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JAKIR HOSSAIN B. ED. COLLEGE
P. O. –Miapur, Ghorsala,
Dist. – Murshidabad, West Bengal,
India, Pin – 742225

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From the Desk of Editor-in-Chief

The undersigned takes pleasure in bringing out the seventh issue of 'JOURNAL OF EDUCATION AND DEVELOPMENT'.

This issue contains articles on various aspects of different subjects of the changing world. To keep the length of the issue within reasonable bounds, it has been necessary to be very selective in the incorporation of articles. Some of the articles still remain in the queue to get appropriate place in the next issue of the journal. The editor acknowledges his debit and gratitude to all members of the editorial board and to all contributors.

Suggestions for further improving the journal are earnestly solicited and will be cordially received.

Kalyani, West Bengal
31, December, 2017

Editor-in-Chief

JOURNAL OF EDUCATION AND DEVELOPMENT

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The purpose of the journal is to foster inter-cultural communication among educators, teachers, academicians, administrators, researchers. nationwide coverage transactional collaborative effort in research and development and to promote critical understanding of educational problems in a global perspective.

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AN EFFECTIVE INCLUSIVE EDUCATION IN CLASSROOM: A VISIONARY MODEL

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Inclusive Education is when every child is welcomed and valued regardless of ability or disability.

Inclusive Education is an **attitude**. It means the doors to schools, classrooms and school activities are open to every child and they are afforded every opportunity to be included with their non-disabled peers. The focus is on giving every child the help s/he needs to learn.

Inclusive education is NOT:

- Dumping kids with disabilities into general classrooms without the supports and services they need to be successful.
- Cutting back special education services as a “trade off” for being in the general education classroom.
- Sacrificing the education of kids without disabilities so kids with disabilities can be included.

Special Education. . .is NOT a place. Special Education is. . .individualized supports that give children with disabilities the extra help they need to learn from general curriculum. Like Physical therapy, Curriculum adaptations, Communication board, Speech therapy, Language therapy, Behavior plan, Environmental accommodations

Each student has an IEP (Individualized Education Programme) with learning goals and objectives for the coming year, list of the services and supports the student will be prepared, accommodations for the student (different ways of learning or responding) will be developed, if and to what extent the general curriculum will be modified for the student, if and why the student will be out of the general education classroom and away from non-disabled students.

We Learn 10% of what we read, 20% of what we hear, 30% of what we see, 50% of what we both see and hear, 70% of what is discussed and 95% of what we teach someone else. (William Glasser)

Students can't learn general curriculum unless they are in the room where it is being taught

IEPs must have:

“A statement of measurable annual goals, including benchmarks or short-term objectives, related to meeting the child's needs that result from the child's disability to enable the child to be involved in and progress in the general curriculum (i.e., the same curriculum as for non-disabled children), or for preschool children, as appropriate, to participate in appropriate activities.”

Tied to General Curriculum

- There must be a connection between the general curriculum objectives and this student's IEP goals and objectives.
- The Team must decide what the student will learn about each subject the class is studying.
- The Team must decide which and how many general curriculum objectives are to be taught.
- The Team must make general curriculum objectives functional and meaningful for this student.

What is the class learning?

- How do the IEP goals fit into the general curriculum?
- Goals may be different but need to be related (like learning to recognize a triangle when others are learning the angles in a triangle)
- The student may need to be taught in a different way (like doing hands on activities instead of listening to a lecture)
- The student may need to work in a different way (like using a computer instead of pencil and paper)

It's not about the place!!!

- All students must have access to general curriculum.
- This is true no matter what class they are in.
- Even students in the most segregated classes **MUST** have access to the general curriculum for their age and grade.

According to PWD Act (1995) the Least restrictive environment (LRE) need to be created in the class room which describes where a child will get services. It should put the fewest possible restrictions on how much time is spent with children without disabilities.

What the law says about LRE.... Each public agency shall ensure that to the maximum extent appropriate, children with disabilities...are educated with children who are non-disabled and that special classes, separate schooling or other removal of children with disabilities from the regular educational environment occurs only if the nature or severity of the disability is such that education in the regular classes with the use of supplementary aids and services cannot be achieved satisfactorily.

Therefore starts with the assumption the student will be in the general classroom, with supports as needed. If that won't work full time, pull the child out of the general classroom for part of the day for therapies or resources. This should be done as seldom as possible.

Only if all other options fail should the child be separated from the general classroom

To develop disability awareness/ sensitivity for example following things need to be done.

- Deafness - have students watch story/event/scientific experiment with the volume off.
- Teach students some sign language or Braille.
- Not able to understand - give students a paragraph in English/Hindi/Gujarati/ language children know and then test them on it.
- Not able to communicate – give students a puzzle to do together but don't allow them to talk.
- Have students use a wheelchair or crutches for a day.
- Have students communicate using only body language or gestures.
- Dyslexia – give students a paragraph to read with the letters switched around.
- Sensitivity to noise – have students take a test while there is a lot of unexpected noise in the background.

It is very important to know to understand that the child needs Accommodation or Modification?

- Accommodations are used when the student is expected to learn the same curricular content. But the student may be taught in a different way or need changes in the environment.
- Modification are used when the student is expected to learn less or different curricular content. This could require the modification of assignments, tests, worksheets and other materials in the classroom.

What are accommodations?

Accommodations are changes in teaching methods. It can include changes in where you teach (place), who will teach, how will you teach (teaching methodology), how the student can respond, materials you use.

For teachers it is very important to know the Curriculum of the subject then only the syllabus.

- You have to know what you are trying to teach (curriculum) before you can change how you teach it.
- If you make the wrong changes, you can end up teaching a different concept than the one you wanted the student to learn.

Math Problem Example

“Ravi and Rajan are brothers. Ravi is elder to Rajan. They two go to a school which is found less than 5 kilometers from their home in Vadodara. Although there is a difference in age of 3 years between 2 brothers, their grade levels are only 2 years apart. Ravi is in the 4th. What class is Rajan in?”

1. Is problem in language? What are the languages difficulties?
2. What are some math difficulties?
3. What difficulties besides language could make it hard to solve this problem?

Accommodation – Translation (the language in which the child is more familiar)

Accommodation – Bare essentials

Ravi and Rajan go to school in Vadodara. Ravi is elder. They are 2 grade apart. Ravi is in the 4th. What class is Rajan in?”

Apart from language and other academic accommodation there is need for Room Accommodations too as follows:

- Special chairs or cushions, lower or high table or chair, titled desk top
- Different or additional lighting (not fluorescent), sitting by a window for natural light
- Sitting close to the blackboard or teacher, sitting away from others
- Stand instead of sitting or sitting instead of standing
- Picture schedules, visual cues or visual timer
- Quiet times or places to help concentration

- Color coding
- Visual organization of the room and supplies
- Keeping materials for student and handing out as needed
- Have at least part of the room bare with nothing on walls, ceilings or floors

Certain Teacher Accommodations are also very essential and useful like

- Don't wear cologne (hard on allergies)
- Don't wear a lot of jewelry (distracts kids with ADHD)
- Count to 10 before letting anyone answer questions (processing time)
- Vary teaching methods
- Projects for extra credit or in place of timed tests
- Giving instructions one step at a time instead of all at once
- Ask questions to get repeat of information
- Divide the class (small groups, peer partners, peer tutors)
- Set up lessons (community instruction, role playing activities)
- Change the learning goals (more time, cooperate, share)
- Create alternative activity (learning center, research teams)

Individual Accommodations can also facilitate learning by providing

- Fewer problems on a page, large print or dark print
- Read things to students and give verbal tests
- Use a tape recorder (taking notes and giving reports)
- Sensory breaks
- Communication device or sign language
- Use a touch screen, voice activated computer, switch controls or adapted keyboard, mouse, calculator
- Peer tutoring or peer taking notes
- Small group work instead of individual assignments
- Assistance with organizing

- More time to transition to next activity
- Change the materials (counting actual objects, tape recorder)
- Change how much or what kind of personal assistance a student gets (prompts, verbal cues, gestures, physical assistance)

To motivating and sustaining their interest in to the teaching – learning process the Grades can be Modified.

- Use a grading system to show the combination of what they learned and how hard they tried.
- Give extra credit for consistent effort and completing assignments.
- Give extra points for positive behaviors or extra assignments.
- Base assignments and grades on meeting IEP goals
- Reduce the amount of writing by using T/F, multiple choice or fill in the blanks, or oral tests
- Give child less to learn at a time
- Allow students to take classes as pass/fail

If adaptations aren't enough

- Schools can add an adult educational assistant to work with the student 1-to-1
- Or they may take a student out of class (called pull out) for pre-teaching, skill building or one-on-one instruction.
- Use of education assistants and pull out instruction should be carefully planned. Is it too much isolation from other students? Does it make the student miss too much class time?

If nothing works and is pull out best?

Pull out” means removing the student from class for a small group of 1-to-1 instruction.

Ask: Why can't the skill be taught in the general classroom? Are there ways to change it so it could be taught there?

- While the student is in pull out, s/he misses what is going on in the general classroom. How do you help the student catch up on what s/he missed?
- How will skills learned in pull out time help the student spend MORE time in the general classroom?

There is also very important to understand the concept of 'Me and My Shadow' in case of these children

- Is having an adult with him/her all day making the students MORE dependent?
- Does the educational assistant take away the student's need to communicate and make choices?
- Does having an educational assistant there make peers less likely to interact with the student? Is the student ever alone with peers?
- Is the student at least arm's length away from the educational assistant when possible?
- Would the student be better off having help from several different people rather than always the same assistant?
- Don't glue an adult to the student every minute.

To check whether the Accommodations work or not by vigilantly observing the behaviour of child like

Before Accommodations were applied the child

- Refused to do work
- Behavior outburst
- Unable to stay seated
- Yelled and hit other kids
- No friends
- Refused many class activities

And After Accommodations were applied the child

- Does class work; learned difficult terms like life span, germinate and organism
- Almost no behavior problems
- Sits appropriately
- Loads of friends
- Participates in all class activities

Then it can be said that Inclusive Education works.

When one advocate the Inclusive Education the above discussed points are the prerequisites to ensure the success of the Inclusive Education .It is more an attitude then the change in the classrooms only.

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A STUDY OF THE EDUCATIONAL AND VOCATIONAL PROBLEMS OF HEARING IMPAIRED STUDENTS

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Abstract

Hearing impairment is not an immediately visible disability. Globally, around 360 million people, i.e., five percent of earth's population, suffer from hearing loss; and some 32 million of these are children. According to the World Health Organization, in the young, hearing loss affects communication, cognition, behavior, social-emotional development, academic outcomes, and later vocational opportunities. Sadly, a huge number of children, especially in developing countries like India, don't have access to proper diagnosis and follow-up infrastructure and hence are condemned to a life of frustration and unrealized potential. In the present study an attempt has been made to examine the problems faced by the hearing impaired students in their special schools. Triangulation method is used in the present qualitative study along with the quantitative approach. The sample comprised of 100 hearing impaired students from special schools of Bengaluru city which included Private aided, Private unaided and NGO schools along with a few parents and teachers. Data was collected by using the developed questionnaires with multiple options. Interview schedules were used for the parents and teachers along with an observation schedule to cross check the responses given by them. Collected data was analyzed using percentage analysis and descriptive analysis. Results revealed that, those individuals with hearing impairment since birth (any severity) in both ears will have tough time to attain language just like normal children. Hence a deaf individual will become dumb. Hence it was found that these are the two impairments which are interlinked. During the schooling they will have issues with academics, making friends, participating in co-curricular activities, and unable to lead a comfortable life. Some hearing impaired individuals need frequent repetitions, which is taken for granted and make fun of their disability by the society. Individuals with vision problem are better accepted than hearing impaired though hearing aid is just like spectacles. This paper also highlights the opinion of parents and teachers about their problems and the implications for the government in solving the problems of hearing impaired children along with the role of special schools and parents.

Key words: hearing impairment, problems, special schools.....

INTRODUCTION

Imagine a world without sound and the frustration of trying to express what you feel or need to others. In many ways, deafness is hardest on children. However, sensorineural hearing loss entails not only lowered hearing thresholds, but also distortion of sounds (Robier, 2001), and this means that language input is partial and degraded. Language is learned from hearing it spoken by parents and peers. Reviewing the related literature maintains that students who are deaf and hard-of-hearing are considered exceptional learners

(Hallanhan, Kauffman, & Pullen, 2009; Smith, 2007; Beveridge, 1999; Bunch, 1987; Moores, 2001). They often can feel secluded and lost. Hearing impairment is a common but serious problem affecting children of all ages. Hearing Impaired or deafness according to (IDEA, 2004) is a condition where an individual is impaired in processing linguistic information through hearing. Without prompt and effective treatment, hearing loss can cause a child to suffer from significant speech delays, social problems and educational challenges. These students require special services which must be offered by qualified and skilled teachers in order to respond to their unique needs (Beveridge, 1999). Although symptoms vary among children, certain traits and behaviors are characteristically indicative of hearing difficulties. In addition, hearing loss significantly influences the language and speech development of students who are deaf and hard-of-hearing that negatively affects their academic achievement, social and emotional interactions and cognitive milestones (Moores, 2001). According to a study carried out in Jordan, (El-Zraigat, 2007) reports that the students who are deaf and hard-of-hearing had poor expressive writing skills. Another study carried out by (El-Zraigat, 2010) indicates that students who are deaf and hard-of-hearing lack adequate reading skills in general. According to WHO (2012), there are 120 million people worldwide with hearing impairment, and 78 million of those affected are in developing countries. Hearing loss can be caused by a number of factors including; heredity (genetics), aging, loud sound exposure, diseases and infections, trauma (accidents), or ototoxic drugs (drugs and chemicals that are poisonous to auditory structures (Van and Dobie, 2004).

Over the decades, deaf and hearing-impaired students have variously been taught in regular classrooms, in special-needs units within mainstream schools and in specialized schools for the deaf. Educating special needs including students who are deaf and hard-of-hearing is considered a process that consists of determining eligibility, delivering special education services, and the final step of this is evaluating (Ysseldyke & Algozzine, 1995). However, certain adaptations or considerations will be necessary to successfully include deaf students alongside their hearing peers. Eccarius (1997) describes the education of students who are deaf and hard-of-hearing as a complex process which requires appropriate placement, identifying the mode of students learning, modified curricula, using audiological technology, schools and family services, and identifying strengths and needs of targeted students through psycho-educational and audiological assessment. To make use of these skills, the classroom setup should be designed favorably for the deaf student or students in your class. The process of educating students who are deaf and hard-of-hearing are affected by different factors like attitudes, qualified and skilled teachers, quality of services offered to schools and families, acoustic environment, family environment, type and degree of hearing loss, language and speech abilities, and the existence of additional disabilities. (El-Zraigat, 2009).

Different studies points out that there are differences in the educational needs of students who are deaf and har-of-hearing and hearing students (El-Zraigat,2007, 2010; Livingston, 1999; Naiman, 1979; Syverrud, Guardino & Selznick, 2009). Thus these group students must be taught by well trained teachers and receive their education at schools fitted with facilities needed. As mentioned earlier students with hearing impairment are considered learners in need of special support. Consequently, they need special educational programs that address their unique needs.

Being deaf can be an isolating experience in the hearing world, and opportunities for group work and discussion are one of the major benefits of educating deaf students in a mainstream classroom. When facilitating group work in the classroom, clarify the topic of discussion at the outset. Encourage all students to participate verbally, by asking and answering questions or giving reports. Pointing at the person who is currently speaking will help the deaf student to focus his attention and follow the discussion better. Visual cues such as waving can help get a deaf student's attention when it is her turn to talk to the group. Sitting in a circle will help students to see each other during group work. The number of children with Hearing Impairment keep increasing and thus the need to create educational opportunities for them by making schools and institutions accessible to them (Adoyo, 2015). Therefore, the present study is attempted to investigate the Educational and Vocational Problems of Hearing Impaired Students.

PURPOSE OF THE STUDY:

Purpose of the study was to investigate the problems faced by Hearing Impaired children.

RESEARCH QUESTIONS:

The following research question served as guiding principles for this study.

Q1: What are the problems faced by the hearing impaired students?

Q2: What does the parents and teachers of hearing impaired opine about their problems?

Q3: What implications can help in solving the problems of hearing impaired students?

METHODOLOGY:

The study was qualitative and quantitative in nature (mixed method) however, triangulation of method was employed to ensure adequate information to answer to the questions raised in the study.

Method

The participants for the survey were drawn from special schools of Bengaluru city who were having hearing impairment. Focus Group discussions to teachers and students along with unstructured interviews to parents were conducted for further probing the information. The informants provided information based on their experiences. These interviews sought to find out the problems faced, type of training required, facilities expected by the schools, future plans for their children etc.,

Sample:

According to Dolores and Tongco (2007) purposive sampling is a method that a researcher uses to reach a targeted sample with specific characteristics. This study was conducted with 100 students purposively drawn from different types of managements on the basis of their hearing impairment along with few teachers and parents who were interviewed.

Table-1: Distribution of Sample (Hearing Impaired students)

Serial No	Type of School Management						Total Sample
01	Private Aided		Private Unaided		NGO		
02	Boys	Girls	Boys	Girls	Boys	Girls	
03	03	04	30	23	22	18	100

TOOLS

The tool used for the present study was a validated questionnaire with multiple options to be selected by the students which was developed by Smt Nandini N and Dr. Haseen Taj (2015). It consisted of 10 statements/questions. Along with which Focus group discussions to teachers and Semi- structured interviews were conducted to parents having hearing impaired children regarding the problems faced by them.

ANALYSIS AND INTERPRETATION:

Percentage analysis

The Data collected from the special schools was analyzed using statistical techniques such as presentation of frequency and percentages. In this section, the researcher analyzed the facilities in special schools based on percentage analysis.

