenge. It is hoped that among the good number of new vocations with whom the Lord has presently blessed this Mission with, there will be many who would generously volunteer to be a missionary reaching out beyond the local confines of Chhotanagpur.

The present time of rapid changes, a time of discontinuity, brought about by the digital technology and the impact of the media has changed the very way in which we live and learn. This is felt in every sphere of life. It has affected our way of thinking and interaction with one another. It has left a huge impact in our mission.

Yet, the age old problems are still with us today. The divide between the rural and urban, the rich and the poor, remains very much the same. While agriculture remains the economic base for the people in the villages, no steps have been taken to bring about new practices in the agricultural sector. There is massive unemployment, both in rural and urban areas, leading to migration of young people, boys and girls, to the cities and turning them to many joining the Naxalite movements and unwittingly getting caught in trafficking. Land alienation with the development-induced displacement of people is still rampant especially as the government wants to promote large scale industrialisation of this mineral-rich region. The exploitative and nefarious link between politicians, police forces and unscrupulous business men is rooted very deep. History seems to repeat itself. The very low standard of education in government schools continues and as a result against all odds the demand on us for opening good schools continues. These challenges will seemingly remain with us for many more years to come. How we face these challenges, poses yet a worrying question.

In front of us is a map of the mission of 1 November 1856. What has been blooming and growing up in the six years since the first conversions! Next to the mother station of Ranchi-Bethesda, five more have sprung up, which, like blossoming daughters, surround the mother. As early as 1850, the station Govindpur could be founded 12 hours southwest of Ranchi. To the west lies Lohardaga, to the east Purulia, to the north Hazaribag, and between it and the Ranchi station, the Pithoria station

belonging to the latter. But the most delightful sight is afforded by the numerous (p.189) villages, which are decorated with a cross, as a sign that Christians dwell in them. They count 56, mostly west of Ranchi from the tribe of the Oraon, and in the village of Cotta is located 16 Christian families, and one house of God, in which one of the first, Neumann, holds a daily Bible study.

But the influence of the gospel is by no means confined to the 56 villages. Here and there in the country live the Inquirers, the aroused, who seek baptism and are under baptismal instruction. The dead mass of Kohl's has come to full flow. The movement is in full swing and has already extended to the Mundas.

In recent years an average of 200 yearly have been baptized. In the cold season of 1856, 40, 50, 60 and more each Sunday were added by baptism to the congregation. In April of the same year, the community baptized 266 adults and 200 children, 800 are in contact with the mission. From afar, as much as 12 hours away the natives come to Ranchi to the church. As early as 1853 it was said of the converted Kohl's: "They are driving the work almost more than the missionaries," they were so eager to lead others to salvation. The first native catechist, Christopal by name, is employed; he receives quarterly 13 1/2 rupees as I am told, and a new church dress for Christmas. Fourteen elders arranged Christian celebrations in the villages.

At the station Ranchi a beautiful, big church can be built. It is called Christ Church and has cost 13,000 rupees. On 18 November 1851, when the community was still few, the foundation was laid. But as the longing for the gospel was a source of inspiration and there were 100 inquirers, including entire families, the old man Gossner also wanted a beautiful edifice that honoured the Lord Jesus among the heathen temples, the church was thought to be set up to seat 800 persons. But, behold, after much laborious work -- the missionaries had to do the main work themselves in the (p.190) construction -- on Christmas in 1855 they called all to come to the new house of God, and it was already too small for the entire congregation.

The school in Ranchi is in full bloom. A Gossner missionary, who is staying on the river Ganges, calls it a model school. About 80 children, mostly of Christian parents, receive their teaching in catechism, biblical history, reading, writing, singing, arithmetic, etc. A selection had to be set up for the formation of native teachers and catechists. But the school is still too small. The whole church consists of four hundred school going children, and the missionaries advise how they can all go to school by making the parents willing to send their children only from the 8th or 9th year.

A report sent by the missionary superintendent Sternberg, stationed at the Ganges, to Father Gossner in a visit to the Kohl's in March of 1856, cannot praise enough the blessed progress of the Kohl mission. He says, among other things: "By the way, I can be very brief in the main office. The mission of the brothers in Ranchi is, in a word, a mission as every missionary could want. Here a nation, neither so refined as the Hindus and the Chinese, yet not so savage as the Australians, a people of good and natural dispositions, both in the body and in the spirit, but sunk in the power of the natural air of the fallen human race, but it was not strengthened and dominated by a devoted doctrine to the gods, or a philosophy which overcame all gods, nor bound by an interested priesthood or false holiness. -- and among this people the gospel has come with grace, and has been kindled in the hearts of men, so that from the day that the first fruits were known of this people who have accepted the love of God, has fired this love from one to the other, from the nearer to the far, from village to village, until now the community gathered there is not counted by individuals, but by hundreds, and founded on the hope that in the course of not many (p.191) years the whole tribe of the Kohl's will be brought into the congregation. On the Sunday, when I was with them, there were 75 souls before the baptismal font - old men and young men, old mothers and mothers with nursing children in the lap, or even more on their backs. -- as one of us, who must be struggling for a year before he can get a single convert, becomes encouraged by such a sight, you can imagine. -- it

should be noted that the baptismal candidates are not allowed to be baptized so quickly or hurriedly. They have usually to wait several years after their confession to give samples of their sincerity by disposing of certain pagan customs and vices. -- The brethren offer them only spirituality, and do not concern themselves with the earthly things. The latter point can be appreciated only by the one who has worked under Hindus and Mohammedans (or even Jews), and when he sees a man coming to be a Christian, they are at once to greet his bag, open it, and provide the man something to eat, or otherwise provide for his or her maintenance. -- I was with Brother Schatz in two villages where some of their next converts lived; when, at first sight, one sees in a moment their behaviour, their faces, their houses, that a spiritual change for the better has occurred in them." -- He writes of a visit to the church service in Christ-Church: "This was a joy indeed, although the term "joy" is almost too dull. For when I was sitting in the wide, bright, high-ceilinged room, and worshiped God with laudatory praises under the guidance of the organ-playing and choral-singing with several hundred Christian Kohl's and 75 baptismal candidates, I was entirely transferred from the dark heathland to a Christian country, and thought involuntarily several times of you, and wished if you could see this only once, that you would see with your eyes that your trouble, prayer, and supplication for the heathen had not been in vain." Gossner accompanies Sternberg's account in the Bienne, saying, "Let us give the glory to the Lord," (p.192) he alone is worthy, and our brothers in Ranchi-Bethesda will know this, and will rather think, not of what they have done but what they could and should have done, so that the Lord will give them even more grace and give even greater blessings. We are also pleased that in their report on their effectiveness they were not saying too much, but rather too little, for we have never heard of them as others now say of their mission. This is out of fashion. -- Mission reports are usually very decorated, God knows what is true. "

A little later, he writes: "Since the fishermen are so in the stream, help them pull the net -- pray, we must get all the Kohl's, the devil shall not keep any bones, unless the Saviour throws back some of them that are bad fish and not good."

. . .In the spring of 1857, which was to bring such grievous suffering to India, the community grew particularly powerful. In the first three months of the year, 185 were baptized. The Kohl's came by the village, and so great was the invitation to the baptism that the boys of the first class in school became preoccupied with learning the catechism. The hall, which formerly served as a church, was only suitable for ordinary morning and evening devotions. The large Christ Church had been as frequented during the rainy season as at festivals. There were more than 900 baptized in the community and well over 2000 candidates for baptism.

When the work was so successful, the disastrous revolution broke out.

It was not in the land of the Kohl's as it was in all of India that the distant rumbling of the approach of this thunder had been heard.

From the outset it may be remarked that the Christian Kohl's did not take part in the revolt; The rebels were the Mohammedans and Hindus, the enemies of the English, and also the enemies of the Kohl's. For centuries they had already experienced severe (p.193) oppression, but never had the Zamindars and Thekedars shown their rage in the most unmerciful manner, except now against the Christians.

Now, however, these persecutions took on a character and an extent that one had to realize, there was a plan behind it, and the intention was that the missionaries and all Christians should either be killed or hunted from the land. At first it seemed as if the intervention of the government would hold the main thing somewhat in check. Thus, a Thakur, who had raged against the Christians before others with murders and threats, and who had also been beating the missionary Herzog with a large band of armed men in 1855, and had beaten him so that he was unconscious and thought dead, but because of blackmail for a compensation of 300 rupees was condemned and

convicted to be hung on the dry branch (gallows). This had helped. But these intimidations did not last long. Soon the Christian persecution came to a head with a double force. The Christians will soon be the field, on whose yield it reckons, from the Thekadar, and soon the cattle are stolen, house and courtyard set on fire, that the poor owner is beggared, a child is accused of being a witch and miserably beaten, others are attacked, and after they are plundered they are beaten and brought to prison, or they have been wrongfully accused by the Zamindar to have harvested his field, and so it goes on -- a sad scene of heavy persecution. In a book we find a list of such oppressions: within a month, there were about 20 cases which were heard by the missionaries. Then, in more than 30 villages, the Christians were attacked at once and haunted with mistreatments and oppressions of all kinds. The Zamindars, among themselves, held conferences to suppress the Christian movement: the slogan from mouth to mouth runs from them: "Hindus; with the Christians and with the missionaries, out!" To this end, the unified landowners sack the missionaries at the government (p.194) in Calcutta, as if they were guilty of all the noise, and by the preaching of the Gospel, they destroyed all order and existing rights. Even the English gentlemen in Ranchi, who were mostly only too innocent of the missionary work, were accused of serving the Christians, and were secretly united with the missionaries. -- These complaints were, of course, carried out in the two high courts, and they were not received by the Governor, to whom they ultimately turned. But it was not concealed from the keen eye, for they, in addition to all the actual oppressions which could not be punished at all, were only the prelude of an even more serious and dreadful drama, to which the curtain was soon to rise.

In the spring of 1857 the general insurrection broke, as was feared. It had its centre in Bengal and the Northern provinces. Its marked tendency was to eradicate all Europeans and Christians, and to restore the old Mohammedan rule in place of the overthrown English government. The worst was that most of the indigenous regiments joined the insurgents. Also in the neighbourhood of Ranchi, in Doranda, were garrisoned regiments of the natives. Still, they remained quiet like the entire surrounding country. But what would tomorrow bring? There had been great concern in the hearts of the missionaries since the outbreak of the Rebellion. Every day they expect that it is going to be let loose near them too. The accounts of the abominations which the Mohammedans had committed to Christians made them fear for themselves the same. The Lord is petitioned by both great and small to avoid the danger in daily hours of prayer. In the event of a necessary flight, everything is ready. Most English families have already been brought to safety in Calcutta. The brothers want to last as long as possible. But they, too, sent the women and children (p.195) under the protection of some missionaries a long distance by oxcart, to wait in a protected place for the course of events, and to have a lead in the case of emergency.

There comes the news that Delhi has fallen, the old Mohammedan royal city, where the Mohammedan king was once again put on the throne, and the head of the dragon of revolution is now crushed. One "thank goodness" after another rises from the hearts of the afflicted. They hope to be able to stay. After four days, the refugees return from their refuge in the mountains. The important work remains undisturbed, the mission stations unharmed, they hope. Especially great is the joy that they now do not need to release the 100 school children to their parents. Three times they had been about to do so. But the children had so kindly asked to remain there. "Why would you send us away?" one had said to the others, "our place is here with you, and where you remain, we remain." How wonderful that the desire of the children could be fulfilled! --

But the joy was short-lived! It was a great mistake to think that with the fall of Delhi it had now come to an end. Chhota Nagpur was also to burn in the flames of the insurrection.

First they went to Hazaribag. Rebellious Spey regiments came, and with them the two companies of the city made common cause. Fortunately, missionary H. Batch received news of the approach of

the rebels early, as the soldiers standing in Hazaribag, and could flee with his own. Still in flight, it was hard for him to believe that by the next day all would be destroyed to rubble and ash. But after four days the sad word came that Hazaribag had been ravaged and burnt down. They came to Calcutta on 3 August, after a very difficult journey, which they had to make partly (p.196) on elephant, partly on horseback, but luckily in good weather.

A few days later H. Batch had to save the brothers in Ranchi also from the flood. The same revolting soldiers, who had looted Hazaribag, now came to Ranchi to strengthen themselves through the regiments stationed there, and to commit the same shame.

On the 31st of July, the missionaries once again gathered all the Christians together in Ranchi, prayed with them, laid the state of affairs before them, and sent them into their villages, together with their children. After they had ordered the watchmen to guard the missionary property as long as possible, they took the wandering road, and as they had come twelve years ago, they now retreat, poor, each one with a bundle on the shoulder. Their flight fell in a very unfavourable time, in the heaviest month of the rainy season.

They were unable to describe what they had to go through on their flight. They had to go twenty-six miles before they came to the railroad, in a pathless region, over mountains, through ravines, swollen rivers, and dense forests, sometimes with violent downpours, sometimes with blazing sunshine always in the same clothes, wading through swollen rivers or after the heavy downpours and then soon to dry again. Often went into the rivers up to the arms, and at night. In the end it was barefoot to walk, because shoes and stockings went to pieces. And yet none of them became ill.

From Purulia, where they passed, they took the missionary Brandt family with them shortly before the outbreaks, and after some difficulties, which were particularly conducive to the survival of the women and children, they finally arrived at Raniganj station. Supported by much love, they came finally to Calcutta, where they met with the Sisters from Hazaribag on the 7th of August.

(p.197) Then they sat, as they said, at the waters of Calcutta, and wept, that they had left Chhota Nagpur (Now Chhotanagpur). They sat, and sighed, "Ah, that help may come out of Zion for Israel, and the Lord redeem his captive people."

After the town of Ranchi was plundered by the Sepoys, the prison was opened, 150,000 rupees of treasure was plundered from the court house, and the destruction moved on to the mission station. Above all, they wanted to destroy the church. Cannons were planted and fired against the beautiful building. But God the Lord protected his temple. Of the four cannon shots that were fired, only one hit and did little damage. Also the interior of the church was only plundered, but not destroyed. Benches were dragged away, the chandelier stolen, the organ was destroyed, but the damage was reduced to 2,000 rupees. All the windows, as far as they could reach, were smashed, no little nail or hook were left in the woodwork, but the building itself remained intact. The bombardment of the church was the signal for the mob to fall upon the other mission houses. The guardian servants could not prevent it. Soon the soldiers also joined the plunderers. And now, after a short interruption, they went all night on a complete clearing. All the not unimportant supplies, all the furniture and iron things were dragged away, so that not even the trace of utensils remained in the houses. Even the nails were pulled out of the walls, and the wood was split. Books were torn, windows and doors were lifted and carried away. Just once the garden fence was left whole. The empty rooms were initially used by the soldiers as lodgings, later on, for the oxen to stay.

Like in Ranchi, the rest of the stations were being abused.

Much worse than the buildings, however, came upon the poor, native Christians. Against them was let go a true hunt, (p.198) The community elders in particular had to suffer terribly. That the Christian villages and Christian houses, as far as the rebels could get to them, were plundered

to the ground, the poor Kolhs were robbed of all their possessions, their clothes, their fruits, their harvests, their cattle, and they defended themselves and were not the worst off. Who could flee fled of course. But what an escape just in the heaviest days of the rainy season! The refugees had to spend six weeks in the forests, mountains and caves, without food except roots and the like. Along with the elders were more than 100 children. Many of the displaced died, and even more became ill and strayed there.

Those who were seized by the enemies suffered ill-treatment and mockery of the rudest kind. The well-known Neumann lost all his cattle, 200 rupees and all his stores. They seized the old mother, his wife and children, struck them with sticks and shoes, took them away for a few hours, and left them then in their misery. They should confess, where Neumann would have surrendered the money spent on his custody. The children got swollen body and fever in consequence of the many beatings. The hair fell out completely. -- In another place all the Christians had been bound and beaten. "Now, let us hear one of your songs," one shouted at them, "teach us something out of the word: where is your Jesus, what is your doctrine, where are your teachers now?" -- In Kharhe the Zemindar had put a Christian captive in fetters and dragged him to Palkot to sacrifice him there to the chief idol. He was thrown into the porch of the temple and tied around the hips with a line from the ceiling. In the night, however, he found an opportunity to get rid of the cords and escape, while his five guards slept. To get rid of the fetters, he would have had to wound himself. The Thakur of Hattia, a close relative of the king, was particularly terrible. As soon as the insurrection broke out, he sent to all the Zemindars, Thikadars, (p.199) and the like with written orders above all to kill the Christians. On Missionary Schatz and an English official, he would have preferably seen. On the native Christians Neumann, Teble and Nathanael was a special prize. Whoever brought them, a village and also 2000 rupees additional. He had determined that the skin of the men would make a tympanic membrane, and that was to be called a good drum, which he could use from such a skin. According to their tone, the daughters of the Christians, whom he was about to catch, should learn to dance well. -- Only the King of Palkot had had any reservations about the extermination of Christians. He wrote to the Thakur that he would have nothing to do with it, if it should come about one day. But since this would not be possible, it would be best to avoid entirely. For few will be left, and then seek their right from the English. "The English," they wrote to him again, "have all fled." "What is the matter," said the king, "as long as we have not all their heads, I will not believe that their dominion has ended." -- This warning may have contributed to the fact that one did not at least try to take the life of the Christians at once. The king was also sent from the land, among other things from the church, but he would not accept anything. Upon the warning of the king, the chief councilman decided to strike, but not to wound and not to kill. But with stick, fist and shoe blows it went all the more devilish. Some died as a result, many of them suffered their own life. Among the tribulations and deprivations -- only two villages of Christians were spared -- a good part of the Christians were asleep, and they were usually dragged down by fever, dysentery, and cholera.

At last the insurrection had been defeated and the missionaries were allowed to return. By God's grace, none of them had been killed, and they could all return to their labors. They tried to restore the destroyed. However, it was impossible to undertake all previous stations again. (p.200) The losses sustained by the estate were too high. Only Ranchi was occupied by the brothers. Here, however, they immediately went back to work. This is Christianity, that one can not be disturbed in the work of the Lord by any disturbances: one knows that God's thoughts must be carried out, and that God's ways lead to the goal, even if they appear to be ways of terror.

CONCLUSIONS

Thus the Lord, after the raging and thundering storm, drew up the peace-bow of his grace again over the land of the Kohls, and the very distorted dark weather-clouds had to serve to make this peace-bow more lovely and lure many to the triumph of peace.

The missionaries were thus able to recognize the Christians, who were the ones who had the worst of the revolution. To them the uprising had been a heavy but healthy fire. They had proved themselves in this and proved that the temple of God in Chhota Nagpur (Chhotanagpur) was not made of wood, hay, and stubble.

That it was made of gold, silver, and precious stone. The Christian Kohls had served the blind fury of the enemy as a guide to apostasy, and to the fortification in faith. One of those who had lost all her savings and had been beaten bloodily, was asked if the scarlet on her back had not made her feel like a Christian: she said, "Should I not like to suffer a little for my dear Lord Jesus, who suffered so much for me?" One of the others had said, under heavy torture: "Jab tak swas rahega, main apne Isu ko na chhodunga, while there is still breath in me, I will not forget my Jesus." Not one among them, said the missionaries, complained and muttered. The development of Christian missionaries in eastern India was started from East India Company which came to visit in India for Business purposes. Then company had started to interfere in royal administration that is last emperors of Mughals Dynasty.

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Best Practices of Top (NAAC) Accredited (Division-Wise) Colleges of Education in Karnataka

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ABSTRACT

Today concern for quality has permeated all sector of life. Everybody has now become quality conscious. It is quite a positive sign that such changing trend of late has also penetrated the system of education and teacher education. Since long the teacher education institutions encrusted and immunized themselves from repeated criticisms hurled against them. In fact they demonstrated indurate characteristics towards change and progression in the direction of achieving excellence. Assessment and accreditation of teacher education institutions in India is undoubtedly a welcoming step in the direction of restoration of quality in teacher education programmes. It will be the greatest achievement if some awareness and openness is created in the functionaries of teacher education institutions about the very philosophy of AA. Once they realize the purpose of AA they will drop their defensive attitude and will turn proactive to take all necessary quality control measures to achieve excellence. But at the same time NAAC and NCTE should also see to it that their AA procedure is objective, transparent, contextual, full proof ,diagnostic, remedial and constructive that help the institution to grow in an atmosphere of mutual trust, confidence and cooperation.

Keywords: A&A, NAAC, NCTE

INTERDUCTION

It is a universally accepted truth that the teacher is the maker of a man. The quality and efficiency of education depends to a great extent on the quality of the teacher. Thus proper teacher training programmes will help the teacher to become an enriched ,dedicated and committed professional. Over the years the quality of teacher education has deteriorated hence changes in all aspects of teacher education need to be made to face the challenges of the 21st century. Thus a process for improving the quality of teacher education and quality of products of the educational enterprise is essential and a need of the hour. Assessment and accreditation of educational institutions will certainly enhance academic and educational quality thereby giving us competent, committed and dedicated teachers.

The NAAC and NCTE will be complimentary to one another so as to evolve suitable appraisal system norms and mechanisms for enforcing accountability of recognized teacher-training institutes. Teacher's accountability involves moral accountability and professional accountability. Teachers need to look at teaching as a mission and not simply as a vocation thereby enhancing effectiveness, efficiency and accountability. Accountability and accreditation in teacher education is justified because presently there exists no standard or criteria for institutions desirous of seeking and pursuing excellence to compare themselves with their peers.

The NAAC has developed and published a series of best practices of various institutions as per seven criterion of assessment and accreditation, some are case studies. Best practices reflect the

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credibility and cheerful life of a colleges of education. These practices are able to instill the scientific approach to issues or problems of society. Best practices are the agents of change for a particular educational institution and society as well.

“Best Practice” with reference to a programme may pertain to a specific aspect/practice within the programme or to an entire programme. A “Best Practice” refers to an institutional practice that exhibits characteristics of a quality teacher education programme or contributes to overall quality of the programme.”

So quality becomes an imperative in a best practice, it should impart quality in its outcome and must be beneficial for stakeholders and for those it is carried out. According to Pillai, Manjunath and Hasan, “a practice qualifies to a ‘best practice’ status if it resulted in high-value impact on any aspect of educational activity in an institution”.

The best practices can be grouped criteria-wise and there falls the seven criteria-wise best practices a college can undertake: I. Curricular Aspect, II. Teaching, Learning and Evaluation, III. Research, Innovations and Extension, IV. Infrastructure and Learning Resources, Student-Support and Progression, VI. Governance, Leadership and Management and VII. Innovations and Best Practices.

OBJECTIVES OF STUDY

1. To know the different best practices of top NAAC accredited colleges of education.
2. To find out the role and impact of best practices on college development and/ in process of colleges accreditation.
3. To list out/ search the significant best practices undertaken by colleges.
4. To provide the processed ready hand data of top NAAC accredited division-wise colleges of education and their best practices.

METHODOLOGY

A total number of 19 colleges of education were selected from four divisions of Karnataka. For this selection, NAAC score and NAAC grade obtained by colleges in its last accreditation cycle (2016 and before) is considered. The data of the best practices undertaken by colleges are obtained from authentic websites of concerned colleges. Almost colleges displayed this data on their websites, except a few. Self-Study Reports (SSRs), Annual Quality Assurance Reports (AQARs), Internal Quality Assurance Cell Reports (IQACRs) and related material is downloaded from the websites of respective colleges. An annexure of top 19 NIRF (National Institutional Ranking Framework) rated colleges of education is provided for comparison among colleges between NAAC score and NIRF ranking. Two best practices of each college is taken into consideration for analysis. Though the colleges earned the NAAC score in their last cycle of accreditation conducted on or before 2016, the new grading system of July 2017 is applied to them to draw more visible distinctions and inferences among them.

FINDINGS OF THE STUDY

From the findings of the present study the following conclusions could be drawn.

1. Mysuru division is better than the other three divisions in order of priority Gulbarga, Bangalore and Belagavi respectively with respect to curricular aspect of institutional information and functioning of the institution of quality management of colleges of education.

2. Gulbarga division is kept relevant information than the other three divisions in order of priority Mysuru, Bangalore and Belagavi respectively with respect to teaching-learning and evaluation aspects of institutional of quality management of colleges of education. Whereas, Mysuru division is better in functioning.
3. Mysuru division is kept better information than the other three divisions in order of priority, Bangalore, Gulbarga and Belagavi respectively with respect to research consultancy and extension aspects institutional information and functioning of the institution.
4. Gulbarga division is better in keeping information than the other three divisions in order of priority, Mysuru Bangalore and Belagavi respectively with respect to infrastructure and learning resources aspects of institutional information. Whereas, Mysuru division is better in functioning of the institution.
5. Gulbarga division is kept better information than the other three divisions in order of priority, Mysuru, Bangalore and Belagavi respectively with respect to students support and progression aspects of institutional information and functioning of the institution.,
6. Mysuru division is has better information the other three divisions in order of priority, Gulbarga, Bangalore and Belagavi respectively with respect to governance, leadership and management aspects of institutional information. Whereas, Gulbarga divisions is better in functioning of the institution.
7. Gulbarga division is has better information than the other three divisions in order of priority, Bangalore, Mysuru and Belagavi respectively with respect to internal quality assurance cell aspect of institutional information and functioning of the institution.

EDUCATIONAL IMPLICATIONS

- The present study helps to improve the issues relating to the quality aspects of Colleges of education.
- The present study helps to maintain and improve the quality of Colleges of education.
- The present study helps to improve the curricular activities in quality management of colleges of education.
- The present study helps to improve the teaching-learning & evaluation process in colleges to maintain quality of education.
- The present study helps to improve the research activities, consultancy & extension services in colleges of education.
- The present study helps to enhance the Infrastructure facilities & learning resources in the colleges for improve the quality of education.
- The present study helps to improve the support & progression to strengthen the college and its quality.
- The present study supports to improve the Governance & Leadership behaviour in the colleges to improve the quality of colleges' education.
- The present study helps to improve the Innovative Practices in the colleges and all the teachers involved in the practices which will help to improve the quality of education.
- The present study helps to improve the Internal Quality Assessment Cell (IQAC) in quality management of colleges of education.

CONCLUSION

The scheme of assessment and accreditation will help institutions to carry out their strength, weakness, opportunity and threat analysis, and in making their programmes more attractive to the

students and to their potential employers. The norms and standards evolve with strengthening of the capacity of the system and commitment for raising the quality of the programme, which will be revealed by the system of assessment and accreditation. The NCTE is now looking forward to using assessment and accreditation as an effective instrument for determination and maintenance of norms and standards for teacher education programmes.

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Information and Communication Technology for Continuing Professional Development of Teacher Educators

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ABSTRACT

Continuing professional development(CPD) has assumed increasing significance for teaching professional because it help to updated content knowledge, pedagogical skills, technological skills, assessment competencies and requisite ethics. ICT integrated CPD involves learning about ICT and learning through ICT. In this paper the need of ICT for Professional Development of Teachers and Teacher Educators, ICT integration frameworks and different approaches to ICT integration are highlighted to initiate further discussion and proactive action to acquire techno-pedagogical knowledge.

Keywords: Continuing Professional Development (CPD), Information and Communication Technology(ICT), Teacher Educators and Pedagogy etc.

INTRODUCTION

Teaching profession in Indian context is characterised by inadequate and ineffective pre-service education, poor teacher preparation and lack of induction support (MHRD-2009, NCERT-2005, Padward and Dixit-2010 and Rajput and walia-2001). In such circumstances, continuing professional development (CPD) of teachers and teacher educators assume significances, as it aims to compensate for teacher professional learning missed during pre-service education and at induction. CPD is ideally viewed as an ongoing process of learning, both formal and informal. After teacher enter into the profession and involves in their personal initiatives and externally planned mandated activities. Unlike in this past, recent teacher education policies seem to take this broad view of CPD at least i principle. The National curriculum Framework for Teacher Education (NCFTE-2009) asserts interalia that CPD is essential to enable teachers to explore, reflect on and develop their practice ,deepen their knowledge of the academic discipline, research and reflect on learners and their education, prepares for other professional roles, break out of intellectual isolation and share experiences and insights with others in the field (NCTE-2009). The integration of Information and Communication Technology (ICT) in teacher professional development programmes makes it continuous and comprehensive one. ICT integrated CPD involves learning about ICT and learning through ICT.

Need for Professional Development of Teacher Educators

Professional development in a broader sense refers to the development of a person in his/hr professional role. More specifically, teacher development is “the professional growth a teacher achieved as a result of gaining increased experience and examining his/her teaching systematically.”(Glatthorn, 1995, p.41). Professional development includes formal experiences such

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as attending workshops, National/International seminar/conferences and professional meeting etc and informal experiences such as reading professional publications, journals and watching television documentaries related to an academic discipline etc.(Ganser,2000). In a nutshell, professional development programme for teacher educators seeks to equip the teacher educators with the following skills

- **Updated content knowledge:** *Teacher educator will develop and update their content knowledge through attending professional development programmes.*
- **Development of pedagogical skills:** *Teacher educators will attain the desired level of instructional skills and learner characteristics, which are required to systematically designed and deliver instructions.*
- **Development of Assessment competencies:** *Assessment is an integral part of teaching learning process professional development programme develop assessment skills among the teacher educators.*
- **Equip with technological skills:** *Teacher educators will develop the ability to use appropriate instructional technology for information management, communication and instructions.*
- **Development of professional ethics:** *Similarly PD programme also assists the teacher educators to practise their role effectively and efficiently.*

Integration of ICT for Professional Development of Teacher Educators

How much and how well, teachers are prepared for teaching is a critical indicator of quality teachers as well as quality education. Preparing teachers for the challenges of changing world means equipping with them subject-specific expertise, effective and innovative teaching practices ,developing an understanding of technology and the ability to work collaboratively with others teachers, members of the community and parents. Basically the advancement of science and technology in teaching and learning process more contextual, learner centric and innovative.

The integration of ICT in teacher professional development, according to Perraton et al (2001) involves two sets of activities, one is training teacher to learn about ICT and its use in teaching as computers are introduced to schools. Another role of ICT is as a means of providing teacher education, either as a core or main component of a programme or playing a supplementary role within it.

Integration of ICT for professional development of teacher educators serves the following purposes

- *Empower Teacher Education to develop their knowledge and skills actively and experimentally in a variety of learning environments both individually and collaboratively.*
- *Include a varieties of learning strategies, encompassing direct instruction ,discussion ,drill and practice ,deduction, induction and sharing.*
- *Provides an authentic learning environment so that teacher educators engage themselves in concrete tasks within realistic scenarios.*
- *Emphasize ways that technology can facilitate and enhance teachers' professional lives.*
- *Encourage teacher educators to be mentors, tutors and guides in teaching learning process.*
- *Develop teacher educator's skills in learning how to learn.*
- *Promote cooperative and collaborative learning*

INTEGRATION OF ICT AND TEACHER EDUCATION

The most important factor in the successful integration of ICT into teacher education is the extent to which the teacher educators have the knowledge and skills for modelling the use of ICT in their own teaching practices. To enable them to develop these skills requires a well conceived and sustained programme of professional development. Countries that have initiated efforts to inculcate ICTs into teacher education have found four professional development strategies helpful in successful technology integration.

First, professional development needs to focus on teaching and learning rather than hardware and software. It should be designed by first considering what students teachers are expected to know and be able to do in a specific discipline and then infusing ICTs into the learning process so that acquiring the knowledge and skill is more efficient.

Second, professional development is practically useless unless leaders and teacher educators are provided with access to technology resources and have the time and support when needed to apply the new knowledge and skills that have learned. A just in time approach to professional development is a model that works well. In this approach, professional development is provided to teacher educators when they have a need or opportunity to use a specific technology tool or application to enhance learning.

Third, professional development in the use of ICTs is not a one-time activity. To keep current with new development means that professional development in ICTs must be an ongoing process.

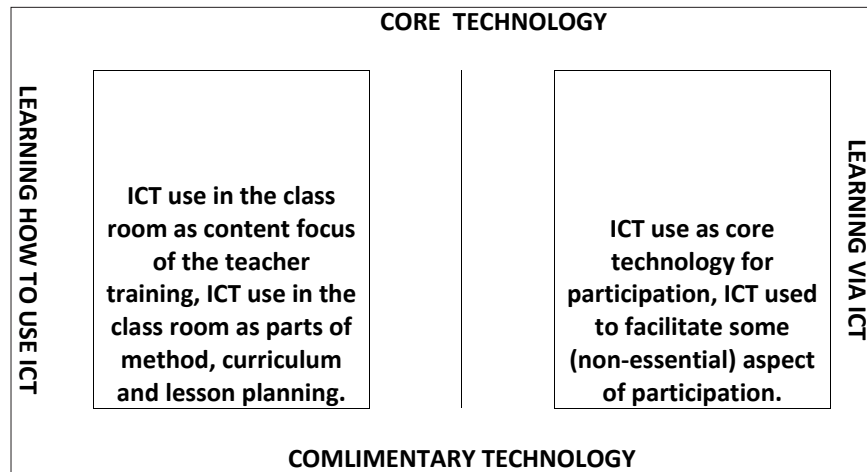
Fourth, professional development starts by providing ICT competencies to a small group of teaching staff. Perhaps this group will have volunteered or demonstrated that they have basic ICT competencies for personal use or have expressed personal interest in using ICTs in their teaching. Working with small group allows the professional development staffs to determine the specific interest and needs of the teacher educators and what works best in the professional development process.

Professional development may be provided to other small groups of faculty, thus expanding and refining the professional development efforts. The most important criterion for effective professional development is to tailor it to the learning needs and skills level of individual teaching staff within a faculty. This suggests that, ideally an institution should be based on availability of resources and provided a variety of options for professional development of faculty.

Framework for Integration of ICT for Professional Development of Teachers and Teacher Educators

Collis and Moonen (2001)(cited in Davis and Kirschner,2003) elaborate on the goals of professional learning about ICT as centred on learning how to use ICT and learning with ICT. When learning how to use ICT the instructional focus is on the use of products in or outside the classroom. In learning with ICT instruction is presented and distributed primarily through web environment systems offering an integrated range of tools to support learning and communication. Davis and Kirschner, (2003) clarify the distinction between the role of ICT as a core and a complementary technology for professional learning settings. A core technology role refers to the principle way of organizing the learning experience. In contrast a complementary technology role is optional serving a valuable function but able to be compensated for via the core technology if so needed, or dropped altogether if not functioning or feasible (ibid: 128). A synthesis of the two dimensions of ICT integration combining the roles and activity sets is presented in figure 1.

Figure-1



Source: Collis and Moonen 2001, cited in Kirschner and Davis, 2003

Frameworks of Integration of ICT: An Institutional Perspective

Pilkinnen (2009) explains that ICT is more a process than a tool, and in the context of ICT innovations, ICT innovation is more a new process to be developed than technology (a tool) to be applied. Benchmarking ICT innovation in CPD programmes in meaningful way would require institutions to articulate clearly the new process around which the benchmarks will cohere. Jochems, van Merriënboer and Koper(2004) propose that a new process for ICT integration needs to address organizational, technological and pedagogical perspective. The Benchmarks of an institutional technology management plan can be independently developed from the benchmarks of the management plan for teaching and learning. If an institution is unable to establish a coherent relational approach to technology integration that is driven by its policy and vision definition(Table No.1), ICT planning activities may often overlook the needs of students and teachers(Ellis and Moore,2006).