Table 2: shows the percentage analysis on the problems faced by hearing impaired students

Sl.	Statement	Frequency	Percentage
1.	<i>What are the problems you face when your teacher is teaching</i>		
a)	Can't understand what teacher teaches without seeing the lip movement when teachers are teaching by turning towards the board.	30	30.00
b)	Can't understand when I am not able to see my teacher.	26	26.00
c)	Word's will not be clear when teachers are far from me.	7	7.00
d)	Can't understand few words when spoken with high speed.	37	37.00
2.	<i>What are the problems faced while communicating with your teachers</i>		
a)	Teachers will not be able to understand what I am trying to express.	33	33.00
b)	Sometimes teachers will not be ready to listen to me completely.	17	17.00
c)	Sometimes teachers lose patience.	6	6.00
d)	I feel low when I am not able to express clearly.	44	44.00
3.	<i>What are the problems you face while communicating with people other than your classmates</i>		
a)	I feel low when I stammer.	18	18.00
b)	I feel low when I am not able to express myself.	22	22.00
c)	I feel bad when my friends are not able to understand my sign language.	33	33.00
d)	They misunderstand my expressions.	27	27.00
4.	<i>What are the problems you face in the teaching materials shown by your teachers?</i>		
a)	I cannot cope up with the teacher.	20	20.00
b)	I cannot understand verbal explanations.	24	24.00
c)	I cannot simultaneously concentrate on both teaching materials as well as teaching.	47	47.00
d)	I cannot respond.	9	9.00
5.	<i>What are the problems you face when there is a classroom discussion?</i>		
a)	Unable to understand the concept of discussion.	37	37.00
b)	Feel lonely when all others participate in the discussion.	16	16.00

c)	Could not respond if anything is asked in between the discussion.	12	12.00
d)	Feel disturbed by the noise in the classroom.	35	35.00
6.	<i>What are the problems you face if any instructions are given in the classroom?</i>		
a)	Unable to understand the instruction given orally.	35	35.00
b)	Always stay in fear due to my disability.	28	28.00
c)	Unable to complete the work assigned.	25	25.00
d)	Feel guilty for not following the instructions.	12	12.00
7.	<i>What are the problems you face during tests and examinations even after extra time is given?</i>		
a)	Cannot cope up with time.	17	17.00
b)	Unable to hear the remainder given by the teachers.	25	25.00
c)	Feel tensed until the tests and exams gets over.	44	44.00
d)	Feel low for not able to write along with my friend's speed who are not having hearing impairment.	14	14.00
8.	<i>What are the problems you face during lunch break?</i>		
a)	Unable to enjoy.	38	38.00
b)	Feel lonely when my friends form groups excluding me.	33	33.00
c)	Feel bad when my friends do not include me in sharing food.	29	29.00
9.	<i>What are the problems you face during your leisure time you spend with, other than your classmates?</i>		
a)	Feel guilty to interrupt in my friend's privacy.	15	15.00
b)	Can't actively participate in all the games like my friends.	44	44.00
c)	Unable to respond spontaneously while chatting.	41	41.00
10.	<i>How will you let your teacher know when you need help?</i>		
a)	Using sign language.	30	30.00
b)	Finger spelling.	6	6.00
c)	Total communication.	46	46.00
d)	Facial expressions.	2	2.00
e)	Verbal communication.	14	14.00
f)	Body language	2	2.00

1. From the table 2 we can observe the problems faced by hearing impaired students when their teachers are teaching. 30% of students were not able to understand what teacher teaches without seeing the lip movement when teachers are teaching by turning towards the board. 26% of students could not understand when they are not able to see their teacher. 7% of students opined that word's will not be clear when teachers are far from them and 37% students can't understand few words when spoken with high speed.
2. The table 2 shows the problems faced while communicating with teachers can be observed. 33% of hearing impaired students feel that their teachers will not be able to understand what they are trying to express. 17% of students opined that sometimes teachers will not be ready to listen to them completely. 6% of students opined that sometimes their teachers lose their patience and 44% of students felt that they feel low when they are not able to express clearly.
3. The table 2 also shows the problems they face while communicating with people other than their classmates. 18% of hearing impaired students feels low when they stammer. 22% of students feel low when they are not able to express themselves. 33% of students feel bad when their friends are not able to understand their sign language. And 27% of students opined that their expressions are misunderstood.
4. It can also be seen from table 2 the problems faced in the teaching materials shown by their teachers. 20% of students opined that they cannot cope up with their teachers. 24% opined that they cannot understand verbal explanations. 47% of students cannot simultaneously concentrate on both teaching materials as well as teaching. And 9% of students cannot respond.
5. From the table 2 we can observe the problems faced when there is a classroom discussion. 37% of students are Unable to understand the concept of discussion. 16% of students feel lonely when all others participate in the discussion. 12% of them could not respond if anything is asked in between the discussion. And 35% of students feel disturbed by the noise in the classroom.
6. From table 2 the problems faced during instructions in the classroom is observed. 35% of students are Unable to understand the instruction given orally. 28% of students always stay in fear due their disability. 25% of students are unable to complete the work assigned. And 12% of students feel guilty for not following the instructions.
7. From the table 2 it is clear about the problems they face during tests and examinations even after extra time is given. 17% of students cannot cope up with time. 25% of students are unable to hear the remainder given by the teachers. 44% of students Feel tensed until the tests and exams gets over. 14% of students Feel low for not able to write along with their friend's speed who are not having hearing impairment.

8. From the table 2 it is clear about the problems faced during lunch break. 38% of students are unable to enjoy. 33% of students feel lonely when their friends form groups excluding them. And 29% of the students feel bad when their friends do not include them in sharing food.
9. From the table 2 the problems faced during their leisure time they spend with, other than their classmates is observed. 15% of students feel guilty to interrupt in my friend's privacy. 44% of them opined that they can't actively participate in all the games like their friends. And 41% of them opined that they are unable to respond spontaneously while chatting.
10. From the table 2 it is seen that how the hearing impaired child let their teacher to know when they need help. 30% of them use sign language. 6% of them use finger spelling. 46% of the students use total communication. 2% of them use facial expressions. 14% of the students use verbal communications and 2% of them use body language.

Interview questions for parents: Interview schedule for the parents of hearing impaired students included the questions which were open for them to answer:

- **What are the problems you face due to his/her disability?**
- **What type of training should be given for your son/daughter in schools?**
- **What are the facilities you expect from schools for your son/daughter?**
- **What do you want your son/daughter to become in future? Why?**
- **How do you communicate with you communicate with your child?**
- **Are you trained to communicate with your child? (Sign language, total language....)**
- **What are the extra facilities you have provided to your child at home?**
- **Who helps him/her in studies?**

From the responses given by the parents having children with hearing impairment for the above questions, it was clear that, they requires much more love and patience on the part of everyone involved. Parents, siblings, and relatives have to get down on the level of their child and put themselves in his/her shoes and not always expect quick results. The child having hearing impairment needs a lot of encouragement and reassurance with hugs and fun time together, or they can tend to feel left out of our hearing world.

- creates auditory
- training program for auditory therapy for skills
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Parents expected schools to create auditory training program for auditory therapy for skills progression by selecting appropriate sounds which should be composed of animal sounds, environmental sounds, sounds of musical instruments, sounds of household things and etc. also many of the parents used sign language to communicate with their children and the extra facilities they provide is only the extra love, care and affection which is very much required for them. Among the responses given by the parents major role and responsibility taken in the studies of their children was by their mother only but in few family even father would take care of their child's education.

The responses regarding the future plans it was highlighted that parents set goals, expecting them to continue to improve in all areas, but they also follow their lead.

Parents of a hearing impaired child may therefore interact and talk to him as naturally as they would do with hearing children. They should remember

- Ensure hearing aids are used by the child.
- See to it that the hearing aids are functioning optimally.
- Talk to the child most naturally preferably in a slightly slower manner ensuring that the child is looking at you.
- Consciously label the things around him.
- Converse on all the incidents and activities going around him.

Interview questions for teachers: Interview schedule for the teachers teaching children who are hearing impaired included the questions which were open for them to answer:

- Are you trained in teaching hearing impaired children?
- What are the problems you face while teaching them?
- Which part of the subject you feel is tough to make them understand? Why?
- What do you do to make them understand easily?
- What are the difficulties you face during tests and examinations?
- What type of training will help them to be successful in their life?

As part of conducting the survey it is important and helpful to interview the people who are familiar with the student to gain an understanding of their concerns and perception of the hearing impaired children. In this regard the classroom teacher, who plays a vital role in their life can provide a valuable information on the problems they face while teaching different subjects, conducting tests and exams. In the Focused Group discussions it was clear that teachers used effective instructional strategies which included activity method, use of visual aids, pictures, hands on approaches especially for science, since vocabulary is difficult. Also few teachers suggested that science text book should be rewritten to make them remember abstract terms and make science concrete by connecting it to things the children could relate to. Couple of teachers mentioned the use of teaching computers, pictorial representation, models, experiments, videos, demonstrations, flash cards etc., supported them to make the students understand the difficult concepts. Teachers were proud in telling that their students were finding mathematics as one of the easiest and interesting subjects when compared to normal children since language is not much involved, but they opinioned that language and geography were the subjects which are tough in teaching. During test and exams few teachers expressed that they need no extra attention, instead they are able to perform well like any other normal children. They also opined that Vocational training will help them to be successful in their life which can be a back bone in opting skill based jobs in their future.

EDUCATIONAL IMPLICATIONS:

Hearing impaired students experience problems when attending mainstream schools unless they receive proper help and support. They may not become properly integrated, and they tend to keep in the background as they try to avoid standing out from their classmates.

Many students fail to communicate as they cannot hear what the teacher or the other pupils are saying. They may never ask the other pupils to repeat themselves, and some even tell the teacher that no special microphone is required even though sound amplification would make it easier for them to hear properly.

The hearing impaired students want to be like their friends with normal hearing, and they often feel inadequate when drawing attention to their hearing problem. All this has social consequences for the children. Many of them keep to themselves and prefer not to take part in classroom activities. The lack of attention to these children's problems often results in the children feeling tired and suffering from headaches when coming home from school.

Even a minor unidentified hearing loss in a school-age child may adversely affect the learning process and result in some form of learning difficulty in school. Class work may suffer if a child with hearing loss is expending extra energy trying to listen to the teacher, take notes, and process what is being heard all at once. The hearing problems of children

often go undetected because many believe that their problems in school are caused by a lack of concentration or inattention.

Hearing impaired people cannot telephone and when they watch TV they have to be dependent on hearing people. Even we are deprived of the pleasure of watching TV and films and here also we need the help of a companion because movies and serials on TV do not have sub titles on them and it should be compulsory and mandatory. It may be mentioned here that life has become easy for a few who have access to SMS through cell phones and by using internet/emails. Not all enjoy these privileges.

The disabled person is largely dependent on a family because they get economic and emotional support from family. The disabled person also gets emotional support from friends and relatives and also gets encouragement. This is the difficult of all the challenges, faced by them. The physically handicapped face problems as they attempt to adjust the demands of living in social environment. Their problems are not only those caused by their disability but also that of adjustment in a world that has apathetic or hostile attitude towards them magnifies their troubles and threatens their very existence as human beings. They face psychological, educational, employment and social problems. Among these, the most difficult is the adjustment to the hostile social forces in the society, disabled person suffers with the erroneous beliefs, which dry up their day-to-day way of life. It automatically generates a social resistance to accepting means of treating or ameliorating disability. The language deficit can adversely affect a child's vocabulary, sentence structure, and speaking ability, causing learning problems that result in poor grades. Inadequate language skills can also affect communication with peers, leading to feelings of social isolation. Children with hearing loss endure low self-esteem issues and possess a general "out of place" feeling when it comes to socializing with other children. Many feel their hearing loss prevents them from partaking in group activities, such as sports or social functions.

From the responses of parents it is clear that there is need to increase human resource particularly sign language interpreters who have appropriate educational skills

The study has confirmed that factors such as the teaching mode of instruction, incompetent interpreters, inadequate infrastructure and social isolation and loneliness have prevented the hearing impaired students from attaining positive learning outcomes.

By all this it can be concluded that there is a great need to improve methods of identifying individuals with hearing impairment thus improving services for providing hearing aids, assistive listening devices, and auditory rehabilitation. Identifying individuals with hearing loss, supplying appropriate hearing aids or other listening devices, and teaching coping strategies may have a positive impact on the quality life of students.

The following Government schemes should be implemented to solve the problems of hearing impaired students:

- Evaluation and diagnosis of hearing and speech – language impairment.
- Selection and fitting of hearing aids and ear moulds.
- Certification hearing disability.
- Educational evaluation and guidance to parents.
- Vocational counselling, training and placement.
- Speech and language therapy.
- Psychotherapy, behaviour therapy and play therapy.
- Medical consultation and guidance.
- Referral and follow-up services.
- Parent Infant Programme and pre-school services.
- National Open School–Special Accredited Institution for Education of the Disabled.
- Parents' guidance and counselling.
- Outreach and extension services
- Material development, distribution and guidance through correspondence.
- Information documentation and dissemination services.
- Technical guidance to various agencies.

CONCLUSION

When teachers role is considered in solving the problems of hearing impaired children according to Hall, Oyer, and Haas (2001) suggest that teachers support hard of hearing students by frequently checking to ensure that the student understands information provided in class. They provided an alternative suggestion in assigning a hearing peer to assist the hearing impaired child to be an active participant in school activities for those times the teacher is preoccupied with other students. Another suggestion was for the teacher to “learn to read” the child’s facial expressions in order to have feedback about his/her understanding of material presented. This particular suggestion takes some time as the teacher gets to know the student better (p.147). In cases when the student doesn’t understand what was said, rephrasing with additional words relevant to what you want to say can provide cues to aid speech comprehension. “When rephrasing, use words central to the main idea of the

communication. For example, if you are saying, “You can get your coat from your locker now,” and the student doesn’t understand, you could say, “Everyone is getting ready for the bus; you can get your coat from your locker now” (Kaveravek, 2002, p.16). Teachers need to be sensitive to the reality that there is usually more than one visual thing happening at one time like a teacher talking while expecting students to take notes of the lecture. Expecting a hearing impaired student to read lips and take notes at the same time is not realistic. The main notes could be provided to that student beforehand so that the student can focus on lip reading the lecture. Volunteer note-takers could be assigned to support hearing impaired students in the higher grades or university where note-taking is done on a daily basis. Many hard of hearing students will also be required to take more work home to prepare themselves for class material to be covered the next day.

Finally there is need for further research on hearing impaired students and their academic experiences in institutions of higher learning. This will help in bringing out the gaps that are there and enable the education sector provide the required interventions.

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SOCIAL VALUES AMONG SCHOOL CHILDREN THROUGH THE TEACHING OF VALUE BASED CONTENTS IN BENGALI

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Abstract:

In the changing world, the crisis of values is pervasive and hence a development in all walks of life. There is progressive erosion of all typed of values resulting pollution of public life. Educational institutions are the places to prepare the future citizens. A proper value system must be inculcated by these institutions through educational process based on rationality, scientific and moral approach to life, and hence needs of value oriented contents and teachers. It is also echoed in the recent National Curriculum Framework for School Education (2005). It is found that the value based Bengali Contents can help the development of values especially some social values among the secondary school children. In fact, the impact of value based Bengali Contents inculcates some social values among the secondary school children. Findings of the study clearly highlights that social values can be inculcated through the instructions with value based contents.

Introduction

The standard of present Indian Education has improved remarkably with the advancement of modern science and technology. In spite of that it is devoid of values. In the conference at Netaji Indoor Stadium regarding “Swamiji’s Idea of Education” educationists came to a conclusion that “the modern system of education in Indian schools failed to teach about values”. It is fact that Values play a vital part in determining the mode of behaviour of an individual. Mastery of value judgments modifies the flow of actions of an individual. The Education commission (1964) recommended that: “Education is a three fold process of imparting knowledge, developing skills and inculcation proper interests, aptitudes and values.” The National Policy of Education 1986, gave a suggestion with regard to value education. It has been stated that the growing concern over the erosion of values and increasing cynicism in society has brought to focus the need for readjustment in the curriculum in order to make education a forceful too cultivation of social, ethical and moral values. A valueless society or a nation is like a ship without rudder. The salient objectives of our national system of education are the inculcation of social, moral and spiritual values among students. It is necessary to develop the values in childhood that moulds and prepares a child for future growth and development. It is therefore the best time for showing the seeds of social values at the very early stage of education. The researchers in their study tried to find out the impact of value based Bengali contents in connection with inculcation of values among the school children.

Objective of the Study

- To find out the effect of teaching of value based Bengali contents for development of social values among the children of secondary school.

Hypothesis

The effect of teaching through the value based Bengali contents is significant for inculcation of social values among school children.

Sample

To test the hypothesis homogeneous groups of students were taken. The sample consists of 80 students of class six. One group is considered as experimental group and the other as control group.

Variables

Independent Variable: contents:- Value Based Bengali contents

Dependent Variable: Development of Some Social Values

Tools

Two basic tools were used for the study

- i) scale on value assessment. The scale constructed by Prof. D. K. De which was used as the pre test for both the groups and
- ii) the test was constructed by investigator. This test was applied for post test of the both groups. The researchers social values accepted for the study are Tolerance, Co-operation, Obedience, Religious devotion, Honesty, Altruism.

Statistical Procedure

Means and standard deviations of pre test and post test of each group were found out. t- test was then applied to find out the significance of the differences between means of both the post-test of experimental group and control group.

Table-1: Showing the pre-test and post-test mean, S.D of both the group

Group \ Test	Pre-test		Post-test	
	Mean	SD	Mean	SD
Experimental	53.62	6.76	73.70	3.96
control	53.62	6.76	63.74	11.72

Table-2: Showing the t - value

Group	No. of Student	Mean	SD	df	t	Level of sig.
Experimental	40	73.70	3.96	78	5.03	significant
Control	40	63.74	11.72			

From the above table-2, it was found that the value of $t = 5.03$ which was significant at .01 level. So, the hypothesis is accepted. This means that the effects of through the teaching value based Bengali contents significantly help to inculcate some social values among school children.

Conclusion

The modern system of education failed to teach value based lesson in our institutions. The absence of value based stories, essays etc. in secondary Bengali contents. But it is proved that the value based Bengali Contents can help the development of values especially some social values among the secondary school children. In fact, the impact of value based Bengali Contents inculcates some social values among the secondary school children. Findings of the study clearly highlights that social values can be inculcated through the instructions with value based contents.

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A STUDY OF EMOTIONAL INTELLIGENCE AMONG PROSPECTIVE TEACHERS IN NAGALAND

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1.Introduction

Over the past several years emotional intelligence has found increased acceptance as a factor that is potentially useful in understanding and predicting individual performance at work. Emotional abilities hold the key to a successful career. It helps the individual much in all his/her spheres of life through its various constituents or components namely knowledge of his emotions managing the emotions in other empathy and handling relationship. Everybody has his own emotional intelligence on different aspects like achievement, motivation, aspiration, adjustment, values, creative, attitude interest and on the whole the entire personality. N matter how rich or poor, old or young, intelligent or dull every one has level of emotional intelligence and creativity. As it is evident that personality as a whole plays and important role in the life of an individual.