Table-1: Three Approaches for ICT Integration in Teacher Professional Development

Policy and vision	Technology literacy	Knowledge Deepenig	Knowledge Creation
Curriculum and Assessment	Basic knowledge	Knowledge Application	21 st Century skills
Pedagogy	Integrae Technology	Complex problem solving	Self Management
ICT	Basic Tools	Complex Tools	Pervasive Technology
Organization and Administration	Standard Classroom	Collaborative Groups	Learning organization
Teacher Professional Development	Digital Literacy	Manage and Guide	Teacher as model learner

Source: UNESCO 2008c

The UNESCO (2008c) information and Communication Technology competency standards for Teacher's (ICT-CST) project attempts to bridge both mainstream and ICT specialist domains in a holistic framework for a modular continuum of ICT integration in all CPD programmes-moving from technology literacy, through knowledge deepening to knowledge creation purposes which develop increasing capacity for teacher empowerment in the utilization of ICT as a tool to enhance the quality of learning (Figure.01)

Approaches to Integrate ICT for Professional Development of Teachers and Teacher Educators

- **Online courses:** The courses which are completely taught via internet is called as online course. These courses are useful for both on-campus and off campus learners. The very strong point of online course is that they can take anytime at anyplace. To produce online courses material a teacher educator required to first assemble and write the contents, then produce in internet with the help of content development software.
- **Online journals:** Theoretically a journal is a personal story or diary. It offers people a place to document their thought and reflections. One of the largest online journals. i.e. Diarist.net established in 1998, available at www.diarist.net. One can check many online journals through the links i.e. http://www.aiims.edu/aiims/library/list_of_journal.htm.
- **E- Books and E-libraries:** Through Digital Library, knowledge becomes globalized and one can access any book in the form of e-book. Electronic books offer creativity possibilities for expanding access as well as changing learning behaviour and academic research. In e-book content can always be accessible, regardless of time or place to be read on PCs or on portable book readers.
- **Web2.0 Tools:** - web2.0 refers to the so called second generation of web based communities. The term web2.0 is commonly associated with web applications that facilitate interactive information sharing interoperability, user-centred design and collaboration on the world wide web(www).a web 2.0 site allows its users to interact with others users or to change website content, in contrast to non-interactive websites where users are limited to the passive viewing of information that provided to them.web2.0 technologies created around the idea that the people who access and consume the web content should not passively absorb what's available; rather they should be active contributors. These are web based utilities and technology tools that focus on social, collaborative, user driven content and applications which facilitates a more socially connected web. The web provides access to reach resources of information encourages meaningful interactions with content and brings people together to challenge, support or respond to each other. There are number of web based services and applications that demonstrate the foundations of the web2.0 concept and they are already being used to a certain extent in education. These are not really technologies as such but services built using the building block of the technologies and open standards that underpin the internet and the web. These include blogs, wikis, multimedia sharing services, content syndication, podcasting and content tagging services. Details list of some web2.0 technologies along with its description and example are given below.
 - **Wiki:** wiki is a piece of server software that allows users to freely create and edit web page content using any web browser and are often used to create collaborative websites. The examples of wikis with URL are:- [wikispace-www. Wikispaces.com](http://wikispace-www.wikispaces.com); [Twiki-http://twiki.org/](http://twiki.org/); [wetpaint-http://www.wetpaint.com/](http://www.wetpaint.com/).
 - **Blog:** A blog is a type of website,usually maintained by and individual with regular entries of commentary. The examples of blogs with URL are: [Edublog http://edublogs.org/](http://edublogs.org/); [Twitter.com/](http://twitter.com/); [wordpress http://wordpress.org/](http://wordpress.org/); [livejournal http://www. Livejournal.com/](http://www.Livejournal.com/).

- **Podcast/vodcast:** A podcast is a series of digital media files, usually either digital audio or video, distributed over the internet for playback on a mobile device or a personal computer. Example, Gcast-<http://www.gcast.com>; podbean-<http://podbean.com/>; Gabcast-<http://gabcast.com/index.php>.
- **Document and multimedia sharing:** - on line facility to create, credit and share documents, graphics, presentation and multimedia for collaboration. Examples of documents and multimedia sharing are: Teachertube-www.teachertube.com; schooltube-<http://www.schooltube.com/>; scribed-<http://www.scribed.com>; Youtube, Slideshare, Flickr.
- **Web conferencing:** web conferencing is used to conduct live meetings, training or presentations in which each participant connected to other participants via the internet. Yugma, Palbee, ivist, webex are the examples of web conferencing.
- **E-mail/news groups:** make it easy for groups to hold conversations and share files using email and the web for public discussions and secure private groups for team collaboration. Examples, Together, e-mail collaboration, e-pals, yahoo groups etc.
- **Social networking:** A social network focuses on building online communities of people who are able to share interests, build online profiles, share information, pictures, blog entries, music clips etc. Examples, orkut, ning, classroom2.0, google wave etc.
- **Social bookmarking:** Social bookmarking is the practice of saving bookmarks to a web site and tagging them with keywords and is a popular way to store, classify, share and search links. Examples, stumble upon, delicious and Buzka etc.
- **Online Faculty Exchange Programme:** To enable the faculties to acquire new information and skills, to bring to their home institutions a general awareness of different environments which are relevant to their teaching areas and to expand experiences with the objective of improving their professional expertise, online Faculty Exchange Programme helps a lot.
- **Webinar:** The term webinar stands for web-based seminar. A webinar is a presentation, lecture, workshop or seminar that is transmitted over the web. The key features of a webinar are its interactive elements-the ability to give, receive and discuss information. Contrast with webcast, in which the data transmission is one way and doesn't allow interaction between presenter and audience.
- **Teleconference:** A teleconference is a meeting or conference held via a telephone or network connection between participants in remote cities and work sites. It involves the exchange of audio, video and data among participants. Similarly, the term teleconference can also refer to a live event that is transmitted via satellite to various locations. Email is a common example of a computer teleconference.
- **Online Research Guidance:** This interactive guide helps the user to locate records that may contain ancestral information and provides details on where to find them.
- **Online Learning:** online learning allows for flexibility of access, from anywhere and usually at anytime. Essentially it allows participants to collapse time and space. The learning materials for online learning are designed properly with learners' need and learning focus. Hence online learning has high authenticity (i.e. facilitates students to learn in the context of workplace), high interactive and collaboration.
- **Online community:** online community is a gateway to keep people coming back to your web site. Community consists of forums, chat rooms, calendars and other tools. It helps the readers' return to your site again and again.
- **E- Tutoring:** E- Tutoring refers to the process of tutoring within an online virtual environment or networked environment where teachers and learners are separated by time and

space. In the context of education it involves the use of learning management system or virtual learning environment such as Moodle, Sakai, WebCT Blackboard etc.

- **Electronics Teaching Portfolio:** An Electronic portfolio uses multimedia technology allowing students/teachers to collect and organize portfolio artefact in many media types (audi,video,graphics,text) with hypermedia links connecting that evidence to the appropriate standards.

CONCLUSION

ICT integration is a comprehensive process of applying the emerging technologies o the educational process to improve all aspects of education in general and teacher education in particular. Its success in teacher education programme depends not only on the availability of technologies but also heavily on the professional development of teacher educators and their skills to use ICT. Hence, the integration of ICT for CPD of teacher educators is need of the hour.

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Youth Creator of India

Irfanali G. Shaikh*

INTRODUCTION

Youth are the most important and dynamic segment of the population in any country. It is believed that developing countries with large youth population could see tremendous growth, provided they invest in young people's education, health and protect and guarantee their rights. We can undoubtedly say that today's young are tomorrow's innovators, creators, builders and leaders.

But they need the required support in terms of good health and opportunities skills to transform the future. The economic trigger happens when a country's more hands to work available than more mouths to feed. To put it succinctly, working age population has to be larger than the dependent population.

INDIA'S DEVELOPMENT IS IN THE HANDS OF THE YOUNG PEOPLE

Almost 34 percent of Indian population consists of youth. They have the power to change the nation. Young mind will be more fresh and innovative which helps in the progress of the country. But adequate opportunities should be given to the youth to represent their ideas and policies for the upliftment of the nation. Only way to express the ideas and to implement their policies is politics. Young people should be motivated to take part in politics and to occupy the high positions such as Prime Minister, Governor and Chief Minister.

Knowledge and unity speaks a lot rather than experience. For instance, a mass protest by the youth in the Marina beach for Jallikattu is a prominent example for the strength of youth. If the ruling power is given in the hands of the youth, then definitely India will become developed nation in 2020.

YOUTH CAN BE AN ANTIDOTE TO BAD GOVERNANCE AND CORRUPTION

They have power to change. Education programs should aim to teach and young minds right from the school level the importance of choosing right people who would take charge of governance. Conventionally, youth have been asked to keep away from politics. Youth should be motivated to consider politics as a means to serve the nation. They should be oriented on anti-corruption drives with focus on prevention, education, and strategies for fighting corruption. Good governance is realistic with youth empowerment.

The pivotal role of youth who are afresh with ideas and not ideals, will help in this movement towards a transparent civil society structure which can influence the political administration for the benefit of the society. For Eg: Youth Arts and Sports Club once a prominent site in Kerala's villages had a dual role to encourage youths participation in social and political activities through awareness and also empowering the people for rights and assisting them at various levels.

Over the years, this has decreased owing to the relative unimportance and support given by the political and state machinery in promoting such youth initiatives, inspite of the fact that they were effective systems to encourage youth towards politics and disseminate information at the grassroot

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level. It is only through a strong system of representation that democracy work and it is only through a strong youth representation that the dynamism and vigour of a country be maintained.

It is therefore important to acknowledge the role of civil societies in empowering youth towards strengthening of the democratic system of the country. The solution lies to effectively utilize modern tools in disseminating the belief among youth on their participation and representation in democracy through civil society initiatives.

YOUTHS ARE PROBLEM SOLVERS

Our nations need them to resolve most of our problems. The nation is facing a lot of problems, and I believe that the youths are capable of solving them. They just need to be given a chance to prove themselves. Youths have the power to unite individuals in the six ethnic groups. Racism is an ongoing issue around the world. Individuals are fighting against each other because of the complexion of their skin and the texture of their hair

Religion is another issue, the youths can convince their fellow man to live in peace and love. All of us are one and we should not allow these little differences to push us away from each other. There also a lot of crime taking place. Women are being killed by their abusive husbands. Person's homes, businesses, are being broken into. All of this crime and violence needs to stop. The youth once more has the ability to bring about a change in their country.

Youths seems to have the ability to face any challenges and problems. They have a positive influence on their fellow young people. They are able to teach them the positive things in life.

The ones who are destroying their future, they tend to listen to their fellow youths. They will make them understand the importance of a good education.

The wise youths that we have out there should be taken into consideration. Some of them, though educated are unemployed. They should be given an opportunity to expose their intelligence to the world and make themselves into someone. Some organisations and other firm should assist the youths; so they can make our land a great and educated one. They will make a huge difference in society and the entire world. The youths are our life and nation. They will make our country proud. The country will be recognized. The youths just need the support from their fellow citizens and they will perform their duties.

CONCLUSION

In conclusion, the role of the youth in the nation building is crucial. They are problem solvers, have a positive influence on other young people and the nation, and are extremely ambitious. They have the ability to create an identity for themselves and move the nation forward. However, they will not be able to do this without the support of their Government and fellow youths. So the youths can make their beautiful land flourish and shine in success.

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Developing the Skill to Prove Sum of Angles of Triangle and Quadrilateral Among B.Ed. Students by Activity Method

Dr. Rajwinder Kaur*

ABSTRACT

This action research project 'Developing the skill to prove sum of angles of triangle and quadrilateral among B.Ed students by activity method' was taken by the investigator. For developing the above skill investigator checked the knowledge of B.Ed Students by showing them figures of different kinds of triangles and quadrilaterals. A Pre-test was conducted to test the knowledge about triangles and quadrilaterals. After evaluating the Pre-test, investigator felt the need to explain the concept of triangles and quadrilaterals by using models and creative activities. For this she explained the concept of different kinds of triangles by lecture method. After this, investigator proved the sum of angles of triangles by activity method using paper cutting and cardboard cutting. Different kinds of triangles on the basis of angles and sides were assigned to sample Students to prove sum of angles of triangle by activity method using paper cutting and cardboard cutting. In the same way after explaining the concept of different types of quadrilaterals, sample students were asked to prove the sum of angles of different types of quadrilaterals by activity method. Students took active participation in paper cutting and preparing models. Then to observe improvement in their achievement level Post-test was conducted. Data collected through Pre-test and Post-test were tabulated and compared using percentage, mean, frequency distribution and cumulative frequency distribution. Data was also compared by using line graph, histogram and bar graph of percentage, frequency distribution and means of Pre-test and Post-test. From the comparison between Pre-test and Post-test a considerable performance in the achievement level of students was observed. This action research project helped the students to understand mathematical concepts about triangles and quadrilaterals. Achievement level of students was raised and they took keen interest to prove sum of angles of triangles and quadrilaterals by activity method.

INTRODUCTION

Mathematics occupies an important place in daily life of an individual. Mathematics is the mother of all sciences. Not a single aspect of our life is free from the use of mathematics. People can go along without their mother tongue but not without calculation. In the absence of the knowledge of this subject, the individual will be at the mercy of others and may be easily cheated. In modern world mathematics is being increasingly used in science, social science, technology and industry. This need is more pronounced in view of use of computers and other devices. As a result of this the subject of mathematics has taken a new look in school curriculum. In India although mathematics occupies the status of a compulsory subject in school curriculum, yet the rate of failure in this subject is alarming.

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Mathematical achievement refers not only to obtaining excellent marks in final examination but also to the attainment of mathematical ability and skills. Mathematical ability is thought as power of solving with speed and accuracy the difficult and complex problems in terms of objectives of teaching mathematics, which requires knowledge of mathematical concepts and skills which the students have learnt during schooling.

IDENTIFICATION OF THE PROBLEM

During teaching investigator observed that most of the B.Ed students did not take interest in teaching of mathematics. They took it as a burden rather than a joyful and meaningful activity. They just used to cram mathematical concepts without understanding them. They had non-mathematical background due to the lack of motivation. They had not opted mathematics as a compulsory or an optional subject in 10+2. Maximum of these students had got marks less than 33% in mathematics in matriculation examination (table 1.2). So these students had little knowledge regarding mathematics. The New Education Policy (1986) of the Govt. of India has also emphasized in strong words for making mathematics compulsory up to 10 years schooling and making optional at higher level. In order to develop the interest of these B.Ed students in mathematics and to make them good teachers the investigator selected some concepts and decided to enable the students to understand these concepts like the sum of angles of triangle and quadrilateral by activity method. For this investigator used lecture -cum- demonstration method.

SAMPLE

A sample of 38 students of B.Ed. was selected. All the students belonged to low socio-economic strata of society. Out of 38 sample students, 19 students were male and 19 were female (Table 9.1). Parents of most of the students were uneducated. Out of 38 students, 10 students were from urban area and 28 from rural area (Table 9.1).

Table-9.1:

Number of students = 38					
10+2 pass	Graduate	Boys		Girls	
		Rural	Urban	Rural	Urban
29	9	15	4	13	6

OBJECTIVES

(A) General objectives

1. To make the students aware regarding the utility of teaching learning material in mathematics.
2. To enhance the understanding of students about mathematical concepts.
3. To motivate the students not to cram the concepts in mathematics.
4. To develop the interest of students in geometry.
5. To enable the students to draw different types of triangles and quadrilaterals.

(B) Specific objective

To enable the students to understand the concept of sum of angles of triangle and quadrilateral by activity method.

Hypotheses

1. If the teacher teaches at understanding level rather than at memory level then there is a possibility to improve their level of performance.
2. If the teacher tries to develop the interest of students by activity method then there is a possibility to improve their level of performance.

Tools

Investigator used various tools such as interview, Pre-test, Post-test, lecture cum demonstration method and mobile phone.

9.8 Course of Action

Stage I

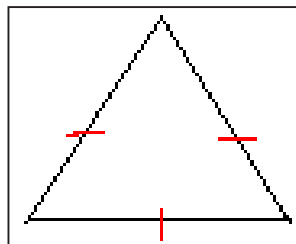
Pre-test and Post Test were developed. Pre-test and Post-test were of marks 50 each. There were 17 questions of marks 1 each, 5 questions of marks 3 each, 3 questions of marks 2 each and 3 questions of marks 4 each in Pre-test and Post-test.

Pre-test was conducted to achieve the objectives of knowledge, understanding and skills to prove some important mathematical results.(Table 1.3)

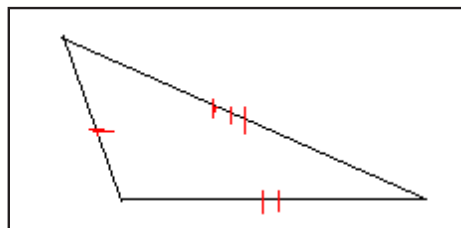
Stage II

After evaluating the Pre-test, investigator felt the need to explain in detail the concept of triangles and quadrilaterals by using models and creative activities. First of all she explained that a triangle is a two dimensional figure bounded by three straight line segments. It is represented by Greek letter Δ . It has three angles and three vertices. She also proved by taking examples that in a triangle sum of any two sides of a triangle is always greater than the third side. On the basis of sides there are three types of triangles and they are-

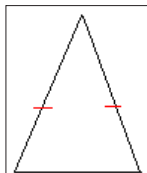
1. **Equilateral Triangle:** Three equal sides and three equal angles.



2. **Scalene Triangle** - No equal side and no equal angles.

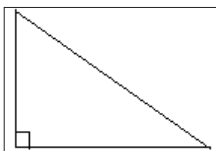


3. Isosceles Triangle - Two equal sides and two equal angles.

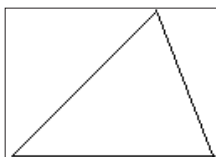


She also explained that on the basis of angles there are also three types of triangles. They are-

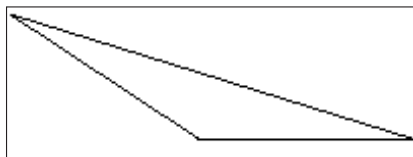
1. Right Angled Triangle: Having one of its angles 90°



2. Acute Angled Triangle: Having all its angles less than 90°



3. Obtuse Angled Triangle: Having one of its angles greater than 90°



Stage III

In order to prove the sum of angles of triangle i.e. 180° by activity method investigator took a chart paper triangle ABC. From this triangle she cut all the three angles i.e. $\angle A$, $\angle B$ and $\angle C$. She drew a straight line and pasted all the angles on this line as shown below.



From the above figures it is clear that the sum of all the angles of triangle is 180° .

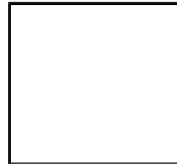
Stage IV

Investigator gave sufficient time to the students to prove the sum of angles of all types of triangles by taking cardboard and chart paper triangles.

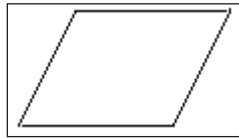
Stage V

Now investigator explained that quadrilateral is a two dimensional four sided figure having four vertices, four angles and two diagonals.

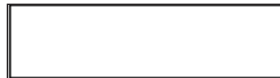
1. **Square**- All the four sides and angles are equal. Each angle equal 90° . Opposite sides are parallel.



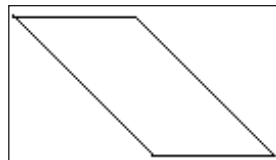
2. **Rhombus**- A four sided figure where all the sides have equal length. Also opposite sides are parallel and opposite angles are equal. Diagonals of rhombus bisect at right angles.



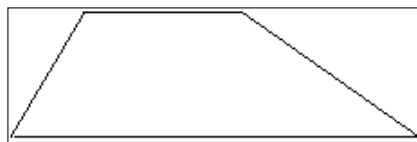
3. **Rectangle**- A four sided figure where every angle is a right angle. Also opposite sides are parallel and of equal length.



4. **Parallelogram**- Opposite sides are parallel and equal in length. Opposite angles are also equal.



5. **Trapezium**- One pair of opposite sides is parallel.



Further the investigator explained that a parallelogram having each angle equal to 90° is a rectangle; a parallelogram having all sides equal is a rhombus and a parallelogram having adjacent sides equal and each angle equal to 90° is a square

Stage VI

In order to explain the sum of angles of quadrilateral i.e. 360° by activity method investigator took a chart paper quadrilateral ABCD. From this quadrilateral she cut all the four angles and pasted them as shown below.



From the figures it is clear that sum of all the four angles of quadrilaterals is 360°

Stage VII

Investigator gave sufficient time to the sample students to practice the above activity by assigning them different types of quadrilaterals.

After completing their assignments sample students arrived at the result that the sum of angles of different types of triangles is 180° and sum of angles of different types of quadrilaterals is 360° . Assignments prepared by all the sample students were checked & their understanding about different types of triangles, quadrilaterals and the sum of their angles was observed while evaluating their assignments. The investigator noticed that there was substantial improvement in their response regarding these concepts.

DATA ANALYSIS

After collecting the data regarding Action Research project, the following things were analyzed.

1. Scores of Pre-test
2. Scores of Post-test
3. Comparative scores of Pre-test and Post-test

GRAPH-9.1

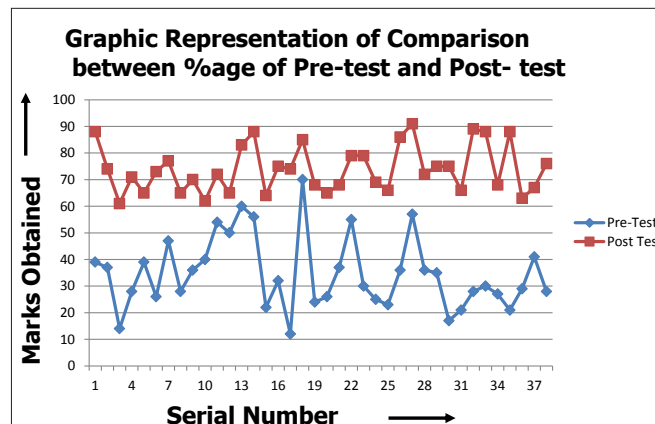
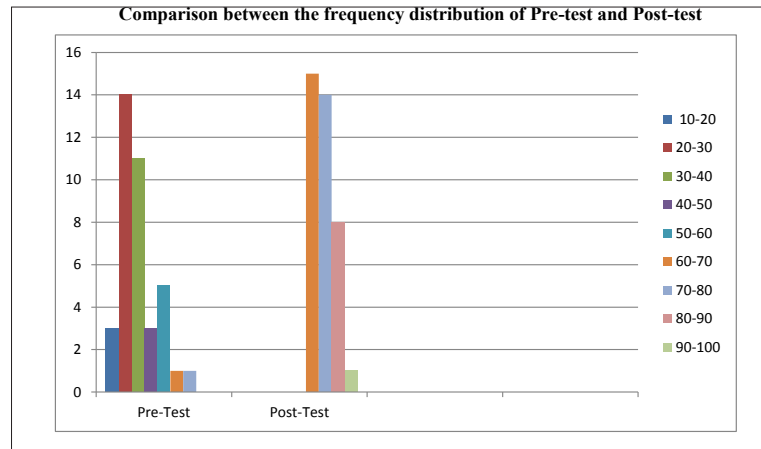


Table-9.6: Comparison between the frequency distribution of pre-test and post-test

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100
No. of Students (Pre-test) f	3	14	11	3	5	1	1	0	0
No. of Students (Post-test) f	0	0	0	0	0	15	14	8	1

Table 9.6 shows that in Pre-test no student has obtained marks in the range of 80-100. But in Post-test 8 students have obtained marks in range of 80-90 and one student in the range 90-100. In Pre-test 36 students have obtained marks in the range of 10-60 and in Post-test no student has obtained marks in range of 10-60. In Pre-test there are 2 students in range of 60-80 whereas in Post-test there are 29 students in the range of 60-80. Therefore there is a considerable change in the result of students.

Graph-9.2: Comparison Between the Frequency Distribution of Pre-test and Post-test

Table-9.7: Comparison Between Cumulative Frequency Distribution of Pre-test and Post-test

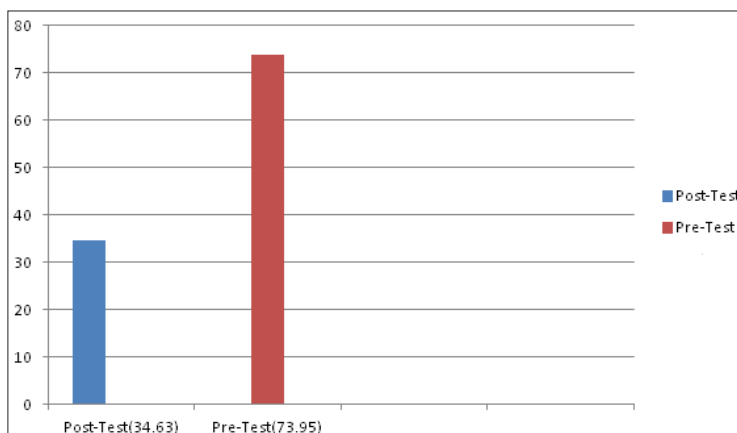
Marks less than	20	30	40	50	60	70	80	90	100
No. of Students (Pre-test) cf	3	17	28	31	36	37	38	38	38
No. of Students (Post-test) cf	0	0	0	0	0	15	29	37	38

From the table it is evident that there are 37 students who have obtained marks less than 70 in Pre-test and there are only 15 students in Post-test who have obtained marks less than 70. There are 36 students in Pre-test who have obtained marks less than 60. On the other hand there is no student in Post-test who has obtained marks less than 60. All the students in Post-test have obtained marks above 60. Thus there is a considerable performance in the achievement level of students.

Table-9.8: Comparison between mean percentage of pre-test and post-test

Test	Pre-test	Post-test
Mean %age	34.63	73.95

From the above result it is seen that mean %age of Pre-test is 34.63% and Post-test is 73.95%. There is a change in the results of the students.

GRAPH_9.3: Comparison between mean %age of Pre-test and Post-test

RESULT

Tabulation and graphical representation of data shows that the hypotheses stated as

1. If the teacher teaches at understanding level rather than at memory level then there is a possibility to improve their level of performance.
2. If the teacher tries to develop the interest of students by activity method then there is a possibility to improve their level of performance.

This project helped the students in enhancing their logical and reasoning power. Students of target group showed their improvement from 34.63% in Pre-test to 73.95% in Post-test. Therefore achievement level of students was improved. Students showed their interest in paper cutting and preparing models. This project also helped the students to prove important mathematical concepts without cramming.

IMPLICATIONS

1. This project will help the teachers to make their teaching effective.
2. This project will help the students to prove important mathematical concepts without cramming.
3. This project will create the interest of students in mathematics.
4. Achievement level of students in mathematics would be enhanced.
5. Students would be encouraged to prove important mathematical concepts by activity method.
6. Students will take interest in preparing teaching learning material.
7. Logical and reasoning power of students would be enhanced.

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म.प्र. में खाद्यान्न संरक्षण में खाद्य प्रसंस्करण उद्योग की भूमिका का विश्लेषणात्मक अध्ययन (जबलपुर जिले के विशेष संदर्भ में)

Dr. Ritu Jain*

प्रसंस्करण (प्रोसेसिंग) का परिचय

कृषि वस्तुओं की विपणन प्रक्रिया में परिष्करण भी एक महत्वपूर्ण कार्य होता है। परिष्करण से तात्पर्य उन क्रियाओं को करने से है जिनके द्वारा वस्तुओं के मूल रूप को परिवर्तित करके उनको उपयोग के लिए पहले से अधिक उपयोगी बनाया जाता है। अन्य शब्दों में वे कार्य जो कच्चे माल को निर्मित वस्तुओं के रूप में परिवर्तित करते हैं, परिष्करण के कार्य कहलाते हैं। परिष्करण से वस्तु की समय व रूप उपयोगिता बढ़ती है। इस तरह धान से चावल, गन्ने से गुड़ व चीनी, फलों से शर्बत, मुरब्बा, जैम, जैली, आचार, दूध से घी, मक्खन, पनीर, गेहूँ से आटा, तिलहन से तेल निकालना आदि विविध प्रक्रिया कृषि उपज पर करने से उसकी समय व रूप उपयोगिता बढ़ती है तथा दूध, फल, सब्जियाँ आदि खराब भी नहीं होती। खराब होने वाली कृषि उपज परिष्करण द्वारा सुरक्षित रूप से संग्रह की जा सकती है तथा उसकी विविध रूपों में वर्ष भर नियमित रूप से आपूर्ति की जा सकती है। अतः वस्तुओं को उपयोग योग्य बनाने एवं उन्हें अधिक समय तक सुरक्षित रखने के लिए परिष्करण करना उचित समझा जाता है। परिष्करण कार्य की महत्ता के कारण वर्तमान में विभिन्न वस्तुओं के परिष्करण उद्योगों का तेजी से विस्तार हुआ है। प्रत्येक वस्तु का परिष्करण प्रक्रिया में हो रहे निरन्तर अनुसन्धानों से वस्तुएँ अधिक उपयोगी होती जा रही है।¹

शोध अध्ययन की आवश्यकता एवं महत्त्व

सन् 1951 से भारत में आर्थिक नियोजन के अंतर्गत पंचवर्षीय योजना में कृषि क्षेत्र के सुधार और विकास पर ध्यान केन्द्रित किया गया इसका सुपरिणाम यह हुआ कि भारत ने कृषि क्षेत्र में उल्लेखनीय उन्नति की है और यह गर्व का विषय है कि आज हम न केवल खाद्यान्न की दृष्टि से आत्मनिर्भर हैं, अपितु देश से खाद्यान्न का निर्यात कर बड़ी मात्रा में विदेशी मुद्रा अर्जित कर रहे हैं। किन्तु इस का दूसरा नकारात्मक पक्ष भी है जो देश के कृषि विकास पर प्रश्नचिन्ह अंकित करता है। तमाम सरकारी और गैर सरकारी कवायदों के बाद भी हमारे देश की कुल पैदावार का तकरीबन बीस फीसदी भण्डारण की कमी और रख रखाव की पुरानी हो चुकी पद्धति की वजह से नष्ट हो जाता है। हालांकि इस आकलन में प्रसंस्करण, पैकेजिंग परिवहन और विपणन के दौरान होने वाला नुकसान भी शामिल है। फिर भी ज्यादातर अनाज की बर्बादी भण्डारण के दौरान होती है। इस बात से साफ मालूम चलता है कि हमारे यहाँ एक तो अनाज को हिफाजत से रखने के वाजिब बंदोबस्त नहीं है, वही दूसरी ओर भण्डारण परिवहन और विपणन के इंतजामात में भी कई खामियाँ हैं

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जबकि यदि हम दुनिया में विकसित विधियों का इस्तेमाल अपने गोदामों के लिए एकरें तो अनाज चार से पांच साल तक अच्छी हालत में रह सकता है। वरना वह समय बीतने के साथ खराब होने लगता है। सरकार हर साल खाद्य सप्लाइ पर हजारों करोड़ रुपये खर्च करती है, मगर इस बात का कतई ख्याल नहीं रखा जाता है कि जो अनाज खरीदा गया है, उसे कैसे हिफाजत में रखा जाएगा? इस समस्या का एक नीतिगत पहलू और है। जब हम गोदामों की क्षमता से दोगुने का भार उस पर डाल देते हैं, तो अनाज को सड़ने से किस तरह से बचाया जा सकता है सरकार एक तरफ कम उत्पादन और निजी जमा खोरी को बढ़ती मंहगाई की अहम् वजह बतलाती है, तो वही दूसरी तरफ खुद सरकार खाद्यान्न संरक्षण के लिये विकसित विधियों का इस्तेमाल न करते हुए, खराब होने दे रही है।

जिस दुनिया में 80 करोड़ से अधिक लोग भुखमरी झेलने को अभिशप्त हो, अनगिनत भूख से जन्मी बीमारियों से मर रहे हो वहाँ अगर अरबों टन भोजन बर्बाद होता है, तो सोचना होगा कि हम कैसी सभ्यता का सृजन कर रहे हैं। हर साल भारत में उतना गेहूँ खराब होता है और मनुष्य के खाने योग्य नहीं रहता, जितना ऑस्ट्रेलिया की सालाना पैदावार है। इससे सालाना कृषि कार्य में 50 हजार करोड़ का नुकसान होता है और इससे 30 करोड़ लोगों के भोजन की भरपाई हो सकती है।

अध्ययन के उद्देश्य

कृषि में पर्याप्त रूप से उचित मूल्य वर्धन करने, कृषकों को उनकी उपज का लाभकारी मूल्य दिलाने तथा उनकी खराब उपज वाली वस्तुओं को सुरक्षित रखने की सुविधा प्रदान करने की समस्या का समाधान उन उपज के प्रसंस्करण में निहित है। प्रसंस्कृत खाद्य पदार्थों को उचित समय पर निर्यात सहित व्यापक विपणन कर कृषकों की मुनाफा दर में सुधार किया जा सकता है।

अध्ययन की परिकल्पनायें

प्रत्येक शोध या अनुसंधान कुछ मान्यताओं या पूर्व परिकल्पनाओं के आधार पर रूपाकार होता है जिन्हें शोध अध्ययन की परिकल्पनाएँ कहा जाता है। इन्हीं परिकल्पनाओं में शोध अध्ययन के संभावित निष्कर्ष भी सन्निहित होते हैं। परिकल्पनाएँ अनुसंधान की प्राविधिक व्याख्या है। प्रस्तावित शोध अध्ययन की मूल परिकल्पना यह है कि—

1. कृषि व्यवसाय में उत्पादन से लेकर विपणन क्रिया इत्यादि में अत्यधिक अनिश्चितता व जोखिम है जिसके विरुद्ध खाद्यान्न रख रखाव की उचित व्यवस्था नितान्त आवश्यक है।
2. खाद्यान्न संरक्षण कार्यक्रमों का कृषि उत्पादन व सामान्य नागरिक को खाद्य सुरक्षा प्रदान करने में पर्याप्त योगदान है।

शोध अध्ययन की योजना एवं प्रविधि

प्रत्येक प्रकार का शोध अध्ययन कुछ निश्चित वैज्ञानिक विधियों पर आधारित होता है। प्रस्तुत शोध अध्ययन भी इन्हीं वैज्ञानिक विधियों को अपनाते हुये एक निर्धारित प्रक्रिया के माध्यम से पूरा किया गया है।

प्रस्तुत शोध अध्ययन को सरल, सहज, नियंत्रित एवं सार्थक बनाने के लिए जबलपुर जिले के संपूर्ण कृषि क्षेत्र में लागू खाद्यान्न संरक्षण कार्यक्रमों का विश्लेषणात्मक अध्ययन का तथ्यपरक अध्ययन सांख्यिकीय विधियों की सहायता से किया गया है। शोध अध्ययन को रूपाकार करने के लिए आवश्यक सूचनाओं समंको एवं संख्यात्मक तथ्यों आदि को निम्नांकित विधियों से प्राप्त किया गया है।

(अ) प्राथमिक साधनों द्वारा

- 1) साक्षात्कार
- 2) प्रश्नावली
- 3) सर्वेक्षण
- 4) मूल अभिलेख एवं गजेटियर आदि

(ब) द्वितीयक साधनों द्वारा –

- 1) विषय सम्मत उपलब्ध एवं ग्रंथ
- 2) विभिन्न पत्र पत्रिकाएँ व साहित्य
- 3) अन्य स्रोतों इंटरनेट आदि

प्रस्तुत शोध अध्ययन प्राथमिक एवं द्वितीयक दोनों ही प्रकार के समंकों एवं सूचनाओं पर आधारित है कृषि विकास एवं खाद्यान्न संरक्षण कार्यक्रमों का विश्लेषणात्मक अध्ययन सूचनाओं से युक्त साहित्य एवं ग्रंथ शिक्षा जगत में उपलब्ध है इसलिए अध्ययन हेतु इनका सहारा लिया गया है और द्वितीयक समंको एवं सूचनाओं की सहायता अधिक ली गई है। शोध को अधिक विश्वसनीय बनाने तथा शोध परिकल्पनाओं का परिक्षण करने के लिए प्राथमिक सूचनाओं को भी संग्रहित किया गया है। संग्रहित प्राथमिक सूचनाओं और समंको को संग्रहित करने के लिए प्रश्नावली बनाकर साक्षात्कार एवं सर्वेक्षण किया गया है। इस उद्देश्य से जबलपुर जिलों एवं क्षेत्रों का मैदानी सर्वेक्षण निर्देशन डिजाइन के आधार पर किया गया है।

भारत में प्रसंस्करण का स्तर

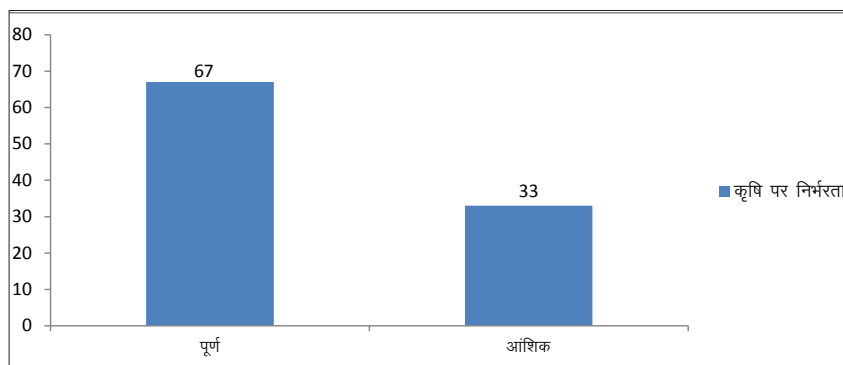
मद	प्रसंस्करण स्तर
फल तथा सब्जियां	2.0
दूध	35.0

सर्वेक्षित कृषकों का कृषि पर निर्भरता के आधार पर विप्लेषण

वर्ग	कृषक संख्या	कृषकों का प्रतिशत
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पूर्ण	209	67
आंशिक	152	33
योग	461	100

रेखाचित्र:-सर्वेक्षित कृषकों का कृषि पर निर्भरता के आधार पर विश्लेषण



उपर्युक्त सारणी एवं रेखाचित्र में कृषकों की कृषि निर्भरता की संख्या दर्शायी गई है जिस में 67 प्रतिशत कृषक कृषि कार्य में पूर्ण रूप से आश्रित हैं, तथा 33 प्रतिशत आंशिक रूप से कृषि कार्य में लगे हुये हैं।

सर्वेक्षित कृषकों का आयु (वर्ष) के आधार पर विश्लेषण

आयु वर्ग	कृषक संख्या	कृषकों का प्रतिशत
30 वर्ष से कम	81	17.40
30 से 40	202	43.90
40 से 50	110	23.90
50 से 60	42	09.13
60 वर्ष से अधिक	26	05.70
योग	461	100

रेखाचित्र:-सर्वेक्षित कृषकों का आयु (वर्ष) के आधार पर विश्लेषण (प्रतिशत)



सर्वप्रथम कृषकों को उनके आयु के आधार पर वर्गीकृत कर संलग्न सारणी नं 36 व 37 में विभिन्न आयु वर्गों के किसानों की संख्या एवं उनका प्रतिशत दर्शाया गया है। सारणी से स्पष्ट है कि 30 से 40 वर्ष की आयु वाले कृषकों की संख्या सर्वाधिक है जो कि सर्वेक्षित कुल कृषकों की संख्या का 43.9 प्रतिशत है। इसी प्रकार 40 से 50 वर्ष तक की आयु वर्ग के कृषकों की संख्या भी 23.9 प्रतिशत है। इस प्रकार आयु के आधार पर कृषक संख्या से विश्लेषण प्राप्त होता है कि 30 से 40 वर्ष तक की आयु का एक बड़ा कृषक समूह कृषि कार्य में संलग्न है

निष्कर्ष

कृषि कार्य में उत्पादन, प्रसंस्करण, पैकिंग, ग्रेडिंग, यूनिट राइस मिल आदि अनेक कड़ी आपस में जुड़ी हुई है। खाद्य प्रसंस्करण से उपज के विविधीकरण को बढ़ावा मिलता है समस्त कार्य एक दूसरे के पूरक व निर्भर है, देखा जाये तो एक सीढ़ी नुमा संरचना है तथा कृषकों को उच्च कीमत की फसलों को अपनाने के लिए उचित प्रोत्साहन मिलता है। इससे प्रति यूनिट निवेश से सर्वाधिक रोजगार सृजित करने की क्षमता है। व गांवों से शहरों की ओर पलायन रोकने में खाद्य प्रसंस्करण की महत्वपूर्ण भूमिका हो सकती है।

- देखा जाये तो जरूरत है, तो बस किसानों के लिए कृषि को लाभ का धन्धा बनाने की मांग व प्रदेश की खासियत को ध्यान में रखकर मोटा अनाज और इससे जुड़े प्रोजेक्ट की प्रोसेसिंग पर जोर दिया जाये जैसे चावल की जगह पोहा बनाकर बाजार में उतारें।
- सोयाबीन का उत्पादन म.प्र. के जबलपुर जिले में बहुत ज्यादा है। यदि सोयाबीन को अनाज की जगह इस की भी प्रोसेसिंग कर दी जाये तो सोयाबीन आटा सोयाबीन दूध केक आदि बनाया जा सकता है।
- कोदू-कुटकी की भी बाजार में बेहतर ढंग से उतारने के लिए किसान को प्रशिक्षित किया जाये।

- फूड प्रोसेसिंग उद्योग के लिए आधारभूत संरचना की जरूरत है तथा गांव स्तर पर प्रशिक्षण केन्द्र खोले जाये तथा जानकारी देने एकसपर्ट रखे जायें व किसानों को इसके लिए वित्तीय व अन्य मदद के लिए शासन को आगे आना होगा। क्योंकि यदि देख जाये तो महिलाएँ घर पर अचार-पापड़ व चिप्स सालों से बना रहीं हैं। लेकिन हमें अंकल चिप्स और लेस ने बताया है कि किस तरह से मार्केटिंग की जा सकती है। 2 से 3 रू. के आलू चिप्स हम खदरा बाजार में 20 रू. देकर खरीदते हैं।

खाद्यान्न संरक्षण कार्यक्रम न केवल कृषकों तक सीमित है बल्कि देश में फैली हुयी गरीबी, बढ़ती हुयी मंहगाई को रोका जा सकता है। व निर्यात को बढ़ाया जा सकता है, राष्ट्र के विकास को तीव्र गति प्रदान कर सकते हैं एवं जीडीपी में कृषि क्षेत्र के योगदान को बढ़ाया जा सकता है। और देश में उन्नति व समृद्धि लाई जा सकती है।

संदर्भ ग्रंथ सूची

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समावेशी शिक्षा : एक अध्ययन

डॉ. विपिन सिंह*

प्रस्तावना

समावेशी शिक्षा को विभिन्न तरीकों से परिभाषित किया गया है जो अलग-अलग बच्चों के सीखने की जरूरतों को संबोधित करता है। समावेशी शिक्षा एक प्रतियोगिताबद्ध अवधारणा है, जिसमें अंतर्निहित प्रथाओं और अर्थों में एक क्षेत्र से दूसरे क्षेत्र में भिन्नता है। 1974 में अक्षम बच्चों के लिए समेकित शिक्षा के लिए केंद्र प्रायोजित योजना शुरू की गई थी, जो सामान्य स्कूलों में अक्षम बच्चों को समान अवसर प्रदान करने और उनकी अवधारणा को सुविधाजनक बनाने के लिए थी। यह सभी छात्रों को एक साथ किसी भी क्षेत्र में उनकी ताकत या कमजोरियों की परवाह किए बिना एक कक्षा में लाने की ओर, और सभी छात्रों की क्षमता को अधिकतम प्रयोग करने का प्रयास करने पर आधारित है। समावेशी शिक्षा के क्षेत्र में सरकार की पहल को राष्ट्रीय शैक्षिक नीति, 1986 से वापस लाया गया, जिसे एक लक्ष्य के रूप में, 'समान स्तर पर सभी समुदायों के साथ अक्षमों को समान विकास के लिए तैयार करने, सामान्य विकास के लिए तैयार करने और उन्हें साहस और आत्मविश्वास के साथ जीवन का सामना करने में सक्षम बनाने के लिए बनाया गया। 1990 में अपनाई गई शिक्षा की विश्व घोषणा ने देश में पहले से तय विभिन्न प्रक्रियाओं को और बढ़ावा दिया। पिछले पाँच दशकों में भारत सरकार का प्रयास अक्षम बच्चों की शिक्षा के लिए व्यापक सेवाएँ प्रदान करने की ओर है। समावेशी शिक्षा, अक्षमता से पीड़ित बच्चों को शिक्षित करने और एक ही छत के भीतर सामान्य लोगों के साथ कठिनाइयों को सीखने का एक नया दृष्टिकोण है।

समावेशी शिक्षण परिवेश में छात्रों के साथ काम करने वाले शिक्षकों के लिए सहायक होने के साथ कई अलग-अलग शैक्षणिक दृष्टिकोण प्रस्तुत किए गए हैं। ये दृष्टिकोण 20 वीं शताब्दी के अंत में विकसित किए गए थे और बड़े पैमाने पर विशेष शिक्षा के मॉडल से प्राप्त किए गए थे। पारंपरिक स्कूली शिक्षा, दुनिया भर में अलग-अलग स्तर पर अपनाई गई, एक समावेशी दृष्टिकोण के अनुकूल होने के लिए संघर्ष किया है। यह संभवतः इसलिए है क्योंकि उपयोग किए जाने वाले मॉडल को कभी भी सभी शिक्षार्थियों को पहली बार में शामिल करने की कल्पना नहीं की गई थी और कुछ मामलों में स्थानीय संस्कृतियों की बारीकियों के संपर्क से बाहर हो गए हैं। समावेशी स्थितियों में शिक्षक अधिक सहयोग करते हैं और अधिक समय की योजना बनाते हैं, एक दूसरे से नई तकनीक सीखते हैं, अधिक वृत्तिक विकास गतिविधियों में भाग लेते हैं, परिवर्तन की अधिक इच्छा दिखाते हैं, और छात्रों की जरूरतों को पूरा करने के लिए रचनात्मक रणनीतियों की एक विस्तृत श्रृंखला का उपयोग करते हैं। सभी स्कूल जाने वाले बच्चे, चाहे वे अक्षम हों या नहीं, उन्हें शिक्षा का अधिकार है क्योंकि वे देश के भावी नागरिक हैं। आज यह व्यापक रूप से स्वीकार किया जाता है कि समावेशन छात्रों के विशाल बहुमत की

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क्षमता को अधिकतम करता है, उनके अधिकारों को सुनिश्चित करता है, और 21^{वीं} सदी के लिए समावेशी शिक्षा सबसे पसंदीदा शैक्षिक दृष्टिकोण है।

समावेशी शिक्षा की अवधारणा

समावेशी शिक्षा क्या है, यह समझने के लिए, बचपन और बच्चों के अधिकारों और स्कूली शिक्षा के ढांचे, सामाजिक मानदंडों और अन्य क्षेत्रीय परिस्थितियों के स्थानीय अवधारणाओं पर विचार करना आवश्यक है। समावेशी शिक्षा के सिद्धांत को "वर्ल्ड नीड ऑन स्पेशल नीड्स एजुकेशन: एकसेस एंड क्वालिटी" (सलामांका स्टेटमेंट, स्पेन 1994) में अपनाया गया था और विश्व शिक्षा मंच (डकार, सेनेगल 2000) में दोहराया गया था। यह कथन सरकारों को शिक्षा प्रणालियों को समावेशी बनाने के लिए सर्वोच्च प्राथमिकता देने और नीति के एक मामले के रूप में समावेशी शिक्षा के सिद्धांत को अपनाने का आग्रह करता है। समावेशी शिक्षा में सभी बच्चे अपनी शक्तियों और कमजोरियों के बावजूद मुख्यधारा की शिक्षा का हिस्सा होंगे। समावेश के विचार को आगे संयुक्त राष्ट्र के मानक नियमों के लिए समान है, अक्षमों के लिए समान अवसर के साथ समानता के लिए अवसरों की समानता और सभी के लिए समानता। समावेशी शिक्षा को सभी शिक्षार्थियों की विविध आवश्यकताओं को संबोधित करने और सीखने के माहौल में बाधाओं को कम करने की प्रक्रिया के रूप में परिभाषित किया गया है। इसका मतलब है कि व्यक्तिगत रूप से अनुरूप समर्थन (यूनिसेफ 2007) के साथ बच्चे की स्थानीय कक्षा की आयु वर्ग में भाग लेना। समावेश में आने वाली बाधाओं को हटाने की एक प्रक्रिया के रूप में समावेशी शिक्षा को देखा जा सकता है। समावेश को समझने का एक आसान तरीका है बहिष्करण के विपरीत विचार करना।

समावेशी शिक्षा सभी शिक्षार्थियों तक पहुंचने के लिए शिक्षा प्रणाली की क्षमता को मजबूत करने की एक प्रक्रिया है। इस तरह की समझ समूहों और व्यक्तियों में अंतर को पहचानती है, जबकि एक ही समय में उन सभी बच्चों के लिए उच्च गुणवत्ता वाली शिक्षा तक पहुंच को बढ़ावा देती है जहां वे एक साथ सीखते हैं। विशेष शिक्षा प्रणाली को कई कारणों से विकसित किया गया था, हालांकि, इसका परिणाम यह हुआ है कि अक्षम बच्चों को उनकी शिक्षा के लिए बहुत कम संभ्रांत संदर्भों में विभाजित किया जाता है। थाईलैंड में जोमेटिन वर्ल्ड कॉन्फ्रेंस (1990) में, 'शिक्षा के लिए सभी' के लक्ष्य निर्धारित किए गए थे और यह घोषणा की गई थी कि प्रत्येक व्यक्ति (बच्चे, युवा और वयस्क) शैक्षिक अवसरों से लाभ उठा सकेंगे जो उनकी बुनियादी सीखने की जरूरतों को पूरा करेंगे। समावेश, एक शैक्षिक दृष्टिकोण और दर्शन है जो सभी छात्रों को शैक्षणिक और सामाजिक उपलब्धि के लिए अधिक अवसर प्रदान करता है। इसमें सामाजिक, मनोरंजक, कला, खेल, संगीत, डे-केयर और आपटर स्कूल देखभाल, अतिरिक्त पाठ्यक्रम, विश्वास आधारित और अन्य सभी गतिविधियों की पूरी श्रृंखला में भाग लेने के अवसर शामिल हैं।

भारत में, राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद (एन.सी.ई.आर.टी.) ने यूनिसेफ के साथ हाथ मिलाया और अक्षम बच्चों के लिए प्रोजेक्ट इंटीग्रेटेड एजुकेशन फॉर डिसएबल्ड चिल्ड्रन (पी.आई.ई.डी.) वर्ष 1987 में शुरू किया, ताकि अक्षमों को नियमित स्कूलों में एकीकृत किया जा सके। हाल के वर्षों में, समावेशी शिक्षा की अवधारणा को न केवल अक्षम छात्रों को शामिल किया गया है, बल्कि उन सभी छात्रों को भी शामिल

किया गया है, जो वंचित हो सकते हैं या वंचित होने की सीमा पर है। पाठ्यक्रम की इस व्यापक समझ ने राष्ट्रीय पाठ्यचर्या की रूपरेखा (एन.सी.एफ.-2005) को विकसित करने का मार्ग प्रशस्त किया है, जो एक कार्यक्रम के माध्यम से स्कूल में सभी बच्चों को शामिल करने और बनाए रखने के महत्व को दोहराता है जो प्रत्येक बच्चे के मूल्य की पुष्टि करता है और उनके बच्चों को गरिमा का अनुभव करने में सक्षम बनाता है और सीखने का आत्मविश्वास। यह स्पष्ट है कि भारत में शिक्षा नीति ने विशेष जरूरतों वाले बच्चों और वयस्कों पर धीरे-धीरे ध्यान केंद्रित किया है, और नियमित स्कूलों में समावेशी शिक्षा प्राथमिक नीतिगत उद्देश्य बन गया है।

समावेशी शिक्षा की पृष्ठभूमि

भारत सरकार संवैधानिक रूप से हर बच्चे को बुनियादी शिक्षा के अधिकार को सुनिश्चित करने के लिए प्रतिबद्ध है। भारत सरकार ने 1947 में देश की आजादी के बाद से विशेष शिक्षा के आसपास कई नीतियां बनाई हैं। भारत सरकार द्वारा शुरू की गई सबसे प्रारंभिक औपचारिक पहल 1974 की एकीकृत शिक्षा योजना (एन.सी.ई.आर.टी., 2011) थी। कोठारी आयोग (1966) ने स्वतंत्रता के बाद के समय में अक्षम बच्चों को शिक्षित करने के महत्व पर प्रकाश डाला (पांडे 2006)। 1980 के दशक में तत्कालीन कल्याण मंत्रालय, सरकार, भारत में, अक्षमता पुनर्वास के क्षेत्र में मानव संसाधन विकास कार्यक्रमों की निगरानी और विनियमन के लिए एक संस्थान की महत्वपूर्ण आवश्यकता का एहसास हुआ। शिक्षा पर राष्ट्रीय नीति, 1986 (एन.पी.ई., 1986) और प्लान ऑफ एक्शन (1992) अन्य समूहों के साथ विशेष जरूरतों वाले बच्चों को एकीकृत करने की आवश्यकता पर बल देता है। भारतीय पुनर्वास परिषद, अधिनियम, 1992 ने अक्षम छात्रों की आवश्यकताओं का जवाब देने के लिए पेशेवरों के विकास के लिए एक प्रशिक्षण कार्यक्रम शुरू किया। 90 के दशक के अंत में (यानी 1997 में) जिला प्राथमिक शिक्षा कार्यक्रम (डी.पी.ई.पी.) में समावेशी शिक्षा का दर्शन जोड़ा जाता है। इस कार्यक्रम ने विश्व के रुझानों के अनुरूप, हल्के से मध्यम अक्षम बच्चों के एकीकरण पर विशेष जोर दिया और 40,000 मिलियन रुपये (लगभग 740 मिलियन अमरीकी डॉलर) के साथ वित्त पोषण के मामले में इस समय भारत सरकार के सबसे बड़े सर्वोत्कृष्ट कार्यक्रमों में से एक बन गया। सर्वशिक्षा अभियान (एस.एस.ए) को 2001 में सार्वभौमिक शिक्षा के सार्वभौमीकरण के लक्ष्य को प्राप्त करने के लिए शुरू किया गया था। सार्वभौमिक प्राथमिक शिक्षा के तीन महत्वपूर्ण पहलू 6-14 वर्ष की आयु में सभी बच्चों की पहुंच, नामांकन और प्रतिधारण हैं।

अक्षम व्यक्तियों के लिए राष्ट्रीय नीति, 2006 जो कि उस रूपरेखा को स्पष्ट करने का प्रयास करती है जिसके तहत राज्य, नागरिक, समाज और निजी क्षेत्र को कार्य करना चाहिए ताकि अक्षमता वाले व्यक्तियों के लिए एक गरिमापूर्ण जीवन सुनिश्चित किया जा सके और उनके देखभाल कर्ताओं के लिए समर्थन किया जा सके। शिक्षा के क्षेत्र की नवीनतम प्रयास, बच्चों के लिए मुफ्त और अनिवार्य शिक्षा का अधिकार (2009) है जो 6 से 14 साल की उम्र के सभी बच्चों को मुफ्त और अनिवार्य शिक्षा का अधिकार देता है। अक्षम बच्चों के लिए शिक्षा के लिए, अधिनियम को अक्षमता अधिनियम, 1995 के साथ व्यक्तियों के अध्याय-5 के संयोजन में पढ़ा जाना चाहिए। पी.डब्ल्यू.डी. अधिनियम का अध्याय-5 यह सुनिश्चित करता है कि अक्षमता से पीड़ित हर बच्चा 18 वर्ष की आयु तक मुफ्त शिक्षा का हकदार है। भारत सरकार ने 2010 तक सभी के लिए शिक्षा

के लक्ष्य को प्राप्त करने के लिए समावेशी शिक्षा की नई योजना को गति दी थी। समावेशन, यह सुनिश्चित करने का प्रयास है कि विविध अक्षम—शिक्षार्थी, विभिन्न भाषाओं और संस्कृतियों, विभिन्न घरों और पारिवारिक जीवन, विभिन्न रुचियों और सीखने के तरीकों के साथ शिक्षा प्राप्त करें।

लगभग हर देश में, समावेशी शिक्षा, शिक्षा में सबसे प्रमुख मुद्दों में से एक के रूप में उभरा है। 1994 (यूनेस्को) में सलामांका स्टेटमेंट जारी होने के साथ, बड़ी संख्या में विकासशील देशों ने अक्षम स्कूलों के छात्रों को मुख्यधारा में शामिल करने के लिए उनकी नीतियों में सुधार करना शुरू कर दिया। सर्व शिक्षा अभियान के तहत एक शून्य अस्वीकृति नीति को अपनाया गया है, जो यह सुनिश्चित करती है कि विशेष आवश्यकताएं वाले प्रत्येक बच्चे को, अक्षमता की तरह, श्रेणी और डिग्री के बावजूद, सार्थक और गुणवत्तापूर्ण शिक्षा प्रदान की जाती है। राष्ट्रीय पाठ्यचर्या की रूपरेखा 2005 में समावेशी शिक्षा का स्पष्ट संदर्भ दिया गया है। 2005 में, मानव संसाधन विकास मंत्रालय ने अक्षम बच्चों और युवाओं की शिक्षा में शामिल करने के लिए एक राष्ट्रीय कार्य योजना लागू की। इसके अलावा, अक्षम बच्चों हेतु एकीकृत शिक्षा को 9^{वीं} और 10^{वीं} कक्षाओं में अक्षम बच्चों की समावेशी शिक्षा के लिए सहायता प्रदान करने के लिए 2009-10 में माध्यमिक स्तर पर अक्षमों की समावेशी शिक्षा को संशोधित और नाम दिया गया था। यह योजना अब 2013 से राष्ट्रीय माध्यमिक शिक्षा अभियान (आर.एम.एस.ए.) के तहत शुरू हुई। इन बच्चों को सामाजिक स्कूलों में समेकित करने और उनके आत्मविश्वास का निर्माण करने में मदद करना महत्वपूर्ण है।

समावेशी शिक्षा की आवश्यकता और महत्व

शैक्षिक मुख्यधारा में अक्षम बच्चों को शामिल करने के लिए अंतर्राष्ट्रीय स्तर पर प्रयास हुए हैं। वास्तव में समावेशी शिक्षा प्राप्त करने के लिए हमें नियमित स्कूलों में विशेष जरूरतों वाले बच्चों के बारे में सोचने और उन्हें शामिल करने की आवश्यकता है। विशेष रूप से, क्योंकि ये बच्चे कक्षा में सीखने और भागीदारी में किसी प्रकार की बाधाओं का सामना करते हैं। जैसा कि सामान्य शिक्षा की कक्षाओं में अधिक से अधिक विविध छात्र शामिल हैं, शिक्षकों को प्रत्येक छात्र को अद्वितीय मानने का मूल्य पता चलता है। प्रभावी समावेशी कार्यक्रमों में, शिक्षक सभी छात्रों को शामिल करने के लिए गतिविधियों को अनुकूलित करते हैं, भले ही उनके व्यक्तिगत लक्ष्य अलग हो सकते हैं। समावेशी शिक्षा सभी छात्रों को सफल होने में मदद करने का एक बेहतर तरीका है। अधिकांश छात्र सामान्य शिक्षा पाठ्यक्रम की समृद्धि के संपर्क में रहते हैं और बेहतर प्रदर्शन करते हैं। समावेशी स्थितियों में बच्चे अकादमिक रूप से बेहतर करते हैं और समावेश संबंधों को विकसित करने के अवसर प्रदान करता है। जैसे कि दोस्ती, सामाजिक कौशल, व्यक्तिगत सिद्धांत, ऐसे लोगों के साथ आराम का स्तर, जिनकी विशेष आवश्यकताएं हैं और कक्षा के वातावरण की देखभाल करना। दोस्ती का सबसे महत्वपूर्ण कार्य लोगों को अपनी देखभाल, प्यार और सुरक्षित महसूस कराना है। एक समावेशी शैक्षिक स्थितियों में, कम प्राप्त करने वाले छात्र अतिरिक्त सहायता प्राप्त करने में सक्षम होते हैं, भले ही वे विशेष शिक्षा के लिए योग्य न हों। अक्षम छात्रों के सहपाठी भी सामाजिक अनुभूति में वृद्धि का अनुभव करते हैं, अक्सर समावेशी कक्षाओं में दूसरों की जरूरतों के बारे में अधिक जागरूक हो सकते हैं। एक दिलचस्प दुष्प्रभाव यह है कि ये माता-पिता रिपोर्ट करते हैं कि वे अपने बच्चों के अनुभवों के कारण विशेष आवश्यकताओं वाले लोगों

के साथ अधिक सहज महसूस करते हैं। अक्षम छात्र लंबे समय तक चलने वाली दोस्ती बना सकते हैं जो अन्यथा संभव नहीं हो सकती, और ये दोस्ती उन्हें जीवन में बाद में सामाजिक रिश्तों को नकारात्मक करने का कौशल दे सकती है।

भारत में समावेशी शिक्षा को लागू करने की चुनौतियाँ

भारत में अक्षमों की संख्या इतनी बड़ी है, उनकी समस्याएं इतनी जटिल हैं, उपलब्ध संसाधन इतने दुर्लभ और सामाजिक दृष्टिकोण हानिकारक हैं। समावेशी शिक्षा प्राप्त करने का मार्ग एक लंबा और विविध है, जिस पर चुनौतियाँ और अवसर पैदा होंगे। भारत एक बहुभाषी, बहु-सांस्कृतिक, बहु-धार्मिक देश है, और इसके लोगों को तेज सामाजिक-आर्थिक और जातिगत रेखाओं के साथ स्तरीकृत किया जाता है। अनुमानित 1,210 मिलियन लोगों के साथ, भारत चीन के बाद दुनिया का दूसरा सबसे अधिक आबादी वाला देश है। इसमें वैश्विक आबादी का 17: और दुनिया के 20: बच्चे स्कूल से बाहर हैं। समावेश का उद्देश्य छात्रों को समर्थन प्रदान करना है। मुख्य उद्देश्य अधिक चुनौतीपूर्ण हो गया है क्योंकि स्कूल छात्रों को तेजी से विविध पृष्ठभूमि और क्षमताओं के साथ समायोजित करते हैं। भारत की जनगणना (भारत सरकार, 2011) के आधिकारिक अनुमानों के अनुसार, देश में अक्षम लोगों की संख्या 26 मिलियन है, या कुल आबादी का लगभग 2.1: है। हालांकि, भारत में अक्षमता की स्थिति पर यूनिसेफ की रिपोर्ट (2000) में कहा गया है कि भारत में लगभग 30 मिलियन बच्चे अक्षमता के किसी न किसी रूप से पीड़ित हैं। दुनिया की 10: आबादी अक्षमता के साथ रहती है, और इनमें से 80: अक्षम लोग विकासशील देशों में रहते हैं। लेकिन भारत में ग्रामीण क्षेत्रों में 75: अक्षम लोग रहते हैं। सरकार ने देश की आजादी के बाद से विशेष शिक्षा के आसपास कई नीतियाँ बनाई हैं। नियमित कक्षाओं में अक्षम बच्चों को शिक्षित करने के लिए एकई चुनौतियाँ हो सकती हैं। ये चुनौतियाँ पर्याप्त मानव और भौतिक संसाधनों की कमी, शिक्षकों और समुदाय के नकारात्मक दृष्टिकोण, गैर-अक्षम साथियों और उनके माता-पिता से मुक्ति पा सकती हैं। यद्यपि भारत सरकार ने ऐसी नीतियाँ बनाने का प्रयास किया है जो अक्षम लोगों के लिए समावेशी हैं, इसके अलावा, स्कूल छोड़ने वाले छात्रों की संख्या अधिक हो रही है (खासकर गरीबी से प्रभावित क्षेत्रों में)। छात्रों को अपने माता-पिता की खराब आर्थिक स्थिति के कारण स्कूल छोड़ने के लिए मजबूर किया जाता है, और अपने माता-पिता की मदद करने के लिए काम करना पड़ता है। यह बाल श्रमिकों की बढ़ती संख्या की ओर जाता है, जिसके परिणामस्वरूप शारीरिक और मनोवैज्ञानिक अक्षमता होती है। अक्षम बच्चों की सीखने की क्षमता के संबंध में, शिक्षकों और माता-पिता दोनों की ओर से नकारात्मक दृष्टिकोण और व्यवहार के आसपास विशेष चुनौतियाँ हैं। एक और गंभीर चुनौती यह है कि अधिकांश अक्षम लोगों को अभी भी मुख्यधारा की शिक्षा के लिए समान पहुंच से बाहर रखा गया है। बड़े वर्ग के आकार भारतीय संदर्भ में समावेशी शिक्षा के कार्यान्वयन के लिए एक और चुनौती पेश करते हैं।

6^{वें} ऑल इंडियाए जुकेशनल सर्वे (एन.सी.ई.आर.टी., 1998) के अनुसार, भारत के 200 मिलियन स्कूली बच्चों (6-14 वर्ष) में से लगभग 20 मिलियन को विशेष शिक्षा की आवश्यकता है। जबकि स्कूल में सकल नामांकन के लिए राष्ट्रीय औसत 90: से अधिक है, अक्षम बच्चों के पांच प्रतिशत से कम स्कूल में हैं। साथियों

द्वारा स्वीकृति अक्षम बच्चों के लिए एक बड़ी चुनौती है। अक्षम बच्चों को अक्सर उनके गैर-अक्षम साथियों द्वारा छोड़ा और तंग किया जाता है। बड़ी संख्या में अक्षम बच्चे गरीबी के स्तर से काफी कम आय वाले परिवारों में रहते हैं। भारत के अधिकांश स्कूल कर्मियों को नियमित स्कूलों में अक्षम छात्रों के लिए शैक्षिक कार्यक्रमों को डिजाइन और कार्यान्वित करने के लिए प्रशिक्षित नहीं किया जाता है। भारत में अधिकांश शिक्षक प्रशिक्षण कार्यक्रमों में अक्षमता अध्ययन पर एक इकाई नहीं है (मायरेड्डी और नारायण, 2000)। दास, कुइनी और देसाई (2013) ने समावेशी शिक्षा स्थितियों में अक्षम छात्रों को पढ़ाने के लिए दिल्ली, भारत में नियमित प्राथमिक और माध्यमिक विद्यालय के शिक्षकों के वर्तमान कौशल स्तरों की जांच की। उन्होंने बताया कि लगभग 70: नियमित स्कूल के शिक्षकों ने न तो विशेष शिक्षा में प्रशिक्षण प्राप्त किया था और न ही अक्षम छात्रों को पढ़ाने का कोई अनुभव था। इसके अलावा, 87: शिक्षकों के पास अपनी कक्षाओं में सहायक सेवाओं तक पहुँच नहीं थी।

भारत में अधिकांश स्कूलों को खराब तरीके से डिजाइन किया गया है और कुछ अक्षम छात्रों की विशेष जरूरतों को पूरा करने के लिए सुसज्जित नहीं हैं। यह भी ध्यान देने योग्य है कि सहायक उपकरणों की खरीद और पुनर्विकास के आसपास चुनौतियाँ हैं। भारत में समावेशी शिक्षा के लिए विभिन्न प्रयासों के बावजूद, लगभग 94: अक्षम बच्चों को कोई भी शैक्षणिक सेवा नहीं मिली है। आज, समावेशी शिक्षा के लक्ष्य को प्राप्त करने के लिए क्या जरूरतें और चुनौतियाँ हैं? एक समावेशी वातावरण अक्षम बच्चों की जरूरतों को कैसे पूरा करेगा? सभी बच्चों के लिए गुणवत्तापूर्ण शैक्षिक कैसे प्रभावी और कुशलतापूर्वक प्रदान की जा सकती है? इसलिए, समावेशी स्कूलों को हर समुदाय में सभी बच्चों की जरूरतों को पूरा करना होगा और केंद्र और राज्य सरकारों को समावेशी कक्षाओं का प्रबंधन करना होगा। भारत में समावेशी शिक्षा को लागू करने के लिए महत्वपूर्ण, चुनौतियों और उपायों सहित समावेशी शिक्षा की अवधारणा पर विस्तार से चर्चा करता है। भारत के अन्य विकासशील देशों के साथ इन चुनौतियों के ऊपर और ऊपर कुछ विशिष्ट विशेषताएँ हैं जो शैक्षिक सुधार के कार्यान्वयन को विशेष रूप से कठिन बना देंगे। शारीरिक और मानसिक रूप से अक्षम बच्चों की विशेष शैक्षिक आवश्यकताओं की देखभाल के बिना भारत सरकार की प्राथमिक शिक्षा की सार्वभौमिकता के प्रति प्रतिबद्धता पूरी तरह से हासिल नहीं की जा सकती है।