1.1- EMOTIONS:

The word emotions is derived from the Latin word emovere which means to stir up or to excite. Emotion can thus be understood as an agitated or excited state of our mind and body. An emotion is a mental and physiological state associated with a wide variety of feelings, thoughts an behavior. Emotions are subjective experiences or experience from and individual point of view.

1.2-INTELLIGENCE

Intelligence is a term used to describe a properly of the mind that encompasses many related ability to learn about, learn from understand and interact with one's environment. This general ability consist of a number of specific abilities which include adaptability to a new environment, capacity for knowledge and the ability to acquire it:

According to Stern (1914): "Intelligence is a general capacity of an individual consciously to adjust his thinking to new acquirement. It is general mental adaptability to new problems and conditions of life".

1.3-EMOTIONAL INTELLIGENCE

The term emotional intelligence was first introduced in (1990) by two American university professors. Dr. John Mayer and Dr. Peter Solovey According to them.

"Emotional Intelligence is a form of social Intelligence that involves the ability to monitor one's own and others feeling and emotions to discriminate among them and to use this information to guide one's thinking and action".

According to Goleman (1995): "Emotional intelligence involves skills that help people harmonize and it should become increasingly valued as a workplace asset in the years to come."

1.4 NEED OF THE STUDY

Going through the research literature available the investigator found so many studies on the Emotional Intelligence and the attitude of school teachers towards teaching profession but no such studies which compare the attitude and emotional intelligence of school and college teachers. The investigators feels that relationship between emotions and attitude is very important. This vital aspect also needs to be investigated. Attitude and Emotion effect the working of teachers and way how they teach.

1.5- STATEMENT OF THE PROBLEM:

The Statement of the problem is a follows:

"A study of Emotional Intelligence and Teaching attitude of prospective teacher"

1.6- OPERATIONAL DEFINATION OF THE KEY TERM USED:

The operational definitions of the terms used in the taken problem are as under:

1.6.1-EMOTIONAL INTELLIGENCE:

In the present study emotional intelligence refers to emotional reasoning using to understand and manage the expression of emotions of self and others further, it is concerned with those aspects or components which the test of emotional intelligence developed by K.S. Mishra (2007) for the students teachers measures.

"Emotional intelligence particularly refers to the ability to get alongwith people and make good personal decisions".

1.6.2-PROSPECTIVE TEACHERS:

In the present study, prospective teachers refer to student teachers who are pursuing B.Ed. course from different teachers training institutions to get the degree of bachelor in Education (B.Ed.)

1.7. OBJECTIVE OF THE STUDY:

In view of the problem mentioned above the investigator has set the following objectives to be achieved by this study:

1.7.1-To study and compare the emotional intelligence of male and female prospective teachers.

1.8. HYPOTHESIS OF THE STUDY

1.8.1-There is no significant difference between the emotional intelligence means scores of male and female prospective teachers.

1.8.2-There is no significant difference between the Intra personal awareness mean scores of male and female prospective teachers

1.8.3-There is no significant difference between the Inter personal awareness mean scores of male and female prospective teachers

1.8.4-There is no significant difference between the Intra personal management mean scores of male and female prospective teachers

1.8.5-There is no significant difference between the Inter personal management mean scores of male and female prospective teachers

1.9 DELIMITATIONS OF THE STUDY

- The present investigation has its delimitation with regards to the variables studied i.e. emotional intelligence and standardized tools used. However the investigator delimited the field of study in the following manner:
- The data of proposed study taken from Nagaland only.
- The study conducted on prospective teachers who were pursuing B.Ed. course from teacher training institutions.
- The sample of the present investigation taken 120 prospective teachers pursuing B.Ed. course from teachers training institutions.
- Tests developed by K.S. Mishra for emotional intelligence.

2. METHODOLOGY OF STUDY

2.1 RESEARCH DESIGN:

The research had been used Descriptive Survey design in the study

2.2 -POPULATION:

The B.Ed. students of Kohima (Nagaland) were the population of the study.

2.3- SAMPLE:

A small part of population which represents the whole population is called sample. In the present study 120 B.Ed. students were constituted the sample of the study.

2.3-TOOLS USED IN THE STUDY

Emotional Intelligence test developed by K.S. Mishra used to collect information about emotional intelligence of prospective teachers.

2.5 Statistical : Researcher used appropriate statistical technique for the study like Mean, Standard Deviation (S.D.) and T-test.

3.0-DATA INTERPRETATION AND RESULT

3.1- COMPARISON BETWEEN THE MALE AND FEMALE PROSPECTIVE TEACHERS IN RELATION TO THEIR EMOTIONAL INTELLIGENCE

TABLE NO- 3.1

Gender	N	Mean	S.D.	df	t-value
Male	60	61.1	12.1	118	3.78**
Female	60	68.2	7.82		

**** Significant Difference at both level (0.05 & 0.01)**

Interpretation:

From table 3.1 it is clear that mean score (M=61.1) for Male Prospective Teachers is less than mean score (M=68.2) of Female Prospective teachers and obtained t-ratio(3.78) for Emotional Intelligence is more than 0.01 & 0.05 level of significance .Therefore it is significant at 0.01 & 0.05 level of significance. It means that there exists significant difference between Male and Female Prospective Teachers in relation to Emotional Intelligence. Thus, the null hypothesis which states that there is no significant difference between Male and Female Prospective Teachers in relation to Emotional Intelligence” is not accepted. Hence Female Prospective Teachers have more Emotional Intelligence with compare to Male Prospective Teachers .

3.2-COMPARISONS BETWEEN THE MALE AND FEMALE PROSPECTIVE TEACHERS IN RELATION TO THEIR INTRA PERSONAL AWARENESS

TABLE NO- 3.2

Gender	N	Mean	S.D.	df	t-value
Male	60	14.5	3.90	118	2.22**
Female	60	15.8	2.73		

**** Significant Difference at Both level (0.05 & 0.01)**

Interpretation

The result reported in table 3.2 reveals mean score (M=14.5) for Male Prospective Teachers is less than mean score (M=15.8) of Female Prospective teachers and obtained t-ratio(2.22) for Emotional Intelligence is more than 0.01 & 0.05 level of significance .Therefore it is significant at 0.01 & 0.05 level of significance. It means that there exists significant difference between Male and Female Prospective Teachers in relation to their Intra personal awareness. Thus, the null hypothesis which states that there is no significant difference between Male and Female Prospective Teachers in relation to Intra personal awareness” is not accepted. Hence Female Prospective Teachers have more Intra personal awareness with compare to Male Prospective Teachers.

3.3 - COMPARISONS BETWEEN THE MALE AND FEMALE PROSPECTIVE TEACHERS IN RELATION TO INTER PERSONAL AWARENESS

TABLE NO- 3.3

Gender	N	Mean	S.D.	df	t-value
Male	60	15.2	4.08	118	0.757*
Female	60	15.7	2.80		

***Not Significant Difference at Both level (0.05 & 0.01)**

Interpretation

Table 3.3 gives information it that obtained t-ratio is 0.757 and Mean value (M=15.2) for Male Prospective Teachers and Mean value(M=15.7) of female Prospective Teachers and t- ratio for Inter personal awareness is less than 0.01 & 0.05 level of significance .therefore it is not significant at 0.01 & 0.05 level of significance. It means that there no exists significant difference between Male and Female Prospective Teachers in relation to Inter Personal Awareness. Hence, the hypothesis which states that there is no significant difference between Male and Female Prospective Teachers in relation to Inter Personal Awareness has been accepted. Thus, it is clear that the Male and Female Prospective Teachers have more less same value in relation to Inter Personal Awareness.

3.4. COMPARISONS BETWEEN THE MALE AND FEMALE PROSPECTIVE TEACHERS IN RELATION TO INTRA PERSONAL MANAGEMENT

TABLE NO- 3.4

Gender	N	Mean	S.D.	df	t-value
Male	60	15.5	3.89	118	4.48**
Female	60	18.5	3.38		

****Significant Difference at Both level (0.05 & 0.01)**

Interpretation

Table 3.4 gives information it that obtained t-ratio is 4.48 and Mean value (M=15.5) for Male Prospective Teachers is less than Mean value(M=18.5) of Male and Female Prospective Teachers and t- ratio for Intra Personal Management is more than 0.01 & 0.05 level of significance . Therefore it is significant at 0.01 & 0.05 level of significance. It means that there exists significant difference between Male and Female Prospective Teachers in relation to Intra Personal Management. Hence, the hypothesis which states that there is no significant difference between Male and Female Prospective Teachers in relation to Intra Personal Management has been rejected. Thus, it is clear that the Female Prospective Teachers have much more Interest in Intra Personal Management compare to Male and Female Prospective Teachers.

3.5. COMPARISONS BETWEEN THE MALE AND FEMALE PROSPECTIVE TEACHERS IN RELATION TO INTER PERSONAL MANAGEMENT

TABLE NO- 3.5

Gender	N	Mean	S.D.	df	t-value
Male	60	16.0	3.86	118	3.37**
Female	60	18.1	2.85		

****Significant Difference at Both level (0.05 & 0.01)**

Interpretation

A perusal of the above table No 3.5 reveals that the mean score (M=16.0) for Male Prospective Teachers is less than mean score (M=18.1) of Female Prospective teachers and obtained t-ratio(3.37) for Inter Personal Management is more than 0.01 & 0.05 level of significance .Therefore it is significant at 0.01 & 0.05 level of significance. It means that there exists significant difference between Male and Female Prospective Teachers in relation to Inter Personal Management .Thus, the null hypothesis which states that there is no significant difference between Male and Female Prospective Teachers in relation to Inter Personal Management ” is not accepted. Hence Female Prospective Teachers have more Inter Personal Management with compare to Male Prospective Teachers .

4.0. Conclusions

The study is concluded with the following conclusions:

1. There exists significance between Male and Female Prospective Teachers in relation to relation to Emotional Intelligence. The Female Prospective Teachers have more Emotional Intelligence with compare to Male Prospective Teachers. So, the

hypothesis is rejected. To improve and provide some training programme for developing Emotional Intelligence among the male prospective teachers.

2. In hypothesis No.2 we find that Female Prospective Teachers are more interested in Inter Personal Awareness. It should be increased Intra Personal Awareness programme to Male Prospective Teachers.
3. On the basis of result of Hypothesis No. 3 it can be said that Female Prospective Teachers have much more interest in Intra Personal Awareness compare to Male Prospective Teachers.
4. The result reported in hypothesis No.4 That Female Prospective Teachers have more interested in Intra Personal Management compare to Male Prospective Teachers.
5. The report of hypothesis No.5 shows that Female Prospective Teachers have more interest Inter Personal Management with compare to Male Prospective Teachers.

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NON-FORMAL PRIMARY EDUCATION IN CHAR AREAS OF BANGLADESH: INNOVATIONS IN CURRICULUM WITH REGARDS TO DISASTER RISK REDUCTION

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Abstract

In remote chars (river/ river estuarine/ offshore islands are called chars in Bengali) there are areas uncovered by existing educational programme. In most of the remote char areas, where erosion, floods and other natural disasters are common, very few or insufficient government primary schools are available; high schools are mostly unavailable. Education was identified as a prioritized sector by different NGOs working in the char areas of Bangladesh in support of their poverty alleviation activities. The three-year non-formal primary (NFP) education model, introduced by Bangladesh Rural Advancement Committee (BRAC) in 1985, is adopted with some variations by different NGOs. In the context of disaster prone char areas, the present study was conducted to identify 1) whether the non-formal primary schools address the issue of disaster risk reduction in the disaster prone char areas of Bangladesh; 2) to what extent different stakeholders consider disaster risk reduction necessary to be incorporated in the curriculum of these schools or not; 3) how and to what extent these schools are addressing disaster risk reduction in their curriculum the present study; and 4) to propose action plan to be utilized by the non-formal schools in the disaster prone char areas with the view to reduce disaster risk. Data had been collected from six non-formal primary schools located in 3 northern and 3 southern char areas of Bangladesh. Through in-depth interviews of the teachers, selected parents of the students and local educated people of the char areas, observations in the non-formal primary schools and FGDs with the students, data had been generated. The study revealed that the curriculum of the NFP schools is unique in its content and instruction method. As flood and river erosion are part and parcel of the lives of the dwellers of char areas, disaster preparedness is found to be included along with the structured curriculum. Not only disaster related concerns but also different social ills i.e. dowry, early marriage, etc. are addressed in these NFP schools with the view to ensued gradual social development. The local culture is considered important and is adhered for innovative teaching through songs, drama, dances, etc. by the students. The NFP education system is unique; students are taught all the subjects by a single teacher and gradually they learn, innovate and demonstrate unique ways of awareness building, preparedness, community mobilization etc. for ensuring safety and security of the community people in pre, during and post disaster context. The practical implication of the study lies in the fact that it documents good examples and proposes action plan which the non-formal schools can adopt and through utilizing those may contribute effectively in disaster risk reduction.

Introduction:

Non-formal Primary education is provided by various national and international NGOs by getting the help of local NGOs in different remote and char areas of Bangladesh in order to ensure primary education, reduce illiterate rate and to create scope for the once drop-out children to continue their studies. In this case, the Bangladesh Rural Advancement

Committee (BRAC) is the largest non-governmental organization in Bangladesh initiated a Non-formal Primary Education programme with experimental schools in 22 villages in 1985, in response to the rural poor people especially in remote and char areas (Lovell & Fatema, 1989).

Sabur (2007) described Non-Formal education as a purposefully and systematically organized form of education that generally occurs outside the formal institution. Such education is designed to meet the learning needs of educationally disadvantaged persons of different ages and backgrounds. The characteristics he has identified include- flexible organization, time and place. Non-formal education may cover basic and continuing educational programs to impart basic literacy, including life skills, work skills, general culture, and facilitate lifelong learning and may enhance earning capabilities for poverty reduction. For him non-formal education ensures equity in access and human resource development. His explanations also match with the goals of the government. Government is the biggest contributor to set free the country from the curse of illiteracy. In line with the international development agenda, in the year, 1991, the govt. introduced Integrated Non-Formal Education Programme. Under this programme, about 2.47million illiterate people had been made literate. To accomplish the activities under this programme, 0.75 million books that included teachers' guide, teachers' training manual and others were distributed. At that time, relevant additional interventions were also identified and successfully implemented. In continuation of those steps, about 18 million more illiterate people were made literate under non-formal education projects (Ahmed, 2005).

In Bangladesh, mainly two types of primary education system are found; namely-formal primary education and non-formal primary education. Both play significant role in promoting primary education throughout the whole country. Non- formal primary education system is introduced in different ways by the locally recruited teachers that allow introduction of creativity, innovation, and emphasize on local culture and other socioeconomic aspects. On the other hand formal primary education maintains almost same syllabus and same teaching technique for whole areas of Bangladesh. Based on the recognition that formal primary education programme has failed to become adequately responsive to the needs of the poorer/disadvantaged sections of people, Non-Formal education programme has evolved in various form as a strategic intervention for poverty alleviation and risk reduction in char areas (Islam & Mia, 2007).

As a disaster prone country, Bangladesh faces some limitations to provide and promote quality primary education equitably in every corner of the country. However, in the hard to reach areas, such as chars, hill tracts, and remote coastal areas of Bangladesh, different NGOs are relentlessly contributing to promote quality education equitably. In

several ways, teaching and learning is quite different in the non-formal primary schools compared to public formal primary schools. In the non-formal primary schools, teachers are recruited mostly from the same community. Thus, along with the curriculum, both the teacher and the students are found to focus on their socio-economic concerns through local cultural practices- local songs, dram, etc. In the same community, the government (formal) primary schools are typical to all such schools all over the country and maintain a general standardization in terms of organization, curriculum teaching-learning system.

To meet the SDGs, there is no alternative to ensuring quality and equitable education for all. In this regard, NGOs play a vital role by promoting non-formal primary education (UNESCO, 2006).

For effective participation in disaster risk reduction and livelihoods promotion for reduce vulnerability of people in the disaster prone char areas, NGOs collaborate with government agencies and other bodies in different levels to develop capacity and skills through non-formal primary education. In a sense, The Jamuna Char Integrated Development Project (JCDP) is a local NGO founded in 1990 to help poor inhabitants of the islands (chars) in the middle of the River Jamuna. It supports 200 community groups on more than 80 chars involved mainly in implementation of development projects in raising awareness through literacy as well as others supportive initiatives in health, sanitations, crop diversifications and so on (Russell, 2000) .

In remote chars (river/ river estuarine/ offshore island is called char in Bengali) there are areas uncovered by existing educational programme. In most of the remote char areas, where erosion, floods and other natural disasters are common, very few or insufficient government primary schools are available; high schools are mostly unavailable. Education was identified as a prioritized sector by different NGOs working in the char areas of Bangladesh in support of their poverty alleviation activities. The three-year non-formal primary education model, introduced by Bangladesh Rural Advancement Committee (BRAC) in 1985, is adopted with some variations by different NGOs.

While the typical role of the non-formal primary schools is to ensure equitable access to education and equitable human resource development, through its very unique characteristics, it is also possible to bring about socio-economic and cultural changes towards desired direction.

Literature shows that in different contexts, the non-formal schools were successful in increasing awareness about various social ills. For example, in pursuance of success for the project of the Government in September 3, 1995 established the “Directorate of Non-Formal Education (DNFE)” as a permanent infrastructure of non formal education to the

disadvantages people. Several non-governmental organizations (NGOs) evaluated the program. Success of such undertakings brought wide international acclamation, which found expression when the prestigious “UNESCO Literacy Award 1998” was accorded to Bangladesh (Rahman et. al, 2010). For expanding primary and mass education programs in a well organized manner, the Government constituted the Primary and Mass Education Division (PMED) in 1992 and the same was transformed into a full-fledged ministry titled “Ministry of Primary and Mass Education (MOPME)” in 2003. Moreover, BRAC (Bangladesh Rural Advancement Committee) involved in Non-formal Primary Education in Bangladesh is up to the year of 2000 in total, BRAC schools enroll 1.3 million children. Promotion in BRAC schools is close to 95% for the three grades offered. Between 1980 and 1997, enrollments doubled from 8 – 16 million with the remarkable success through learning process (Rahman et. al, 2010).

In this context, the present study was conducted to identify 1) whether the non-formal primary education addresses the issue of disaster risk reduction in the disaster prone char areas of Bangladesh; 2) to what extent different stakeholders consider disaster risk reduction necessary to be incorporated in the curriculum of these schools or not; 3) how and to what extent these schools are addressing disaster risk reduction in their curriculum the present study; and 4) to propose action plan to be utilized by the non-formal schools in the disaster prone char areas with the view to reduce disaster risk.

Literature review

In recent years, non-formal education has become an important phenomenon in developing countries like Bangladesh. Apart from government initiatives many international, national and local NGOs are providing non-formal education for increasing public awareness and preparedness against natural disaster. The government has undertaken various measures to increase access to primary education reduce dropout rate, increase completion rate, improve quality of education and increase literacy rate and help bringing quality of life. The government has introduced Primary Education Development Programme II (PEDP-II) and a new project outside the PEDP II named “Reaching Out-Of-School Children Project” (ROSC) to meet the learning needs of OSC through community-based and locally operated learning centers. Under ROSC project 500,000 children of 7 to 14 years age are being provided stipend to attend the schools (Ahmed, 2005).

And the three-year non-formal primary education model, introduced by Bangladesh Rural Advancement Committee (BRAC) in 1985, is adopted with some variations by different NGOs (Lovell & Fatema, 1989). Education was identified as a prioritized sector by different NGOs working in the char areas of Bangladesh in support of their poverty

alleviation activities. In remote char there are areas uncovered by existing educational programme. In those areas the NFP schools are established. The curriculum of the NFP schools is unique in its content and instruction method. As flood and river erosion are part and parcel of the lives of the dwellers of char areas, disaster preparedness is included in the curriculum. The local culture is considered important on the way toward development and thus is practiced through songs and dances by the students. As a non-formal system the teaching method is unique; students are taught all the subjects by a single teacher. The curriculum of these schools is prepared in such a way so that the students, after completing their three-year non-formal education are able to continue their studies at the formal sixth grade.

Government policy and action

Bangladesh enthusiastically adopted the Education for All (EFA) agenda of the World Conference on Education for All (Jomtien, 1990). A compulsory primary education law was promulgated and the government proceeded to implement a compulsory primary education programme since 1991 with increased resource allocation and efforts to mobilise public support for this programme. Other supportive measures included:

- a. Provision for free textbooks for all children at the primary level, which reduced cash costs to parents for their children's primary education;
- b. Food for education - distribution of grain to school children, later replaced by monthly cash grant for 40 percent of the children in primary school identified as poor;
- c. Monthly stipends and tuition waiver for rural girls at the secondary level, which became an incentive for girls to go to primary school;
- d. Competency-based primary education curriculum introduced since 1993 in an effort to enhance relevance and quality of education;
- e. Increased proportions of women in teaching with sixty percent reservation for women in recruitment of teachers for government primary schools;
- f. Mobilisation of external assistance for major primary education development activities. Since the EFA initiative, the volume of external assistance has increased and more of it has been devoted to primary education (JBIC, 2002).

NGO Contribution

In present time NGO have become important actors in the education sector. Although at the initial stage their activities were limited to adult literacy, NFE and primary education, in recent years the private sector (including NGOs) has become dominant not only in primary

education but also in secondary, college and university education. Indeed a kind of a revolution is taking place through the explosion of the number of English medium schools and private universities (of which there are 54). The private sector in Bangladesh has created its own space and emerged as a vibrant actor in the education sector.

Many NGOs are involved in education. Approximately 700 NGOs are enlisted to the Campaign for Popular Education (CAMPE), the umbrella organization for the education NGOs set up in 1991. These NGOs are involved in adult education, child education services, pre-primary education, NFE and primary education. Some NGOs are also involved in providing support services such as teacher training, curriculum and materials development (Alam, 2007).

NSPs are best known for their non-formal primary education programme in Bangladesh and also internationally. A new trend is emerging within the existing NFPE model (Interview with a Program Coordinator)

The government efforts have been complemented by vibrant NGO involvement in providing primary education, especially for children left behind by the public sector schools. A model known as non-formal primary education pioneered by BRAC, and a similar approach followed by other NGOs, served up to 1.5 million children every year in approximately 40,000 non-formal one-room-one-teacher centres in the later half of the last decade (Ahmed & Nath, 2005). Each of these centres took a cohort of 30-33 children who were eight years or older, beyond the entry age for regular primary school, and taught them for three years to bring them up to the level of fourth or fifth grade of primary school, so that they could join and continue in formal education. In fact, over 80 percent of these children joined the formal school. The large majority of these children, 70 percent initially, were girls. Gradually, the model developed into a full primary education programme, offering the equivalent of 5-year formal primary education in four years. The BRAC model was adopted by a majority of the 700 NGOs now involved in basic education delivery (Ahmed & Nath, 2005).

Other distinctive features of the non-formal primary schools are: Elimination of all direct costs for families, with no tuition and provision for free learning materials; women teachers who are recruited from the neighbourhood; essential pedagogic and management quality for institutions ensured by close supervision; parents, especially mothers, closely involved through consultation and regular mothers' meetings; a school with only 33 students, which is close to the students' home.

Other Developments

Micro-credit programmes pioneered by Grameen Bank and other NGOs, which reach over 10 percent of the poor households has opened the door for economic freedom and a change in social status for women. Health and family planning programmes in which NGOs have played an active role have, apart from benefiting women and their families, have also expanded the opportunities for women to work outside home as health and family planning workers (Grameen Bank, 2011). Various forms of skill development programmes, adult and nonformal education programmes offered by NGOs, which have included content about law and legal rights and life skills have promoted the forces of change. Social mobilization in support of girls' education and against traditional gender perceptions have been undertaken by the government and civil society organizations – a prominent example of which is the creation of the cartoon character Meena as the champion of girls' education sponsored by UNICEF. (USAID, Basic Education Policy Support Activity, Bangladesh Education Sector Review Report No. 2, Overview of the Status of Gender Equity, 2002) high priority to human resource development, including literacy and skills development among women.

Low levels of literacy among women, especially in the rural areas, have been of particular concern since literacy is a first step in skills development and hence an improved capacity to undertake livelihood activities. With this in view, consultations on improving literacy levels and basic skills among women were conducted with the Government, local elected officials, and representatives of civil society during the technical assistance (TA) Fact-Finding Mission for the proposed ADB Sustainable Livelihood in Barani Areas Project, Punjab (SLBAP) in May 2003 (ADB, 2004). A concept paper was prepared, aimed at improving literacy levels and basic skills among women in conjunction with the livelihood opportunities to be provided under the proposed SLBAP.

The people living in char areas are constantly challenged by fragile infrastructure, frequent impact of natural hazards including flood, river erosion, losses of standing crops etc. A noticeable number of children in the char areas are being deprived of the right to compulsory primary education due to poverty, ignorance, shortage of schools and lack of communication facilities. Despite many development efforts, char dwellers remain deprived due to geographical reasons. Even, they have no proper knowledge about disaster risk reduction strategies and preparedness. Hence, the necessity of The Non-formal Primary Education is required which can identify and prioritize different issues related to development of char areas incorporating the disaster risk reduction in the education curriculum.

Thus, this research can present by identifying the issues of The Non-formal Primary Education in char areas to relevant government departments, in addition to drawing attention of relevant organizations, researchers, social workers, policy makers, and media professionals

Theoretical Frame work

To address the objectives of the study this study used the Outcome-based performance management model.

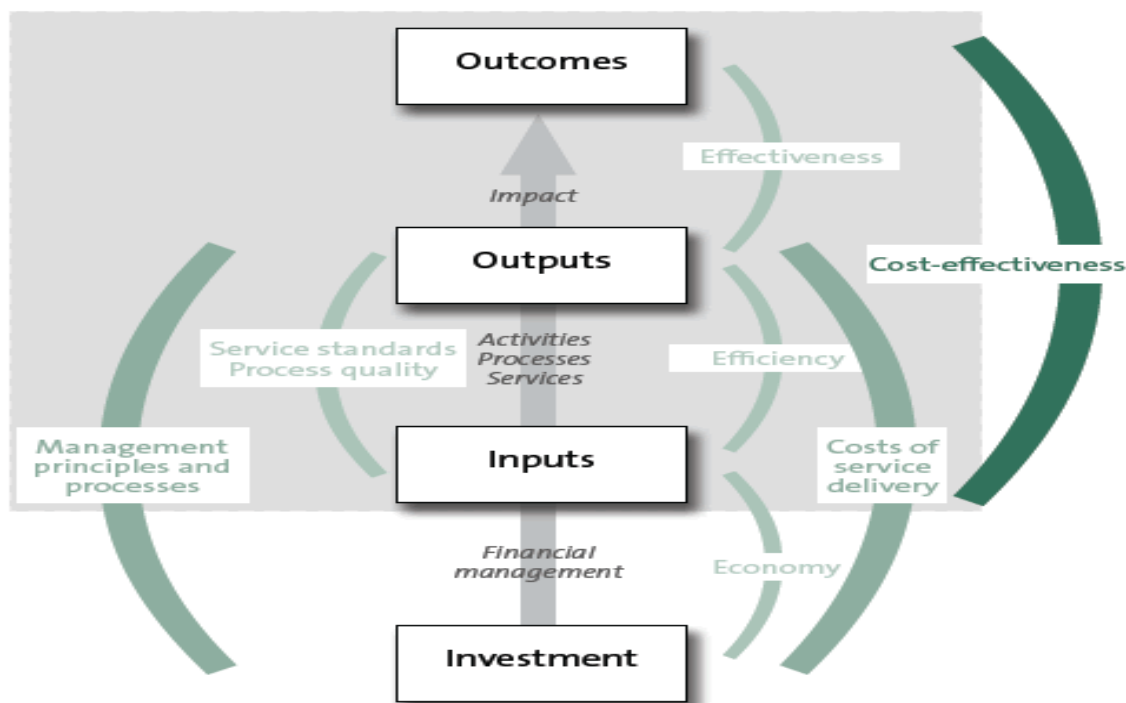


Figure: outcome-based performance model

The process of this research conduction can be easily understood by outcome-based performance management model. As we pursue the expected outcome to be appeared in the remote char areas of Bangladesh then some pertinent steps should be followed are given below.

Investment: Different NGOs are the capital accumulator and logistic supports providers for ensuring NFE education in Char areas.

Inputs: proving education through innovative learning process such singing, dancing, reciting and local cultural activities with addressing different social ills such dowry, child marriage, hygiene health matters by a single teacher . Teacher teaches core subjects alongside addresses the issues and duties of before and after natural disasters.

Output: by engaging the children in this learning process gradually they are to improve their social awareness and can complete their initial three years non-formal primary education thus also lead them to keep contribution in natural disaster risk reduction process.

Outcome: and in the long run this education help to reduce the dropout rate of them. Parents realize the importance of education so the try to keep continue of theirs children education and in fine it is to say that this education process help to eliminate the all kinds of social ills by spreading knowledge.

And this whole processes are interrelated by different supportive and technical activities and it is much cost efficient.

Methodology

This exploratory study was conducted to identify the unique features of the non-formal primary education in the char areas of Bangladesh to see basically the role of non-formal primary education to reduce the risk of natural disaster.

This Study was qualitative in nature to see in how much extent different stakeholders expect the risk management curriculum in non-formal primary education to be included as the text book in different char areas of Bangladesh as well as to propose an effective action plan thus non-formal education can be a vital instrument to reduce the natural disaster risk in char areas.

Data Collection

Study Area

Data had been collected from six non-formal primary schools located in 3 northern and 3 southern char areas of Bangladesh.

Sampling

In this study we gather primary data through purposive sampling since we wanted to reach out the most affected and involved groups within a very limited time resources.

Tools

Through in-depth interviews of the teachers, selected parents of the students and local educated people of the char areas, observations in the non-formal primary schools and FGDs with the students, data had been generated.

Primary data is collected from directly involved stakeholders and beneficiaries in non-formal primary education project organized and patronized by different national and international NGOs in remote and hard to reach char areas in Bangladesh. . Data had been collected from six non-formal primary schools located in 3 northern and 3 southern char areas of Bangladesh. Through in-depth interviews of the teachers, selected parents of the students and local educated people of the char areas, observations in the non-formal primary schools and FGDs with the students data had been generated.

The study revealed that in the remote char areas, where erosion, flood, storm are common, no formal primary educational institutions are established; high schools are of no question. There some other objectives can be related to conduct this study such as Guide victims in handling and coping with natural disasters; Provide literacy education for victims of natural disasters; Raise awareness for risks associated with natural disasters.

Objectives

With the aim to identify 1) whether the non-formal primary education addresses the issue of disaster risk reduction in the disaster prone char areas of Bangladesh; 2) to what extent different stakeholders consider disaster risk reduction necessary to be incorporated in the curriculum of these schools or not; 3) how and to what extent these schools are addressing disaster risk reduction in their curriculum the present study; and 4)) to propose action plan to be utilized by the non-formal schools in the disaster prone char areas with the view to reduce disaster risk.

Study Findings:

The study revealed that the curriculum of the NFP schools is unique in its content and instruction method. The findings of this study shows that how char people adapt themselves with the erosion and flood and to what extent the Non-formal Primary Education curriculum can be incorporated within disaster risk reduction and preparedness context. As a result, the study will focus to find out the causes addressing the disaster risk reduction and preparedness techniques through The Non-formal Primary Education in different sector of their livelihood in char. These findings can help the government and the other organization to take proper steps for emphasizing on the education context of the char people. As flood and river erosion are part and parcel of the lives of the dwellers of char areas, disaster preparedness is found to be included along with the structured curriculum.

The char dwellers are some of the poorest and most vulnerable people particularly those who live on the island/attached river chars although people living on the unprotected riverbanks experience similar difficulties. Char land areas irrespective of their geographic attachment to the mainland and distance from the growth centers are particularly vulnerable to flood, drought and river erosion (ISPAN, 2003).

Char people use their indigenous knowledge to adapt through this diverse situation. So it is important to improve and indicate the indigenous knowledge to adapt with the char environment and therefore the emphasis should place on The Non-formal Primary Education to promote awareness and strategic intervention in disaster risk reduction.

Generally, the local culture is considered important on the way toward development and thus is practiced through songs and dances by the students. As a non-formal system the teaching method is unique; students are taught all the subjects by a single teacher and gradually the boys and girls learn, innovate and demonstrate unique ways of awareness building, preparedness, community mobilization, pre, during and post disaster activities etc. to withstand natural disaster.

In hard to reach char areas different national and international NGOs are working for non-formal primary education with innovative techniques thus lead students in disaster management participation and in long run students enrolment and pursue of more secondary and higher education is increasing and dropout rate also decreasing. BRAC, ASHA, NGO FORUM, CLP and rural NGOs basically are contributing in char areas for gender empowerment, primary education promotion, health safety and hygiene alongside relentlessly work to make char's peoples, boys and girls aware and competent to withstand the natural disaster by how to reduce risk of natural disaster using innovation in informal primary education. Study finds some innovation tools these are basically used by various NGOs in non-formal primary education as considered to teach disaster risk management to the different stakeholders which leads community people and students to be aware and prepared to withstand natural disaster in char areas. We ask them that how NGOs engage them and in which way they teach; them to make them participate in disaster risk reduction program. Different innovative tools and technic are used to learn disaster risk management in NFPE in char areas as following:

Campaigns

“In Bosnia and Herzegovina, the municipality officials and the UNICEF country office developed a public campaign entitled ‘Spreman, Sprašen’ (‘Prepared, Saved’). The campaign contained a number of elements, including a Knowledge, Attitude and Practice (KAP) survey, communications training, focus groups and workshops, the development and adaptation of learning materials, a game, and cartoon, and created an online presence in social media networks. This helped to reach children and parents throughout the country” (Disaster Risk Reduction in Education: Good Practices and new Approaches, 2013).

In Bangladesh various formal and non-formal primary education programs provide villagers and students training on earthquake, cyclone, and flood. It teaches them about their duty about natural calamity and what should be there duty .These program are patronized by various NGOs.

Cartoons

Cartoons are a popular way to connect with children. Sometime various NGOs arrange cartoons drawing program by class teacher to make students attract in listen and learning about disaster management and it's consequence. Most often it leads increasing of student's class presence. For example: Meena Cartoon series was highly popular in promoting girls education in Bangladesh in 1990s.

Drawings

A number of countries have engaged children through art to strengthen their awareness of natural hazards. This is fun for children as they are able to express their ideas and knowledge in a fun way. This tool is considered as most attracted technic to teach students about natural disaster. For many times class teacher arrange it and after drawings teacher provides incentives like, chocolate, color pen sponsored by patronizes(NGOs) in char areas.

Singing and Acting

Class teacher teach students through make them attract by singing, acting and telling fun and poem. In this session students participate spontaneously and enjoy learning about disaster management and about academic learning as well.

Parents Meeting

In non-formal primary education process parents are to join monthly meeting so as to they can be involved themselves in non-formal primary education regards to disaster management process in char areas of Bangladesh.

And Data collection period to get relevant data we ask some different stakeholders who are directly or indirectly engaged with Non-Formal Primary education in Char areas. We ask them some question following

In response to the question as to- Do you think that NFPE is necessary in your area?- most of them answer yes because NFPE has great impact on their life .That helps them A) to be literate B) to make them aware about natural disaster C) relatively improve their thinking level about out sided world D) poor and vulnerable children at list get primary education E) Increase health status F) help to recognize that what should be their duties before and after natural disaster.

Asking the above question most of the stakeholders answer yes NFPE is needed for making them literate. Almost half of them say yes for regarding disaster management. Most of them answer yes due to cost free primary education for their children. And some of them say yes because it helps their health and living condition.

And finally it is found that NFE education in char areas has great positive effect on the people's lives who are living disaster prone areas and considered vulnerable. The dwellers in char areas are getting helped through their children can get non-formal primary education without cost alongside they are becoming concern about different social ills like social violence against women and children ,dowry, early marriage etc. They are being aware to play their duties that what should do before and after the natural disaster by getting non-formal primary education. And this whole NFE education system supported by different NGOs as investing the capital for social development. So the char areas children are getting at least 3 years NFE education alongside they are getting taught disaster risk reduction management skill from this NFE education process and ultimately this teaching program covered and monitored by a single teacher with addressing different social problems and natural disaster issues by using the different innovative technic.so that the result is ultimately peoples are getting aware about their tasks what should be in terms of social ills and in terms of natural risk reduction. In fine the process is considered cost effective and after completing NFE, the parents are sending their sons for secondary education.