समावेशी शिक्षा को लागू करने के लिए कुछ उपाय

समावेशी शिक्षा अक्षम बच्चे को अपने काम में गर्व की भावना विकसित करने में मदद करती है क्योंकि वे वास्तव में ऐसे महसूस करते हैं जैसे उन्होंने सार्थक कार्य किया हो। हम जानते हैं कि अल्बर्ट आइंस्टीन अधिगम में अक्षम थे लेकिन फिर भी 20^{वीं} सदी के सबसे बड़े बुद्धिमान बनने में कामयाब रहे, अपने गैर-अक्षम साथियों के साथ अक्षम बच्चों को शिक्षित करना भारत में आबादी को शिक्षा प्रदान करने के लिए बेहतर तरीकों में से एक माना जाता है (शाह, 2005, शाह व अन्य, 2014)। भारत सरकार को देश में समावेशी शिक्षा की एक मजबूत प्रणाली बनाने के लिए अपनी शिक्षा प्रणाली में मौजूदा खाई को भरने की आवश्यकता है।

सीमांत व अक्षम बच्चों को सामान्य बच्चों के समान मानना चाहिए और उन्हें सहानुभूति देने के बजाय उनकी प्रतिभा और क्षमताओं को उनके आत्म-सम्मान और समाज के कल्याण के लिए पहचान दिलानी चाहिए। अक्षम बच्चों वाले परिवारों को अक्षम बच्चों वाले परिवारों के साथ संबंध विकसित करने चाहिए और अपना योगदान देने के अवसर देने चाहिए। सभी अक्षमों और अक्षमता के विशिष्ट क्षेत्रों में सामान्य शिक्षकों और विशेष शिक्षकों के लिए दो से तीन सप्ताह की अवधि के सेवा कार्यक्रमों में अक्षम बच्चों को प्रभावी ढंग से पढ़ाने की व्यवस्था होनी चाहिए। स्पेशल स्कूल जो विशेष जरूरतों वाले बच्चों को लेने के लिए प्रतिबद्ध हैं, तो शिक्षकों को बच्चे की जरूरतों को समायोजित करने के लिए कार्यशालाओं में भाग लेना चाहिए। प्रशिक्षण कार्यक्रमों की समय-समय पर मूल्यांकन और विशेष शिक्षा में बदलती प्रवृत्तियों की चुनौतियों का सामना करने के लिए निरंतर अद्यतन शिक्षक तैयारी को योजना का हिस्सा होना चाहिए। समावेश, विशिष्ट वर्ग के शिक्षक की एकमात्र जिम्मेदारी नहीं होनी चाहिए। सभी को शामिल होना चाहिए और जिम्मेदारी लेनी चाहिए। शिक्षकों के लिए प्रशिक्षण निरंतर और मूल्यपरक होना चाहिए। यह सबसे महत्वपूर्ण रूप से अभिवृत्तियों में बदलाव पर ध्यान केंद्रित करना चाहिए। पाठ्यक्रम के सुधार को शिक्षकों हेतु प्रशिक्षण द्वारा जमीनी स्तर पर पहुँचा जाना चाहिए। उपरोक्त कार्यक्रमों में से प्रत्येक के लिए पाठ्यक्रम को एक विशेषज्ञ समूह द्वारा सावधानीपूर्वक विकसित किया जाना चाहिए जिसमें विशेष शिक्षक अभ्यास करना शामिल है।

भारत में समावेशी शिक्षा के बेहतर कार्यान्वयन के लिए निम्नलिखित उपाय हैं।

1. समावेश की नीति को सभी स्कूलों और पूरे भारतीय शिक्षा प्रणाली (एन.सी.एफ., 2005) में लागू करने की आवश्यकता है। स्कूलों को ऐसे केंद्र बनने की आवश्यकता है जो बच्चों को जीवन के लिए तैयार करते हैं।
2. एक प्रणाली के रूप में, समावेशी शिक्षा लचीली होनी चाहिए। इसके लचीलेपन को उन तरीकों और सामग्रियों में परिलक्षित किया जाना चाहिए, जो इन बच्चों को नियमित पाठ्यक्रम तक व्यापक पहुंच प्रदान करे।
3. माता-पिता को अपने बच्चे के बारे में सभी निर्णय लेने में शामिल होने का अधिकार है। उन्हें शिक्षा प्रक्रिया में भागीदार के रूप में दर्जा मिलना चाहिए।
4. एक स्कूल-आधारित सहायता टीम एवं मेंटर टीचर को विशेष शैक्षिक आवश्यकताओं के साथ शिक्षार्थियों की जरूरतों को पूरा करने के लिए पूरे स्कूल के लिए रणनीति विकसित करनी चाहिए।
5. स्कूल की प्राथमिक जिम्मेदारी है कि वह बच्चों को अपने सामान्य रूप से विकासशील साथियों के साथ सीखने में मदद करे। एक समावेशी स्कूल को सभी बच्चों की जरूरतों को पूरा करने के लिए शिक्षा संरचनाओं, प्रणालियों और कार्यप्रणाली को सक्षम करना चाहिए।
6. किताबें, स्टेशनरी, ड्रेस, परिवहन भत्ता, लड़कियों के लिए आर्थिक मदद, वजीफा, सहायक सेवाएं, सहायक उपकरण, छात्रावास, चिकित्सीय सेवाएं, शिक्षण अधिगम सामग्री आदि छात्रों की जरूरत के अनुसार प्रदान करते हैं।
7. विशेष बच्चों को मुख्यधारा में लाने के लिए उन समायोजन की आवश्यकता होती है जो स्कूलों को पहले से बनाने की आवश्यकता होती है। सेवा क्षेत्रों में निर्मित रैंप और व्हीलचेयर का उपयोग होना चाहिए।

8. ग्रामीण विशेष शिक्षा कार्यक्रमों के लिए शिक्षकों की तैयारी को अलग तरह से नियोजित किया जाना चाहिए, क्योंकि इन कार्यक्रमों का उद्देश्य अक्षम व्यक्तियों को उनके स्वयं के वातावरण और समुदाय में एकीकृत करना होगा।
9. समावेशी शिक्षा के प्रति शिक्षक का दृष्टिकोण विशेष प्रशिक्षण द्वारा विकसित किया जा सकता है, जो इस क्षेत्र में अच्छा शिक्षण कार्य करने के लिए एक अच्छा विशिष्ट योग्यता प्रदान कर सकता है।
10. शिक्षा का अधिकार, भारत के सभी नागरिकों के लिए लागू होना चाहिए। राज्य और केंद्र सरकारों के साथ-साथ अन्य सभी सामाजिक कार्यकर्ताओं को समावेशी शिक्षा की व्यापक अवधारणा के महत्व को पहचानना चाहिए जो सभी शिक्षार्थियों की विविध आवश्यकताओं को संबोधित करता है।

निष्कर्ष

शिक्षा का अधिकार अधिनियम 2009 सभी बच्चों को उनकी जाति, धर्म, क्षमता के बावजूद शिक्षा सुनिश्चित करता है। समावेशी शिक्षा तब होती है, जब सभी छात्रों के पास किसी भी चुनौती की परवाह किए बिना, उपयुक्त सामान्य शिक्षा वर्गों में रखा जाता है जो अपने स्वयं के पड़ोस के स्कूलों में उच्च गुणवत्ता के निर्देश, हस्तक्षेप, और समर्थन प्राप्त करने के लिए होते हैं तथा उन्हें मुख्य पाठ्यक्रम में सफलता प्राप्त करने में सक्षम बनाते हैं। (बुई, क्वर्क, अल्माजान, और वैलेंटी, 2010; अलकुरैनी और गुट, 2012)। समावेशी दृष्टिकोण के माध्यम से समावेशी समाज का निर्माण करना आवश्यक है। ऐसा करने में हमने आमतौर पर आयोजित मान्यताओं को चुनौती दी है और मुख्य मान्यताओं का एक नया सेट विकसित किया है। अक्षम छात्रों की पहली पसंद होती है, अपने साथियों के साथ अधिकतम संभव स्तर पर अक्षम होने के बिना सामान्य शिक्षा प्राप्त करना (अलकुरैनी और गुट, 2012)। अक्षम छात्रों को शिक्षित करने की एक विधि से अधिक समावेश है। यह इस बात पर जोर देता है कि प्रत्येक बच्चा, उसकी अक्षमताओं की तीव्रता और गंभीरता की परवाह किए बिना, समाज का एक महत्वपूर्ण सदस्य है और उस समाज में भाग लेने में सक्षम है।

सफल समावेशी शिक्षा मुख्य रूप से छात्र मतभेदों और विविधता को स्वीकार करने, समझने और उपस्थित होने के माध्यम से होती है, जिसमें शारीरिक, संज्ञानात्मक, शैक्षणिक, सामाजिक और भावनात्मक शामिल हो सकते हैं। इसमें नियमित शिक्षक और विशेष शिक्षक के साथ-साथ अन्य सभी कर्मचारी और संकाय शामिल हैं जो माता-पिता व अभिभावक के साथ-साथ प्रमुख हितैशी हैं। समावेशी कक्षा को डिजाइन करने और कार्यान्वित करने में मार्गदर्शन की आवश्यकता है, बच्चों, उनके परिवारों, अपने साथियों, स्वयं और स्कूल के बारे में विशेष अध्ययन की आवश्यकता है। एक अच्छी समावेशी शिक्षा वह है जो सभी छात्रों को कक्षा के सभी पहलुओं में समान रूप से या समान रूप से भाग लेने की अनुमति देती है। चुनौतियों का सामना करने के लिए, बेहतर और अधिक समावेशी स्कूलों के निर्माण के लिए शिक्षकों, अभिभावकों और समुदाय के नेताओं की भागीदारी और सहयोग महत्वपूर्ण है। भारत सरकार समावेशी दृष्टिकोण पर ध्यान केंद्रित करते हुए अपनी शिक्षा प्रणाली में सुधार करने की कोशिश कर रही है। समुदायों में मानव अधिकारों के बारे में जागरूकता बढ़ाने और अक्षम बच्चों और वयस्कों के समावेशी शिक्षा और स्कूल से परे जीवन में सफल होने के सकारात्मक उदाहरणों को सार्वजनिक करने से चुनौतियों को दूर किया जा सकता है। हमें सभी बच्चों के लिए शिक्षा को

आनंदमय बनाने के लिए सीखने की एक समावेशी डिजाइन विकसित करने की आवश्यकता है ताकि उनके लिए शिक्षा का स्वागत, शिक्षार्थी के अनुकूल और लाभदायक हो और वे इसके अलावा नहीं बल्कि इसके एक हिस्से के रूप में महसूस करें। इसलिए, इन बच्चों को और अधिक प्रभावी ढंग से कैसे शिक्षित किया जाए, इस सवाल के एक अच्छे समाधान के रूप में शामिल किया गया।

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The Role of Resilience and Psychological Well-Being in School Engagement and Perceived Academic Performance: An Exploratory Model to Improve Academic Achievement

Swati Shikha*

ABSTRACT

The aim of the present study is to examine the relationship between resilience, subjective well-being and academic achievement (i.e., school engagement and perceived performance). To achieve this, a battery of instruments was applied to 945 Compulsory Secondary Education students from Basque Country (425 boys and 520 girls) of medium socio-cultural level and aged between 12 and 17 (Mage = 14.50, SD = 1.82). The study tests a structural model for analyzing the effects of resilience and subjective well-being on school engagement and perceived performance. The findings provide evidence in favor of the influence of resilience and subjective well-being as decisive psychological variables in the prediction of school engagement and perceived performance. Finally, the results of this study highlight the need to foster education of resilience and subjective well-being to improve academic achievement among adolescent students.

Keywords:- Resilience, Subjective Well-Being, School Engagement, Academic Achievement, Adolescence.

INTRODUCTION

Although resilience is an object of study in many different disciplines within the social and health sciences, there is currently no single definition of the term that has been unanimously accepted by the scientific community [1]. However, almost all definitions are built around two key aspects: significant exposure to risk and positive adaptation [1, 2]. According to the American Psychiatric Association [3], resilience is the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress.

From this eminently human-centered perspective, numerous definitions of resilience have been proposed in the field of psychology, with each being subject to the specificities of the various conceptual trends endorsed by their authors and hence the widely accepted need to clarify and specify the construct [4]. As so as it often happens with scientific terms, there is currently no consensus regarding the definition of resilience in research, although the majority of authors agree that it involves resistance to or a positive and effective way of coping with situations of risk and adversity [1].

Therefore, on the one hand, we have those definitions which view resilience as a process. In this sense, Masten [1] defined it as the capacity for or the result of successful adaptation despite challenging or threatening circumstances. Later, Luthar and Zigler [5] described resilience as a

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dynamic process which results in positive adaption within a context of severe adversity. These authors distinguished three main aspects to this construct: adversity, positive adaptation and the emotional, cognitive and sociocultural mechanisms which influence human development. Luthar et al. [6] defined resilience as a dynamic process encompassing positive adaptation in a context of significant adversity. In other words, the individual is exposed to a high-intensity risk and yet, at the same time, deploys a series of adaptive behaviors despite the impact of possible threats to their development process. Another similar definition was proposed by Masten [7] and refers to resilience as a type of phenomenon characterized by good results despite serious threats to adaptation or development. Subsequently, Luthar [8] defined resilience as the expression of positive adjustment despite the significant adversities of life, while Wyman et al. ([9], p., 308) stated that “resilience reflects a diverse set of processes that alter children’s transactions with adverse life conditions to reduce negative effects and promote mastery of normative developmental tasks.”

However, resilience has also been understood as the individual capacity or ability to survive and regain one’s balance after experiencing certain traumatic events. Richardson et al. [10] suggested that resilience develops thanks to an intrinsic or extrinsic driving force that emerges from the processes of overcoming trauma. Based on this theoretical model [10, 11], Connor and Davidson [12] defined resilience as the set of personal qualities that enable a person to prosper in situations of adversity. In other studies, resilience has been defined as a synonym of vulnerability reduction [13], the ability to tolerate experiences of change and adversity [14], the ability to adapt to adversity [15], effective coping [16], a complex behavioral repertoire [17] and personal stability or recovery [18].

Nevertheless, despite these differing definitions, a series of common characteristics can be identified which relate resilience with human strengths, some kind of disturbance and subsequent growth, adaptive coping and positive results despite adversity. This study is based on the definition of resilience proposed by Connor and Davidson [12], who claimed that the phenomenon encompassed personal qualities that enable the individual to prosper despite exposure to adversity

[7]. Based on Richardson’s model [10, 11], these authors opt for a variable construct, rather than a static vision of what resilience means. Indeed, at an empirical level, it has been demonstrated that resilience is a multidimensional characteristic which varies in accordance with context, time, age, sex and cultural origin, and may even emerge in different ways in the same individual, depending on their circumstances [19]. From this perspective, resilience is seen as referring to a pattern of positive adaptation, with resilient individuals demonstrating a resilient pattern or resilient qualities, which enable them to cope successfully with stress. In turn, this individual set of resilient qualities is itself immersed in a process of dynamic interaction with other intrinsic or environmental variables which influence the individual’s ability to adapt to adverse situations.

As mentioned above, the increasingly popular salutogenic approach offers the opportunity to examine the role of resilience in the field of clinical psychology. As Ursano points out ([20], p., 274), “the study of response to trauma should include the study of resilience and health.” In specific terms, the antecedents of Connor and Davidson’s model [12] are subject to the efforts made by these two researchers to assess resilience as an index of health or well-being.

The Connor-Davidson Resilience Scale (CD-RISC) [21] was developed specifically to measure the effects of pharmacotherapy and other therapeutic intervention methods. The clinical improvement observed in the study was documented by the scale, with high scores in resilience being proportional to the global improvement experienced by the individual. According to Prince-Embury [22], these results are relevant because scores on the scale have been shown to be sensitive to real changes in subjects’ psychological well-being, thus suggesting that high resilience levels are related to an improvement that goes beyond the mere alleviation of symptoms. They are also important because

they indicate that resilience is subject to change. Thus, the study helped corroborate the fact that resilience is quantifiable, modifiable and can be improved through interventions [12, 23].

One of the variables that is related to both resilience and the academic field is psychological well-being. Psychological well-being can be divided into three basic components: (a) satisfaction with life;

(b) positive affect; and (c) negative affect [24]. Thus, for a person to achieve high levels of subjective well-being, they need to feel satisfied with life, have a predominantly positive affectivity and a low level of negative affect. Thus, psychological well-being is purely evaluative and subjective, the most important element being how each individual assesses his or her own life [25].

The inclusion of the satisfaction with life concept as a key variable in psycho-educational studies is a positive development, since the manifestation of the feeling of well-being in relation to oneself can be considered a personal development milestone within the educational context [26].

Satisfaction with life has been identified as a cognitive component of subjective well-being and is expressed in the form of an individual's global judgment of their life [27]. As such, life satisfaction is the result of the comparisons made by the subject regarding the events of their life, against a standard established by themselves [28]. Satisfaction with life is therefore conceived as a resulting variable that assesses the self-perception of global satisfaction.

As regards positive/negative affect, a person's position on the psychological well-being scale is a result of their position in two independent dimensions: positive affect and negative affect [29]. Thus, an individual will have a high level of psychological well-being to the extent to which positive affect predominates over the negative affect. These two dimensions are independent from each other, making it impossible to predict a subject's score in the negative dimension on the basis of their score in the positive affect one and vice versa. The most recent study found [30] corroborates this, since satisfaction with life was observed to correlate significantly with both positive and negative affect, with all correlations being moderately strong, while positive and negative affect were not found to be significantly correlated with each other, thus indicating that they are independent constructs.

Subjective well-being, commonly called "happiness," is affected by a number of psychological factors, including resilience. Scientific research has found that, firstly, resilience is positively associated with satisfaction with life and, secondly, that it is negatively associated with negative affect and positively associated with positive affect [31]. It is also known that resilient people who progress toward their goals have higher levels of positive affect and satisfaction with life [32]. In other words, those individuals who cope with and adapt better to stressful situations and adversity feel better about themselves and are happier than their non-resilient counterparts.

In broad terms, subjective well-being provides a measure of how good we feel about ourselves and how happy we are. Although we are dealing here with a concept that is difficult to delimit, most authors agree that the following elements should, at least, be taken into account: its subjective nature, which is rooted in each individual's own experience; its global dimension, since it encompasses an assessment or judgment about all aspects of life; and the need to include positive measures, since its nature goes beyond the mere absence of negative factors. It is therefore important to consider the effect of resilience on two major dimensions: the cognitive and the emotional or affective dimension.

A positive relationship has been observed between resilience and satisfaction with life, with those evincing a resilient pattern tending to believe in their own ability to overcome adverse situations, which translates into a greater sense of well-being [33]. Indeed, resilience has been consistently identified as a particularly relevant variable for satisfaction with life in diverse studies which report a positive, concurrent relationship between resilience and this construct. In other words, sufficient

empirical evidence exists to confirm the beneficial effect of resilience on satisfaction with life. Indeed, longitudinal studies have verified that resilience during the first phase

of life strongly predicts satisfaction with life during the second phase [32, 34]. Resilience has also been found to correlate positively with satisfaction with life and negatively with depression, through the mediator mechanism known as the cognitive triad (positive cognitions about oneself, the world and the future) [31].

The empirical evidence found in this field confirms diverse theoretical models which provide specific information about the association between resilience and well-being indicators. In this sense, resilience has been found to play a mediator role in the relationship between positive affect and satisfaction with life, suggesting that people who feel happy have higher levels of satisfaction not only because they feel better, but also because they have developed psychological resources such as resilience in order to live better [35]. Empirical conformation has also been provided for another model in which resilience serves as a predictor variable of the cognitive-evaluative component of subjective well-being, that is, the more resilient a person is, the more satisfied they feel with life [36]. It has also been proposed that the link between resilience and satisfaction with life is strongly mediated by the affective aspect of subjective well-being [37].

Thus, one of the psychological traits that foster satisfaction with life is the individual capacity to overcome adversity and grow despite it. It seems that those who adapt better to stressful situations and more easily to adversity are also those who feel most satisfied with their lives, unlike their non-resilient counterparts.

A large number of studies report a strong link between psychological resilience and positive emotional states, finding that individuals with a resilient profile experience more positive emotions in stressful situations than less resilient subjects, even though they experience similar levels of negative emotions. This is because they have a greater capacity to overcome adversity and grow

[38]. A diverse range of methodologies (self-reports, observation and longitudinal studies) have been used to demonstrate that resilient people are characterized by having positive affect, with findings indicating that these individuals possess an enthusiastic and energetic attitude to life, as well as curiosity and openness to new experiences [39, 40]. They also tend to deploy positive emotions in order to effectively cope with adverse situations, including humor [7, 19], relaxation [41] and optimistic thought [42]. Folkman and Moskowitz [43] argue that attaching a positive meaning to the events of everyday life and having a problem-centered coping style may help generate positive emotions in adverse situations. In other words, resilience has been found to facilitate positive affect and alleviate negative affect.

There is also support, however, for a relationship in the opposite direction, with positive emotional states leading to higher levels of resilience in the future [44]. This means that resilience is partly due also to the appearance of positive emotions, since when faced with a stressful event, the balance between positive and negative emotions has an impact on how the individual copes with adversity [38]. In the review conducted by Salovey et al. [45] on the effects of positive emotions, one of the aspects analyzed was related to the immune system, since being optimistic and having positive emotions provides the body with resources for coping with health problems, fosters the development of resilience and may motivate healthy behavior. In other words, positive emotional states may facilitate healthy behavioral practices, providing individuals with the resilient capacity they need to cope with the possibility of having or developing serious health problems. These same authors point out the existence of empirical findings that are consistent with the association between positive emotional states and an increase in the availability of psychological resources such as resilience.

Tugade et al. [16] argue along the same lines when they state that positive emotions are not simply a product of resilient traits but also play a very important role in resilient people's capacity to recover from stressful events. Positive emotions broaden cognitive and behavioral repertoires, playing a reparatory role in situations which generate negative emotions. This theoretical perspective suggests that the ability to feel positive emotions constitutes an essential part of the mechanisms which protect against adversity. Moving further along in this direction, the theoretical work carried out by Greco et al. [46] suggests that positive emotions are a resource which fosters the development of a resilient process during childhood.

Finally, the research conducted by Ong et al. [47] suggests that resilience generates other adaptive assets, catalyzing or triggering a cascade of positive experiences. In comparison with people who have low resilience levels, highly resilient individuals have a greater capacity to react to situations and are more disposed to view daily events in a positive light. These authors later added the observation that positive emotions constitute a basic building block for resilience [47]. The results of their research indicate that feeling positive emotions fosters the ability to adequately recover from circumstances of daily stress. Swaminath and Rao [48] argue something similar in their theoretical review of studies which have contributed to identifying the tangible effects of positive emotions, highlighting the influence of positive affect on cognitive flexibility and the construction of psychological resources such as resilience, optimism and creativity.

In any case, the findings of the aforementioned studies suggest a relationship between the aspects of resilience and the positive dimension of emotionality. As for the direction of this relationship, it is clear that resilient people are characterized by their ability to feel positive emotions when faced with situations of risk or adversity. Equally, positive affect has been identified by empirical studies as one of the factors, which fosters resilience. In short, one may assume that resilience is a good indicator of affective balance, which implies feeling more positive and fewer negative emotions, although this relationship has hardly been explored at all to date.

Although the usefulness of resilience in school contexts has been widely recognized [49], the application of a resilience-based approach within educational research is unusual [50]. Consequently, prior research analyzing the relationship between resilience and school engagement is scarce [51], although with the emergence of positive psychology a number of studies have linked resilience to other educational factors and variables such as the presence of a motivational climate in the classroom [52], the use of diverse motivational and emotion regulation strategies and academic performance among adolescents [53]. Therefore, and although it has not yet been fully established that resilience is indeed a stable predictor of a higher level of school engagement, a positive correlation can be hypothesized between the two variables, with students who respond in a more resilient manner to stressors in the school context being more likely to react in an adaptive fashion to the school itself and their academic work. They are also more likely to participate more in school life and dedicate more time to learning tasks than their non-resilient counterparts.

We found only two studies which refer to the effect of resilience on school engagement. The first one was conducted from a community perspective and reports that certain contextual factors associated with resilience (cultural adherence and commitment to the community) affect school engagement, suggesting that greater school engagement may be the result of efforts by the school to improve certain resilient aspects of the environment [54]. The second study is a recent publication that links resilience with school engagement [51] and aims to identify the external and internal factors that predict resilience in a sample of students in a socially disadvantaged situation, observing a positive relationship between the two study variables. It has also been

found that non-resilient students are more impacted by contextual risk variables (neighborhood, school climate or

risky friendships), with resilience softening the negative effect of said contextual factors on academic performance [53]. Other authors have observed too that students with better academic results score higher for certain characteristics associated with resilience [55]. Similarly, it is worth highlighting the existence of a large body of research that, when studying “academic resilience,” defines the construct as performance, with resilient students being seen as those who achieve good academic results [56].

Finally, and from the perspective of psychopedagogic guidance rather than scientific research, Skinner and Pitzer [57] propose a perspective on school engagement that emphasizes its role in organizing the daily school experiences of children and youth, as well as their cumulative learning, long-term achievement and eventual academic success. The proposed intervention is enriched by the inclusion of concepts such as “daily resilience,” which focuses on the analysis of how students respond to mistakes, difficulties or failures at school. The authors conclude that the same personal and interpersonal resources that promote engagement may shape students’ reactions to challenges and obstacles, with academic coping being an especially important bridge back to reengagement.

Only a few studies to date have focused on the impact of satisfaction with life and emotions on indicators of school adjustment, and there is a pressing need for more empirical evidence regarding the relationship between the indicators of personal well-being and educational variables [58].

Nevertheless, it is a well-accepted fact that students’ perception of their own well-being is better the more engaged they are with their school [59]. In this sense, prior research suggests that subjective well-being is a strength related to adaptive results during adolescence, including positive school experiences [60]. Based on the importance of simultaneously analyzing all three components of subjective well-being [61], Heffner and Antaramian’s study [62] demonstrated that both satisfaction with life and affective states predict adaptive functioning and even flourishing at school, represented by the following indexes: school engagement and academic performance.

If we look at the cognitive component of subjective well-being separately, we see that it has been consistently linked to school adaptation indicators such as perceived academic ability, positive attitudes toward school, school engagement and the value of the importance of school [63]. There are also theoretical approaches which support the connection between academic performance and satisfaction with life [64]. As regards the affective component of subjective well-being, longitudinal studies have linked negative emotions with non-adaptive results at school and school failure [65]. In relation to the positive affect indicator of subjective well-being, evidence exists, which points to positive emotions being associated with school success [62].

In addition to the information reported regarding each of the study variables and their interrelations, evidence also exists of the indirect effect of contextual variables on satisfaction with life, with school engagement as a mediating variable of the said effect [66].

Most prior research has focused on analyzing the relationship between these variables, either in a bivariate fashion or in short-reaching descriptive methodologies. More advanced research methods are required that are capable of establishing relationships of influence between the different variables in order to enable the testing of predefined explanatory theoretical models. One such research method is structural equation modeling (*SEM*). Taking all the relationships between all the variables outlined above into consideration, a hypothesized theoretical model was developed according to which resilience directly predicts subjective well-being and indirectly predicts engagement and perceived academic performance levels through subjective well-being (See Fig.-1).

Figure 1. Proposed theoretical structural model.

METHOD

Participants

Participants were chosen from among secondary school students attending schools in the Autonomous Region of the Basque Country (ARBC). The sample group comprised 945 adolescent students (425 boys and 520 girls; Mage = 14.50, SD = 1.82; range 12–17) from a mid-level socio-cultural context. The students were distributed throughout the different school years as follows: Year 1 of Compulsory Secondary Education (CSE) (25.2%); Year 2 of CSE (18.7%); Year 3 of CSE (18.7%); Year 4 of CSE (16.1%); and the 2-year Spanish Baccalaureate (21.9%).

Variables and measurement instruments

Resilience was evaluated using the CD-RISC 10 Resilience Scale [67]. The 10 items of this abbreviated version of the Connor-Davidson Resilience Scale [12] are scored on a 5-point Likert-type scale (higher scores reflecting greater resilience until 40). The reliability and validity of the CD-RISC 10 to be adequate in one large sample of adolescents were found [69]. In this study, the internal consistency coefficient obtained was $\alpha = 0.75$.

The Spanish version of the Satisfaction With Life Scale (SWLS) by Diener, Emmons, Larsen and Griffin [28, 68] was used to evaluate satisfaction with life. This scale measures global cognitive judgments of satisfaction with one's life on a 7-point Likert-type scale. The internal consistency coefficient obtained for the sample used in the present study was $\alpha = 0.82$. The minimum score is set at 5, while the maximum score is 35 points. The authors have also established the following rating ranges for a better interpretation of their results: from 31 to 25 = extremely satisfied; from 26 to 30 = satisfied; from 21 to 25 = slightly satisfied; 20 = neither satisfied nor dissatisfied; from 15 to 19 = slightly dissatisfied; from 10 to 14 = dissatisfied; from 4 to 9 = extremely dissatisfied. This questionnaire has been implemented successfully in various studies with populations of adolescents [66, 69].

Affect balance was measured using Bradburn's Affect Balance Scale [29]. The scale comprises 18 items to which responses are given on a 4-point Likert-type scale. The scale has shown adequate reliability and validity in a population of adolescents [24]. The Cronbach's alpha reliability coefficients obtained with our sample were positive affect (0.78) and negative affect (0.78). The score obtained by a subject is within a theoretical range between 9 and 36 points for each positive or negative scale.

School engagement was evaluated using the School Engagement Measure (SEM) by Fredericks, Blumenfeld, Friedel and Paris [70, 71]. The measure consists of 19 items to which

participants respond on a 5-point Likert-type scale. Based on these 19 items, the authors obtain 3 factors which measure behavioral (with 4 items), emotional (5 items) and cognitive engagement (7 items), which are the 3 measures used for this study. The reliability assessment resulted in adequate internal consistency indexes for all three factors. With the sample group used in this study, the internal consistency for the scale was $\alpha = 0.72$ for behavioral engagement, $\alpha = 0.70$ for emotional engagement and $\alpha = 0.78$ for cognitive engagement. The possible score in the behavioral dimension ranges from 4 to 20, in the emotional dimension from 5 to 25 and in the cognitive one from 7 to 35 [71].

Perceived academic performance was evaluated using the Brief School Adjustment Scale (EBAE- 10. by Moral de la Rubia et al. [72]. This multidimensional questionnaire comprises 10 items with 6 response options, grouped into 3 indicators of school adjustment: problems with school integration, academic performance and academic expectations. For the purposes of this study, only the academic performance subscale was used, referring to participants' perceptions of their own performance as students. The subscale comprises three items, including "I get good grades" and "I think I'm a good student." The internal consistency of the subscale was $\alpha = 0.77$. The total score ranges from 3 to 18 and a higher score indicates a higher level of academic performance.

Procedure

A number of schools were randomly chosen from a list of all schools in the Autonomous Region of the Basque Country (ARBC), and different year groups within each school were selected in accordance with the interests of the study. The battery of questionnaires was administered to participants class by class during school hours. Throughout the process, care was taken to ensure that all participation was strictly voluntary, and the anonymity of the responses given was protected in order to reduce the social desirability bias. The single blind criterion was used, with students being unaware of the purpose of the study. The study complied with the ethical values established for psychological research and assessment and respected the basic principles laid out in the American Psychology Association's (APA's) ethics code and in current regulations (informed consent and the right to information, protection of personal data and confidentiality guarantees, non-discrimination, non-remuneration and the right to withdraw from the study at any time).

Data analysis

Missing values (2.1%) were inferred using the expectation maximization (EM) algorithm and the Markov chain Monte Carlo (MCMC), offered by the LISREL 8.8 program. Extreme values (1.3%) were eliminated using the SAS program. To ensure normality, the bootstrap method was applied, as offered by the AMOS 24 program.

A Pearson correlation analysis was conducted between the study variables with the aim of determining any possible connections between them and to verify the non-existence of multicollinearity. A descriptive analysis was also carried out of the means and standard deviations of all the study variables. Both the descriptive statistics and the correlation coefficients were calculated using the SPSS 22 program. To test the structural regression model we used the structural equation modeling (SEM) technique, provided by the AMOS 24 program. In the first step, the measurement model is analyzed to check that each of the latent variables is represented by its indicators. In the second step, the analyses for testing the structural model are carried out using the maximum likelihood (ML) procedure.

Results Measurement model

The measurement model included four latent variables (resilience, subjective well-being, school engagement and perceived academic performance) whose indicators, in the case of resilience and perceived academic performance, were the items on the questionnaire administered. As for the variables subjective well-being (satisfaction with life, positive affect and negative affect) and school engagement (cognitive engagement, behavioral engagement and emotional engagement), the indicators were the parcels of the different scales. The analysis of the measurement model

(see Table 1) revealed an acceptable fit: $\chi^2(129) = 491.471, p < 0.001; CFI = 0.921; TLI = 0.906; SRMR = 0.050; RMSEA = 0.054$ (90% CI = 0.049–0.060). All factor loadings of the latent variable indicators were significant ($p < 0.01$), which implies that all latent factors are represented by their corresponding indicators.

Table :-1. Goodness of fit parameters for the complete mediation model (M1).

Model	$\chi^2(df)$	CFI	TLI	SRMR	RMSEA(CI)
M ₁	665.196 (131)	0.883	0.864	0.057	0.066(0.049– 0.060)

Note: CFI and TLI > 0.90 (acceptable fit); RMSEA and SRMR 0.05 ≥ 0.08 (acceptable fit).

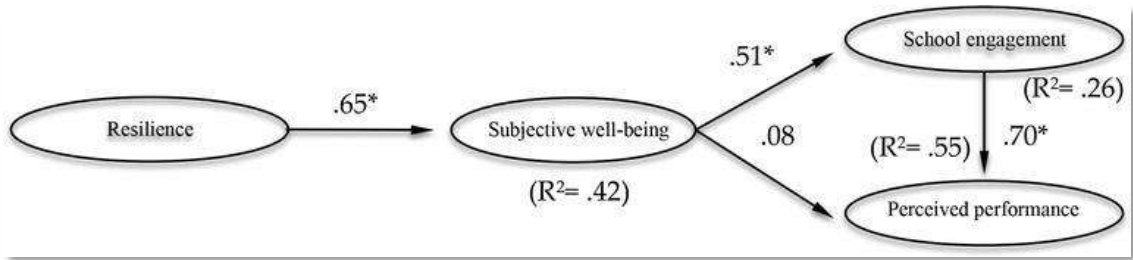
Theoretical model analysis

Once the measurement model had been analyzed, the global fit of the proposed theoretical model (Figure-1) was estimated. This model proposes that resilience is positively related to subjective well-being which, in turn, has predictive power for school engagement and perceived academic performance, thus playing a mediator role between resilience and the two indicators of school adjustment.

The complete mediation model (Figure-2) postulates that resilience is positively related to subjective well-being, which has predictive power for both indicators of school adjustment, thus playing a mediator role between resilience and school engagement and perceived academic performance. An initial analysis of the resulting parameters revealed that the model fit the empirical

data in an acceptable manner, ($\chi^2(131) = 665.196, p < 0.001; GFI = 0.928; CFI = 0.883; TLI = 0.864; SRMR = 0.057; RMSEA = 0.066; RMSEA$ confidence interval 90% = 0.049–0.060).