Challenges

Limited funding for literacy programmes in general and for the natural disaster literacy programme in particular; the facilitators face a number of challenges in implementing the programme:

- Not all classes include the full range of required focus on natural disaster management.
- Limited infrastructure and facilities to support and motivate people in learning disaster risk management, which requires communities to help by providing facilities;
- Difficulty in raising awareness of the programme in char areas due to the business of parents and guardians because most often they keep them busy for surviving , including in recruiting volunteers and tutors for the programme in rural areas;
- Challenging to use ICTs with limited funding;
- Lack of incentive to make students and parents on this regard issue. The disaster risk management is not considered as compulsory through innovation technic i for learning and there is lack of inducement for class teacher so as to he or she can teach students innovatively about disaster risk reduction.

Conclusion and Recommendation

The need to train children on risk awareness and preparedness about natural disaster is very much important in the char areas. Awareness and preparedness against natural calamity can protect a large portion of wealth at least in the vulnerable char areas. And it can be possible to make chars people aware and prepare against natural disaster only less cost and effective way through addressing natural disaster risk reduction course teaching in non-formal primary education program by innovative technic in char areas. In non-formal primary education in char areas can play more significant role in disaster risk reduction if following measures are implemented.

- Adequate fund for continuing the non-formal primary education for ensuring innovative technic.
- Must ensure and include concrete disaster risk reduction course for NFPE at least in disaster prone areas of Bangladesh.
- Government, local authority and NGOs should work collaboratively for sustaining this program.
- Provides ICT base training and ensure electric supply and hand cash money can motivate people to strongly participate in learning disaster risk reduction program.
- To make students' learning sustainable which can be applied later in their practical life, hygienic and sound environment is very important. So the environment of NGO schools should be improved more. In addition to providing education to students.
- NGOs should make an attempt in order to increase awareness and motivate guardians, so that the students can continue their studies and be able to improve their quality of life and can be able to withstand natural disaster by learning disaster risk reduction course.
- Teaching in mother tongue;
- 'Joyful learning' through games, songs and dance; to teach disaster risk reduction course.
- An emphasis on empowering learners.
- Ensure learning materials, support training and learning programmes in disaster risk reduction through non-formal primary education by using innovative tools and technics

- Local volunteers and local capacities should be increased to support this program strongly.
- Emphasis on equal access to training and education, especially for women and out-of-school young people through this non-formal primary education thus can ensure their participation in disaster management learning.

By providing students with the knowledge and training to teach disaster risk management from non-formal primary education needed to spread it to their peers and communities and by continuing on developing new editions of particular disaster risk reduction course, The aim should increase the pool of trainers and the number of campaign, seminars and other formats of knowledge trade through local song, dance, drama acting. Which is more, the target group can be reached by non-formal primary students, aiming to involve interested community members for joint participation and learning the disaster risk reduction course to withstand against natural disaster. So disaster risk reduction course through innovation in non-formal primary education can be an ideal package in dealing with disaster management in char areas in Bangladesh. The practical implication of the study lies in the fact that it documents good examples and proposes action plan which the non-formal schools can adopt and through utilizing those may contribute effectively in disaster risk reduction.

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PSYCHOLOGICAL AND DEMOGRAPHIC CORRELATES ACADEMIC PROCRASTINATION AMONG ADOLESCENTS OF PUNJAB STATE

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Introduction:

Education is a telescopic and microscopic device through which one can get the correct observation to measure the level of prosperity, welfare, security and promise for a bright future. It provides the key to overcome stress and strain imposed by nature or cultivated by society. The main endeavor of edification is to adapt the behavior of the individual according to the needs and expectations of the society. The fundamental problem of all living creatures after taking birth is the problem of adaptation to the environment, mentally, physically, emotionally, socially and professionally. Some creatures have some natural capacities, which help them to adapt to the environment, and no systematic education is needed. However, in case of human beings, it is a different one. He is the most dependent being among all of them, and the education is infused in him by society or institutions formally as well as informally to achieve the goal of self-dependence.

Education is a process in which and by which knowledge, character, and behavior of the young are shaped and molded (Drever, 2007). According to Dewey (1938), education is a process different from the process of preparing for future life. It is a continuous repetition of experiences and feelings.

The secondary stage, students are called adolescents. Adolescence is mainly critical period of human being life. Poets have described it as the spring of life of a human being and an important era in the total lifespan. The word adolescence arrive from a Greek word 'adolescere' which elucidates 'to grow to maturity.' A number of psychologists define it as the intermediary age of life. The kid experiences some alterations in this transitional phase. The stage runs amid childhood and adulthood and is occasionally called the epoch of teenage. Adolescence is said to be a stage of high stresses and strains. The children of this age are quite perplexed and worried about their somatic variations and sudden changes in their total appearance, behavior, and attitude of the others towards them. They are also worried about the sudden changes in their sexual behavior, psychological and physiological problems, etc. Adolescence is the period of highest development and expansion about mental execution. Intelligence reaches its climax during this period. Cerebral powers like logical thinking, abstract reasoning and attentiveness are almost developed up to the end of this period. An

adolescent learns to reason and seeks answers how and why of everything, scientifically. His power of critical thinking and observation is much developed.

Academic achievement means achievement level of students; it can be said as what a student perform or get at his school. It is everyday practice to advance students from lower class to higher class by academic achievement. It helps in declaring that whether a student is thriving or unsuccessful choosing students for a variety of courses and selecting students for diverse jobs. It is the altitude of learning in a exacting area of a subject regarding knowledge, skills, understanding, and application usually evaluated by teachers in the form of test scores in their annual examinations.

Academic procrastination is a sole vent for procrastinatory tendencies and is the entity of much less scientific exploration. Academic procrastination occurs when students unnecessarily delay effecting projects, activities or assignments and have been associated to inferior academic grades, shoddier well-being, and more strain. Studies have instituted procrastination to be a noteworthy forecaster of accomplishment in college and the progress of a scale upon which to measure it could be fairly lucrative to colleges and universities. An abundant scales such as the Lay (1986) General Procrastination Scale, the Solomon and Rothblum (1984) Procrastination Assessment Scale for Students, and the Choi and Moran (2009) scale have been employed to compute procrastination. Conversely, the Tuckman (1991) Procrastination Scale is the mainly widely-used scale to identify academic procrastinators.

In psychology, the locus of control connates to the extent to which individuals believe they can control events affecting them. Understanding of the conception was developed by Rotter, J.B. in 1954 and has since turn out to be an aspect of persona studies. A person's "locus" (Latin for "place" or "location") is conceptualized as either interior (the person believes they can organize their life) or exterior (meaning they believe their decisions and existence are forbidden by ecological factors which they cannot influence, or by chance or fortune).

Research shows that students tend to have an internal locus of control when it comes to academic achievements and they tend to have an external locus of control when they face failure or lack of achievements (Garden et al. 2004). Also, research has associated academic achievements with locus of control. Students who have high levels of internal locus of control have also a better academic performance than students who have high levels of external locus of control (Judge et al. 2001) don't need to take more liability for their success in school).

Parents with more edification also have a higher anticipation for their children's education which facilitates the higher educational realization for their children (Alexander et al. 1994). Well educated parents have involved more in their children's education than less educated parents. (Gronlickand et al. 1994) Such parental association in children's education is profitable. The more actively involved parents are in their children's education, the higher their children's perceptions of capability and better they execute in school and augment their achievement motivation.

Need and Significance of the Study

Adolescence is a revolutionary phase of human being life. It is a cultivation point of intellectual, social and political beliefs of an individual. An imperative facet of adolescence is academic achievement which is an outcome of variety of demographic and psychological facets. Achievement motivation is the internal or external motivation factor which result in the attainment of high standards of excellence in the life. It thus serves as a major contributor variable in academics. The present and social beings results in development in motivation to strive more and more high standards of life. The achievement motivation is also the co-variable of the locus of control which is belief in oneself or other self for the life decisions. It is a belief system which determines the path of life.

Along with various positive features affecting student's performance in curricular areas, academic procrastination is one negative attribute that affects academic achievement. It is a lack of motivation relating in delaying tasks. The student have to face many challenging tasks during their learning phase. Academic procrastination results in lagging of intellectual tasks whereas locus of control and achievement motivation result in betterment of the achievement.

Review of related Literature

The objective of the current investigation was to predict the high school students' academic burnout based on social adjustment, academic procrastination and academic hope. Research method was descriptive and co relational. 350 students were selected as a sample employing multi-cluster sampling method. Social adjustment inventory, assessment scale of procrastination (PAS), academic hope and academic Burnout questionnaire were employed. The results elaborated statistically significant Correlations between burnout scores with social adjustment, academic procrastination and academic hope scores. Also Stepwise regression analysis showed that students' burnout could be predicted by social adjustment, academic procrastination and academic hope by Mohammadipour & Rahmati (2016)

Abid et.al (2016) analyzed that learning performances of the students with internal locus of control are high, and they are more proactive and effective during the learning process. On the other hand, the ones with external locus of control are more passive and reactive during this period. Apart from these, it is noted that there are some differences among students' demographic groups and their learning factors.

Neesha (2017) The study focused on the influence of Big Five Personality on the achievement motivation and academic performance among sojourn students. The sample of the study consist of 57 sojourn students, in the age group of 17years to 22 years. Neo Five Factor Inventory and Stanford Achievement Test participants. Grade Point Average were collected was also collected from the participants. The results revealed that no significant correlation between the Big Five personality traits and achievement motivation; and academic performance. The findings of this study are intriguing because it provides an impetus to future researchers to find out why there is no relationship between personality, achievement motivation and academic performance among sojourn students, and what cultural factors are at play here.

Arakeri and Sunagar (2017) concluded in their research on gender found that internality among females is more than male students. The gender comparison of influence of externality chance showed that male students are more influenced by externality chance factors than the female students.

Overview

Academic procrastination and demographic correlates

- Academic procrastination reveals in low academic achievement (Ellis & Mccown 1995, Wotten, 2003; Ferrai 2009; Hussain & Sultan)
- Researchers have reported efficient behavioural outcomes due to academic procrastination (Milgam, Mey-Tal & Levison 1998 Klingsleck, 2013)
- Lack of extrinsic motivation result in procrastination (Reasinger & Reasinger, 1996; Bawmeister, 1999; Balkis & Duru, 2009; Vij & Lomash 2011)
- High boredom result in procrastination (Blunt & Pych,2000)
- Academic procrastination is wide spread among student (Mensink & O'Sullian 2000; Ackerman & Gross 2005)
- Goal avoidance and procrastination has been correlated (Noran, 2000, Howell & Watson 2007)

- Demographic differences exists on academic procrastination (Akinoola & Tella 2004; Balkis & Duru, 2009, Ozer & Ferrai 2011)

Academic Procrastination & Psychological Correlates

- Internal locus control is negatively correlated with academic procrastination (Jasen & Carton, 1999; Beck et.al 2000; Milgram and Tenne, 2000)
- There is a positive relationship between academic performance and locus of control (Anakwe, 2003; Nejati et.al 2012)
- External locus of control has been found to be positively correlated with goal avoidance (Aken, 2010; Muneer, 2013)

Achievement Motivation

- Gender differences has been highlighted with respect to achievement motivation (Kaur, 2004; Sharma et.al.; 2006; Thijis 2011, Acarya & Joshi, 2011)
- High achievement result to high achievement motivation (Bansal et.al. 2006; Sharma et.al 2006; ; Chawdhary et.al 2009)
- Family environment and achievement motivation has been found to be correlated (Holawah, 2006; Muola, 2010; Bhahago, 2011; Manjuvani and Anuradha, 2011)

Objectives of the Study

1. To determine the status of academic procrastination among adolescents of Punjab.
2. To highlight the level of academic achievement among adolescents of Punjab.
3. To find out the relationship between academic procrastination, the locus of control and achievement motivation of adolescents.
4. To examine gender, class, caste and locality-wise differences among adolescents of Punjab with respect to academic procrastination.
5. To highlight gender, class, caste and locality-wise differences among adolescents of Punjab with respect to academic achievement.
6. To demonstrate gender, class, caste and locality-wise differences among adolescents of Punjab with respect to locus of control.
7. To find out the relationship between academic procrastination, the locus of control and achievement motivation of adolescents.

Research Hypothesis

1. There will be significant gender, locality, caste and class differences between academic procrastination of adolescents of Punjab.
2. There will be significant gender, locality, caste and class differences between academic motivation of adolescents of Punjab.
3. There will be significant gender, locality, caste and class differences between locus of control (P) of adolescents of Punjab.
4. There will be significant gender, locality, caste and class differences between locus of control (C) of adolescents of Punjab.
5. There will be significant gender, locality, caste and class differences between locus of control (I) of adolescents of Punjab.

Delimitations

- The study was limited to three variables, i.e., Academic Procrastination, Locus of Control and Achievement Motivation.
- The study was restricted to 576 students.
- The study was confined to three cities of Punjab namely Ludhiana, Moga, and Sangrur.
- Only those students were selected who are between 12 to 17 years.

The only descriptive survey was to be undertaken, and no remedial will be provided.

Method and Procedure

The investigator selected the random sampling method for the present study. The sample of the present study consisted of 576 adolescents between ages 12-16 years (studying in classes IXth to XIIth) from three districts Ludhiana, Moga, Sangrur for the present study. The sample of 48 students in each school was selected. Further, the selected schools from three districts were 12; a total number of males and females from each district 192; 288 adolescents from urban and 288 from rural areas.

Tools

- Academic Procrastination Scale prepared by A. K. Kalia and Manju Yadav (2012) was used.
- Deo-Mohan: Achievement Motivation (N-ACH) Scale (DMAM)

- Sanjay Vohra developed Locus of Control Scale Indian Adaptation of Levensons Scale.

Data Collection

The investigator visited the respective schools and collected the data from adolescents on Academic Procrastination Scale, Achievement Motivation Scale and Locus of Control Scale. The administration of the tests commenced with distribution of test booklet followed by brief explanation of purpose of conducting the test, method to be followed while attempting the test and requisite instructions regarding time limit and scoring of the test. The time limit for taking the test was one hour so that all the students can attempt all the items. The physical factors viz. adequate lightning, minimal noise and requisite proper infrastructure for favorable administration of the test were also taken care of by the investigator. After the time was over, test booklets were taken back from the students.

Scoring

The Academic Procrastination Scale, Achievement Motivation Scale and Locus of Control Scale were scored as per scoring key respectively.

Hypothesis Testing and Results

The formulated hypothesis and their results are depicted as below:

There is no significant difference in mean score of achievement on Academic Procrastination scale with respect to gender.

The mean and SD for boys (N=312) are 23.89 and 9.37 respectively and the mean and SD for girls (N=264) are observed to be 21.00 and 9.85. Further the t- value for the variable i.e. gender is found to be 2.89 which is significant at 0.01 level. It shows that mean achievement score on Academic Procrastination scale with respect to gender differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Academic Procrastination scale with respect to gender' is rejected.

There is no significant difference in mean score of achievement on academic procrastination scale with respect to location.

The mean and SD for rural (N=240) are 22.65 and 9.81 respectively and the mean and SD for urban (N=336) are observed to be 22.69 and 9.34. Further the t- value for the variable i.e. location is found to be 0.04 which is not significant at 0.01 level. It shows that mean achievement score on academic procrastination scale with respect to location do not differ significantly. In this context the hypothesis (Ho) namely, 'there

is no significant difference in mean score of achievement on academic procrastination scale with respect to location' is accepted.

There is no significant difference in mean score of achievement academic procrastination scale with respect to caste.

The mean and SD for general (N=192) are 22.43 and 9.24 respectively. Also the mean and SD for SC (N=192) are 23.13 and 10.12 respectively and the mean and SD for OBC (N=192) are 22.34 and 9.20. Further the F- value for the variable i.e. caste is found to be 0.39 which is not significant at 0.01 level. It shows that mean achievement score on academic procrastination scale with respect to caste do not differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement academic procrastination scale with respect to caste' is accepted.

There is no significant difference in mean score of achievement on academic procrastination scale with respect to class.

The mean and SD for high (N=183) are 18.5 and 9.43 respectively; the mean and SD for middle (N=201) are observed to be 22.89 and 9.06 and the mean and SD for low (N=192) are 22.93 and 10.60 respectively. Further the F- value for the variable i.e. class is found to be 2.66 which is significant at 0.01 level. It shows that mean achievement score on academic procrastination scale with respect to class differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on academic procrastination scale with respect to class' is rejected.

There is no significant difference in mean score of achievement on Academic Motivation scale with respect to gender.

The mean and SD for boys (N=312) are 95.19 and 17.65 respectively and the mean and SD for girls (N=264) are observed to be 92.67 and 18.92. Further the t- value for the variable i.e. gender is found to be 2.95 which is not significant at 0.01 level. It shows that mean achievement score on Academic Motivation scale with respect to gender differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Academic Motivation scale with respect to gender' is rejected.

There is no significant difference in mean score of achievement on academic motivation scale with respect to location.

The mean and SD for rural (N=240) are 94.13 and 17.02 respectively and the mean

and SD for urban (N=336) are observed to be 93.29 and 19.60. Further the t- value for the variable i.e. location is found to be 0.29 which is not significant at 0.01 level. It shows that mean achievement score on academic motivation scale with respect to location do not differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on academic motivation scale with respect to location' is accepted.

There is no significant difference in mean score of achievement on academic motivation scale with respect to caste.

The mean and SD for general (N=192) are 93.87 and 20.78 respectively. Also the mean and SD for SC (N=192) are 78.97 and 31.52 respectively and the mean and SD for OBC (N=192) are 84.50 and 28.86. Further the F- value for the variable i.e. caste is found to be 10.48 which is significant at 0.01 level. It shows that mean achievement score on academic motivation scale with respect to caste differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on academic motivation scale with respect to caste' is rejected.

There is no significant difference in mean score of achievement on academic motivation scale with respect to class.

The mean and SD for high (N=183) are 102.85 and 19.55 respectively; the mean and SD for middle (N=201) are observed to be 93.61 and 18.06 and the mean and SD for low (N=192) are 94.01 and 18.10 respectively. Further the F- value for the variable i.e. class is found to be 3.14 which is significant at 0.01 level. It shows that mean achievement score on academic motivation scale with respect to class differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on academic motivation scale with respect to classes is rejected.

There is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to gender.

The mean and SD for boys (N=312) are 5.68 and 2.44 respectively and the mean and SD for girls (N=264) are observed to be 5.72 and 2.57. Further the t- value for the variable i.e. gender is found to be 0.04 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (I) scale with respect to gender do not differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to gender' is accepted.

There is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to location.

The mean and SD for rural (N=240) are 5.35 and 2.48 respectively and the mean and SD for urban (N=336) are observed to be 5.95 and 2.50. Further the t- value for the variable i.e. location is found to 0.03 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (I) scale with respect to location do not differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to location' is accepted.