Figure 2 : Standardized solution of the complete mediation model.



Direct and indirect effects between the study variables

When the regression coefficients of the proposed model were analyzed separately, it was found that all the direct pathways proposed were significant at a level of $p < 0.01$, with the exception of the subjective well-being-perceived academic performance pair ($\beta = 0.080$, $p > 0.0$). Specifically, resilience was found to have a predictive power of 65% for subjective well-being. As regards the indicators of school adjustment, subjective well-being was found to directly determine school engagement ($\beta = 0.510$, $p > 0.01$), which in turn predicted perceived academic performance ($\beta = 0.697$, $p > 0.01$).

As regards the indirect effects on both indicators of school adjustment (school engagement and perceived academic performance), for which the proportion of variance explained was 26% for school engagement and 55% for perceived academic performance, the results indicate that resilience has an indirect effect on school engagement, mediated by the level of subjective well-being. Furthermore, if perceived academic performance is added to this last pathway, then subjective well-being and school engagement act simultaneously as mediator variables between perceived academic performance and resilience ($\beta = 0.355$, $p > 0.01$).

Discussion of the results

As we had hypothesized, during compulsory secondary education, resilience predicts subjective well-being directly and school engagement and perceived academic performance indirectly. It is therefore clear that perceiving oneself as being able to cope successfully with adverse situations has a significant impact on young people's personal and school-related adaptation. Thus, the results of this study confirm that postulated by prior research [16]. The idea that subjective well-being is present in people who are capable of successfully coping with the challenges and problems of life are a reasonable one. However, it was necessary to demonstrate this idea among the adolescent population and indeed, the results obtained here do just that.

The findings reported by studies focusing on the satisfaction with life construct support both the formulation of the hypothesis regarding its dependence on resilience and the results obtained in this regard here. Empirical evidence exists of the role played by resilience as a predictor variable which has a positive effect on the cognitive component of subjective well-being [36]. Similarly, it has been suggested that resilience catalyzes or triggers a cascade of positive emotions in situations of stress [38], and it is therefore likely that there is also a dependent relationship between resilience and the affective component of subjective well-being.

Consequently, the results of this present study demonstrate that, as we expected, resilience has a direct, positive influence on subjective well-being, measured through satisfaction with life and

emotional experience. It is important to highlight the fact that, as found in other studies also [73], resilience has a strong predictive power for positive affect, followed by satisfaction with life and, finally, negative affect. Consistently with that reported by previous studies, we can therefore confirm the idea that people's perceptions of their own capacity to overcome adversity are one of the key aspects which determine their feeling of personal well-being [33]. Thus, it can be concluded that a stronger perception of one's ability to cope with challenges and risks leads to a more positive assessment of one's life so far and prompts more positive and fewer negative emotions. As such, resilience influences personal adaptation during adolescence.

The relationship between resilience and school engagement has been analyzed by only a few studies, all of which coincide in identifying a positive relationship between the two variables [54]. At the same time, other studies confirm the close links between resilience and other educational variables which, like school engagement, are indicators of school adjustment [52]. However, no studies exist which focus on the influence of resilience on school engagement from the three-dimensional perspective adopted here. In this sense, the relationships analyzed in the regression model and the results obtained therefore make a novel contribution to this particular field of study. The results reported here show that the indirect predictive power of resilience for school engagement is significant, with high levels of resilience prompting individuals to become more engaged in school activities, probably because they see themselves as being more capable of coping with the adverse situations that may arise in the school context, thanks to their higher level of resilience [65] and their greater degree of subjective well-being. When adolescent students feel more able to cope with adversity, they feel happier and more satisfied with life, and both of these facets prompt them to engage more in school activities (behavioral engagement), identify more with the school (emotional engagement) and invest more in the learning process (cognitive engagement).

Another finding worth highlighting is the direct influence of psychological well-being on school engagement. This finding partly confirms that reported in previous studies, such as the one by Heffner and Antaramian [62], in which the authors argue that components of subjective psychological well-being (satisfaction with life and affective states) predict adaptive functioning at school, represented by the school engagement and school performance indexes. While the structural model tested in this study highlights the direct influence of subjective well-being, it only does so in relation to school engagement, not perceived academic performance, which it influences indirectly through school engagement. In other words, students with higher levels of psychological well-being also feel more engaged at school and consequently have a better perception of their academic performance as a result of this engagement.

The structural model that was empirically tested in this study revealed resilience and subjective well-being to be decisive psychological variables for predicting both school engagement and perceived academic performance. The fact that students' resilience and subjective well-being are factors which explain part of the variation observed in school engagement (indirectly in the first case and directly in the second) reaffirms the importance of focusing on these variables in educational contexts [69]. However, it also provides important insights into how to act: for students who feel less engaged at school, preventive education and psychological intervention in the school environment should focus on fostering resilience, the achievement of greater satisfaction with life and actions designed to increase positive affect. Only in this way will we help students become more engaged in the school context, which will in turn undoubtedly help improve their academic results.

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समस्याओं में फँसी कामकाजी महिलाएँ : एक सर्वेक्षण

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भारत में यदि नारी मुक्ति का बिगुल बजा है तो केवल एक ही सुर में, यानी महिलाओं को घर की चहारदीवारी से बाहर निकलकर कामकाल में संलग्न कर दीजिए और समझ लीजिए कि बहुत बड़ा अहसान महिलाओं के ऊपर कर दिया है, किंतु यह यक्ष प्रश्न हमेशा रहेगा कि क्या सचमुच महिलाओं के घर से निकलने तथा कामकाजी होने मात्र से उनकी समस्याओं का निदान हो जाएगा? या क्या वे वास्तव में शोषण से मुक्त हो जाएँगी?

महिलाएँ कामकाजी तो सदा से रही हैं बल्कि घरेलू जिंदगी में कोल्हू के बैल की तरह जुटी हुई हैं। हॉ इतना अवश्य है कि बाहरी कार्यक्षेत्र में आने से उनके कार्य को महत्व मिला है जो उन्हें घरेलू कार्यों में कतई नहीं मिलता बल्कि घरेलू कार्यों को उनका जन्मसिद्ध अधिकार समझा जाता है, जिन कार्यों की न तो कभी तारीफें मिलती हैं और न ही उसका कोई मूल्य समझा जाता है।

शिक्षा के क्षेत्र में जागृति आने से महिलाओं के कदम विभिन्न रोजगारों की ओर अग्रसर हुए हैं। एक रिपोर्ट के अनुसार वर्ष 1981 से 1991 के दशक में रोजगार में पुरुषों की संख्या 21.4% बढ़ी है, जबकि महिलाओं के आँकड़ों में 42.66 4% की वृद्धि हुई है। इस तरह के आँकड़ों महिलाओं में अंकुरित हुए आत्मविश्वास को दर्शाते हैं जो अपनी योग्यता, कार्यक्षमता से राष्ट्र की उन्नति में सक्रिय भागीदारी दर्ज करा रही हैं। लगता तो यही है कि रोजगार के क्षेत्र में कदम रखने से महिलाओं को कुछ फायदे नसीब हुए हैं किंतु वास्तव में उन्हें परंपरागत कठिनाईयों के अलावा समस्याओं का अंबार भी सौगात के रूप में मिला है। कोई भी महिला बाहरी तौर पर किसी कार्यक्षेत्र को अपनाते का निर्णय सदियों से चले आ रहे रूढ़ियों के भँवरजाल से निकलकर लेती हैं।

फिर उसका अपने कार्यक्षेत्र में बने रहना या न रहना आज भी उस पर स्वयं निर्भर न होकर विवाह पूर्व पालकों पर तथा विवाह पश्चात ससुराल पक्ष पर निर्भर करता है। वर्तमान में अधिकांश लड़के उसी लड़की को पत्नी स्वीकार करते हैं जो घरेलू कामकाज के साथ-साथ नौकरीपेशा भी हो। क्योंकि परिवार में सोने का अंडा देने वाली कामकाजी बहु आर्थिक सहारा सिद्ध होती है।

इसीलिए कई बार यह भी देखने में आता है कि महिला स्वयं अपनी कमाई पर भी कोई अधिकार नहीं जता पाती उसे अपने वेतन का पूरा हिसाब घर में देना होता है। यदि घर में नौकर-चाकर हो तो उनका वेतन, राशन, बच्चों की फीस, दवाई, कपड़े आदि का खर्च पूरी तरह से उसके वेतन पर निर्भर करता है।

महिला स्वयं पर खर्च करने में भी ऊहापोह की स्थिति में रहती है। घरेलू कार्यों तथा बच्चों की देखभाल से तो कभी मुँह मोड़ नहीं सकती। सारा दिन दफ्तर में पुरुषों के साथ बराबरी का कार्य करने के बावजूद घर में पति का सहयोग अर्जित करने का उसमें कोई साहस नहीं होता है। बच्चों की परवरिश के लिए यदि

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समय नहीं दे सकती है तो हीनता बोध से महिला की ग्रस्त रहेगी। बच्चों में यदि कोई गलत आदत पनप जाए या वे कुसंस्कारित हो जाएँ तो इसकी जिम्मेदारी वही मानी जाएगी। दफ्तर के आवश्यक कार्यों में भी यदि नियत समय से अधिक संलग्न रही तो परिवार के सदस्यों की नजर हमेशा उसके चरित्र के इर्द-गिर्द ही मँडराती रहेगी।

अपने कार्यों को प्रगति देने से पूर्व उसे विचार करना आवश्यक हो जाता है। दफ्तर में सामूहिक मनोरंजन के कार्यक्रम पिकनिक, नाटक आदि में शरीक होना कामकाजी महिला को निरर्थक लगता है बल्कि उस समय को वह पति, बच्चों के साथ गुजारत है। कभी पति की अनुमति बिना इस तरह के आयोजनों में शामिल हो जाए तो शक्की नजरें उसे अंदर तक हिला देती हैं। कहने को तो हमारा समाज स्वतंत्रता की राह पर है किंतु विचारों का पिछड़ापन जहाँ का तहाँ है। विशेषकर महिलाओं के संदर्भ में। नौकरीपेशा महिला यदि अनजाने में भी खुलकर हँस-बोल ले तो दफ्तर में कई बेसिर-पैर वाले कहानीकार कल्पना में विचरण करने लगते हैं।

आज भी यौन शुचिता का परिवेश महिला को संपूर्ण रूप से खुलकर कार्य करने से रोकता है, उसमें निहित प्रतिभा को कुटित करता है। कामकाजी महिलाओं को इस समस्या से निजात पाने के लिए अपने व्यक्तित्व में सुदृढ़ता लाना चाहिए। सरकारी कार्यालयों में कार्यरत महिलाएँ अपेक्षाकृत सुरक्षित रहती हैं, किंतु निजी संस्थानों में काम करने वाली महिलाएँ बहुत ही बँधी-बँधी सी महसूस करती हैं।

अपने बॉस की इच्छा के विरुद्ध कार्य करने का आशय होता है नौकरी से हाथ धो बैठना। वैसे भी प्राइवेट संस्थानों के अनेक रोजगार विज्ञापनों में नौकरी की प्रमुख शर्त स्मार्ट, सुंदर व आधुनिक महिला होना होता है, योग्यता का मापदंड गौण होता है। इस तरह के विज्ञापन दबी-छुपी जर्जर मानसिकता को प्रकट करते हैं। दुर्भाग्य से कोई महिला इस तरह के दूषित परिवेश में कार्यरत हो और अपने बॉस का व्यवहार अनुचित लगे तो तुरंत दृढ़ता से प्रतिक्रिया व्यक्त कर जता देना चाहिए कि उनका व्यवहार ऐसा नहीं होना चाहिए। तभी वह किसी को अपना अनुचित फायदा नहीं उठाने देगी।

नौकरी पेशा महिलाओं के लिए रात्रि ड्यूटी करना बहुत मुश्किल होता है। पुलिस, नर्स, होटल जैसे क्षेत्रा में कार्यरत महिलाओं में एक अज्ञात भय हमेशा व्याप्त रहता है। रात्रि ड्यूटी का उनके गृहस्थ जीवन पर भी असर पड़ता है। यदि पति-पत्नी भिन्न-भिन्न शहरों में कार्यरत रहें तब तो महिला बहुत ज्यादा असुरक्षित महसूस करती है। इसी तरह से दौरे पर कार्यवश बाहर जाने पर भी घर की जिम्मेदारी पति तथा बच्चों के प्रति आत्मीयता, स्वयं अपनी चिंता से नौकरी बोझिल लगने लगती है।

अनेक बार महिलाओं की इस तरह की नौकरी परिवार में अलगाव पैदा कर देती है। प्रसूति अवकाश का सीमित होना, नौकरी वेतन में पक्षपात जैसी समस्याएँ भी जटिल होती हैं किंतु वर्तमान परिप्रेक्ष्य में इन समस्याओं से मुँह नहीं मोड़ा जा सकता बल्कि निदान खोजना आवश्यक है। इसके लिए महिलाओं को अपने मन में विश्वास पैदा करना होगा साथ ही पुरुष प्रधान समाज को अपनी विचारधारा में परिवर्तन लाना होगा क्योंकि महिलाएँ अनेकानेक समस्याओं का सामना करते हुए भी समाज की प्रगति में सक्रिय हैं।

पुरुषों के साथ आर्थिक सहारा बनकर इस महँगाई के युग में परिवार को सबल बना करी हैं। फिर भी यदि उन्हें समाज में गरिमामय स्थान न मिले तो यह निंदनीय है। महिलाओं के लिए दूषित परिवेश के निर्माता

सहकर्मियों में ही मौजूद रहते हैं। अतः यदि हम चाहते हैं कि महिलाएँ प्रगति करें तो सहयोगी रवैया बनाना प्रथम उद्देश्य होना चाहिए।

समाज महिला से अधिक से अधिक क्षमता की अपेक्षा करता है तो उसके लिए कंकरीली-पथरीली पगड़ंडी के स्थान पर स्वच्छ मानसिकता वाली राह बनाना आवश्यक है। हरेक पुरुश को सोचना होगा कि हरेक पीड़ित महिला एक महिला होने के अतिरिक्त माँ, बहन, बेटी या पत्नी भी है। चिंतन के उदार होने तथा महिलाओं के संगठित होने पर ही कामकाजी महिलाओं की समस्याएँ कम होंगी।

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इतिहास के आइने में मिथिला की लोक संस्कृति

डॉ. शिव कुमार पासवान*

किसी भी क्षेत्र की संस्कृति उस क्षेत्र का दर्पण होता है। बिहार राज्य का मिथिलांचल क्षेत्र आदि काल से ही अपनी लोक संस्कृति के लिए विख्यात रहा है। लोक की अपेक्षा संस्कृति अधिक गतिशील होती है। मिथिलांचल की लोक संस्कृति धर्म आधारित है जिसका विस्तार अनुष्ठानिक पूजा-पात्र लोक देवी-देवता, थान एवं गहबर तथा गाथा गायन संगीतमय लोकानुरंजन आदि में द्रष्टव्य है इन कृतियों में क्षेत्रीय लोक संस्कृति के चिन्ह आरेखित हैं। इसके साथ ही लोक संस्कृति में आचार विचार, चास-वास, पर्व-त्योहार, नाच-गान, खेल-कूद, देवी-देवता, खान-पान आदि आता है। मिथिला के सांस्कृतिक विकास में लोक का अतीत एवं वर्तमान संचित है। जिस आधार पर भविष्य की कल्पना की जा सकती है।

मिथिला की लोक संस्कृति आदिम जातियों की संस्कृतियों की भांति सहज ज्ञान, मूल वासनाओं, भय और उल्लास का प्रकटीकरण नहीं है। वह तो वस्तुतः सनातन काल से प्रवाहित ज्ञान धाराओं, मध्य युग में उत्कर्ष प्राप्त कलाओं और साहित्य समुच्च तथा विधि नियम तथा कर्मकांडों में निबंध जीवनचर्चा, इन सभी से अनुप्राणित भी है और सुसज्जित भी है। इसलिए मिथिला ब्रजमंडल की संस्कृतियों में उनमुक्त भावनाओं एवं परिष्कृत शैलियों, नैसर्गिक अभिव्यजंन तथा नागरिक सुरुचि का जो समन्वय दिख पड़ता है वह शायद ही अन्य किसी लोक संस्कृति में मिलता है। मिथिला के साहित्य और इतिहास के तो अनेक अध्ययन किये जा चुके हैं। किन्तु वहां की चित्रकला, संगीत नाटक तथा रीति-रिवाजों का विभिन्न वर्गों की जीवन चर्चा से क्या संबंध है इसके विवेचन की बहुत आवश्यकता है।¹

मिथिला की संस्कृति अपनी एक अलग पहचान है। संस्कृति किसी समाज में पायी जानेवाली उच्चतम मूल्यों की वह चेतना है जो सामाजिक प्रथाओं व्यक्तियों चिंतकृतियों, भावनाओं मनोवृत्तियों के साथ-साथ उसके द्वारा भौतिक पदार्थों को विशिष्ट स्वरूप दिये जाने की अभिरिक्त है 2 दूसरे शब्दों में किसी क्षेत्र की सांस्कृतिक जीवन की पहचान में बौद्धिक चेतना के साथ-साथ उर्जा, पर्व-त्योहार, मेले, उत्सव और लोगों का समान सहन-सहन, खान-पान का अपना एक स्थान होता है। इसके साथ ही सभ्यता और संस्कृति का निर्माण एक शाश्वत, तथा एक सार्वभौमिक प्रक्रिया है जो सृष्टि के शुरुआत से जारी है और उस समय तक चलती रहेगी जब तक मानव जाति का अस्तित्व बचा रहेगा।³ लोगों में ज्ञान जब तक रहेगा सभ्यता का निर्माण होगा और जब तक अनुभव रहेगा संस्कृति का विकास होता रहेगा। समाज का व्यक्तित्व है, विचार, भावना आचरण कथा कार्यकलापों के विभिन्न प्रस्तरों से संस्कृति की सिद्धि होती है। विख्यात अंग्रेज विद्वान 'सर जान हाल्टन' ने बिहार को भारत का हृदय कहा है, इस भारत की हृदय और बिहार की आत्मा वहां की ग्राम यो लोग संस्कृति है। जिसने भारतीय संस्कृति के परिष्करण में योगदान किया है। मिथिला क्षेत्र बिहार के समस्त इलाकों में सांस्कृतिक दृष्टिकोण से सम्पन्न है ऐतिहासिक प्राचीनता के साथ-साथ सांस्कृतिक

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सम्पन्नता की दृष्टि से मिथिला के बाद मगही भाषी क्षेत्र मगघ है। मिथिला जहां जगत जननी सीता अवतरित हुई थी। यहां न्याय और साध्य के प्रवर्तक गौतम, कपिल, कनाद, जैमिनी आदि अवतरित हुए तथा मैथिल कोकिल विद्यापति ने लोक भाषा मैथिली में रचित अपनी कोमलकांत पदावली से वहां की लोक संस्कृति को संजोने संवारने का सफल प्रयास किया।

हमारी लोक संस्कृति का इतिहास पुराना है। इस लोक संस्कृति की आत्मा जन साधारण है। जो नगरों से दूर गांवों एवं वन पर्वतों में बसती है। यहां के ग्राम्य संस्कृति के मूलाधार जिन्हें आजकल अनपढ़ वनचर आदि की संज्ञा की दी जाती है, वहीं इस संस्कृति के जीवन्त प्रहरी है। हमारी लोक संस्कृति ने भारतीय संस्कृति के सर्वाधिक महत्वपूर्ण दान आत्मीयता का दिया है। अपने समान ही सबों का समझना भारतीय संस्कृति के अतिरिक्त किसी भी देश में नहीं है। लोक संस्कृति प्रकृति की गोद में पलती और पनपती है। लोक संस्कृति का उदगम और परिख्याति पर विचार करते हुए चिन्तकों ने स्पष्ट किया है कि सामान्य जनता में प्रचलित, आस्था, विश्वास परम्पराएँ एवं रीति-रिवाज की वास्तविक संस्कृति का निर्माण करते हैं। इन्हें सीखने के लिए किसी विश्वविद्यालय की शरण नहीं लेने पड़ती, बल्कि व्यक्ति अपने पूर्वजों के मुख से सुनकर एक विस्तृत समाज में लोगों को वैसा करते देखकर संस्कृति ग्रहण करता है। इसलिए हमारी लोकसंस्कृति ने भारतीय संस्कृति का सर्वाधिक महत्वपूर्ण दान 'आत्मीयता' का दिया।⁴

लोक संस्कृति को ऐतिहासिक दृष्टिकोण से अनुशीलन के लिए इन्हें निम्न खण्डों में वर्गीकृत किया जा सकता है। लोक धर्म, लोक साहित्य और लोक कला। लोक धर्म का प्राकृतिक परिवेश प्रकृति पूजन में केन्द्रित है। प्रो. प्रफुल कुमार 'मौन' ने लिखा है कि उत्तर बिहार के मिथिला और मधेश के जनपदों में राजा सलहेस अन्तर्राष्ट्रीय ख्याति के लोक देवता है। हिमालय के प्रदेश से गंगा तक का यह क्षेत्र इनकी कर्मभूमि थी। इनके शैर्य पराक्रम की वीर गाथाएँ लोकनाच, लोकमूर्तियाँ और चित्र परम्परित हैं। आज अनुसूचित जातियों-जनजातियों, पिछड़ों और उपेक्षितों को राष्ट्र की मुख्यधारा से जोड़ने का जो राजनैतिक उपक्रम हो रहा है, उसमें राजा सलहेस, लोरिक, दीनाभद्री, दुलरा दयाल आदि जैसे जनपदीय चरितों को प्रेरणास्पद प्रतीक के रूप में संदर्भित किया जा सकता है। इनकी गीत गाथाओं में जाति की अपेक्षा जनपदीय इतिहास संचित है।

"लोकधर्म" के अन्तर्गत सूर्य और चन्द्रमा का लोकपूजन, व्रत अनुष्ठान, कोहबर और अरिपनों में सूर्य, चन्द्रमा अंकन कल्याण प्रद माना जाता है। कमला कोशी जीवछ और गंगा को नदी देवी एवं बरगद, पीपल, नीम आदि देववृक्षों के रूप में लोकपूजित है। इस प्रकार मिथिला के लोकसंस्कृति में जितना महत्व पौरुष का है उतना ही प्रकृति का भी है। इसलिए मिथिला में पत्थर ही नहीं, नदी और पानी की भी पूजा की जाती है। बरगद एवं पीपल के साथ-साथ तुलसी भी पूजनीय है। लोक के द्वारा एवं लोक के लिए सृजित तथा लोक को अभिव्यंजित करता लोक साहित्य श्रुति और स्मृति परम्परा से संरक्षित होता है। अभिजात्य संस्कार से भिन्न जनपदीय भाषा में मुखरित मैथिली लोक साहित्य मानवीय उदगार की मौखिक अभिव्यक्ति है। डा. रामदेव झा ने लोकजीवन में प्रचलित परम्परा प्रवाह में निर्मित श्रुति साहित्य को लोक साहित्य कहा है जबकि सत्यव्रत सिन्हा इसे लोकानुरंजनी साहित्य कहते हैं।⁵ मैथिली लोकसाहित्य अत्यन्त समृद्ध है। लोक साहित्य में लोकोक्तियों को लोकज्ञान की संचित एवं परीक्षित निधि कहा गया है। इसमें जातीय मनोवृत्ति, मिथकीय अवधारणा, ऋतु जन्म प्रभाव, काल विचार आदि पदात्मक गद्यत्मक आदि रूप में वर्णित है।

मिथिला की लोककलाओं में चित्रकला प्राचीन कला है। यह मिथिला के सौन्दर्यबोधी लोकचिन्तन का प्रतिफलन है।⁶ मिथिला चित्रकला उत्तर बिहार के सम्पूर्ण मिथिला क्षेत्र की कला है। इसे व्यापक अर्थ में मिथिला चित्रकला कहा जाता है। यह कला मिथिला के मधुबनी, दरभंगा, सहरसा, पूर्णिया जिले के समस्त लोक जीवन की कला है। 1962 ई. के बाद से मधुबनी मुख्य रूप से इस कला के लिए केन्द्रीय स्थल बन गया। इसके प्रचार-प्रसार एवं विपणन के सारे कार्यक्रम मधुबनी को ही केन्द्र में रखकर तय किये गए। इसलिए मधुबनी के आसपास के गांवों में सर्वाधिक कलाकर्मी स्त्रियां अपने चित्रलेखन में पूरी आस्था के साथ अपने हृदय की धड़कनों को उतारने में परिपूर्ण नजर आती है। ये अपने कलाक्रमों में अंतरलिप्त है किन्तु इनके मन में अर्थ की उपादयता की कामना भी है। इस कला की सफलता केवल इस बात में अर्न्तनिहित नहीं थी कि इसके व्यापक प्रचार प्रसार भारत और दुनियाँ के अधिकांश विकसित और विकासशील देशों में हुए तथा लोगों ने इस नवीन एवं अनुपम चाक्षुश यथार्थ को बड़े उत्साह के साथ स्वीकार किया इसका वास्तविक सफलता तो यहां के जीवन में देखी गयी कि इसी बहाने यहां एक नई सांस्कृतिक जागरूकता आई और इससे जीवन के अनेक सामाजिक सांस्कृतिक मूल्यों का परिष्कार हुआ।⁷

यह लोक चित्रकला जो मधुबनी पेन्टिंग के नाम से विश्व विख्यात है। इस चित्रकला की पहचान दिलाने में डब्ल्यू जी. आर्चर, भाष्कर कुलकर्णी, पुपुल जयकर जापान के हाशीगावा तथा ग्रियर्सन आदि का नाम उल्लेखनीय है। आज यह चित्रकला मिथिला के घर-घर में रच बस गई और जो लोक संस्कृति से जुड़ा हुआ है। शादी ब्याह में कोहबर घर में इस चित्रकारी का प्रयोग किया जाता है। पूजा पाठ उपनयन संस्कार आदि में अरिपन इस चित्रकारी के माध्यम से बनायी जाती है। इस लोक चित्रकारी के द्वारा देवी-देवता जादू-टोना, गोदना, गोबर शैली जैसे चित्रकारी की जाती है। इस लोक चित्रकारी में श्रोतीय शैली, ब्राह्मण शैली, कायस्थ शैली, दलित एवं अन्य शैली में पेन्टिंग की जाती रही है। इसलिए मिथिला के घर-घर में यह चित्रकारी रची बसी है।

आज आवश्यकता है मिथिला की संस्कृति को संजोने की ताकि सदियों पुरानी परम्परा एवं गौरवमयी मिथिला की सांस्कृति पहचान बनी रहे। क्योंकि आधुनिकता के इस दौर में हम अपने संस्कार, संस्कृति के साथ अदभूत परंपराओं को भूल रहे हैं। इस बदलाव ने शहरी क्षेत्र को ही नहीं, ग्रामीण परिवेश को भी प्रभावित किया है। पहले जहां माय-बाबूजी जैसे सम्बोधन घर-घर में सुनने को मिलते थे वहीं अब इसकी जगह मॉम व डैड जैसे विदेशी शब्दों ने ले ली है। इतना ही नहीं, जन-जन के कंठ में संरक्षित लोकगीत भी अब लगभग विलुप्त होने के कगार पर है।⁸

अतः आज आवश्यकता है मिथिला की संस्कृति जैसे मूल्यवान धरोहर के रक्षा की इसके साथ ही मिथिला की लोक संस्कृति के अध्ययन मूल्यांकन एवं प्रकाशन की ताकि, विश्व पटल पर मानवता के प्रेरणा और प्रकाश देने हेतु इस ऐतिहासिक धरोहर पर शोध परक काम किया जा सके।

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डॉ. संजीव कुमार*

बुंदेलखंड के वाकाटकों के पूर्व और मौर्यों के बाद का बुंदेली समाज शुंग वंश नागवंश, सातवाहन, विक्रमादित्य, शक, कुशाण, नवनाग आदि शासकों की अधीनता में रहा है। इस समाज शासकों के बीच के बीच संघर्ष अधिक हुए हैं। इस युग को आचार्य द्दिवेदी ब्राह्मण साम्राज्य न मानकर हिन्दु संस्कृति का निर्माण युग मानते हैं जिसमें ब्राह्मण संघर्षशील तो हैं। परंतु आपस में ही बौद्धों के प्रति प्रतिक्रिया कहीं नहीं थी। सामाजिक राजनीतिक क्षेत्र में उथल-पुथल थी। धर्मशास्त्र को नवीन रूप दिया गया (यह सस्तुतः संकट की एक व्यावस्था थी) पर परवर्ती स्मृतिकार उसे आगे न बढ़ा सके। विभिन्न शासकों के समाज तंत्र में समान्वित किया गया। पं० द्दिवेदी लिखते हैं कि मान से या अपमान से यवन, शक, कुशाण सभी इस समाज तंत्र में खपा लिये गये। राजनीति में राजा की निरंकुशता का, उसके दैवी अधिकारों का जन्म भी इस युग से पहले ही हो गया था इस युग में ब्राह्मण राज हो गया। परिणाम यह हुआ कि जब आगे दैवी अधिकार वाले सम्राटों का अन्त हुआ तब राज्यपीठों के अपदस्थ हुए ब्राह्मणवंशों में पराजय, जन्य कुण्ठा एवं जन्म श्रेष्ठता की झूठी भावना घर कर गई और सम्राटों के दरबार के समान ही समाज में ऊँच-नीच एवं स्पृश्य-अस्पृश्य के भेद दिखाई दिये।

वाकाटक काल में अपने-अपने वर्ण के अन्तर्गत विवाह की अनुमति थी परंतु कभी-कभी अनुलोभ विवाह भी होते थे। वाकाटक रुद्रसेन का विवाह प्रभावती गुप्तों से होना इसका प्रमाण है। इसी प्रकार ब्राह्मण क्षत्रिय विवाह का भी उल्लेख मिलता है। ब्राह्मणों में उपपद प्रसिद्ध थे पर कुल के नाम से प्रचलित न हुए थे। वाकाटकों के लेखों में ऋग्वेदी और सामवेदी ब्राह्मणों का उल्लेख कहीं नहीं है। वर्ण व्यवस्था का पालन नियमानुसार था। वाकाटक काल में पत्थरों और कहीं-कहीं ईंटों से मन्दिर बाँधने की पद्धति प्रचार में आने लगी थी। अजंता की गुफाओं से ज्ञात होता है कि तत्कालीन राजप्रसाद, घर और दुकान लकड़ी के होते थे। कालिदास के साहित्य में तत्कालीन सामाजिक परिवेश का परिचय मिलता है।

वाकाटक काल में पौराणिक हिन्दु धर्म का भी अत्याधिक उत्कर्ष हुआ। उनके राज्य में सर्वत्र उनके हिन्दु देवी के देवालयों का निर्माण हुआ। अधिकांश वाकाटक राजाओं के शैव होने के कारण अन्य देवों की अपेक्षा भगवान शिव के मंदिरों का निर्माण संख्या में हुआ होगा। साहित्य के क्षेत्र में संस्कृत और प्राकृत दोनों की रचनायें लिखी मिलती हैं। स्थापत्य की दृष्टि जबलपुर के पास बहरीबंध और तीगोवा के मंदिर को ध्यान में रखना आवश्यक है।

वाकाटकों के समय बुंदेलखंड में शिवोपासना में साथ विष्णु पूजा में तीव्रता आई। कृष्ण और राम विष्णु के अवतार के रूप में पूजे जाने लगे। परशुराम को भी विष्णु का अवतार माना जाने लगा। विष्णु और शिव

*ललित नारायण मिथिला विश्वविद्यालय कामेश्वर नगर दरभंगा (बिहार)

के बीच अभिन्नता स्थापित की गई। यह हिन्दु संस्कृति के निर्माण का युग था जिसे पं० द्विवेदी ने शुगों के काल से ही माना है। शंगों के शासन काल में वैष्णव देवमंदिरों का निर्माण हो रहा था और पश्चिमोत्तर सीमाओं के यवन भागवत धर्म में दीक्षित हो रहे थे। इसके अतिरिक्त टुमेन में प्रस्तुत काल का एक विश्णु मंदिर प्राप्त हुआ है। जिसमें आजकल विन्ध्यवासिनी देवी की मूर्ति लगा दी गई है। इसे वासुदेव की लीलाओं के अर्थ चित्रों से अलंकृत किया गया है।

बौद्ध धर्म में महायान शाखा का सूत्रपात हुआ और उसमें भी मूर्तिपूजा होने लगी। जैन धर्म का भी प्रचार हुआ। लक्षणीय बात यह है कि शैव और वैष्णव को राजचिन्हों में भी धारण किया गया।

दामोदर धर्मानन्द कौसम्बी के अनुसार समुद्रगुप्त ने आर्यावर्त को भी विजित किया तथा नौ नाग राजा को अपना चाकर बताया। प्रयाग प्रशस्ति में इसे विस्तार से कहा गया है। समुद्रगुप्त से हर्षकाल तक के समाज में ब्राह्मण, क्षत्रिय, वैश्य तीन उच्च वर्ग माने गए थे। शूद्रों की स्थिति में विशेष परिवर्तन नहीं हुआ। उत्तर कालीन हिन्दु धर्म में श्रेणियों और समाजिक दलों के पारस्परिक संबंध संगोत्र विवाह—पद्धति, सहभोज के नियमों द्वारा शासित थे। ब्राह्मण क्षत्रिय स्पर्धा चालू रही। गुप्तवंश के शासन में समाज और धर्म की उन्नति के अनेक प्रयत्न हुए। विशुद्ध साहित्य के क्षेत्र में जो सर्वतोन्मुख उन्नति हुई उसका दर्शन हमें कलाओं में होता है। न केवल वास्तु तथा स्थापत्य कलाओं ही वरन् चित्रमाला, संगीत लक्षणकला और मुद्रा निर्माण की कला का अभूतपूर्व विकास हुआ। ब्राह्मण, वराहमिहिर इस काल के प्रसिद्ध वैज्ञानिक, गणितज्ञ हैं। कालिदास का साहित्य एक महत्वपूर्ण उपलब्धि है। इस युग में धार्मिक सहिष्णुता के साथ—साथ एक राष्ट्रीय संस्कृति का विकसित होने का असर था। भारत धार्मिक क्षेत्र में ही नहीं सामाजिक—सांस्कृतिक स्तर पर समन्वय की भावना विशेष थी। स्पष्ट है कि विवाह, खान—पान, संस्कारों आदि में निशेध कठोर नहीं हुए थे। अन्त्यज की दशा शूद्रों से भी बुरी थी। दास प्रथा का प्रचलन था। नारी की स्थिति में परिवर्तन आ गया था। गुप्त कालीन स्मृति ग्रंथों में वैदिक शिक्षा केवल उच्चकुलों की स्त्रियों तक सीमित हो गई थी, सती, पर्दा प्रथा का कहीं—कहीं प्रचलन था। अन्तर्राष्ट्रीय व्यापार उन्नति में था। वाकाटक और गुप्त काल मंदिरों के निर्माण का युग जाता है। फाहियालन पाँचवीं शताब्दी में भारत आ गया था। उसने बौद्ध धर्म, जैन धर्म की उन्नति का विवरण दिया है। इस प्रकार की सर्वतोन्मुखी उन्नति के कारण ही गुप्त काल को इतिहास का स्वर्णयुग कहा जाता है।