There is no significant difference in mean score of achievement on Locus of Control (PI) scale with respect to caste.

The mean and SD for general (N=192) are 5.63 and 2.39 respectively. Also the mean and SD for SC (N=1692) are 6.04 and 2.61 respectively and the mean and SD for OBC (N=192) are 5.73 and 2.44. Further the F- value for the variable i.e. caste is found to be 1.02 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (I) scale with respect to caste differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (PI) scale with respect to caste' is rejected.

There is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to class.

The mean and SD for high (N=183) are 6.36 and 2.03 respectively; the mean and SD for middle (N=201) are observed to be 5.96 and 2.42 and the mean and SD for low (N=192) are 6.01 and 2.54 respectively. Further the F- value for the variable i.e. class is found to be 0.23 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (I) scale with respect to class do not differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to class' is accepted.

There is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to gender.

The mean and SD for boys (N=312) are 7.75 and 1.66 respectively and the mean and SD for girls (N=264) are observed to be 7.35 and 1.94. Further the t- value for the variable i.e. gender is found to be 0.23 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (C) scale with respect to gender do

not differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to gender' is accepted.

There is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to location.

The mean and SD for rural (N=240) are 7.97 and 1.41 respectively and the mean and SD for urban (N=336) are observed to be 7.56 and 1.95. Further the t- value for the variable i.e. location is found to be 7.72 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (C) scale with respect to location do not differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to location' is rejected.

There is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to caste.

The mean and SD for general (N=192) are 7.57 and 1.88 respectively. Also the mean and SD for SC (N=192) are 7.45 and 1.91 respectively and the mean and SD for OBC (N=192) are 7.72 and 1.74. Further the F- value for the variable i.e. caste is found to be 1.03 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (C) scale with respect to caste differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to caste' is rejected.

There is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to class.

The mean and SD for high (N=183) are 7.34 and 2.23 respectively; the mean and SD for middle (N=201) are observed to be 7.43 and 1.81 and the mean and SD for low (N=192) are 7.91 and 1.77 respectively. Further the F- value for the variable i.e. class is found to be 4.75 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (C) scale with respect to class differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to class' is rejected.

There is no significant difference in mean score of achievement on Locus of Control (P) scale with respect to gender.

The mean and SD for boys (N=312) are 8.52 and 1.49 respectively and the mean and

SD for girls (N=264) are observed to be 7.85 and 1.73. Further the t- value for the variable i.e. gender is found to be 24.92 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (P) scale with respect to gender differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (P) scale with respect to gender' is rejected.

There is no significant difference in mean score of achievement on Locus of Control (P) scale with respect to location.

The mean and SD for rural (N=240) are 8.50 and 1.53 respectively and the mean and SD for urban (N=336) are observed to be 7.96 and 1.65. Further the t- value for the variable i.e. location is found to be 15.92 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (P) scale with respect to location differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (P) scale with respect to location' is rejected.

There is no significant difference in mean score of achievement on Locus of Control (P) scale with respect to caste.

The mean and SD for general (N=192) are 8.21 and 1.62 respectively. Also the mean and SD for SC (N=192) are 8.12 and 1.71 respectively and the mean and SD for OBC (N=192) are 8.21 and 1.54. Further the F- value for the variable i.e. caste is found to be 0.19 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (P) scale with respect to caste do not differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (P) scale with respect to caste' is accepted.

There is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to class.

The mean and SD for high (N=183) are 7.97 and 1.81 respectively; the mean and SD for middle (N=201) are observed to be 8.12 and 1.62 and the mean and SD for low (N=192) are 8.33 and 1.58 respectively. Further the F- value for the variable i.e. class is found to be 2.21 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (P) scale with respect to class differ significantly. In this context the hypothesis (Ho) namely, 'there is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to class' is rejected.

DISCUSSION OF RESULTS

The present study assessed the prevalence of academic procrastination behavior amongst students of Punjab. The results of the present study are discussed as follows:

4.10.1 ACHIEVEMENT ON ACADEMIC PROCRASTINATION SCALE

- The moderate level of achievement on the academic procrastination Scale was examined. The same has been observed by **Yaakub, 2000; Howell and Watson, 2007**.
- It can be said that the male and female students differ on Academic Procrastination scale. Further the mean of boys (23.89) is more than that of girls (21.00) therein the academic procrastination behaviour is said to be more prevalent in the males as compared to the females. **Akinsola and Tella, 2007** found no difference owing to gender in academic procrastination behaviour whereas findings of the present study has been similar to **Balkis and Duru (2009)**.
- The rural and urban adolescents do not differ on academic procrastination scale as is highlighted by **Ozer and Ferrari (2011)**.
- General, BC, SC and OBC students of adolescents do not differ on academic procrastination scale as reported by **Vij and Lomash (2014)**.
- The high, middle and low students differ on academic procrastination scale. Further as the mean of low class (22.93) is more than their counterparts henceforth academic procrastination behaviour is more in the low caste students. The finding is in consonance with that of **Jansen and Carton (1999)**.

4.10.2 ACHIEVEMENT ON ACHIEVEMENT MOTIVATION SCALE

- The moderate level of achievement on the achievement motivation Scale was observed.
- It can be said that the male and female students differ on achievement Motivation scale. The boys have more achievement motivation than the female students as observed by mean scores of boys:girls:: 95.19: 92.67 as reported by **Kaur (2004) and Muola (2010)**.
- The rural and urban students do not differ on achievement motivation scale whereas **Kaur (2004)** reported a significant difference between the two.
- The mean of General caste students (93.87) is more than students from other castes henceforth it can be said that the General students have more achievement motivation

as compared to students from other castes (**Bansal et al. , 2006; Halawah, 2006**).

- It can be said that the high, middle and low students differ on achievement motivation scale and this behaviour is more widespread among high class students (M=102.85) than the middle and low class students (**Bahago, 2011**), **Manjuvani and Anuradha (2011)**).

4.10.3 ACHIEVEMENT ON LOCUS OF CONTROL SCALE

- The moderate level of achievement on the Locus of Control (I) Scale has been observed. High level of achievement on the Locus of Control (C) Scale and moderate level of achievement on the Locus of Control (P) Scale has been reported.
- The male and female students do not differ on Locus of Control (I) scale and the rural and urban students do not differ on Locus of Control (I) scale (**Muneer 2013**).
- It can be said that the general, SC, BC and OBC students differ on Locus of Control (I) scale. Further SC students have more mean (6.04) than their counterparts which elucidates that SC students believe in more individual control over their life decisions than their counterparts. No significant difference has been reported by **Barling and Fincham (1978); Naik (2015)**.
- The high, middle and low students do not differ on Locus of Control (I) scale. On the other hand, significant interaction between locus of control and social class (**Battle and Rotter, 1963**) was found.
- Male and female students do not differ on Locus of Control (C) scale as highlighted by **Nejati et al. (2012)**.
- Rural and urban students differ on Locus of Control (C) scale. Further the mean of rural students is more than their urban counterparts therefore rural students believe more in chance control for their life activities.
- It can be said that the general, SC, BC and OBC students differ on Locus of Control (C) scale and SC students (M=7.72) are found to believe in more chance control than their counterparts as demonstrated by **Singh (2014), Chetri (2014)**.
- High, middle and low students differ on Locus of Control (C) scale wherein low class students (M=7.91) are found to believe more in chance control than their counterparts. It has been observed that the disadvantaged child is externally controlled (**Riessman, 1962**) whereas **Dag and Singh (1985)** using Rotter's I-E scale for adults have observed that there is no difference in locus of control responses between Brahmins and Harijans in Orissa.

- Male and female students differ on Locus of Control (P) scale and the boys having more mean (8.52) are found to believe in powerful others for controlling their life decisions than the female samples.
- The rural and urban students differ on Locus of Control (P) scale and rural are found active believer of powerful others in their everyday affairs.
- No significant difference has been reported in mean score of achievement on Locus of Control (P) scale.
- High, middle and low students differ on Locus of Control (P) scale and low class students are found to believe more in powerful others for controlling their life decisions. No significant difference has been reported by **Barling and Fincham (1978)**; **Naik (2015)**.

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INCLUSIVE EDUCATION – A WAKE UP CALL

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ABSTRACT

The present paper traces the concept of Inclusive Education in Indian context. The paper throws light on National policy frame work in Inclusive Education. The paper critically reviews need of Inclusive Education in India and challenges of Inclusive Education, Inclusive children in the Classroom, Teacher, competences, strategies and approaches.

Keywords: Inclusive, Competencies, Strategies of teaching.

INTRODUCTION:

The crucial need to advancement in the access education draws on the perception of inclusion as principle to promote societal changes. UNESCO (2005) defined it as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities and reducing inclusion within and form of education. It involves changes and modification in the content, approaches, strategies with a common vision which covers all children of the appropriate age range and a conviction that is the responsibility of regular system to educate all children.

The national policy on education (1986) advocated providing Inclusive Education for the mildly handicapped and education for severely handicapped children.

According to Ministry of Human Resources Development the degree of disability rather than educational needs should become guiding force. But programme of Action (1992) fir implementation of NPE stated principle of placement for highly. No disabled child who can be educated in general schools should be placed in special schools. Even those who are placed in special schools initially should be transferred to general schools as soon as they acquire self help, communication and basic skills.

CONCEPT OF INCLUSIVE EDUCATION

The concept of Inclusive Education is accepted as an efficient means realizing the dream of 'Education for all'

Inclusive Education refers to education of children with special needs along with abled peers in regular classroom. This concept is based on the promise that all children should get equal opportunity to learn. Equal opportunity should be provided to all children to learn their own pace. Education should be universal without excluding anybody. Inclusive

Education is an attempt to provide education to exceptional children along with other normal children to fulfill the objectives of education in a democratic way.

CHALLENGES OF INCLUSIVE EDUCATION

Inclusive is not a soft process. It requires a lot of struggle & commitment to overcome all types of barriers mainly educational, attitudinal and social.

How can we flourish Inclusive Education in a prevalent system?

How can we change their belief, practices and model of working in the system?

Practical problems will arise while including children with diverse educational needs.

Challenging task for school and teachers.

Challenging role of schools in terms of attitudinal change organising learning environment and school activities, mind set of parent with the needs of children.

Adaptation

Language minorities' student will need an interpreter so modification in classrooms rules necessary.

Make adaptation, where one of the challenges of inclusive is adapting the general curricular to meet the needs of student with disabilities. Adaptation are adjustment or modification in environment, instruction material used for learning which enhances person's performance also.

INCLUSIVE CHILDREN IN THE CLASSROOM:

Vandercook, Fleetham, Sinclair & Tetlie (1988) remarked that in Inclusive Classrooms all children are enriched by having the opportunity to learn from one another, grow to care for one another and gain the attitude, skills and values which are key important to inculcate among our children. When proper arrangements are present, inclusion works for all students with or without disabilities informs of mutually held positive attitudes, gains in academic and social skills and preparedness for living in a community.

If students get appropriate directions and guidance from teachers, will help to develop friendship and positive peer interaction. Inclusive Classroom enhances the opportunity for disabled children to imitate behaviour of models. Stainbeck (1990) also stated that classrooms have no place if societal support integration of all individuals is not there. All children need education in non segregated classroom, to develop relationship and prepare for their life in the main stream.

APPROACH OF TEACHING – STRATEGIES.

The student having diversities in the same class, the teacher must use strategies which will help all students to learn.

Strategies should be like:

- Co-operative learning
- Peer tutoring
- Language experience approach

In co-operative learning, teachers divides the class in to mixed ability groups to achieve a goal. Here, number of students to achieve a common goal with mutual collaboration and support.

In peer tutoring, teacher role is very important because as a teacher he may find some student have learning difficulties and have not understood the topic as well as another student when a student from same class or same age teaching or discussing topic technique is called peer tutoring. Here, we as a teacher may adopt cross age tutoring where some older student tutor younger student .i.e. senior class tutor Junior class students.

In language experience approach where it integrate the development of reaching skills with development of history, speaking and wishing skills. This approach deals with thinking process means which:

- Child thinks about and he talk about.
- What child says, he can write (if not able to someone can write)
- Where child write other can write for him and he can read.

Many children with different disabilities may talk and other child in the class. Teacher may are different techniques and approaches like demonstration approach, simulation, discussion, experiential learning, activities, games, shared responsibilities, role play, team approach etc.

DIFFERENT ALTERATION TO SERVE STUDENT NEED

The different instrumentional variables can be incorporated to suit indididual learner need like.

Leaning enviormenment: Provide noise balance and level, classroom light, visual stimulation to smooth learner needs.

Learning Assistance student may require various levels instructional and physical assistance. It can be given by peers, schools staff and volunteers.

Instructional grouping arrangement: Teacher can make different grouping like what class instruction teachers directed small group instruction, co-operative learning group, independent seek work.

Instructional materials:

..... altered to be more manipulative, simple, tangible. It should be appropriate and match with student learning and comprehensive level.

TEACHER COMPETENCIES

In various inclusive education there are various skills and competencies to be developed among teachers. It is also one of the important challenging task. The teacher must develop different strategies to design accommodation of interaction and curriculum centered around the individual student. For this teacher must learn to be more accountable responsible for each student. he must be more understanding, problem solving using multiple methods, media approaches. He must value all student and equally treated too. He should be skillful to provide day to day success to all student for the encouragement and increase self esteem for student gradually. He must ensure flexibility in curriculum, with supplement content. He must have positive attitude towards student with special needs. He must have skills to work in a team with parent, special educator, resource teacher and regular general teacher. The teacher must have appreciation of student diversities and equally consider class experience as learning experience.

CONCLUSION

Inclusive Education is a challenging task for educational system. Here one has to review all policies and their should be clear stand of the nation regarding the education of both abled and disabled children. The apex body like NCERT, UGC needs to review the implementation of its scheme. Inclusive Education is a dynamic concept. Teacher must equip with knowledge skills to maintain inclusive classroom. Each one should valued for what they are, what they bring and what they can do. Not only this but schools where the diversal need among the student can be utilised. An attempt also to meet needs, quality which is the major goal of Inclusive Education.

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A JOURNEY TOWARDS INCLUSIVE EDUCATION: NEED OF THE DAY

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Introduction

“Ignorance ... is a guarantee of marginalisation.” Lewin (2000: 23)

The World Health Organisation (WHO) estimates that 10% of any population are disabled (Thomas, 2005a). In addition, approximately 85% of the world's children with disabilities under 15 live in developing countries (Helander, 1993, cited in Robson & Evans, no date).

There is a growing consensus that people with disabilities should be included in development programmes, as the exclusion to date of this marginalised group will probably result in the non-achievement of the UN Millennium Commission's broadly inclusive global development agenda. However, if a person with a disability is dehumanised by cultural belief or stigma, as they are in India (Alur, 2002), then they can be 'invisibilised' and not considered worthy of rights. Disability is clearly a development issue that we ignore at a price, including that of human rights.

What is inclusive education?

Inclusive Education is an approach to reach all the diverse needs of vulnerable groups. Inclusive Education is the process of increasing the participation of all students in school including disabled. It has been used to refer to the **Placement of children with Disability in ordinary class rooms alongside their peers.** (Kugelmaaa, 2004). It focuses major on – Social Inclusion, Physical inclusion and Cognitive Inclusion.

Needs change in general school

Until recently, most conceptual literature on inclusive education was Northern (European and North American) in origin, taking a 'whole-school' approach to institutional change (Peters, 2004), and influenced by the social model of disability. Children in special schools were seen as geographically and socially segregated from their peers, and the initial movement to locationally integrate these students in mainstream schools ('integration') shifted to one where the whole school was encouraged to become more adaptable and inclusive in its day-to-day educational practices for all students ('inclusive education'). Pedagogy in particular was highlighted as the key to meeting all students' educational needs

by making the curriculum flexible, and so more accessible. By recognising that teaching methods which can make curriculum accessible to children with disabilities can also make learning accessible to all students (Ainscow, 2000, Ainscow, 1997), a teacher or school principal is well on the way to improving the overall quality of their school. In this way, inclusive education is not a disability-only issue, but an educational quality issue (ibid).

This discourse is attempting to shift perceptions of disability from the medical model to the social model. However, there are many conceptual difficulties with the terms of integration and inclusion in India, which are often used interchangeably (ibid). Further, varying definitions of disability and subjective interpretations of what 'type' of child a teacher is willing to include in their classroom add to the confusion.

Even if a previously excluded child is given access to a mainstream classroom, what happens within that space can be anything but inclusive if the school quality is poor, they cannot access an inflexible curriculum, or they are ignored or bullied by the teacher or their peers.

The practices were drawn from five states (Uttar Pradesh, Karnataka, Maharashtra, Tamil Nadu and Kerala) based on information available from officials and professionals working for the education of children with disabilities. The school practices were documented after discussions with teachers, parents, children with disabilities and their peer group. The concerns of NGOs, bureaucrats and professionals from apex institutions for teacher training were accounted for by carrying out interviews. Based on documentation, field observations and data analysis, this study identifies positive initiatives taken up by the government and NGOs, and suggests further measures that need to be taken to achieve the goal of UEE for all children including those with disabilities. In India, inclusive education is still developing and presently it is not easy to identify 'good practices'. In this study, good practices were analysed by using three dimensions: creating inclusive culture; producing inclusive policies; and evolving inclusive practices (Booth et al., 2001).

Inclusive culture was analysed by studying the knowledge, skills and attitudes of teachers, parents and children in accepting children with disabilities. Enrolment policies of the government were examined to identify inclusive policies. Inclusive practices included teacher training programmes showing awareness, and providing guidance in modification of materials, methodology, content and evaluation for the benefit of all children.

To Increase the participation of children having both disable and able in to general education system. General Education needs for restructuring the culture, policies and practices in school. This implies that classroom instruction needs to address all vulnerable students who are marginalized and excluded.

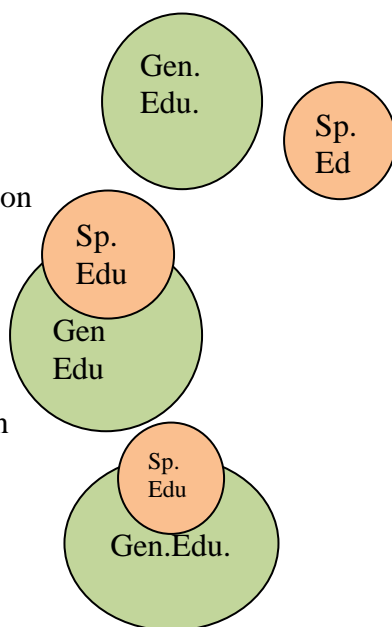
- Evolving support system
- Flexible education system

Advocacy of Inclusive Education

- Instead of Integration, inclusion be promoted as integration is the term describe as the process of moving children from special education settings to regular classrooms where they undertake more if not all of their schooling (Ashman and Alkins 1998) in contrast Inclusive aims at empowering member of society to sensitize the need and dismantle actual and potential sources of exclusion.(Slee2003)
- Inclusion is Integral part of the general education where as special education is apart from inclusive and integration is a part of inclusive Education.(Carrinngton& Robinson 2004)
- Special Education

- Integration Education

- Inclusive Education



Inclusive Education is very important as

- Every child has fundamental right to Education
- Every child has unique characteristics, learning needs and interest
- Right to address the diverse needs of learner by Education
- Need to development for the positive attitude towards creating favourable climate by all members of the society
- Acknowledges and respects the differences among all children as all can learn
- Providing equal opportunity to all children

- At present inadequate educational opportunities for children with disabilities.
- Role of School in Inclusive Education
- Avoid traditionalism
- Develop sensitivity to accept children with difference
- Develop pedagogy of Inclusion
- Adopt flexibility in teaching- learning methods and interaction with them
- Concept of team teaching and cooperative learning
- Create context and meaning of learning for each child
- Adopt flexible and innovative methods of evaluation

Teacher in Inclusive Classroom

For this there is need to create inclusive climate in and out the classroom by developing

- unconditional positive attitude toward all students
- competences in teacher to deal and teach these students in general classroom
- the ability to solve the problem and assess the skills possessed by the students
- Ability to take advantage of children's individual interest and motivation to develop needed skills
- Ability of alternative assessment
- Ability to value all skills along with academic skills
- Be aware of rights of students for educational support
- Partnership with parents and colleagues

Strategies

- Development of modules for pre and in service teacher training for inclusive practice
- Macro and micro level planning for implementing
- Take challenge as an opportunity and develop strategies to cope up
- Develop to fulfill the learning needs in formal and non formal settings

Based on analysis of the state of special and inclusive education and the documentation of inclusive model practices, the following key observations are made.

- Central and state governments have taken a number of initiatives to improve the enrolment, retention and achievement of children with disabilities. There is a need to establish interlinks and collaborations among various organizations to prevent overlapping, duplication and contradictions in programme implementation.
- Most services for children with disabilities are concentrated in big cities or close to district headquarters. The majority of children with disabilities who live in rural areas do not benefit from these services.
- There is an absence of consistent data on the magnitude and educational status of children with disabilities, and the disparities between regions and types of disability. This makes it difficult to understand the nature of the problem, and to make realistic interventions.
- Special schools and integrated educational practices for children with disabilities have developed over the years. Inclusive educational has gained momentum over the last decade.
- Community involvement and partnerships between government agencies and NGOs have been instrumental in promoting inclusive education.
- Many schools have a large number of children in each classroom and few teachers. As a of this, many teachers are reluctant to work with children with disabilities. They consider it an additional workload.
- Training for sensitization towards disability and inclusion issues, and how to converge efforts for effective implementation of programmes, are important concerns.
- Different disabilities require different supports. The number of skilled and trained personnel for supporting inclusive practices is not adequate to meet the needs of different types of disability.
- The curriculum lacks the required flexibility to cater to the needs of children with disabilities.
- There are limited developmentally appropriate teaching–learning materials for children both with and without disabilities. The teaching–learning process addresses the individual learning needs of children in a limited way.

- Families do not have enough information about their child's particular disability, its effects and its impact on their child's capacity. This often leads to a sense of hopelessness. Early identification and intervention initiatives sensitize parents and community members about the education of children with disabilities.
- Bearing in mind this scenario, the following recommendations need to be considered in order to move towards education of children with disabilities in inclusive settings.
- The attitude that 'inclusive education is not an alternative but an inevitability, if the dream of providing basic education to all children is to ever become a reality' needs to be cultivated among all concerned professionals, grassroots workers, teachers and community members, especially in rural and remote areas.
- Links and bridges need to be built between special schools and inclusive education practices. Linkages also need to be established between community-based rehabilitation programmes and inclusive education.
- Public policies, supportive legislation and budgetary allocations should not be based on incidence, but on prevalence of special education needs, and take into consideration the backlog created as a result of decades of neglect.
- The existing dual ministry responsibilities should be changed. Education of children with should be the responsibility of the Department of Education. The Ministry of Welfare should confine itself to support activities only.
- Inclusion without 'adequate' preparation of general schools will not yield satisfactory results. It is essential that issues related to infrastructural facilities, curriculum modification and educational materials should be addressed.
- Regular evaluation should be based on performance indicators specified in the implementation programme, and accountability for effective implementation at all levels should be ensured.
- There should be emphasis on bottom-up, school-based interventions as part of regular programmes following inclusive strategies. The programme should be based on stakeholder participation, community mobilization, and mobilization of NGO, private and government resources.
- The training of general teachers at pre-service and in-service levels should address the issue of education of children with disabilities, so that teachers are better equipped to work in an inclusive environment. Some of the issues in training that need to be addressed include the methodology to be adopted for identifying children with

disabilities; classroom management; use of appropriate teaching methodologies; skills for adapting the curriculum; development of teaching–learning materials that are multi-sensory in nature; evaluation of learning; etc. The time has come to scale up successful experiments on teacher training such as the Multi-site

- Action Research Project and the Indian adaptation of the UNESCO Teacher Education Resource Pack, since these experiences are lying dormant.
- Orientation training of policy-makers and education department officials, both at the state and block level, is essential. In addition, there is a need to develop on-site support systems for teachers. Grassroots workers, parents, special school teachers, para-teachers and other individuals can be shown how to provide the required support.
- The existing handful of teacher trainers cannot reach the vast number of teachers working with children with disabilities in rural/remote areas. There is a need to explore alternatives such as training para-teachers, investing in pilot studies to develop tele-rehabilitation programmes, and exploring strategies for distance education.
- The preparation of children in the form of early childhood intervention before enrolment is required. This would ensure that they do not drop out, are retained in schools, and compete equally with other children.
- In order to strengthen inclusive practices, networking between existing practitioners (i.e., IEDC, DPEP, SSA, etc.) would be useful. Simultaneous implementation, and consistent monitoring, reinforcement and coordination between government departments and NGOs at national and state levels will promote inclusive practices.

The future of educational inclusion of all children, particularly those with disabilities, in the areas of government policy, school quality, attitudinal change and the potential for research. Due to word-length and data limitations, the paper was not able to explore in-depth some of the more pragmatic areas of inclusive education implementation, such as curriculum access, assessment methods, measuring achievement, and the learning environment.

Conclusion

The paper concludes that a twin-track approach to disability may assist not only in improving educational access for marginalized children, but also the reconceptualisation of inclusive education as a school quality issue to benefit all children. This could contribute in the long-term towards the achievement of Education For All and fulfillment of the Fundamental Right to Education enshrined in the Constitution of India in 2002.

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AN EXPLORATION TO THE SPECIAL NEEDS OF THE FIRST GENERATION LEARNERS OF UNDER GRADUATE COLLEGE

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ABSTRACT

A First Generation Learner is defined as someone whose parents are not educated and he/she is enrolled in educational institution for the first time in his family. In spite of different measures undertaken and implemented by Government of India census report of 2011 reported 74.04% literacy against World literacy of 84.1% (**UNESCO, 2012**). First generation college students are disproportionately over represented in the most disadvantaged racial, income, and gender groups. In our country still there are many children who come in educational institutions for formal education for the first time in their family. Their parents have no academic background or formal education on any level. This leaves these children at a disadvantage. Moreover, being the first in one's family to experience the culture of formal education they lack the intergenerational benefits of information about education. This condition makes participation in college a particularly formidable task for first generation students. Researchers have also noted the inequities in educational experiences and outcomes of the first-generation students. However, few researchers have examined persistent and imperative behaviors of First Generation Learners. The transition to college for first-generation students is particularly challenging, both academically and culturally, many a time it is seen that these students are at-risk for early departure from college, especially before the second year. In this paper an attempt is made to explore the special needs of the FGL (First Generation Learners) on the basis of available researches and also to suggest the required support strategies to be provided to the FGL (First Generation Learners) so that they can also participate in education like other students.

KEY WORDS: First Generation Learner (FGL), Special needs

INTRODUCTION

Even after 68 years of independence India has not achieved cent percent literacy. According to the last Census Report rate of literacy is 74.04% (**Government of India census report, 2011**) against World literacy of 84.1% (**UNESCO, 2012**). In the process of learning, there are numerous factors that play a significant role towards making it a smooth, pleasurable and constructive process. Learners' background, present knowledge, upbringing, educational qualification of parents etc. are some of these factors. The teacher is also in a position to help the learners empower themselves. Knowledge acquisition should be continuous that is, the learners should study consistently so as to have no gaps. A learner must seriously take into consideration that learning is a great commitment and it requires hard work in order to make it a successful procedure. The teachers are facilitators who set the tone for a great learning environment. However, a lot depends on the way the learners face the

lessons and his/her overall learning. A power relationship exists between teachers and learners in which power is not shared equally. This fact, when combined with perception of status, gives rise to social distance between the teacher and his/her learners. Again this social difference becomes more if the student is a First Generation Learner.

Generally teachers have two essential roles in the classroom. Firstly, to create the conditions under which learning can take place i.e. the social aspect of teaching which implies the search for the proper conditions and means to impart teaching by a variety of means. Secondly to impart knowledge to their learners, this is the task-oriented side of teaching. This is the instructional or teaching function of the teacher. These two roles are complementary to each other; the latter would be more or less impossible without the former. In practice, it is very difficult to separate the two and often teachers perform both functions simultaneously in the classroom.

There are few factors which influence the teaching-learning in a classroom consisting of First Generation Learners –

First, teachers have a set of professional attitudes, personal attitudes and beliefs, which are likely to influence interaction between teachers and learners considerably. The attitudes of teachers towards the content and teaching-learning process as a whole influence the teacher's behavior towards the FGLs.

Second, teachers like all other individuals bring their personalities into social encounters. So the arena of education is a major factor of social life that shapes personality. In the intimacy of the teaching/learning situation, it is extremely likely that personalities of both the teachers and students will be modified. But additional complication arises in the situation where education is imparted to first generation learners.

Third, Teachers have motivations for teaching and learners for learning, both instrumental and integrative. Teachers and learners also have deeper, more personal goals. There may be difference in motivation for learning between FGL (First Generation Learners) and other learners.

Fourth, Teachers and learners are engaged in an activity that is determined by the goals they have in mind. Every task has some goal and an Individuals' personal goal is activated by the performed tasks and goal helps an individual to keep focused.

Combining all the significant elements of teaching-learning situation it can be said that the learner is the most significant person responsible for advancement of self so learners should be organized, attentive and focused to be successful in the work they have undertaken. The teacher is also responsible for the success of learning process to a great extent. If the

teacher turns the classroom into an enthusiastic and encouraging place for learning then the learner will enjoy being there as well.

All these elements require re-organization and rethinking when it comes to FGLs. Along with all the criteria mentioned above FGLs need some customization in the learning process. Firstly, studying should take place at an appropriate time convenient to the First Generation Learners. Teachers should know the best time of the day for FGLs in order to make them study and keep that as permanent study time. Secondly, the learners study schedule should be combined with any other daily activities or work. Last of all it is equally important that along with all the aforementioned factors, the learners should be prepared to study hard.

RATIONALE OF THE STUDY

The First Generation Learners are not similar to the rest of the students. When these students reach college, unlike other students educational environment seems altogether different to them. They apply to different colleges under different universities and undertake study without any guidance and acculturation from parents and siblings who have already attended or graduated from college.

First Generation Learners lack of familiarity with university culture, they are unaware of the differences in roles of various types of university personnel and accepted modes of communication. To the FGLs, college seems like a foreign country and a confusing system to explore. Again these students often are not sure about what they need to do to achieve success.

FGLs enter college less prepared than their continuing generation peers. Therefore intimidation, stress, self-doubt, and low confidence are some very common features of the First-generation students which may adversely affect their learning process. If the first generation college students are treated equally with other students of the college then they can benefit from social and academic integration.

India is in a transitional period with increasing number of FG learners showing more interest in education. The desire to improve their status in the society has inspired them to attend schools in large numbers and work hard to cope with the challenges but their special needs are not given special attention in the sphere of education. This special support may be provided by the college authority and also the teachers. In this background the objectives of the study are framed in the following way.

OBJECTIVES OF THE STUDY

To explore the special needs of the FGL (First Generation Learners) on the basis of available researches.

To suggest the required support strategies to be provided the FGL (First Generation Learners).

RELEVANT RESEARCH STUDIES

First-generation college students come from families where neither parent has more than a high school degree. The campus takes justifiable pride in the fact that we seek to extend the promise of a college education to our students. But we also know that the experience of being the first in a family to attend college may impact students' academic performance, self-confidence, and persistence (**Huber and Naganand, 2008**).

First generation college students are disproportionately overrepresented in the most disadvantaged racial, income, and gender groups, and thereby inhabit intersecting sites of oppression that uniquely place them within this broader context of educational stratification (**Choy, 2001; Horn & Nuñez, 2000; Nuñez & Cuccaro-Alamin, 1998; Warburton, Bugarin, & Nuñez, 2001**). Moreover, being the first in one's family to experience the culture of college (**London, 1989, 1992, 1996**) and lacking the intergenerational benefits of information about college also make participation in college a particularly formidable task for first generation students. Researchers have noted and lamented the inequities in educational experiences and outcomes for first-generation students (e.g., **Pascarella, Pierson, Wolniak & Terenzini, 2004**); however, few researchers have examined their persistence behaviors (e.g., **Duggan, 2001, 2002; Ishitani, 2003**). The transition to college for first-generation students is particularly challenging, both academically and culturally (**Choy, 2001; London, 1989, 1996; Nuñez & Cuccaro Alamin, 1998**), and first generation students are at-risk for early departure from college, especially before the second year (**Choy, 2001; Ishitani, 2003**).

Astin, (1975); Gardner, (1996); Tinto, (1993) found participating often in school clubs was significantly and positively related to persistence only for CGS, but not for FGS. But FGS were also benefitted from participation in campus clubs. Therefore, institutions should arrange for student activities in ways that contribute to and benefit FGS and thereby promote their persistence. For example, campus clubs and activities may be set up in ways that reinforce the values and priorities of CGS as well as in ways that better accommodate their schedules. However some FGS have more family commitments and may find it difficult to take part in campus clubs, student affairs personnel may reevaluate their club and other student activity offerings to ensure that first generation students have opportunities for participation that might enhance their persistence as well.

There is no denying of the fact that participation and involvement in academic activities may be more important to FGS than social activities. **Tinto (2000)** in his study found the academic integration index was unrelated to persistence for CGS, but had a positive effect on persistence for FGS. Validation is most effective early in the college experience and it occurs when faculty actively seek to reaffirm first generation students “that they can do college-level work, that their ideas and opinions have value, that they are worthy of the attention and respect of faculty, staff and peers alike” (**Terenzini et al., 1994, p. 70**).

Lideth Ortega-Villalobos (2009) led a conversation in which she shared her recommendations for supporting and inspiring the FGL (First Generation Learners) to make the most of their learning experiences. Interventions aimed at benefitting First Generation College Students (FGCS) are likely to benefit the general student population. Benefits are more if interventions are administered early within the first 2 years of college. Effective strategies can help students develop a sense of self-competence (**Thayer, 2000**).

However, because First-Generation Students have lower educational aspirations than Continuing-Generation Students (**Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996**) this finding could be problematic. It certainly calls attention to the importance of understanding more about factors that promote aspiration formation such as early home and school habits (**McDonough, 1997**), and the need to invest more in programs that promote the development of educational aspirations, such as early intervention, postsecondary encouragement, and information dissemination (**Gladieux & Swail, 1999**). First Generation College Students (FGCS) are more likely to leave college after the first year than Non-FGCS.

Student affairs professionals can promote validation by training faculty to foster validation in the classroom and to foster validating experiences outside the classroom and by incorporating faculty into new student orientation programs (**Rendón 1993; Terenzini et al.1994**). The potential for academic self-concept as an important factor in increasing the academic performance of first generation students is discussed in this study.

First-generation students are more likely than their peers to be from low income families, have lower achievement (as measured by the Collegiate Assessment of Academic Proficiency), and have lower overall degree aspirations. They are also more likely to be older and to have dependent children than their non-first-generation counterparts (**Terenzini, et al., 1996**). To gain a clearer picture of the realities of campus life at a particular institution the college experiences related to social and academic integration play an important role in the persistence decisions of both FGS and CGS (**Braxton, Sullivan, & Johnson, 1997**). However, the findings of this study suggest that the roles of students’ involvement in social activities relative to academic activities in college may be different for FGS and CGS.

From the research finding it can be stated that the FGS (First Generation Students) are different to their Non-FGS peers in terms of their background, their present status etc. which has resulted in intimidation, stress, anxiety, decreased confidence for academic performance and doubts over their abilities. Let us find out how these FGS can be accommodated in colleges with their Non-FGS peers without making them feel they are different.

SUGGESTIONS FOR HEALTHY ACCOMMODATION OF FIRST GENERATION LEARNERS

High school counselors, college counselors, teachers and other professionals should make a special effort to provide first-generation students with the kinds of information and experiences that allow them to perceive, or even observe real opportunities for success regardless of the type of institution or the size of institution they choose to attend.

Helping students discover and understand opportunities for success in terms of the academic, the social, and the financial dimensions of different types of institutions are equally important and mutually reinforcing. To understand the academic and social climates of the campus, counselors can encourage students to spend extended, productive time in campus.

Teachers should arrange for student-to-student interaction. Group work increases student learning, student attitudes toward learning, and student persistence (Cooper & Robinson, 1998), so is well worth the time. In addition, interactions will enrich the experiences of all students by engaging students in the sharing of personal perspectives.

In the diverse classroom it is difficult for faculty to be aware of each student's progress. Classroom assessment techniques (CAT) should be used to assess prerequisite knowledge and experiences and to provide topics that stimulate productive discussion. Few common classroom assessment techniques are – teachers may ask students to describe what is confusing at the end of a course session and the one-sentence summary like to ask students to summarize what they just learned.

Students who need more time to digest materials can be encouraged to obtain their first exposure to materials outside of class time. Readings and assignments can be used to promote student exposure to course content before they come to class. Journal assignments, study questions, and routine integration of pre-assigned readings into class activities may help motivate FGS to complete learning in time. Students should be given time to think during class discussions.