इसी समय के आसपास हूणों ने भारत के राजनीति जीवन में अत्यधिक अस्त व्यस्तता प्रस्तुत की। गुप्त साम्राज्य को हूण आक्रमणों से प्रबल धक्का पहुँचा। कतिपय इतिहासकार हूणों के आक्रमण को गुप्त साम्राज्य के पतन का कारण भी मानते हैं। कालांतर में हूण लोग हिन्दु समाज में मिला लिये गये। अनेक विद्वानों का विचार है की इन्हीं हूणों से अनेक राजपूत वंश उत्पन्न हुए हैं। राजपूतों की इस विदेशी उत्पत्ति को बुंदेलखंड के संदर्भ में बिलकुल भी नहीं माना जा सकता क्योंकि बुंदेली समाज में शौर्य अवश्य है पर इसके साथ—साथ सदाशयता, राष्ट्रीयता और स्वाभिमान की भावना विशेष है। गुप्त साम्राज्य के बाद हर्षवर्धन को भारतीय इतिहास तथा बुंदेलखंड दोनों में विशेष महत्व का मान गया है। बुंदेलखंड में हर्षवर्धन का शासनकाल अत्यंत महत्व का माना जाता है। उसने हूणों के आक्रमण को विफल किया था। हूणों का मुखिया तोरमण था उसने बुंदेलखंड कुछ समय के लिए एरन (बुंदेलखंड की प्राचीन नगर) पर राज

किया था। एरन के लेख में तथा अन्यत्र भी उसके बुंदेलखंड में भयभीत करने वाले शासन का उल्लेख है। इसिहासकारों ने हूणों की संस्कृति और सभ्यता को बर्बर कहा है क्योंकि उनका आघात केवल भारत ही नहीं विश्व की अन्य सभ्यताओं पर पशुता पूर्ण माना गया है। बुंदेलखंड में बर्बरतापूर्ण व्यवहार करने वालों को "हूण" (हूण काह विकृत रूप) कहा जाता है। बन्दरों की प्रकृति हूणों से समान मानकर उन्हें अपने खेत से भगाने के लिए "डिसूजा" का प्रयोग संभवतः इसी का प्रतीक है। ऐसे ही बिना नियम के खेल "हुडी" भी कबड्डी का रूप है जिसमें खिलाड़ी की सॉस की अपेक्षा सहनशक्ति की परीक्षा ली जाती है और सभी प्रकार से नोचा-खसोटा जाता है। हर्षचरित तें कतिपय हमत्वपूर्ण उल्लेख करते हैं। जिनसे बुंदेलखंड में रहने और तत्कालीन जीवन के संबंध में कहा जा सकता है— जैसे: हर्षकी बहन राज्यश्री का अपने पति की मृत्यु पर क्षुब्ध होकर विन्ध्य पर्वत पर चले जाना, हर्ष द्वारा उसकी खोज करना और विन्ध्य पर्वत पर चला जाना, हर्ष द्वारा उसकी खोज करना और विन्ध्य प्रदेश के जीवन में कृषि और अहेर का उल्लेख करना आदि ऐसे साहित्यिक साक्ष्य हैं जो हर्ष कालीन बुंदेलखंड के जीवन की झँकी देते हैं। 'हर्षचरित' में गाँव और जंगल के जीवन में समानता बताई गई है जिससे यह भी निश्कर्ष लिया जा सकता है कि जातीयता का विशेष बोलबाला नहीं था। इसी समय की अजंता गुफा की चित्रावली भी (6-7 शताब्दी के आस पास) इसका साक्ष्य है।

मुसलमानों के पूर्व तथा हर्ष के बाद उत्तर भारत (640 ई0 से 1200 ई0) अनेक छोटे-छोटे राज्यों में बँट जाता है। विभिन्न शासकों में कन्नौज का राजकुल, आयुध राजकुल, प्रतिहार और गहड़वाल वंश प्रमुख हैं। मिहिरभोज और अल्पकालीन शासन इस प्रदेश को कुछ न दे पाया। मिहिरभोज से पहले नवीं शताब्दी में बुंदेलखंड प्रतिहारों के नागभट के अधीन रहा था। इसी की परंपरा में महीपाल दसवीं शताब्दी में और उसके बाद विनायकपाल भी थोड़े समय तक बुंदेलखंड में टिक पाये। विजयपाल के समय में सात शक्तियाँ उदित हुईं और वे इस प्रकार हैं—

1. आन्हिलवाड़ के चालुक्य
2. जेजाकभुक्ति में चन्देल
3. ग्वालियर के कच्छपघात
4. डाहल के चेदि
5. मालवा के परमार
6. दक्षिणी राजपूताना के गुहिल तथा
7. शाकम्भरी के चौहान

ये शक्तियाँ एक जुट न रह सकीं। बुंदेलखंड में तीन शासकों के कुलों का विशेष प्रभाव रहा। ये तीनों जेजाकभुक्ति के चन्देल, डाहल और चेदि (बाद में कलचुरि) और ग्वालियर के कच्छपघात विभिन्न प्रकार से जनसमाज और संस्कृति को एक खास जीवन देते हैं। समस्त उत्तर भारत सामंतवाद में स्थिरता, उन्नति और कला उत्कर्ष की ओर अपने सामर्थ्य के अनुसार अग्रसर होता है। चन्देलों को बुंदेलखंड के उत्तर तथा कलचुरियों को दक्षिण में समकालीन ही माना गया है। दोनों राजसत्ताओं में दिग्विजय के दाँव-पेंच चलते रहे थे। इनका शासनकाल हिन्दु धर्म और समाज दोनों की उन्नति देने वाला था।

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4. महावंश, पेज 448 से 454।
5. कल्पसूत्र, पेज 372 से 454।
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7. भारत का प्राचीन इतिहास, डा. रमाशंकर त्रिपाठी, पेज-320 से 401।
8. भारत का प्राचीन इतिहास, रामशरण शर्मा, पेज-301 से 412।
9. प्राचीन एवं मध्यकालीन भारत का इतिहास, पेज-342 से 412।
10. दिव्यावदान, पेज-172 से 276।
11. दीपवंश, पेज-407 से 499।
12. इण्डिका, मेगास्थनी, पेज-334 से 449।

बिहार में किसान आन्दोलन और सहजानंद सरस्वती: एक ऐतिहासिक अध्ययन

डॉ. सुरेश कुमार*

बिहार में किसान आंदोलन की एक समृद्ध परंपरा रही है। चंपारण का सन् 1917 का किसान आंदोलन इसी की एक कड़ी था। चंपारण में उन दिनों 'तिनकठिया प्रथा' थी। इस प्रथा से स्थानीय किसान असंतुष्ट थे क्योंकि खाद्यान्न के संकट के साथ-साथ भूमि की उर्वरा शक्ति का भी इस प्रथा के कारण नाश हो रहा था। गांधीजी ने अब तक चंपारण का नाम सुना था वहां नील की खेती होती है, इसका भी ख्याल नहीं के बराबर था। इस बात की जानकारी गांधीजी को पहले पहल राजकुमार शुक्ल से प्राप्त हुई थी। राजकुमार शुक्ल चंपारण के एक किसान थे। उन्होंने लखनऊ की सभा में गांधी से मुलाकात की और उनके वकील ब्रजकिशोर प्रसाद ने किसानों के दुख का हाल बताया। चंपारण के बारे में कांग्रेस की महासभा में ब्रजकिशोर बाबू बोले और सहानुभूति-प्रकाशक प्रस्ताव पास हुआ। लखनऊ से गांधीजी कानपुर गये। वहां भी राजकुमार शुक्ल मौजूद थे। कोलकाता में गांधीजी के भूपेन बाबू के पहुंचने के पहले ही शुक्ल ने वहां डेरा डाल रखा था। गांधीजी को 'इस अपद, अनगढ़ पर निश्चयवान किसान ने जीत लिया था।' बिहार में उस समय वकीलों का एक मंडल था जिसमें ब्रजकिशोर प्रसाद, राजेन्द्र प्रसाद तथा रामनवमी प्रसाद आदि प्रमुख थे। ये सभी गरीब किसानों के लिए लड़ते थे। त्यागी होते हुए भी ब्रजकिशोर बाबू या राजेन्द्र बाबू मेहनताना लेने में सकोच नहीं रखते थे। उनके मेहनताने के तथा बंगाल के और बिहार के बैरिस्टर्स को दिए जाने वाले मेहनताने की कल्पना में न आ सकने वाले आंकड़े सुनकर गांधीजी सुन्न हो गये थे।

राष्ट्रीय स्तर पर सामंत संघर्षों एवं किसान आंदोलनों की एक नई लहर 1920 ई. में शुरू हुई। संयुक्त प्रांत का अवध क्षेत्र किसान सभा आंदोलनों का सर्वाधिक महत्वपूर्ण आधार था। वहां के तालुकदारों के असहनीय शोषण और उत्पीड़न के चलते किसान बाबा रामचंद्र के नेतृत्व में जुझारू संघर्ष छेड़ चुके थे जो कई बार हिंसात्मक रूप धारण कर लेता था। पुनः केरल के मालाबार जिले का प्रसिद्ध मोपला विद्रोह प्रारंभिक विस्फोटों की एक लंबी कड़ी के परिणामस्वरूप अगस्त, 1912 में फूट पड़ा। यह विद्रोह मूलतः जेनमी या भूस्वामियों के खिलाफ विक्षोभ पर आधारित था। मगर चूंकि किसान-बटाईदार मुख्यतः मुस्लिम थे और जेनमी मुख्यतः हिन्दू, इसलिए संघर्ष ने धीरे-धीरे स्पष्टतः सांप्रदायिक स्वरूप अपना लिया। कांग्रेस चूंकि अब तक मध्यम वर्ग के लोगों की ही संस्था बनकर काम कर रही थी इसलिए इन किसान आंदोलनों का इसके साथ कोई अंतरंगता कायम न हो सकी थी। ये किसान आंदोलन कांग्रेस से बिल्कुल अलहदा थे। देशव्यापी थे। जो सहयोग आंदोलन आरंभ हो रहा था, उसका कोई ताल्लुक न था। यही क्यों, खुद कांग्रेस की भी शुरू के दिनों में बराबर यही मांग थी कि जहां-जहां अभी बंदोबस्त नहीं हो पाया है, वहां स्थायी बंदोबस्त कर दिया जाय कि जिससे जमींदारों के अधिकारों की रक्षा हो सके, और उसमें किसानों का कहीं जिक्र तक न रहता था।

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उपरोक्त राष्ट्रीय-प्रादेशिक परिदृश्य के बीच स्वामी सहजानंद सरस्वती ने 1920 ई. में सक्रिय राजनीति में प्रवेश किया। स्वामी जी ने अपने राजनीतिक जीवन की शुरुआत एक गांधीवादी के रूप में की थी। उन्होंने गांधीजी के प्रत्येक आदेश का पालन अक्षरशः करने की कोशिश में चरखा और तकली चलाना भी शुरू कर दिया था। कांग्रेस के प्रतिनिधि की हैसियत से उन्होंने कांग्रेस के सभी वार्षिक अधिवेशनों में भाग लिया। किसान क्रांति को साम्राज्यवाद के विरुद्ध चल रहे संघर्ष का एक अभिन्न अंग मानते हुए स्वामी जी की धारणा थी कि शोषित बहुमत के सहयोग के बिना भारतीय स्वतंत्रता संग्राम की सफलता संदिग्ध है। किसान समस्याओं के प्रति अपनी सतत् जागरूकता, निष्ठा एवं कटिबद्धता के कारण ही स्वामी जी ने वर्ष 1928 में पटना वर्ष 1929 में सोनपुर मेले में जिला स्तरीय किसान सभाओं का आयोजन किया एवं बिहार प्रांतीय किसान सभा की स्थापना की। कहना अनावश्यक है कि वर्ष 1929 में किसान सभा की शुरुआत गांधीवादी समझौते के सिद्धांत की नीति के तहत की थी। किंतु सविनय अवज्ञा आंदोलन के दौरान स्वामी जी की जेल-यात्रा और वहां के अनुभव तथा वर्ष 1934 के भूकंप से उत्पन्न परिस्थितियों में किसानों पर जमींदारों द्वारा किये गये अत्याचार ने स्वामी जी को यह सोचने पर मजबूर कर दिया कि गांधीवादी रास्ते से जमींदारों-पूंजीपतियों के हृदय की कल्पना करना भी सत्य से दूर भागना है। भूकंप के बाद महात्मा गांधी के बिहार के दौरे के समय स्वामी जी और गांधीजी के बीच जमींदारों के आतंक से संबंधित विस्तृत वार्ता हुई। स्वामी सहजानंद सरस्वती ने बताया कि किसानों को खेतों से बालू के ढेर निकालने के लिए जो रिलीफ या कर्ज सरकार या विभिन्न सामाजिक संस्थाओं द्वारा दिया जा रहा था उसे भी जमींदार लोग बलपूर्वक मालगुजारी के एवज में अपने सिपाहियों द्वारा वसूल कर रहे थे। प्रसंगवश, इन जमींदारों में दरभंगा महाराज भी एक थे। लेकिन गांधीजी ने उत्तर दिया, *“ये शिकायतें यदि दरभंगा महाराज को मालूम हो जाए तो मुझे विश्वास है कि वह जरूर उन्हें दूर करेंगे। श्री गिरिन्द्र मोहन मिश्र उनके मैनेजर हैं। वह कांग्रेसी भी हैं।”* स्वामी जी ने लिखा है, *“उस दिन की बात के बाद उनपर, गांधीजी पर, मेरी अश्रद्धा हो गयी और उसी दिन से मैं सदा के लिए उनसे अलग हो गया। उस भूकम्प के बाद ही यह दूसरा मानसिक भूकम्प मेरे अन्दर आया।”* वर्ष 1933 के अप्रैल एवं वर्ष 1935 के नवंबर के बीच की अवधि में बिहार के दस जिलों में लगभग पांच सौ किसान सभाएं आयोजित की गईं। वर्ष 1937 के हाजीपुर में प्रांतीय किसान सम्मेलन के साथ-साथ इन जिलों में सैकड़ों छोटी-बड़ी किसान सभाएं भी आयोजित हुईं। पटना में 88, गया में 38, मुंगेर में 57, भोजपुर में 39, भागलपुर में 22, दरभंगा में 38, मुजफ्फरपुर में 43, सारण में 19, पूर्णिया में 13 तथा चंपारण में 2 किसान सभाओं को स्वामी जी ने संबोधित किया। यद्यपि किसान सभा उस वक्त मुख्यतः धनी और मध्यम किसानों के ऊपरी हिस्सों का ही प्रतिनिधित्व करती थी फिर भी आम किसान भी इस सभा की ओर आकर्षित होने लगे थे क्योंकि किसानों का हित जिससे सधे इस पर वह कुछ भी करने को तैयार थे। किसानों के संगठन में वैज्ञानिक विचारों के प्रवेश और समावेश तथा राष्ट्रीय आंदोलन के साथ नाता जुड़ने से किसान आंदोलन में एक उभार आने लगा।

किसान सभा के उद्देश्यों में बिना मुआवजा के जमींदारी उन्मूलन के प्रस्ताव का स्वामी जी न 1934 ई. में विरोध किया था पर वर्ष 1935 के सम्मेलन में उन्होंने स्वयं इस प्रस्ताव को पेश किया। 1936 के लखनऊ कांग्रेस अधिवेशन ने किसानों की कई मांगों को अपने कार्यक्रम में शामिल कर लिया। उसी साल

फैजपुर के कांग्रेस अधिवेशन ने इसी आधार पर अपना कृषि-सुधार प्रस्ताव तैयार किया। 1937 में जवाहर लाल नेहरू ने कांग्रेसी कार्यकर्ताओं को निर्देश दिया कि फैजपुर कृषि कार्यक्रम का 'महान महत्व' है। 1937 में नेहरू का यह भी मानना था कि "भारत की सर्वाधिक महत्वपूर्ण समस्या किसान समस्या है, बाकी सब गौण हैं।" उन्होंने जोर देकर कहा कि "हमें अपनी प्रतिज्ञाओं के प्रति ईमानदार रहना है और किसानों की आशाओं को संतुष्टि और पूर्णता प्रदान करनी है।" किसानों और किसान सभाओं ने कांग्रेस अध्यक्ष के इन सार्वजनिक वक्तव्यों का स्वागत किया। फैजपुर का यही कृषि-सुधार प्रस्ताव आने वाले चुनाव के लिये घोषणा पत्र का आधार बना और कांग्रेस की जीत करा दी। कुछ ही महीने के बाद छपरा जिले के मसरख में प्रांतीय राजनीतिक सम्मेलन ने किसान सभा के जमींदारी उन्मूलन वाले प्रस्ताव को स्वीकृत कर लिया। उत्साह में आकर कांग्रेस के अंदर जितने कांग्रेस सोशलिस्ट या अन्य थे, सबों ने मिकलकर एक बैठक में स्वामी जी, राहुल जी और किशोरी प्रसन्न सिंह को लेकर एक उपसमिति बनायी। उपसमिति का काम इसी प्रस्ताव के आधार पर कांग्रेस प्रतिनिधियों का चुनाव करना था। ख्याल यह था कि यदि प्रतिनिधियों के चुनाव में बहुमत प्रतिनिधि इसी विचार के हो जायें तो प्रांतीय कांग्रेस कमिटी मंत्रिमंडल को जमींदारी उन्मूलन कानून बनाने का आदेश देती। किंतु एक बार सत्ता में पहुंचने के बाद यह नेतृत्व सामान्यतः वाम को और विशेषतः किसान सभा को नियंत्रित करने के साधनों और रास्तों की तलाश करने लगा।

सरदार पटेल ने राजेन्द्र प्रसाद को एक पत्र में लिख: "किसान सभा भविष्य में बहुत बड़ी बाधा उत्पन्न करेगी और मेरा पक्का मत इसके गठन के विरुद्ध रहा है। वे उस समय का इंतजार कर रहे हैं जब वे हमें हटा सकेंगे। इसीलिए मैं उनको महत्व नहीं देता। हमें कलकत्ता में स्थिति का संभलकर सतर्कता से सामना करना होगा। कुछ महीनों बाद हम उनके द्वारा पैदा की हुई स्थिति को नियंत्रित करने के योग्य नहीं रहेंगे।"

अक्टूबर, 1937 में कोलकाता की अखिल भारतीय कांग्रेस समिति की बैठक में दक्षिणपंथियों ने शिद्दत से महसूस किया कि उन्हें संगठित होना चाहिए।

जयरामदास दौलतराम की सलाह कि 'हमें अब अधिक बैठे नहीं रहना चाहिए' को क्रियान्वित किया गया। यह हिदायत जारी की गई कि सभी 'परंपरावदी कार्यक्रम वालों को मिल जुलकर काम करना चाहिए' अन्यथा 'भविष्य में बहुत बड़ी कठिनाई' आ सकती है। पटेल ने प्रसाद को स्पष्ट भाषा में लिखा कि: "बापू प्रसन्न नहीं हैं ... हरिपुरा में हमें किसी भी तरह से संघर्ष करना होगा ... कृपया प्रतिनिधियों के चुनाव पर नजर रखें, सभी गांधी विरोधी तत्वों को निकाल बाहर कीजिए। संयुक्त मोर्चे के नाम पर अव्यवस्था की ताकतों को हम सहन नहीं करेंगे। हमारी सहनशीलता का वे नाजायज फायदा उठा चुके हैं किंतु अब दृढ़ कदम उठाने का समय आ गया है।"

बिहार प्रदेश कांग्रेस कमिटी के सदस्य और बिहार किसान सभा के अध्यक्ष सहजानंद को चंपारण, सारण और मुंगेर जिलों की कांग्रेस कमिटियों ने निर्देश दिया कि वे उनके जिलों की यात्रा न करें। दिल्ली की कांग्रेस महासमिति की बैठक में आलाकमान की ओर से एक प्रस्ताव आया कि प्रांतीय कांग्रेस कमिटी की अनुमति के बिना कोई कांग्रेसजन किसान संघर्षों में नहीं पड़ सकता। गांधीजी के हस्तक्षेप पर उस समय प्रस्ताव को आलाकमान ने वापस कर लिया। पर कुछ ही दिनों बाद यही प्रस्ताव बंबई कार्यसमिति द्वारा स्वीकृत करा दिया गया। यही नहीं, प्रस्ताव में यह भी कहा गया कि कोई कांग्रेसजन इस प्रस्ताव के खिलाफ कहीं बोल नहीं सकता। स्थानीय कांग्रेसियों को धमकी दी गई कि यदि वे उसकी बैठकों में गये तो उनके

विरुद्ध अनुशासनात्मक कार्यवाई की जाएगी। गौरतलब है कि यह प्रतिबंध उस समय लगाया गया जब दक्षिणपंथी कांग्रेसियों ने जमींदारों के साथ समझौते पर हस्ताक्षर किए थे। उन दोनों ने किसान आंदोलन को कुचलने के लिए आपस में गठजोड़ कर लिया था। यह प्रसंग चंद्रेश्वर प्रसाद सिंह द्वारा राजेन्द्र प्रसाद को लिखे गये पत्र से बेहतर तरीके से समझा जा सकता है: **“मैं आपके विचारों से पूरी तरह सहमत हूँ कि जहाँ भी हमें मिलकर कार्रवाई करने से लाभ होता है, वहाँ हमें मिलकर काम करना चाहिए। मेरी पूर्ण इच्छा है कि इस संबंध में आपको पूर्ण सहयोग दूँ।”**

जमींदारों के एजेंटों और दक्षिणपंथियों के अनुयायियों ने जिलों से सहजानंद की यात्रा को असफल करने की अपनी ओर से भरसक कोशिश की किंतु किसानों ने बड़ी संख्या में पहुंचकर उनकी कोशिशों को विफल कर दिया। सहजानंद बिहार प्रदेश कांग्रेस समिति के सदस्य थे किंतु दक्षिणपंथियों के समर्थन से निचले स्तर की कांग्रेस समितियों ने उनके विरुद्ध **‘अनुशासनात्मक कार्रवाई’** की। प्रदेश कांग्रेस समिति ने बाद में इस कार्रवाई का समर्थन किया। किसान सभा को अपना पक्ष रखने का कोई अवसर नहीं दिया गया। सहजानंद सरस्वती ने नागरिक स्वतंत्रता का मामला उठाया किंतु प्रसाद और पटेल सभी स्तरों पर किसान का विरोध करने के लिए दृढ़ प्रतिज्ञ थे। अंततः स्वामी जी और किशोरी प्रसन्न सिंह तीन साल के लिए कांग्रेस से बाहर किये गये।

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Organochlorine Pesticides, their Toxic Effects on Living Organisms and their Fate in the Environment

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ABSTRACT

Organochlorine (OC) pesticides are synthetic pesticides widely used all over the world. They belong to the group of chlorinated hydrocarbon derivatives, which have vast application in the chemical industry and in agriculture. These compounds are known for their high toxicity, slow degradation and bioaccumulation. Even though many of the compounds which belong to OC were banned in developed countries, the use of these agents has been rising. This concerns particularly abuse of these chemicals which is in practice across the continents. Though pesticides have been developed with the concept of target organism toxicity, often non-target species are affected badly by their application. The purpose of this review is to list the major classes of pesticides, to understand organochlorine pesticides based on their activity and persistence, and also to understand their biochemical toxicity.

Keywords: LD₅₀, pesticide persistence, biochemical toxicity, organochlorine (OC) pesticides

INTRODUCTION

Pesticides are a group of chemicals used for the destruction of insects, weeds, fungi, bacteria, etc. They are generally called insecticides, fungicides, bactericides, herbicides or rodenticides. Most of the pesticides have the ability to destroy a wide variety of pests or weeds, but some are developed against specific pests or pathogens. Most of these chemicals are designed in such a way as to disturb the physiological activities of the target organism, leading to

dysfunction and reduced vitality. Pesticide residues may constitute a significant source of contamination of environmental factors such as air, water and soil. This phenomenon could become a continuous threat to the co-existence of plant and animal communities of the ecosystem. Problems caused by pest lead to loss of about one third of the world's agricultural production every year, and that despite the fact that pesticide consumption comes up to more than two million tons. In India, the loss amounts to more than ₹ 6,000 crores annually, by contributing factors such as weeds (33%), diseases (26%), insects (20%), birds (10%), rodents, and others (11%). Every year the magnitude of the problem increases by the appearance of newer pests and diseases (Rajendran, 2003).

The greater use of pesticides for high agricultural production has led to increased pollution of environmental compartments – soil, water and air. The characteristics of pesticides, such as high lipophilicity, bioaccumulation, long half-life and potential of long range transport, have increased the chances of contaminating the air, water and soil, even after many years of application. A study by Pimentel (1995) showed that only a small percentage (0.3%) of applied pesticides goes into the target pest while 99.7% go somewhere else into the environment. Application of a wide variety of pesticides has been advised to increase the crop productivity in tropical countries where crop loss

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is severe due to high temperature and humidity, which are conducive to rapid multiplication of pests (Kannan *et al.*, 1993; Lakshmi, 1993). According to a World Health Organisation study, 80% of all pesticides are used by developing countries (Veil, 1990). Due to lack of proper legislation, improper market regulations and ignorance shown by people, agricultural workers from developing countries are prone to experience high levels of agricultural chemicals, including 1990 pesticides (Smith & Jong, 2001). Among agriculturalists of developing countries, pesticide exposure is the primary occupational hazard (Wasseling *et al.*, 2001; Konradsen *et al.*, 2003; Coronado *et al.*, 2004) which leads to health issues and environmental contamination associated with pesticide use (Mancini, 2005; Remor *et al.*, 2009). Although farmers are considered to be the main risk group, formulators, loaders, mixers, production workers and agricultural farm workers are all extremely susceptible groups. The non-occupational hazards may be due to pollution of the ecosystem or habitat as a whole. An estimate shows that deaths and chronic diseases due to pesticide poisoning amounts to about one million per year worldwide (Environews, 1999).

The overuse or misuse of pesticides is contributing adversely to the environmental health as well as to ecosystem services. Pesticides are reported to affect many aquatic and terrestrial species. Life in aquatic ecosystems such as microorganisms, invertebrates, plants and fish are badly affected by pesticides (Liess *et al.*, 2005; Grande *et al.*, 1994; De Lorenzo *et al.*, 2001; Castillo *et al.*, 2006; Frankart *et al.*, 2003). In the Indian situation, massive use of pesticides has started since the 1960s when the “**Green Revolution**” was initiated and maximum agrochemicals were used to achieve high agricultural production.

Classification of pesticides

Classification of pesticides is mainly based on:

1. **Chemical nature (organochlorines, organophosphates, etc).**
2. **Application requirement (agriculture, public health, domestic).**
3. **Target organism or targeted use (insecticide, herbicide, fungicide, etc).**
4. **Classification of pesticides based on chemical nature is given in.**

Organochlorines

Organochlorines (**OC**) are a group of chlorinated compounds widely used as pesticides. These chemicals belong to the class of persistent organic pollutants (**POPs**) with high persistence in the environment. OC insecticides were earlier successfully used in control of malaria and typhus, yet they are banned in most of the advanced countries (Aktar *et al.*, 2009). The review statistics on the use of different pesticides shows that 40% of all pesticides used belong to the organochlorine class of chemicals (Gupta, 2004; FAO, 2005). Due to their low cost and the need against various pests, organochlorine insecticides such as DDT, hexachlorocyclohexane (**HCH**), aldrin and dieldrin are among the most widely used pesticides in developing countries of Asia (FAO, 2005; Gupta, 2004; Lallas, 2001).

Organophosphates

Organophosphates (**OP**) are esters of phosphoric acid. The OP group of pesticides asserts its effects through irreversible inactivation of the enzyme acetylcholinesterase, which is essential for nerve function in humans, insects and many other animals. OP samples degrade rapidly by hydrolysis on exposure to light, air and soil, however small amounts are detected in food and drinking water.

Carbamates

Carbamates are organic compounds derived from carbamic acid (NH_2COOH). The functional group present in carbamate insecticides are carbamate esters. Their mechanism of action is by reversible inactivation of the enzyme acetylcholinesterase. Carbamates break down in the environment within weeks or months (Goel & Aggarwal, 2007).

Pyrethroides

Pyrethroides and pyrethrins are similar organic compounds isolated from the flowers of pyrethrums (*Chrysanthemum Coccineum* and *C. cinerariaefolium*). The insecticidal properties of pyrethrins are derived from ketoalcoholic esters of chrysanthemic and pyrethroic acids (Reigert and Roberts, 1999). Pyrethroides affect the sodium channels and lead to paralysis of the organism. Pyrethroides have a comparatively slight level of mammalian toxicity and have a fast biodegradation capacity. Exposure to very high levels of the compounds in air, food or water may cause giddiness, headache, vomiting, muscle twitching, low energy, convulsions and loss of consciousness (Goel & Aggarwal, 2007).

Phenylamides

Phenylamide fungicides are systemic compounds that show potent eradicated anti-fungal activity (Schwinn & Staub, 1987). When added to the soil, they enhance plant growth and yield; in addition, these fungicides affect the homeostasis of the soil system (Monkiedje & Spitteller, 2002). These chemicals affect nutrient cycling and enter the food chain, and have thus been reported to affect higher organisms including humans. They affect nucleic acids by inhibiting the activity of RNA polymerase I system. They are known to impact mitosis and cell division in target fungi (Chao et al., 2011).

Phenoxyalkonates

Phenoxyalkonates are a widely used family of herbicides. These pesticides are mainly used to control weeds in agriculture. Nearly all compounds of this group are degraded by microorganisms (Viltos, 1952).

Triazines

The compounds that fall under this category are herbicidal pesticides. They include desmetryne, chlorazine, atriazine, propazine, etc. These compounds are known to have potential use as insect chemosterilants. Higher concentrations of these herbicides were found to inhibit plant catabolism pathway (Evan et al., 2007).

Benzoic acid

Benzoic acid herbicides include dicamba, dichlobenil, chlorambin, bromoxynil, ioxynil and naptalam. Little information is available regarding their degradation by soil microbes. Ioxynil is found to precipitate in acid soils (Zaki et al., 1967).

Phthalimide

Phthalimides include three fungicides, captan, folpet and captafol which together represent the second most important group of organic fungicides used in American agriculture. They represent

about half the usage of the dithiocarbamates (NAS, 1975). The fungicides difolatan, captan and folpet react with thiols such as cysteine and glutathione at acidic pH levels of 4.0 to 5.0.

Dipyrids

The dipyridyl herbicides include paraquat and diquat. They are strongly adsorbed as organic cations in the soil (Funderburk, 1969; Funderburk & Bozarth, 1967). Microorganisms metabolize paraquat as the main source of nitrogen (Baldwin *et al.*, 1966).

Others

There are many more pesticides used in agricultural practice. Heavy metals have found vast use as pesticides. Elements like iron, lead, sulphur, arsenic, mercury, zinc, tin, etc. have been used in inorganic or organic metal form. Methyl mercuric chloride, sodium arsenate, calcium arsenate, zinc phosphide are some of the compounds that fall under this category. Among the various classes of pesticides, organochlorines and organophosphates are widely used. Organochlorines are known for their high persistence and toxicity characteristics. These pesticides cause neurological damage, endocrine disorders, and have acute and chronic health effects. Hence contamination of the environment with organochlorine pesticides drastically affects the ecosystem.

Organochlorine pesticides – chemistry, persistence and hazard classification

The basic characteristics of organochlorine pesticides are high persistence, low polarity, low aqueous solubility and high lipid solubility. Organochlorine pesticides can enter the environment after pesticide applications, polluted wastes discarded into landfills, and discharges from industrial units that synthesize these chemicals. They are volatile and stable; some can adhere to the soil and air, thus increasing the chances of high persistence in the environment, and are identified as agents of chronic exposure to animals and humans.

They have a related chemical structure, showing chlorine substituted aliphatic or aromatic rings. Due to their structural resemblances, these compounds share certain physicochemical characteristics such as persistence, bioaccumulation and toxicity. One basic character that they share across the spectrum is persistence, where persistence is defined as half-life greater than two months in water or six months in soil sediment. The persistence of OC compounds varies from moderate persistence with half-life of approximately 60 days to high persistence with half-life up to 10–15 years. The most commonly used pesticide in agricultural practice is dichlorodiphenyltrichloroethane (**DDT**), which is moderately hazardous, with high persistence and a half-life of 2–15 years (Augustijn-Beckers *et al.*, 1994). The use of DDT is now banned in many countries but it is illegally used in most of the developing countries. This applies also to endosulphan, an insecticide which is highly hazardous and has moderate persistence with a half-life of fifty days and is used in the production of cashew (Quijano, 2002).

Due to the high persistence and bioaccumulation potential, the Stockholm Convention has classified most of the OC compounds as environmental hazards and banned the use of many of them. However in many developing countries they are still in use making the ban ineffective.

Biochemical toxicity of organochlorines

Organochlorine toxicity is mainly due to stimulation of the central nervous system. Cyclodines, such as the GABA antagonists endosulphan and lindane, inhibit the calcium ion influx and Ca²⁺- and

Mg-ATPase causing release of neurotransmitters (Mathew, 2012). Epidemiological studies have exposed the etiological relationship between Parkinson's disease and organochlorine pollutants.

Effect in humans

Examination of effects of different classes of pesticides leads to the conclusion that many of them are responsible for hypertension, cardiovascular disorders and other health related problems in humans. Organochlorines act as endocrine disrupting chemicals (**EDCs**) by interfering with molecular circuitry and function of the endocrine system (Sohail et al., 2004). Farm workers, their families and those who pass through a region applied with pesticides can absorb a measurable quantity of pesticides. The presence of pesticide residues has been detected in blood plasma of workers in agricultural farms. Direct or indirect exposure to pesticides leads to neuromuscular disorders and stimulation of drug and steroid metabolism (Subramaniam and Solomon, 2006).

Another mode of exposure to these pesticides is through diet. Among food items, fatty food such as meat, fish, poultry, and dairy products serve as main causes (Rusiecki et al., 2008). Many of the organochlorine molecules are carcinogens and neurotoxic (Kaiser, 2000). The hazardous nature of organochlorines was explained by citing different examples. The menace caused by endosulfan is of great concern. Endosulfan remains in the environment for longer periods and bio-accumulates in plants and animals which leads to contamination of food consumed by humans (Briz et al., 2011). It affects mainly the central nervous system and was found to have higher acute inhalation toxicity than dermal toxicity. Gastrointestinal absorption of endosulfan is very high (USEPA, 2010).

Disproportion of thyroid hormones can lead to a variety of disorders. Serum concentrations of p,p'-DDE and HCB were found to be associated with abnormal thyroid hormone levels. p,p'-DDE was reported to increase free thyroxine (**T4**) and total triiodothyronine (**T3**) levels, and to be inversely associated with thyroid-stimulating hormone (**TSH**) (Meeker et al., 2007). On exposure to dioxinlike organochlorines, a dose-dependent decrease in total T4 was also reported (Turyk et al., 2006). Organochlorine pesticides were reported to increase the risk of hormone-related cancers including breast, prostate, stomach and lung cancer (Wolff et al., 1993). Recently dioxins have been found in human ovarian follicular fluid, which may lead to the development of endometriosis. Exposure to dioxins can cause several autoimmune diseases, including multiple sclerosis and eczema (Sinaii et al., 2002). Organochlorines can function as xenoestrogens and compounds such as TCDD, methoxychlor and alachlor were reported to exert effects on human and experimental animals due to inhibited synthesis and increased degradation of thyroid hormones.

Analysis of the National Health and Nutrition Examination Survey 1999– 2004 studying the relation between organochlorine pesticides and prostate and breast cancers has shown that serum concentrations of b-HCH, trans-nonachlor, and dieldrin were significantly associated with prostate cancer prevalence (Xu et al., 2010). In children, exposure to dioxins showed significant positive associations with learning disability (**LD**) (Lee et al., 2007). Risk of attention deficit hyperactivity disorder (**ADHD**) at higher levels of p,p'-DDE and PCBs exposure was reported (Sagiv et al., 2010). Prenatal exposure to p,p'-DDE and its presence in cord serum was found to lead to disappearance of neuronal development after 12 months of infant age (Torres-Sánchez et al., 2009). Epidemiological studies have shown that exposure to persistent organic pollutants, mainly organochlorine pesticides, is strongly associated with type 2 diabetes. Some persistent organic pollutants, as highly chlorinated PCBs and trans-nonachlor, were associated with the incidence of type 2 diabetes in obese people (Lee et al., 2006).

Selected persistent organic pollutants are reported to induce divergent actions on blood pressure, suggesting a chemical structure based association of pesticides (*Henríquez-Hernández et al., 2014*). In a population based study, different persistent organic pollutants and pesticides were reported to be associated with liver dysfunction biomarkers such as bilirubin, ALT and ALP, suggesting that these environmental pollutants can cause adverse effects on liver functions (*Kumar et al., 2014*). A study conducted in Costa Rica reported that occupational pesticide exposure to dieldrin could be partly responsible for the increased risk of Parkinson's disease seen in the population (*Steenland et al., 2014*). Studies showed that the change of lipids over time, especially LDL-cholesterol, is linked to POP exposure (*Penell et al., 2014*). Increased oxidative stress markers in plasma were found to be associated with exposure of POPs and could be a causative agent for oxidative stress (*Kumar et al., 2014*). Persistent organic pollutants were reported to influence the complement system, leading to activation of the immune system in humans (*Kumar et al., 2014*). Detection of organochlorine pesticides from human breast milk was reported from many places in the world. In Croatia, p,p'-DDE was found to be the dominant organochlorine pesticide in human breast milk (*Klinčić et al., 2014*). Exposure of infants to chlordanes via breast milk was reported as a potential health risk in Korea (*Lee et al., 2013*). Another study from Korea also revealed the presence of organochlorine pesticides (**OCs**) chlordanes, aldrin, dichlorodiphenyltrichloroethanes (**DDTs**), dieldrin, heptachlors, endrins, hexachlorocyclohexanes (**HCHs**), hexachlorobenzene (**HCB**), toxaphenes and mirex, in milk (*Kim et al., 2013*). Organochlorine pesticides HCB, β -HCH, pp'DDE, pp'DDT, pp'DDT, Σ -DDT were present in breast milk of the population in Guerrero, Mexico, proportionally to exposure (*Chávez-Almazán et al., 2014*).

A study conducted in China showed that prenatal exposure to DDT, β -BHC, HCB and mirex caused decrease in birth weight of infants (*Guo et al., 2014*). A number of studies were published on the effect of organochlorine pesticides on induction of diabetes mellitus in humans. A recent study reported that POP exposure is a risk factor contributing to insulin resistance (*Arrebola et al., 2015*). Chronic exposure to chlordecone was found to cause hypertensive disorders in pregnancy and gestational diabetes mellitus among French Caribbean women (*Saunders et al., 2014*). In a study conducted in Slovakia, highly increased blood levels of diabetes (*fasting glucose and insulin*) and obesity markers (*BMI, triglyceride and cholesterol*) were found in large groups of males and females in highly polluted areas. A significant decrease in testosterone level was also observed in males (*Langer et al., 2014*). Prevalence of type 2 diabetes and exposure to persistent organic pollutants has been established (*Airaksinen et al., 2011*). Recent studies on organochlorine pesticides have shown that β -HCH, HCB and DDT residues bio-accumulate in maternal and cord sera and from maternal blood they can be transferred through the placenta and affect thyroid hormone levels in the newborn (*Li et al., 2014*). OC pesticides have been suggested to affect the thyroid system through gender-specific mechanisms; the extent of the effect may differ among compounds (*Freire et al., 2013*). A report from Brazil had shown that OC compounds are reported to trigger anti-androgenic effects in men and estrogenic effects in women (*Freire et al., 2014*). OC pesticide heptachlor was reported to induce mitochondria-mediated cell death via impairing electron transport chain complex III, thus acting as a neurotoxicant with possible association with Parkinson's disease (*Hong et al., 2014*).

Exposure to organochlorine pesticide residues was reported as a potential risk factor for gallstone disease in humans (*Su et al., 2012*). Potential neurotoxic effects of organochlorine compounds were reported on early psychomotor development even at low doses (*Forns et al., 2012*). A positive correlation was observed of exposure to some OC pesticides and vitamin D deficiency in humans (*Yang et al., 2012*). Early exposure to certain environmental chemicals, especially organochlorine compounds, with

endocrine-disruption activity were reported to interfere with neonatal thyroid hormone status (Freire et al., 2011).

Toxic effect of pesticides in fauna

Wild birds are of great importance to the ecosystem. Decline in the bird community serves as an indicator of environmental pollution. Continuous use of pesticides is one of the major causes for the reduction of birds. In many cases the impact is not direct, however repetitive use of pesticides like DDT in soil is taken up by earthworms which are then ingested by birds and thus their accumulation may result in a large loss in bird population (Fry, 1995). Subsequent research has also identified other pesticides and industrial chemicals that cause mortality and reproductive impairment, which affects both embryos and adult birds. The effects on embryos include mortality or reduced hatchability, wasting syndrome and teratological effects that produce skeletal abnormalities and impaired differentiation of the reproductive and nervous systems through mechanisms of hormonal mimicking of estrogens. The range of chemical effects on adult birds covers acute mortality, sub-lethal stress, reduced fertility, suppression of egg formation, eggshell thinning and impaired incubation and chick rearing behaviors (Gilman et al., 1979). Pesticides cause extinction, behavioral changes, loss of safe habitat and population decline in several birds. Prolonged use of pesticides causes a drastic decrease in birds like the peregrine falcon, sparrow hawk and bald eagle (Mitra et al., 2011). The levels of organochlorines in seabird eggs were indicated by forming a deposit of pollutants in the body, thus serving as a useful indicator of environmental contamination (Pearce et al., 1989).

Toxic effect in farm animals

The prolonged use of pesticides in agriculture has caused serious health problems as these pesticides accumulate and affect the food chain. Organochlorine compounds are highly lipophilic and can accumulate in fat-rich food such as meat and milk (Hernandez et al., 1994). Pesticides are introduced into cattle mainly through fodder or contaminated water used for household and public purposes (Sabbah and Bouguerra 1997). Amphibians and insectivorous reptiles, like lizards, have an important function in linking invertebrates with vertebrates in the food chain. They serve as a food source for some organisms and are also a means by which chemical residues, especially residues of organochlorine pesticides taken in with contaminated prey, can enter food chains. Amphibians consume these pesticides by a number of ways, including inhalation, contact and through ingestion. Amphibians in open water bodies may also be exposed to pesticides due to run-off from adjacent agricultural land on which chemicals are used to control crop pests. Continuous exposure of honey bees to pesticides affects the quality of honey. The routes of honey contamination with pesticides are direct and indirect. The direct is treatment of beehives with pesticides (Tsipi et al., 1999). Wild animals, including the grasscutter (*Thryonomys swinderianus*), which are a good source of protein, are seriously affected by the use of pesticides. Grasscutters are a source of food for the people of Ghana in Africa (Sarah et al., 2011). As pesticides have high effect on the animal and bird community, ultimately humans also take up pesticides as meat, milk and crops derived from these animals and plants are consumed by humans.

CONCLUSION

The use of pesticides in order to improve agriculture has not only affected the crop, it has also altered the food chain and the ecosystem. These chemicals not only affect the crop, animals and birds in a specific area but also badly affect the ecosystem balance. Pesticides are causes of high morbidity and mortality. Hence the use of chemical pesticides should be controlled and more use of

bio-pesticides should be employed. Many alternatives are available to reduce the effects of pesticides on the environment. Alternatives include manual removal, applying heat, covering weeds with plastic, placing traps and lures, removing pest breeding sites, maintaining healthy soils that breed healthy and more resistant plants, cropping native species that are naturally more resistant to native pests and supporting bio-control agents such as birds and other pest predators. Consumer awareness should be brought up among people in concern with the long-term harm caused by pesticides.

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उच्च माध्यमिक स्तर पर गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति छात्रों की अभिरुचि का अध्ययन

डॉ. निशा शर्मा* और प्रतिमा दुबे**

प्रस्तावना

मानव जीवन का शिक्षा से घनिष्ठ सम्बन्ध है। मानव जीवन की दृष्टि चाहे जो भी रही हो, उसने शारीरिक शक्ति, मानसिक विकास, बौद्धिक उन्नति, भौतिक आनन्द और आध्यात्मिक पूर्णता की प्राप्ति के लिये एकमात्र शिक्षा का ही सहारा लिया है। मानव ने असम्भव से असम्भव कार्य को शिक्षा द्वारा ही सम्भव बनाया है।

शिक्षा मनुष्य के लिये तृतीय नेत्र के समान है। शिक्षा वैयक्तिक, सामाजिक और राष्ट्रीय प्रगति के लिये ही नहीं, अपितु सभ्यता और संस्कृति के विकास के लिये भी अपरिहार्य है। शिक्षा ही वह साधन है जो मानव को प्राणी जगत के अन्य जीवों से पृथक करती है, जिससे व्यक्ति अपना व्यक्तिगत जीवन सुखमय बनाता है तथा सामाजिक जीवन के अपने कर्तव्यों का पालन करते हुए राष्ट्र के विकास में सक्रिय योगदान देता है।

आज हम वैज्ञानिक युग में जी रहे हैं। हमारे चारों ओर विज्ञान ही दृष्टि गोचर होता है। फलस्वरूप आज मानव जीवन का ऐसा कोई क्षेत्र शेष नहीं है, जो विज्ञान के चमत्कारों से अप्रभावित रह गया है। खाने-पीने, उठने बैठने, लिखने पढ़ने, यात्रा, उद्योग और ईंधन के अतिरिक्त कला और साहित्य भी आज विज्ञान से प्रभावित है। प्रकृति पर क्रमशः विजय के द्वारा सुख-सुविधाओं में वृद्धि विज्ञान की ही देन है।

आधुनिक समय में जिस प्रकार शिक्षा का प्रसार हो रहा है, वहीं पर अभिभावकों एवं शिक्षा तन्त्र के प्रबन्धकों ने शिक्षा प्रदान करने वाली शिक्षण संस्थाओं को भी पाठ्यक्रमों के आधार पर कई भागों में विभाजित करके खड़ा कर दिया है। उन्होंने इस विभिन्नता का आधार विज्ञान, वाणिज्य एवं कला संकाय को बनाया है, उनमें से मुख्यतः यहाँ कला संकाय के अन्तर्गत गृह विज्ञान विषय एवं उसके प्रयोगात्मक स्वरूप को उद्घटित किया जा रहा है।

इतना उपयोगी विषय होने के बावजूद भी उच्च माध्यमिक स्तरों पर गृह विज्ञान विषय में प्रायोगिक कार्य व प्रयोगों के प्रति घटती रुचि एक गंभीर मसला है। गृह विज्ञान विषय में सिद्धान्त व प्रयोग को एक साथ लेकर चलने की जिस धारणा की बात की जाती है, वह मूर्त रूप नहीं ले सकी है, कारण है – संसाधनों और कुशल शिक्षकों का अभाव।

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गृह विज्ञान प्रायोगिक शिक्षा के मामले में ग्रामीण और शहरी बालिकाओं के बीच बहुत बड़ी खाई है। इसके कई कारण हैं, लेकिन प्रमुख कारण है – ग्रामीण क्षेत्रों में ढॉचागत सुविधाओं का अभाव, अपर्याप्त सहायक-तंत्र, सूचना का अभाव और अन्य संसाधनों की कमी। साथ ही तमाम शैक्षणिक सहायता में व्यवस्था का शहर की ओर ज्यादा झुकाव। गृह विज्ञान क्षेत्र में रोजगार और शिक्षण संबंधी सूचनाओं के मामले में ग्रामीण क्षेत्र की बालिकाएँ अनभिज्ञ रहती हैं, जिसके फलस्वरूप वे न केवल इस विषय बल्कि इसके प्रयोगात्मक कार्यों में समस्याग्रस्त रहने के कारण समुचित रूचि नहीं ले पाती हैं।

समस्या अभिकथन -

उच्च माध्यमिक स्तर पर गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति छात्राओं की अभिरूचि का अध्ययन।

अध्ययन के उद्देश्य -

- (1) उच्च माध्यमिक स्तर पर गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति ग्रामीण एवं शहरी क्षेत्र की छात्राओं की अभिरूचि का अध्ययन करना।
- (2) उच्च माध्यमिक स्तर पर गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति सरकारी एवं निजी विद्यालयों की छात्राओं की अभिरूचि का अध्ययन करना।

अनुसंधान विधि -

शोधकर्त्री ने अपने शोध कार्य के लिये सर्वेक्षण विधि को आधार बनाया है।

चर -

1. स्वतन्त्र चर – गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति छात्राओं की अभिरूचि

न्यादर्श -

प्रस्तुत शोध कार्य में हनुमानगढ़ जिले के ग्रामीण एवं शहरी क्षेत्र के उच्च माध्यमिक स्तर के सरकारी एवं निजी विद्यालयों में गृह विज्ञान विषय को ऐच्छिक विषय के रूप में लेने वाली कुल 220 छात्राओं {110 छात्राएँ ग्रामीण क्षेत्र (55 सरकारी विद्यालयों से + 55 निजी विद्यालयों से) + 110 छात्राएँ शहरी क्षेत्र (55 सरकारी विद्यालयों से + 55 निजी विद्यालयों से)} को अध्ययन हेतु न्यादर्श के रूप में चुना गया है, जिनकी आयु 16 से 19 वर्ष के मध्य है।

प्रयुक्त उपकरण -

अध्ययन म-प्रयुक्त उपकरण निम्न हैं –

गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति छात्राओं की अभिरूचि संसूची-
स्वनिर्मित प्रश्नावली।

सांख्यिकी -

अध्ययन में प्रयुक्त की जाने वाली सांख्यिकी मध्यमान, प्रमाप विचलन एवं क्रान्तिक अनुपात है।

अध्ययन में प्रयुक्त परिकल्पनाएँ -

परिकल्पना -1

उच्च माध्यमिक स्तर पर गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति ग्रामीण एवं शहरी क्षेत्र की छात्राओं की अभिरुचि में सार्थक अन्तर नहीं पाया जाता है।

समूह	संख्या N	मध्यमान (\bar{X})	प्रमाप विचलन (σ)	क्रान्तिक अनुपात (C.R.)	सार्थकता स्तर
ग्रामीण छात्राएँ	110	41.64	5.986	0.986	स्वीकृत
शहरी छात्राएँ	110	42.56	5.664		

निश्कर्षतः कहा जा सकता है कि गृह विज्ञान विषय अन्य विषयों की अपेक्षा ज्यादा रुचिकर लगने में, गृह विज्ञान विषय के प्रयोगात्मक कार्यों में रुचि लेने में, प्रयोगात्मक कार्यों की जानकारी होने में, प्रयोगात्मक कार्य करने से आत्मविश्वास में वृद्धि होना मानने में, गृह विज्ञान विषय के समस्त प्रायोगिक कार्यों को समय पर पूर्ण करने का प्रयास करने में, आहार आयोजन संबंधी प्रायोगिक कार्य रुचिकर लगने में, प्रयोगशाला में सिखाई गई खाद्य वस्तुओं को घर पर बनाने का प्रयास करने में, भोज्य समूहों की वास्तविक मात्रा एवं गृह सज्जा संबंधी जानकारी परिवार के अन्य सदस्यों के साथ साझा करने में, गृह विज्ञान विषय के प्रायोगिक कार्य के अन्तर्गत दी जाने वाली टीकाकरण संबंधी जानकारी से अवगत होने तथा गृह विज्ञान विषय के प्रायोगिक कार्यों के आधार पर भविष्य में व्यवसाय का चयन करने आदि गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति अभिरुचि संबंधी कारकों में उच्च माध्यमिक स्तर की ग्रामीण एवं शहरी क्षेत्र की छात्राओं में समानता पायी जाती है।

परिकल्पना-2

उच्च माध्यमिक स्तर पर गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति ग्रामीण क्षेत्र के सरकारी एवं निजी विद्यालयों की छात्राओं की अभिरुचि में सार्थक अन्तर नहीं पाया जाता है।

समूह	संख्या N	मध्यमान (\bar{X})	प्रमाप विचलन (σ)	क्रान्तिक अनुपात (C.R.)	सार्थकता स्तर
सरकारी विद्यालयों की छात्राएँ	55	39.52	4.114	3.674	अस्वीकृत
निजी विद्यालयों की छात्राएँ	55	42.84	5.268		

निश्कर्षतः कहा जा सकता है कि गृह विज्ञान विषय के प्रायोगिक कार्यों को स्वयं करना रूचिकर लगने में, गृह विज्ञान विषय का प्रायोगिक कालांश पढ़ने में अधिक रूचि लेने में, प्रयोगशाला में कराये/ बताये गये प्रायोगिक कार्य को स्वयं घर पर पुनः करना पसन्द नहीं होने में, उत्साह एवं रूचि के साथ प्रयोगात्मक कार्यों को करने में, आहार आयोजन एवं कुशल प्रबन्धन संबंधी प्रायोगिक जानकारी परिवार के सदस्यों को बताने में, बैंक संबंधी कार्य अरूचिकर लगने में, गृहसज्जा संबंधी सिखाये गये कार्यों को अन्य लोगों को सिखाने में रूचि लेने में, वस्त्रों पर विभिन्न प्रकार की कशीदाकारी को स्वयं घर पर करने में रूचि लेने में तथा क्षेत्रीय स्थलों के भ्रमण/सर्वे के दौरान संबंधित स्थलों की सूचनाएँ एकत्रित करना रूचिकर कार्य नहीं होना आदि गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति अभिरूचि संबंधी कारकों में उच्च माध्यमिक स्तर के ग्रामीण क्षेत्र के सरकारी एवं निजी विद्यालयों की छात्राओं में असमानता पायी जाती है।

परिकल्पना -3

उच्च माध्यमिक स्तर पर गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति शहरी क्षेत्र के सरकारी एवं निजी विद्यालयों की छात्राओं की अभिरूचि में सार्थक अन्तर नहीं पाया जाता है।

समूह	संख्या N	मध्यमान (\bar{X})	प्रमाप विचलन (σ)	क्रान्तिक अनुपात (C.R.)	सार्थकता स्तर
सरकारी विद्यालयों की छात्राएँ	55	41.16	5.674	2.742	अस्वीकृत
निजी विद्यालयों की छात्राएँ	55	43.22	5.115		

निश्कर्षतः कहा जा सकता है कि गृह विज्ञान विषय के प्रायोगिक कार्य का गृहकार्य पूर्ण करना रूचिकर लगने में, प्रायोगिक कार्य करने में अधिक आनन्द आने में, प्रायोगिक कार्यों को कुशलतापूर्वक करने हेतु नियमित अभ्यास की आवश्यकता नहीं होने में, गृह विज्ञान विषय का चयन एक प्रायोगिक विषय होने के कारण करने में, आहार आयोजन संबंधी प्रयोगात्मक कार्य का दैनिक जीवन में कोई लाभ नहीं होने में, भोज्य पदार्थों की वास्तविक मात्रा को जानने में रूचि लेने में, सरलीकरण का उपयोग घर पर नहीं किये जा सकने में, बैंक संबंधी विभिन्न कार्यों को स्वयं करने से आत्मविश्वास में वृद्धि नहीं होना मानने में, टीकाकरण के लाभों की जानकारी अन्य लोगों को देने में तथा गृह विज्ञान विषय के प्रयोगात्मक कार्यों के ज्ञान से रोजगार के अवसर बढ़ना मानने आदि गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति अभिरूचि संबंधी कारकों में उच्च माध्यमिक स्तर के शहरी क्षेत्र के सरकारी एवं निजी विद्यालयों की छात्राओं में असमानता पायी जाती है।

परिकल्पना -4

उच्च माध्यमिक स्तर पर गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति ग्रामीण एवं शहरी क्षेत्र के सरकारी विद्यालयों की छात्राओं की अभिरुचि में सार्थक अन्तर नहीं पाया जाता है।

समूह	संख्या N	मध्यमान (\bar{X})	प्रमाप विचलन (σ)	क्रान्तिक अनुपात (C.R.)	सार्थकता स्तर
ग्रामीण छात्राएँ (सरकारी विद्यालय)	55	39.52	4.114	1.082	स्वीकृत
शहरी छात्राएँ (सरकारी विद्यालय)	55	41.16	5.674		

निष्कर्षतः कहा जा सकता है कि गृह विज्ञान विषय के प्रायोगिक कार्य करने के बाद उस प्रक्रिया को घर पर पुनः प्रयोग में लेने में, प्रायोगिक कार्य के अन्तर्गत भोजन पकाने की विभिन्न विधियों एवं पदार्थों की मिलावट की जाँच संबंधी कार्य घरेलू स्तर पर प्रयोग में लेने में, दैनिक जीवन में कुशल प्रबन्धन का प्रयोग लाभदायक होना मानने में, गृहसज्जा संबंधी प्रायोगिक कार्य का उपयोग घर में साज-सजावट के दौरान करने में, वस्त्रों पर विभिन्न प्रकार की पेंटिंग/छपाई को स्वयं घर पर करने में रुचि लेने में तथा क्षेत्रीय स्थलों के भ्रमण/सर्वे के दौरान संबंधित स्थलों की सूचनाएँ एकत्रित करना रुचिकर नहीं लगना आदि गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति अभिरुचि संबंधी कारकों में उच्च माध्यमिक स्तर की ग्रामीण एवं शहरी क्षेत्र के सरकारी विद्यालयों की छात्राओं में समानता पायी जाती है।

परिकल्पना -5

उच्च माध्यमिक स्तर पर गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति ग्रामीण एवं शहरी क्षेत्र के निजी विद्यालयों की छात्राओं की अभिरुचि में सार्थक अन्तर नहीं पाया जाता है।

समूह	संख्या N	मध्यमान (\bar{X})	प्रमाप विचलन (σ)	क्रान्तिक अनुपात (C.R.)	सार्थकता स्तर
ग्रामीण छात्राएँ (निजी विद्यालय)	55	42.84	5.268	0.844	स्वीकृत
शहरी छात्राएँ (निजी विद्यालय)	55	43.22	5.115		

निष्कर्षतः कहा जा सकता है कि गृह विज्ञान विषय के प्रयोगात्मक कार्य वाले दिन सदैव उपस्थित रहने का प्रयास करने में, प्रायोगिक कार्य हेतु प्रदर्शन विधि की आवश्यकता होने में, भोजन परिसीमन संबंधी कार्य का घर में प्रयोग नहीं करने में, पुश्पसज्जा संबंधी कार्य को घर पर उपयोग में लेने में, वस्त्रों पर विभिन्न प्रकार की सिलाई-कटाई को स्वयं घर पर करने में रुचि लेने में, टीकाकरण सूची में दी गई जानकारी को पारिवारिक सदस्यों के साथ साझा करने में तथा प्रायोगिक कार्य के अन्तर्गत बतायी गयी प्राथमिक चिकित्सा पेटी का अपने घर पर उपयोग करने आदि गृह विज्ञान विषय में प्रयोगात्मक कार्य के प्रति अभिरुचि संबंधी कारकों में उच्च माध्यमिक स्तर की ग्रामीण एवं शहरी क्षेत्र के निजी विद्यालयों की छात्राओं में समानता पायी जाती है।

शैक्षिक निहितार्थ -

- (i) गृह विज्ञान विषय के अन्तर्गत सम्पन्न होने वाले प्रायोगिक कार्य को छात्राओं के जीवन से सम्बद्ध कर दिया जाना चाहिए क्योंकि यह एक मानवीय विशेषता है कि जो विषय हमारे जीवन से संबंधित होते हैं, हम उनमें अधिक रुचि प्रदर्शित करते हैं।
- (ii) उद्देश्यहीन शिक्षण या विषयवस्तु छात्राओं में रुचि उत्पन्न नहीं कर पाती है। अतः गृह विज्ञान विषय के अन्तर्गत प्रयोगों के उद्देश्य छात्राओं को स्पष्ट होने चाहिए, उद्देश्य जब तक स्पष्ट नहीं होंगे, छात्राओं में गृह विज्ञान विषय के प्रायोगिक कार्य के प्रति रुचि उत्पन्न नहीं हो सकेगी।
- (iii) गृह विज्ञान विषय के प्रायोगिक कार्य के प्रति रुचि बनाये रखने के लिये आवश्यक है कि शिक्षण वस्तु तथा प्रायोगिक विधियों में विविधता लाई जाये।
- (iv) गृह विज्ञान विषय के पाठ्यक्रम में चिंतन, मानसिक, तार्किक क्षमता विकसित करने वाली विषयवस्तु को समाहित किया जाना चाहिए ताकि छात्राओं में कौशल विकास के साथ रुचि भी जागृत हो सके।

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A Study on the Achievement in Mathematics of Outstanding Learners at MP in Comparison to School Test in West Bengal

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ABSTRACT

In this paper, an investigation has been done to know the achievement status of Outstanding learners in mathematics in Madhyamik Pariksha (MP) in comparison to school Test in West Bengal irrespective of several categories like region, gender and caste as a whole. Total 151 Outstanding learners of 14 high/higher secondary schools under West Bengal Board of Secondary Education (WBBSE) from five districts in West Bengal were taken as a sample of this study. The mean-achievement score in mathematics in MP-2018 is 94. In general, 8.1% of the mean-achievement score of Outstanding learners in mathematics in MP-2018 has been increased in comparison to school Test. According to caste, the relationship among the number of Outstanding learners is OBC-A<OBC-B<SC<General. No ST Outstanding learner was found here. According to gender, the performance of male learners is better than that of female learners in MP when compared to Test. But it is a matter of pity though the mean-achievement score of the urban learners has increased in MP, it has decreased for rural learners. It indicates that there is something wrong with the evaluation system.

Key words: mathematics education, Outstanding learners, students' achievements, secondary level, rural, urban, gender, caste.

2010 AMS Mathematics Subject Classification: 97A99, 97B70, 97D60.

INTRODUCTION

In the evaluation system of secondary school level in West Bengal, gradation system has been started a few years ago. The performance of the students is measured by two ways-one is quantitative and other is qualitative through this system. In this system, every student gets subject wise grades and an overall grade. At present, the score between 90-100 is called Outstanding and graded by "AA" for both performances of individual subject and overall. The students who get the overall grade "AA" may not obtain grade "AA" in each subject, but according to overall grades, they are Outstanding learners. Now, Madhyamik Pariksha (MP) is the first Board Examination at secondary level under West Bengal Board of Secondary Education (WBBSE) in West Bengal. The Xth Standard learners of every institution under this Board appear for a Test at school level before appearing for the MP. In this level, mathematics is a crucial subject which is the base of science. But it is a matter of pity that a traditional idea is borne in the educational environment

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as well as in society, that math is a difficult subject for all. This stereotype view is not obvious for any other subject like mathematics at secondary level. So, questions may be raised- "Is the poor performance in mathematics seen of the Outstanding learners? Is there any inconsistency in the achievement in mathematics of these Outstanding learners between school Test and MP?" On the other hand, we dream to make a beautiful society through all round development of the society. It can be done using the powerful weapon of 'education" and in particular, 'mathematics education". Mathematics education nourishes the rational faculty of the learners. So, Outstanding learners should come from all corners irrespective of region, gender, caste to fulfil our said dream. The researchers feel that these learners will play a more active role to make a good nation which we dream. Since, the researchers, one of whom is deputy secretary (academic), WBBSE and the other is a secondary level mathematics teacher under this Board, so they have emphasized to know the present status of mathematics education of Outstanding learners in MP in comparison to school Test, irrespective of region, gender, caste etc.

Objective of the Study

- (i) To find the achievement of the Outstanding learners in mathematics in MP-2018 on the basis of region, gender, caste.
- (ii) To study on the achievement of the Outstanding learners in mathematics in MP-2018 in comparison to school Test.

Sample

Total 14 high/higher secondary schools of five districts (Viz. Kolkata, North-24 Pargana, Nadia, Purba Bardhaman and Birbhum) under WBBSE in West Bengal have been taken as a sample for this study. Among them, 6 schools are situated in rural area and 8 are in urban. They are 7 co-ed, 3 boys and 4 girls. 12 schools are instructed by Bengali and 2 by English. They are also 13 Government sponsored and 1 private.

Data

The achievement scores of school Test and MP-2018 of Outstanding learners (secured grade "AA" in MP-2018) in mathematics of 151 students (Male-105 and girls-46) are the raw data of this study.

Procedure

Descriptive type survey was adopted for this study. A questionnaire was framed for it which is shown in Appendix.

Numbers of Outstanding learners according to several category i.e. region, gender and caste are found. Then, the mean-achievement scores of school Test and MP according to region, gender, caste and whole are calculated. The graphical presentations of them have been done.

Salient Points of the Study

- (i) The numbers of Outstanding learners according to several categories like region, gender, caste etc. are presented below in Table-1.

Table-1: Numbers of Outstanding learners according to several categories

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Gender	Male					Total	Female					Total	Grand Total
Category	SC	ST	OBC-A	OBC-B	General		SC	ST	OBC-A	OBC-B	General		
Urban	8	0	1	5	60	74	7	0	0	2	30	39	113
Rural	2	0	4	2	23	31	1	0	1	0	5	7	38
Grand Total	10	0	5	7	83	105	8	0	1	2	35	46	151

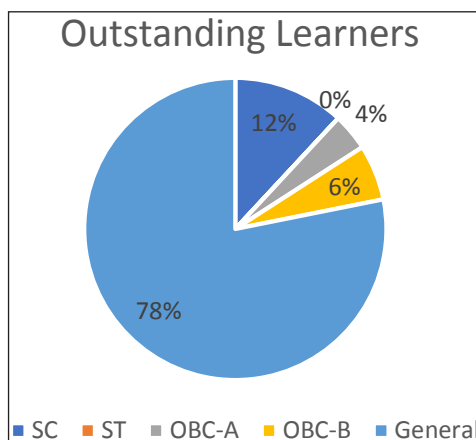
• SC-Scheduled Caste, ST-Scheduled Tribe, OBC-Other Backward Class

ii. The numbers of Outstanding learners and their percentages according to caste i.e. SC, ST, OBC-A, OBC-B and General are presented below in tabular as well as graphical form (Table-2, Graph-1a, Graph-1b).

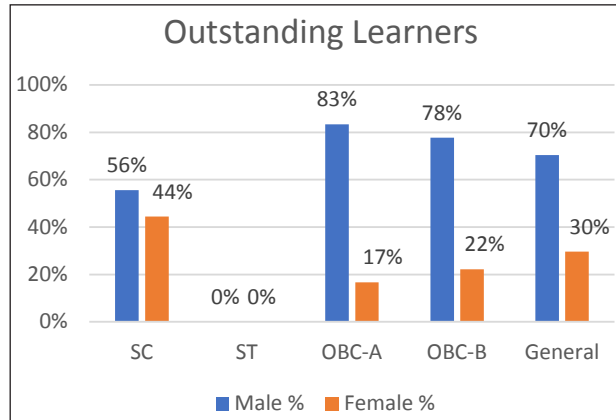
Table-2: Numbers of Outstanding learners and their percentages according to caste

1	2	3	4
Gender Category	Male	Female	Total and their percentages
SC	10	8	18 (12%)
ST	0	0	0 (0%)
OBC-A	5	1	6 (4%)
OBC-B	7	2	9 (6%)
General	83	35	118 (78%)

Graph-1a



Graph-1b

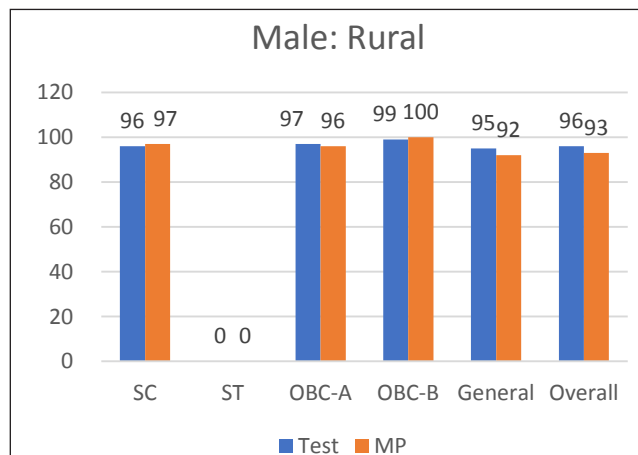


iii. The mean-achievement scores of school Test and MP-2018 in mathematics of Outstanding male learners of SC, ST, OBC-A, OBC-B, General and Overall in respect of rural schools, urban schools and composite (rural and urban schools) are shown below in tabular as well as graphical form (Table-3, Graph-2a, Graph-2b and Graph-2c).

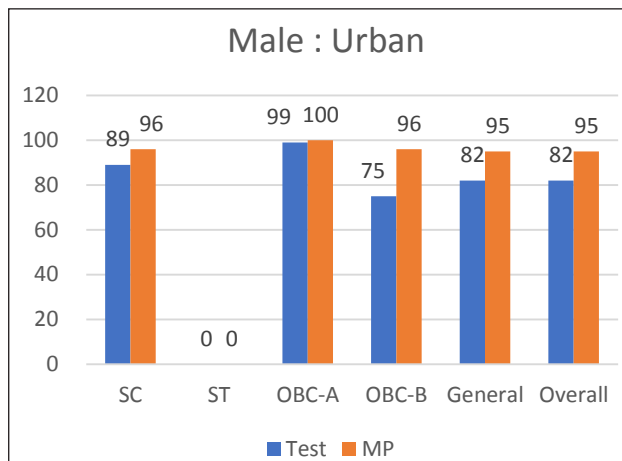
Table-3: Mean-achievement score of Outstanding Male learners of several categories

1	2	3	4	5	6	7	8	9	10	11	12	13
Category	SC		ST		OBC-A		OBC-B	General		Overall		
Types of Exam	Test	MP	Test	MP	Test	MP	Test	MP	Test	MP	Test	MP
Rural	96	97	-	-	97	96	99	100	95	92	96	93
Urban	89	96	-	-	99	100	75	96	82	95	82	95
Composite	91	96	-	-	97	97	83	97	85	94	86	95

Graph-2a



Graph-2b



Graph-2c

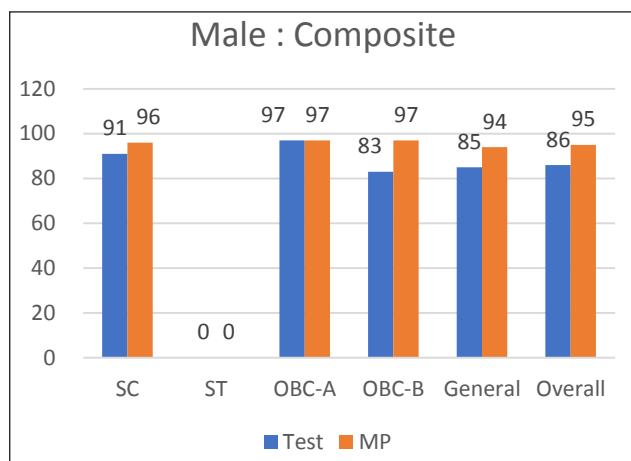


Table-3 reveals that the mean-achievement scores of Outstanding male learners in school Test and MP are 86 and 95 respectively i.e. 10.5% score is increased in MP in comparison to school Test.

In Outstanding male learners of urban area, the mean-achievement score of MP is higher than that of school Test. In remarkable, 28% score is increased by OBC-B and 16% increased by General.

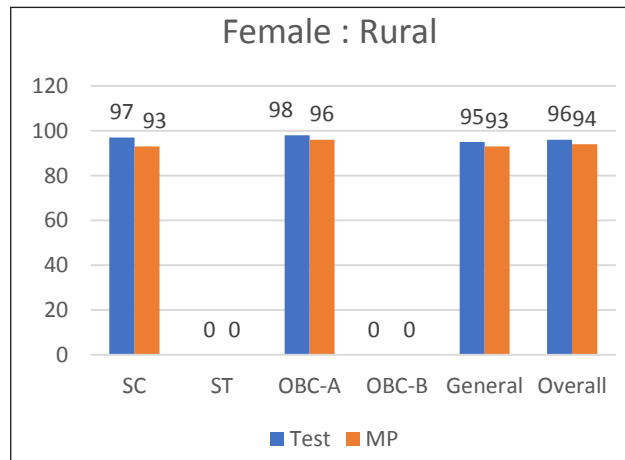
On the other hand, in Outstanding male learners of rural area, 3% of the mean-achievement score of MP is lesser than that of school Test.

- iv. The mean-achievement scores of school Test and MP-2018 in mathematics of Outstanding female learners of SC, ST, OBC-A, OBC-B, General and Overall in respect of rural schools, urban schools and composite (rural and urban schools) are shown below in tabular as well as graphical form (Table-4, Graph-3a, Graph-3b and Graph-3c).

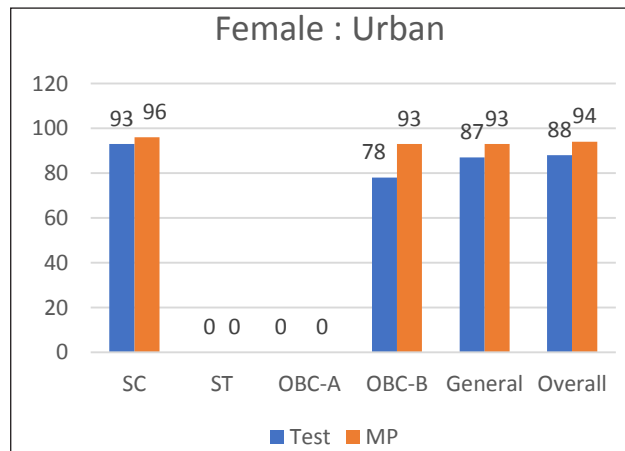
Table-4: Mean-achievement score of Outstanding Female learners of several categories

1	2	3	4	5	6	7	8	9	10	11	12	13
Category	SC		ST		OBC-A		OBC-B		General		Overall	
Types of Exam	Test	MP	Test	MP	Test	MP	Test	MP	Test	MP	Test	MP
Rural	97	93	-	-	98	96	-	-	95	93	96	94
Urban	93	96	-	-	-	-	78	93	87	93	88	94
Composite	93	96	-	-	98	96	78	93	88	93	89	94

Graph-3a



Graph-3b



Graph-3c

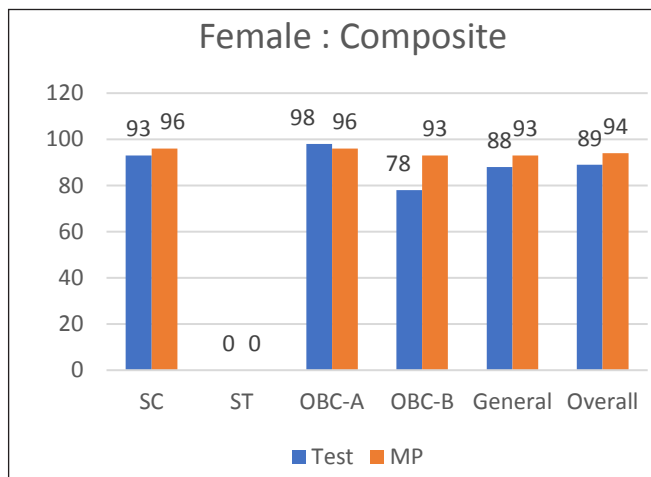


Table-4 reveals that the mean-achievement scores of Outstanding female learners in school Test and MP are 89 and 94 respectively i.e. 5.6% score is increased in MP in comparison to Test.

In Outstanding female learners of urban area, the mean-achievement score of MP is 6.8% higher than that of school Test. In remarkable, more than 19% score is increased by OBC-B and about 7% increased by General.

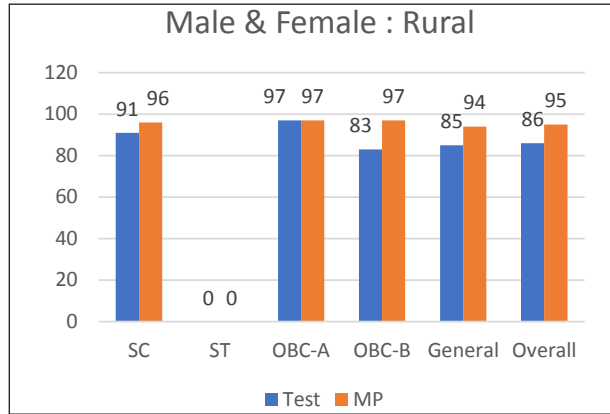
On the other hand, in Outstanding female learners of rural area, 2% of the mean-achievement score of MP is lesser than that of Test. The mean-achievement scores of all category of rural female Outstanding learners are decreased in MP in comparison to Test.

- (v) The mean-achievement scores of school Test and MP-2018 in mathematics of Outstanding learners (both male and female) of SC, ST, OBC-A, OBC-B, General and Overall in respect of rural schools, urban schools and composite are shown below in tabular as well as graphical form (Table-5, Graph-4a, Graph-4b and Graph-4c).

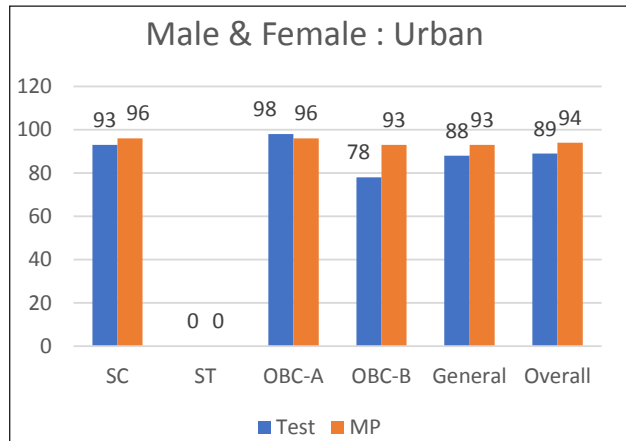
Table-5: Mean-achievement score of Outstanding learners (both male & female) of several categories

1	2	3	4	5	6	7	8	9	10	11	12	13
Category	SC		ST		OBC-A		OBC-B		General		Overall	
Types of Exam	Test	MP	Test	MP	Test	MP	Test	MP	Test	MP	Test	MP
Male	91	96	-	-	97	97	83	97	85	94	86	95
Female	93	96	-	-	98	96	78	93	88	93	89	94
Composite	92	96	-	-	97	97	82	96	86	94	87	94

Graph-4a



Graph-4b



Graph-4c

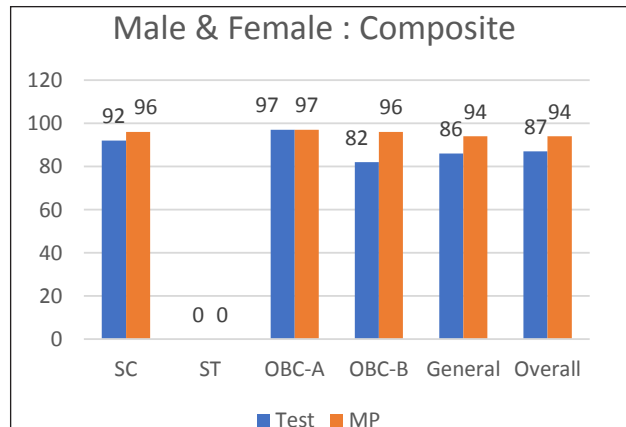


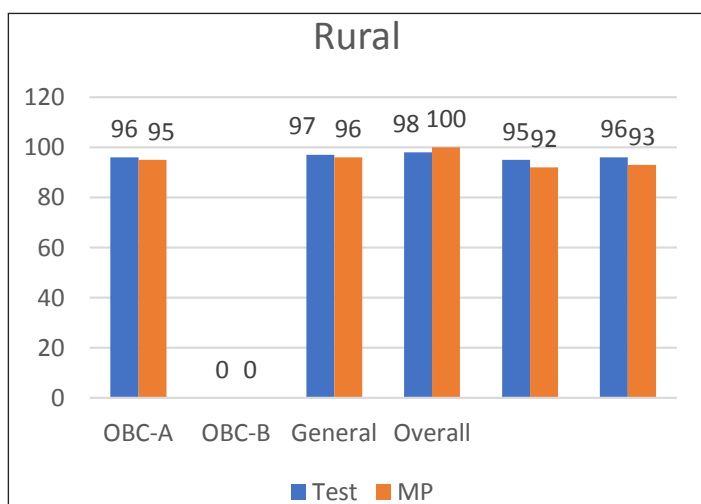
Table-5 reveals that the mean-achievement scores of MP of all Outstanding learners (except Outstanding female learners of OBC-A) are equal or greater than that of school Test. In general, 8.1% score is increased in MP in comparison to Test.

Here, the increased mean-achievement score (i.e. 10.5%) of male learners is higher than that (5.6%) of female learners. In remarkable, 16.9% score is increased by OBC-B (male) and more than 19% increased by OBC-B (female), 10.6% score increased by General (male) and 5.7% score increased by General (female).

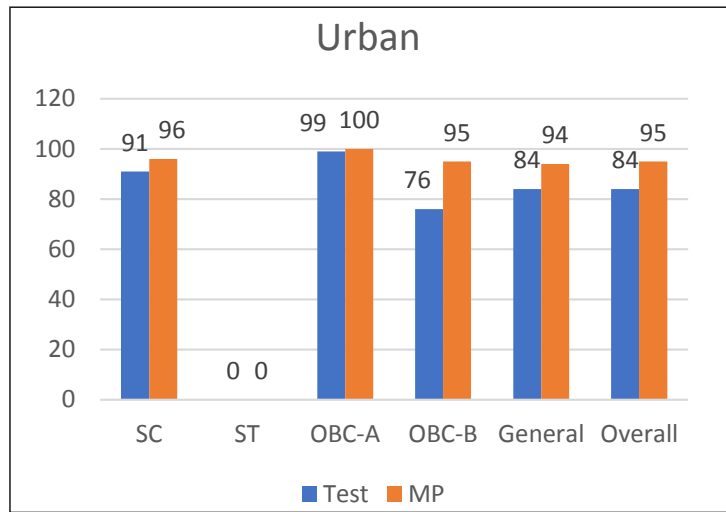
vi. The mean-achievement scores in mathematics of school Test and MP-2018 of Outstanding learners of several categories (SC, ST, OBC-A, OBC-B, General and Overall) in respect of rural schools, urban schools and composite are shown below in tabular as well as graphical form (Table-6, Graph-5a, Graph-5b and Graph-5c).

Table-6: Mean-achievement score of Outstanding learners of several categories in rural and urban schools

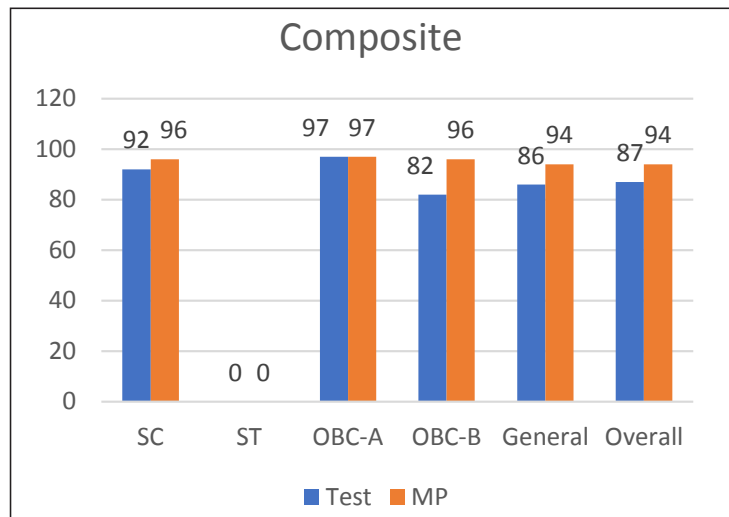
1	2	3	4	5	6	7	8	9	10	11	12	13
Category	SC		ST		OBC-A		OBC-B		General		Overall	
Types of Exam	Test	MP	Test	MP	Test	MP	Test	MP	Test	MP	Test	MP
Rural	96	95	-	-	97	96	98	100	95	92	96	93
Urban	91	96	-	-	99	100	76	95	84	94	84	95
Composite	92	96	-	-	97	97	82	96	86	94	87	94



Graph-5a



Graph-5b



Graph-5c

Table-6 reveals that the mean-achievement scores of MP of all categories of all Outstanding learners (except OBC-B) of rural area are lesser than that of school Test. In general, the rate of decreased mean-achievement score is 3.1%.

On the other hand, the mean-achievement scores of MP of all categories of all Outstanding learners of urban area are equal and greater than that of Test. In general, the rate of increased mean-achievement score is 13.1%. In remarkable, 25% score is increased by OBC-B (urban learners) and about 12% increased by General (urban learners).

CONCLUSION

1. In general, 8.1% of the mean-achievement score of Outstanding learners in mathematics in MP-2018 has been increased in comparison to school Test. The learners and the persons who are related to this can apparently get the pleasure from this finding.
2. According to caste, the relationship among the number of Outstanding learners is OBC-A<OBC-B<SC<General. But no ST student has secured 90% and above marks. The performance in mathematics of general category student is very good than any other category. So, special attention is needed for several castes according to the above findings.
3. As a whole, the increased rate of the mean-achievement scores in mathematics in MP in comparison to school Test is graded like OBC-A<SC<General<OBC-B. The mean-achievement score is 94.
4. According to gender, the performance of male learners is better than that of female learners in MP when compared to Test.
5. According to region/area, the increased rate of mean-achievement score of urban learners in MP in comparison to Test is about 12%. On the other hand, 3.1% is decreased rate of mean-achievement score of rural learners in MP in comparison to Test. So, it is not a healthy situation for the evaluation system.

Further Study

- (i) To find out the causes-why the mean-achievement scores in MP in all most all categories Outstanding learners of rural areas are decreased in comparison to school Test, but these are increased by urban learners.

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2. Sk. Samsul Alam, An Investigation into Achievement Status of Rural Secondary School Learners in Mathematics in Burdwan District, Indian Journal of Mathematics Teaching, ISSN 2454-3640, Vol-42, Nos-1&2, PP4-17, 2016.

APPENDIX QUESTIONNAIRE

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Towards an Understanding of 'Hindu Philosophy'

Shivam Sharma*

INTRODUCTION

The concept Hindu has been so naturalized in our society that its real connotation and denotation are lost upon us and we have stopped questioning what it is actually to be Hindu. In the 21st century India the word Hindu means so many things but everyone associates it only with religion. The concept Hindu is not merely a word but a label that has a history which forces us to think and question the taken for granted usage of this term in present day scenario. The word Hindu has been homogenized in such a way that nobody cares to understand or consider the history it has and the amalgamation of various trends of thoughts that coexisted together and collectively came to be known as Hindu.

In this paper, I will try to deal with the concept Hindu and how and why this concept has originated. "The term Hindu is the Persian variant of the Sanskrit Sindhu, referring to the Indus River, and was used by the Persians to denote the people of the region. The Arabic 'Al-Hind," therefore, is a term denoting a particular geographical area. Although indigenous use of the term Hindus themselves can be found as early as the fifteenth and sixteenth centuries, its usage was derivative of Persian Muslim influences and did not represent more than a distinction between 'indigenous' or 'native' and foreign." (King.162). There is an agreement between most of the scholars on the origin of the term Hindu which is given to us by Persians and Greeks for the people living beyond the river Sindhu and from Sindhu the term Hindu came into emergence. So, it is clear that the term Hindu primarily had territorial and ethnic connotations as it is used for the all the people who live beyond the river Sindhu. Despite their cultural, linguistic, and religious differences they all were called Hindu. So, the term Hindu itself has so many aspects, but nowadays if you ask anyone that what is Hindu or who is Hindu, he/she would reply that it is the creed of the people who believe in a particular religion. This reduces Hindu to be identified almost entirely and exclusively with its religious aspect.

In this paper, I will problematize the association of the concept Hindu with religion and its construction as a religious identity. The concept Hindu and its various derivatives like Hinduism etc. have been transformed from its original regional, ethnic basis to a religious identity. I will also discuss the concept "Hindu philosophy". In present academic discourse when we study Hindu philosophy we many times introduce this term and never question its authenticity and validity. When we talk about Hindu philosophy what is that we are talking about. Because if the concept Hindu is a geographical indicator then whatever we have under the head of Indian philosophy (today's legitimate term we have for this geography) should be Hindu philosophy as well but we find that this is not the case. We have nine major classical schools of Indian philosophy from which six Indian philosophical systems (also categorized and called *saddarshanas*) comes into Hindu philosophy and three schools have been excluded (which are Buddhism, Jainism and Carvaka). I will try to discuss this classification and also try to shed light upon the difference between Hindu philosophy and Indian philosophy that prevails in the academic discourse which is the result of the construction of that "ism" (Hinduism) through the concept of Hindu. As by this 'ism' the term Hindu has been popularized as religious identity in 19th century and continues in this form even today. The richness of spirituality that we have in our Indian philosophical tradition is taken for granted and reduced to a religious framework.

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HINDU AS A RELIGIOUS IDENTITY: A NATURALIZED MYTH

The concept Hindu we have in our present day society is not merely a label or a word which is something new to us but it includes a history within itself as this concept has evolved with time and now whatever definition of this concept we have is the result of our history. This historical evolution and construction of Hindu identity in a religious sense alone is unclear. I have already mentioned that there is an agreement between most of the indigenous scholars that the concept Hindu has had geographical basis in its origin and probably includes ethnic, linguistic, and religious aspects. But now this concept has been transformed and homogenized in such a way that it is comprehended as a religious identity alone.

In the article ‘Unpacking the Labels “Hindu and “Hinduism” in Singapore’ Vineeta Sinha also problematizes the term Hindu, and says “a term Hindu and its various derivatives including Hinduism have been transformed from their original regional and possibly ethnic meanings to carrying religious substance. More importantly, specific meanings are attributed to these categories particularly through orientalist and Indological writings and have structured definitions and empirical interpretations of Indian religiosity. These writings have tended to produce homogenous, monolithic and essentialist conceptualizations of Hinduism” (Sinha, 139).

There are scholars who argued that the Muslim rulers during the medieval period used the word Hindu to broadly define their subjects and their cultural practices, by labeling them Hindu they also distinguished their subjects from themselves. A variety of cultural practices were clubbed

Under the umbrella term which was Hindu and it came to be used for a plurality of belief systems that were in existence in that period. Hindu was also used for the people who belonged to the religion other than Islam and from here the concept Hindu started to shift from geo-ethnic to a religious identity.

On the other hand there are scholars who argued that the shift from region to religion in the label of Hindu has taken place during British colonial period. As they constructed the term Hinduism for the practices (mainly religious) of Hindus (natively Indians) and from here the concept Hindu has been naturalized as a religious identity. According to Richard King “it is clear that the term Hindu before nineteenth century used by the indigenous Indians, did not have the specifically religious connotations which it subsequently developed under orientalist influences until the nineteenth century”. (King, 163)

David N. Lorenzen in his article “Who Invented Hinduism” argued that such claims are false. He said that “Over the past decade, many scholars have put forward the claim was constructed, invented, or imagined by British scholars and colonial administrators in the nineteenth century and did not exist, in any sense, before this date. J. Laine (1983) agrees that Hinduism was invented in the nineteenth century, but credits the inventions to the Indians rather than to the British”. (Lorenzen, 630)

Let’s not go deep into history and it is not my main objective to find how the concept Hindu has been transformed from regional to religious identity as there are different stands among scholars on this discourse as some scholars state that it is the result of medieval Muslim invasion on the other hand some state that it is the result of orientalist indological understanding. But there are evidences that after the medieval age and the British subjugation of about two centuries the term Hindu has been practiced in its original sense as “The 1955 Hindu marriage act section 2(1) defines a Hindu as a category including not only all Buddhists, Jains, and Sikhs but also anyone who is not a Muslim, Christian, a Parsee or a Jew”. (Sharma, 17)

Here it is clear that the term Hindu has been used in terms of the original regional identity as it includes the native cultures practices and religions into it. Then how and when it was constructed as a religious identity that prevails in present day society. It is the contribution of the continuing rulers from medieval to British time and the Indian nationalists as well. As Veer Savarkar in his book

'Hindutva: Who is Hindu' mentions "A Hindu means a person who regards this land of Bharatvarsha, from the Indus (Sindhu) to the seas as his fatherland as well as his holy land that is the cradle land of his religion" (Savarkar, 1). He also mentions that the term Hindu has been designated to all the people belonging to Bharatvarsha but he also relates this to religion as he uses the term fatherland and holy land which he quoted from *smriti* and *purana*. Based on the abovementioned ideas I can safely put forward my argument that the conception that we have about Hindu today is not the result of medieval era Muslim invasions or of western orientalism or the nationalists approach to this concept but it is a resultant of their continued and combined selfish approach. And nowadays this concept has been so naturalized and internalized that people only understand the concept Hindu in terms of religion and that also in homogenous way. This concept entered our philosophy and has given birth to the concept 'Hindu philosophy' which was seen with religious connotations denying it its diverse richness and this marked a dividing line between Indian philosophy and Hindu philosophy.

WHAT IS HINDU PHILOSOPHY?

In philosophy we often find the term Hindu philosophy and we never question that what is Hindu philosophy? In this section I will try to discuss the label Hindu philosophy used in academic discourse by various Indian and foreign thinkers.

To proceed further I should mention the givens. India has a very rich heritage in the field of philosophy as we have a huge number of philosophical systems resulting from a more or less two thousand and five hundred years of continuous philosophical activity which is so diverse that we can't put them all together into a single label on any basis other than geographical. Whenever we talk about Indian philosophy or philosophy of India in academic discourses it is about the classical philosophical systems. One can question why it does not include the philosophical activity of medieval, modern and contemporary times. It can only have two reasons, first might be that no important work has been done in these periods or maybe we don't acknowledge them to be put under Indian philosophy, the second case that could be possible is that we have never allowed ourselves to come out of the classical Indian discourse.

Classical Indian philosophy has been divided majorly into nine different schools which are Carvaka, Buddhism, Jainism, Nyaya, Vaisheshika, Samkhya, Yoga, Mimamsa, and Vedanta. And among these nine schools according many thinkers the later six philosophical systems refer to Hindu philosophy.

In the book 'Unifying Hinduism' by Andrew Nicholson, Hindu refers to the religious thought and practice of practitioners of *Sanatana dharma*, a term that means "eternal dharma" used many centuries ago in the *Bhagvat gita*. The British in India were overwhelmed in India with what they considered to be a "multitude of popular rites without any unifying philosophical or theological framework" hence, unaware or at least unappreciative of India's rich Sanskrit literary and philosophical traditions, they were said by some to have created the "ism" needed to legitimate the diverse lifestyle and beliefs of the Hindus. Nicholson painstakingly demonstrates that between the twelfth and sixteen centuries, certain thinkers began to treat as a single whole the diverse Philosophical teachings of the *Upanishads*, epics, *puranas*, and the schools known retrospectively as the 'six systems' (*saddarsana*) of mainstream Hindu philosophy." (Chapple, 547)

The binary that we have in Indian philosophy that divides these nine classical schools of Indian Philosophy (into *Astikas* and *Nastikas*) is the result of oriental-liberal-nationalist discourse and they put the six schools into a vessel and labelled them as *astikas* (as these schools believed in the authority of Vedas and other authoritative scriptures). There are many myths attached to these systems as they share many things in common and on that basis they had been put together

under the *Astika* label. Further this label transformed in due course of time and came to be known as Hindu philosophy.

Daya Krishna in his article "Three Myths about Indian Philosophy" talks about this binary of Indian philosophy and argues that "almost invariably each writer on Indian philosophy starts his account by drawing a distinction between the "orthodox" and "unorthodox" schools of Indian philosophy. This distinction is in terms of their acceptance and non-acceptance of the authority of Vedas. He claims that the notion of Vedic authority is a myth and produces various arguments in support. He also claimed that "if, therefore we deny the authoritative character of Indian Philosophy then, in an important sense, we deny the concept of "schools" also. There is no such thing as final, frozen positions which the term schools, in the context of Indian Philosophy, usually connote" (Krishna, 94-100)

The argument that I want to make is, do these six schools believe in the authority of Vedas and other authoritative scriptures and are explicitly different from the other three schools of Indian philosophy because these are the arguments that have been placed to justify the label which homogenized all the six schools of Indian philosophy. The similarities that have been proposed between these six schools are, they all believe in the authority of Vedas and other authoritative

Scriptures, they relied too much on the spiritual side of man and also on moksha etc. But we have to look closely at all these schools separately to check whether these similarities are valid or are just allegations to make them homogenous.

Labelling these six schools as Hindu Philosophy may be a part of the approach of putting these schools into a religious framework that has been done similar to the concept of Hindu. The term Hindu philosophy in philosophical academic discourse has been connected with the philosophy of Vedas and other scriptures mainly to the Upanishads and on the basis of acceptance of their authority they have been as being rooted and grounded in religious philosophy, but we can argue that it is not the reality.

The understanding of Hindu Philosophy and the association of the term Hindu with religion can also be seen in the writings of Radhakrishnan. "Radhakrishnan"s hierarchy of religions is well-known. "Hinduism," Radhakrishnan affirms, "accepts all religious notions as facts and arranges them in the order of their more or less intrinsic significance": "The worshippers of the Absolute are the highest in rank; second to them are the worshippers of the personal God; then come the worshippers of the incarnations like Rama, Kṛṣṇa, Buddha; below them are those who worship ancestors, deities and sages, and the lowest of all are the worshippers of the petty forces and spirits (HVL 32)". (<http://www.iep.utm.edu/radhakri/>)

For Radhakrishnan, Hinduism at its Vedantic best is religion. Other religions, including what Radhakrishnan understands as lower forms of Hinduism, are interpretations of Advaita Vedanta. Hindu Religion (mainly Vedantic) and other religions are related in Radhakrishnan"s mind as are experience and interpretation. The various religions are merely interpretations of his Vedanta. In a sense, Radhakrishnan "Hinduizes" all religions. Radhakrishnan appropriates traditional exegetical categories to clarify further the relationship: "We have spiritual facts and their interpretations by which they are communicated to others, *śruti* or what is heard, and *smṛiti* or what is remembered. Śaṅkara equates them with *pratyakṣa* or intuition and *anumana* or inference. It is the distinction between immediacy and thought. Intuitions abide, while interpretations change (IVL90)". (<http://www.iep.utm.edu/radhakri/>)

Apart from the orientalists the Indian scholars have also contributed in the labelling process of Hindu Philosophy and the allegations that we are facing in present times that Indian philosophy is merely religious or mystic in its nature is the result of the oriental-liberal-Indian nationalists"

discourse. My main concern in this paper is to generate a discourse that can better the present image of Indian philosophy which has often been portrayed as exclusively.

Difference between 'Indian Philosophy' and 'Hindu Philosophy'

In this part, I will address questions like is there any difference between Hindu Philosophy and Indian Philosophy? If the concept Hindu has geographical origins then how these two concepts are different in their nature? I will also discuss Buddhism and Jainism, that why they have their place in Indian Philosophy but are not considered being a part of Hindu philosophy.

In academic discourse and as well as in practices there is a demarcation between Hindu philosophy and Indian Philosophy and this demarcation can be grasped easily through the writings of many scholars. In our present day society the term "Indian" is used and naturalized as the geographical demarcation and the term Hindu is used to refer to the religious identity. And that could be seen with the division of philosophical schools under the label Indian philosophy where we have nine philosophical schools and out of which six has come to be known as Hindu philosophy. But according to me the word Hindu and Indian is similar in their nature they both carried regional, ethnic, linguistic, and religious aspects in them. The *nastika* schools as Carvaka, Jainism and Buddhism which have their space under Indian philosophy but not under Hindu philosophy is because of the naturalization of the term Hindu as religious. But in actuality there is no difference between these two because both the concepts of India as well as Hindu has geographical origins. However due to the modern constructions, Jainism and Buddhism have not been placed under Hindu philosophy. According to me the word religion itself is a modern invention and it is highly problematic to use it out of context. There were varieties of belief systems in ancient times which co-existed in the geo-entirety that has come to be known as Hindu or India which are one and the same.

The difference that we have in both the concepts Hindu philosophy and Indian philosophy is the result of "Hinduism" that is a modern 19th century invention, developed through the oriental-Indian scholars discourse. The article 'Orientalism and the Modern Myth of Hinduism' by Richard King will support my claim as in his article he explains that how the cultural and spiritual richness of Indian philosophy makes the image of India in west. He points out two images one is of 'mystical east' and the other is that of the 'militant fanatic' that is coming to the fore in western circles. And how these "orientalist presuppositions about the "spirituality" of India were used by reformers such as Ram Mohan Roy, Dayananda Saraswati, Swami Vivekananda, and Mohandas K. Gandhi in the development of an anti-colonial Hindu nationalism." (King, 147-151) The notion of a Hindu religion was constructed and propagated by western orientalist based upon their understanding of what might constitute a religion i.e. they tried to superimpose their presuppositions about religion on the Indian people. This idea was later adopted by Hindu nationalists in their search for freedom from the British imperial rule and hegemony. This view is in tune with King's idea that "the notion Hinduism is itself a western inspired abstraction, which until the nineteenth century bore little or no resemblance to the diversity of Indian religious belief and practice. The term "Hinduism" which of course derives from the frequency with which Hindu came to be used, is a western explanatory construct. As such it reflects the colonial Judeo-Christian presuppositions of the western orientalist who first coined the term." (King, 162)

King argues that, David Kopf praises this 'gift' from the orientalist seemingly unaware of the Eurocentric agenda underlying it and the extent to which the superimposition of the monolithic entity of "Hinduism" upon Indian religiosity in a westernized direction. Thus, he states that, the term Hinduism seems first to have made an appearance in nineteenth century, and gradually gained provenance in the decades." The oxford English dictionary traces "hindooism" to an 1829 reference in the Bengalee, and also refers to an 1858 usage by the German Indologist Max Muller. Dermot Killingly however, cites a reference to 'hindooism' by Rammohan Roy in 1816. As killingly suggests, "Rammohan was probably the first Hindu to use the term 'Hinduism". Roy's idea about Hindu were

influenced by his European, Muslim and Unitarian theological influences which may have resulted in him being called as the Father of Modern India by westerners. "European colonial influence upon Indian religion and culture has profoundly altered its nature in the modern era. In particular I would like to highlight two ways in which western colonization has contributed to the modern construction of "Hinduism"- firstly by locating the core of Indian religiosity in Sanskrit texts (the textualisation of Indian religion) and secondly by an implicit (and sometimes explicit) tendency to define Indian religion in terms of the normative definition of religion based upon contemporary western understanding of the Judeo-Christian traditions." (King, 166) The linking of Sanskrit texts to the concept Hindu philosophy further disallowed Buddhist and Jaina philosophy to associate themselves with it. The presuppositions of the orientalist cannot be undermined in the process whereby the modern Indians have come to believe their own identity and culture through colonial lenses. It is clear, then, that from the nineteenth century onwards Indian self-awareness has resulted in the development of an intellectual and textually based "Hinduism" which is then traced back to India's religious history.

Therefore we can safely submit that Hindu philosophy is similar to Indian philosophy and both are geographical constructs. The addition of religious connotations to Hindu philosophy has been due to the construction of modern orientalist and nationalist thinkers which drew a dividing line between Hindu philosophy and Indian philosophy. They have achieved this project by linking Indian philosophy to Sanskrit texts and labelling it as Hindu and having religious meanings however this has never been the case.

CONCLUSION

In this paper, I have tried to understand the concept Hindu which has had its own history from its geographical identity formation to the construction of this concept as religious identity. I also discussed the concept of Hindu philosophy and its sub-classification into different schools and have tried to problematize this classification with reference to the classical notion of the concept Hindu primarily being a geographical indicator. In this paper I also investigated the modern discourse and difference that has been constructed between Hindu philosophy and Indian Philosophy which has prevented certain other philosophies to come under the umbrella term of Hindu philosophy. We need to look at Hindu Philosophy from a vantage point from where we can examine it in an unbiased fashion.

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