Evaluation tool should be based on simple, direct and clear language. Vocabulary or speed of processing should not be the criteria if the goal of the test is to assess student

learning. Variety of examination formats may be used so that students have various ways to demonstrate learning. **A non-competitive grading system** may be used to develop a non-competitive culture **among FGS and CGS**.

A variety of ethnic names and surnames (Ram, Rashid, Peter etc.) should be used in classroom by teachers. Diverse references should be used in examination questions and citing examples during regular classroom instruction. Again names of girls and boys should be used deliberately to balance names with roles, so that sometimes the professional has a female name and sometimes the professional has a male name. By this students should see opportunities for people like themselves in different professions.

Study groups should be encouraged to engage them actively with the course and with each other. Active participation in a good study group can move a student up at least a grade, and all students develop better understanding when they explain concepts to peers through debate and discussions.

There should not be any faulty assumptions about life experiences of FGS, this may unintentionally alienate students whose values and expectations differ from the teachers as well as the rest of the class. First-generation Indians may have different reactions to the teacher's references to historical events, literary allusions, or implied assumptions about life experiences.

Teachers should communicate assignments clearly to FGS as they may not know what is expected of them in papers, projects, or activities. The grading criteria should be explained unambiguously. Teachers should provide feedback in writing so that students can refer back to instructions when required.

Teachers have to express their confidence in students' abilities. First generation students may lack confidence in their academic skills. First-generation college students often feel out of place and inadequate in the academic environment, and they respond especially well to faculty who genuinely believe in their potential for success.

First Generation Students may be more comfortable discussing personal issues in private with the teachers. Informal advising during and after office hours may help them broaden their educational experiences and deal with barriers to their success.

CONCLUSIONS

Any teaching – learning environment yields maximum outcome if the process is undertaken in the students and teachers own educational background. But most faculties teach in an environment different from their own educational background, and they face increasing numbers of First Generation students. These students turn the classrooms into

multicultural environments that can enrich experiences of both the students and faculty members. Hence the conclusions of the study are as follows –

- Teachers must be aware of themselves and their students when planning and teaching their courses and communicating with students.
- A variety of learning and testing opportunities, a non-competitive grading system based on learning objectives, and genuine concern for individual student and support for student achievement should characterize the teaching-learning process when dealing with the FGS.
- The FGS may think themselves to be visitor in a foreign land. But these students can join our academic culture and make remarkable contributions enrich our society and nation at large.
- This can be achieved with constructive educational policies, optimistic educational administration and above all dedicated and cheerful teachers.

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ATTITUDE OF UNDER-GRADUATE STUDENTS TOWARDS INTERNAL ASSESSMENT

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Abstract

Present education system, Assessment related issues become a most important topic of discussion for carried out as a part of teaching and learning. Internal assessment is a part for evaluates what students do when they are in the classroom. The study aimed to measure the Attitude of Under-graduate students towards Internal Assessment in respect of Gender and different types of College. For this study 207 samples were selected by purposive sampling technique. Samples were classified in different strata, viz. Government College, Government Aided College, Private College, Male and Female. Four major dimensions and various other dimensions have been taken. The broad dimensions are as follows: Aim of Internal Assessment, Procedures of Internal Assessment, Merits and demerits of Internal Assessment. Four hypotheses were framed by researchers for reaching the findings of the study. After data analysis, it was found that there were no significant mean differences in all hypotheses. There was no significant difference in respect of Gender and different types of College of the Attitude towards Internal Assessment of Under-graduate students.

Keywords

Internal Assessment, Teacher-made test, Entry level behavior, Remedial Teaching, Immediate Feedback.

Introduction

Assessment is a modern concept in the field of Evaluation in Education. Assessment emphasizes the teaching-learning outcome paradigm, providing feedback on the teaching learning situation. A student's grades his placement , promotion as well as suitable curriculum are all dependent on assessment. Assessment generally classified into two parts; Internal and External. Internal assessment is set and marked by the school (i.e. teachers). Students get the mark and feedback regarding the assessment. External assessment is set by the governing body, and is marked by non-biased personnel.

Internal assessment is a crucial part of the instruction process, used to get an insight into a student's current knowledge; in art and aids teachers, students, and parents in evaluating student progress. Internal assessment illustrates aspects of student progress that are not typically evaluated in external assessment. **Internal assessment** can be due at different times throughout the semester and is managed by the individual lecturer. The **internal assessment** is what you do as part of your coursework - the essays, group assignments, tests, etc. Internal assessment also serves as a basis for professional development and remedial teaching. Teachers who analyse the work of their students will see trends in student

performance that may be related to instruction. For example, a teacher who sees that the products of his/her art students lack depth. For remedy, he/she may wish to take advanced art courses to elicit more depth in student products.

Importance of Internal Assessment

- (i) Internal Assessment is direct, flexible and can easily be tied with the unit of instruction.
- (ii) It is economical in terms of time and money and can be conducted frequently.
- (iii) Internal Assessment permits the use of a variety of evaluation tools for diagnosis learners achievement. The results can be used for the improvement of teaching learning processes and providing remedial teaching.
- (iv) Internal Assessment create the competing environment, which make pleasant effects over the educational achievements.
- (v) Parents of the students are informed about the progress of students so that they can care for their children.
- (vi) Teacher evaluate his progress and his teaching methods and try to overcame his weakness.
- (vii) It evaluates the particular curriculum for a particular class.
- (viii) Teacher can group the students according to Ability, Hard work, Intelligence on the basis of the result and make arrangements for weak students' betterment.
- (ix) It fulfills the objective of learning and retaining it for along time.

Literature Review:

Khare, D.D. (1962) conducted a study "A Comparative Study of External and Internal Assessment at the Board Examination." The main objective of the study was to comparison of the results of internal and external assessment in Higher Secondary students. Finally Khare found that students got Second and Third division in Internal assessment in comparison to external assessment in higher secondary school, revealed that score of half yearly examination was higher in comparison to annual examination that was external and internal assessment improve the result.

Shah, (1972) in a research paper "Pattern of Internal and External assessment in Arts, Commerce and Science college " had selected his aims to investigate the difference of students achievement being pattern of internal and external assessment of arts, commerce and science college. He found that there was a tendency to decrease weightage of internal

assessment in Arts, Science and Commerce colleges, while in the college of Education tendency in favour of increasing Internal Assessment.

Abiy Yigzaw (2013) in his research work “ High school English Teachers' and Students' Perceptions, Attitudes and actual practices of Continuous Assessment.” The main objectives of the study were to study high school English language teachers and students perceive continuous assessment, to study high school English language teachers and students perceive the roles of continuous assessment in the development of students' intellectual, physical, social and interactive skills. The major findings were teachers perceive continuous assessment positively and believe that it is part of their teaching. Students perceived continuous assessment positively, and assumed that they practice it in their learning process. Results also showed that both groups believe that continuous assessment significantly contributes to students' social interaction, cognitive, and affective growth.

Aytaged Sisay Zeleke, (2013) study on “ A comparative study on the practice of continuous assessment between Addis Ababa and Unity Universities.” The major objective of the study was to compare the continuous assessment practices in two universities. The major findings of the study were the judge-mental role of continuous assessment is more practiced than the development role of the assessment.

Dr.Ansarul Hasan, (2013) in a research paper “ A Comparative Study of Attitude of B.Ed students at VBS Poorvanchal University Jaunpur towards Internal Evaluation” , had selected his aims to know the attitude of B.Ed students of VBS Poorvanchal University towards Internal Assessment and to find out the difference in the attitude of students of Government aided and Self finance B.Ed colleges towards internal Assessment/ Evaluation. He found that Government aided college' students and Self finance college' B.Ed students have significant difference between the degrees of Attitude towards Internal Assessment/ Evaluation.

Objectives of the Study

The following objectives were considered for the study -

- To measure the Attitude of Under-graduate students towards Internal Assessment
- To compare the Attitude towards Internal Assessment among different gender of Under- graduate students
- To compare the Attitude towards Internal Assessment among different types of college of Under- graduate students

Hypothesis

- ❖ H_1 - There will be no significant difference between Boys and Girls on the criteria of Attitude towards Internal Assessment.
- ❖ H_2 - There will be no significant difference between Government College and Government aided College under-graduate students on the criteria of Attitude towards Internal Assessment.
- ❖ H_3 - There will be no significant difference between Government College and Private College under-graduate students on the criteria of Attitude towards Internal Assessment.
- ❖ H_4 - There will be no significant difference between Private College and Government aided College under-graduate students on the criteria of Attitude towards Internal Assessment.

Methodology

The present study is descriptive survey research. This study considers Quantitative approach for collection and interpretation of data.

Variables

Researchers considered one variable: Attitude towards Internal Assessment, and two Attribute variables: Gender (Boys and Girls) and Types of College (Government College, Government Aided College and Private College).

Sample

For this study, Researchers selected three-degree colleges (Krishnanagar Government College, Naihati Rishi Bankim Chandra Evening College, and Fakir Chand College) by taking Purposive Sampling method. Total 207 samples were selected from three types of college (Government college, Government aided college and Private college). Sample distribution were –

Table - A Distribution of Sample

Type of Colleges	Boys	Girls	Total
Government College	35	23	58
Government Aided College	36	52	98
Private College	17	34	51
Total	98	109	207

To measure the Attitude towards Internal Assessment, a questionnaire has been prepared. Internal Assessment Scale included 30 items. Four major dimensions and various other dimensions have been taken. The broad dimensions are as follows: Aim of Internal Assessment, Procedures of Internal Assessment, Merits and demerits of Internal Assessment. About 30 items 24 items was in Positive statement and 6 items was in Negative statement. Five-point scale was used for narrating each statement of questionnaire. All statement was expressed in three alternative categories, viz, Strongly agree, Agree, Neutral, Disagree, Strongly disagree.

Data Analysis and Interpretation

The Mean and SD of the scores of the students is shown in **Table -B**

Table-B Descriptive Statistics of the Sample

Groups	Number of Students	Mean	SD
Total Students	207	112.64	10.20
Total Boys	98	113.62	8.67
Total Girls	109	111.48	11.51
Government College Boys	35	112.42	7.60
Government aided College Boys	36	110.22	9.65
Private College Boys	17	100.76	7.16
Government College Girls	23	117.17	9.25
Government aided College Girls	52	115.27	8.47
Private College Girls	34	113.08	12.81

Table- C Represent ‘t’-test of Attitude towards Internal Assessment between Total Boys and Total Girls

Attitude towards Internal Assessment	N	Mean	SD	Df	t
Total Boys	98	113.62	8.67	205	0.18
Total Girls	109	111.48	11.51		

The above table reveals that ‘t’ value was found to be not significant, therefore the corresponding null hypothesis (H_0) was accepted. So, there existed no significant difference in the mean score of attitude towards Internal Assessment between Total Boys and Total Girls under-graduate students.

Table-D Represent 't'-test of Attitude towards Internal Assessment between Government College and Government aided College under-graduate students

Attitude towards Internal Assessment	N	Mean	SD	Df	t
Total Government College Students	58	114.12	8.54	154	0.54
Total Government Aided College Students	98	111.37	9.20		

The above table reveals that 't' value was found to be not significant, therefore the corresponding null hypothesis (H_2) was accepted. It could be inferred that there existed no significant difference in the mean score of attitude towards Internal Assessment between Government College and Government Aided College under-graduate students.

Table- E Represent 't'-test for Attitude towards Internal Assessment between Government College and Private College under-graduate students

Attitude towards Internal Assessment	N	Mean	SD	Df	t
Total Government College Students	58	114.12	8.54	107	0.012
Total Private College students	51	108.98	12.62		

The above table reveals that 't' value was found to be not significant, therefore the corresponding null hypothesis (H_3) was accepted. So, there exists no significant difference in the mean score of attitude towards Internal Assessment between Government College and Private College under-graduate students.

Table- F Represent 't'-test for Attitude towards Internal Assessment between Private College and Government aided College under-graduate students

Attitude towards Internal Assessment	N	Mean	SD	Df	t
Total Private College Students	51	108.98	9.20	147	0.029
Total Government Aided College Students	98	111.37	12.62		

The above table reveals that 't' value was found to be not significant, therefore the corresponding null hypothesis (H_4) was accepted. It could be inferred that there existed no significant difference in the mean score of attitude towards Internal Assessment between Private College and Government Aided College under-graduate students.

Conclusion

No significant difference was found in the mean scores of Attitude towards Internal Assessment between Total Boys and Total Girls in respect of gender, wherein; the attitude scores were significantly higher in case of Total Boys.

No significant difference was found in the mean scores of Attitude towards Internal Assessment between Government College and Government Aided College, wherein; the attitude scores were significantly higher in case of Government College under-graduate students.

No significant difference was found in the mean scores of Attitude towards Internal Assessment between Government College and Private College under-graduate students, wherein; the attitude scores were significantly higher in case of Government College under-graduate students.

No significant difference was found in the mean scores of Attitude towards Internal Assessment between Private College and Government Aided College under-graduate students, wherein; the attitude scores were significantly higher in case of Government Aided College under-graduate students.

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DEMOGRAPHIC CORRELATES ACADEMIC PROCRASTINATION AMONG ADOLESCENTS OF PUNJAB

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Introduction :

Adolescence is mainly critical period of human being life. Poets have described it as the spring of life of a human being and an important era in the total lifespan. The word adolescence arrive from a Greek word 'adolescere' which elucidates 'to grow to maturity.' A number of psychologists define it as the intermediary age of life. The kid experiences some alterations in this transitional phase. The stage runs amid childhood and adulthood and is occasionally called the epoch of teenage. According to A.T. Jersild (1957) teenage years is that span of years throughout which boys and girls progress from childhood to adulthood, mentally, emotionally, socially and physically. Various psychologists consider it as the period when an individual is competent of begetting offspring. It means that when the individual accomplish the authority of reproducing its own kind, then we can say he has. Adolescence is said to be a stage of high stresses and strains. The children of this age are quite perplexed and worried about their somatic variations and sudden changes in their total appearance, behavior, and attitude of the others towards them. They are also worried about the sudden changes in their sexual behavior, psychological and physiological problems, etc. Adolescence is the period of highest development and expansion about mental execution. Intelligence reaches its climax during this period. Cerebral powers like logical thinking, abstract reasoning and attentiveness are almost developed up to the end of this period. An adolescent learns to reason and seeks answers how and why of everything, scientifically. His power of critical thinking and observation is much developed.

Academic Achievement - A Prediction of Students Success

Academic achievement means achievement level of students; it can be said as what a student perform or get at his school. It is everyday practice to advance students from lower class to higher class by academic achievement. It helps in declaring that whether a student is thriving or unsuccessful choosing students for a variety of courses and selecting students for diverse jobs. It is the altitude of learning in a exacting area of a subject regarding knowledge, skills, understanding, and application usually evaluated by teachers in the form of test scores in their annual examinations.

Trow (1956) defined academic achievement as 'knowledge attaining ability or degree of capability in school tasks usually calculated by standardized tests and expressed in grade

or units based on pupils performance. Good (1959) refers to academic achievements as the knowledge obtained or skills developed in the school subjects usually premeditated by test scores or marks assigned by teachers.

Sometimes students show their poor performance in their academics due to lack of interest, parent's high expectations, stress, academic anxiety, lack of motivation, sickness, etc. They delay their work and not submitted their work in time. Hence their negative behavior shows academic procrastination towards their academic performance.

Academic procrastination

Academic procrastination involves delaying an academic task mainly due to lack of motivation. Academic procrastination is considered as a dispositional characteristic that can have predominantly severe outcomes for students, whose existence is characterized by frequent construct, motivation, must be considered to understand human behavior fully. Individuals are motivated when they do not perceive contingencies between outcomes and their own actions. They perceive their behavior for manifold goals in restricted time possessions. Such a state of affairs leads to motivational conflicts. Students are to face a bundle of striking activities they might want to get affianced in.

The current investigations noted that not all variety of procrastination led to unconstructive consequences and scrutinized the adaptive values linked with procrastination (Bernstein, 1998; Ferrari, 1991; 1994). The explorations demonstrate that procrastination is interrelated to inherent motivation (Senécal et al., 1995). Students highlighted that course materials become less infuriating, more appealing, and more engaging when they procrastinate (Schraw et al., 2007). Additional benefits of procrastination comprise freeing up time for planning and other activities, more concerted effort, a better sense of confront, and climax experience immediately before exams (Knaus, 2000; Lay, Edwards, Parker, and Endler, 1998; Schraw et al., 2007).

Locus of Control

In psychology, the locus of control connates to the extent to which individuals believe they can control events affecting them. Understanding of the conception was developed by Rotter, J.B. in 1954 and has since turn out to be an aspect of persona studies. A person's "locus" (Latin for "place" or "location") is conceptualized as either interior (the person believes they can organize their life) or exterior (meaning they believe their decisions and existence are forbidden by ecological factors which they cannot influence, or by chance or fortune).

Locus of control is a psychological theory that refers to how sturdily people deem they have control over the circumstances and occurrence that affect their lives. In education,

the locus of control characteristically refers to how students distinguish the grounds of their academic success or failure in school. Students with an internal locus of control believe that their success or failure is a result of the attempt and hard work they devote in their education. Students with an external locus of control normally trust that their successes or failures upshot from external factors beyond their control, such as providence, fortune, situation, injustice, prejudice, or teachers who are unfair, bigoted, or unskilled. For example, students with an internal locus of control might censure poor grades on their failure to study, while students with an external locus of control may blame an unfair teacher or test for their poor performance.

Achievement Motivation

The conjecture of achievement motivation was developed by McClelland and his associates in 1951 at the University of Harvard. He defined motive as, reintegration of a change in a fact by a cure and anticipation of a future change in effect contingent upon specific actions. The definition given by him has two essential terms which need supplementary clarification. The first term is reintegration which means the restoration of the psychological process in the conscious as a result of the stimulation by an environmental event. Second is a cue which is the cause of an effect on arousal in the individual. According to him, all human motives are learned in the environment irrespective of their nature. Jackson, Ahmad, and Heapy (1976) postulated six distinct dimensions of achievement motivation: 1. Status with experts 2. Acquisitiveness 3. Achievement via independence 4. Status with peers 5. Competitiveness 6. Concern for excellence.

Development of achievement motivation is exaggerated by some variables in the home, school, and society. Abode plays a fundamental role in the early training of children in the development of attitudes and motives. Parental prospect and supervision to the child develop a need for high accomplishment in life. The society and its social philosophy are an essential variable in developing achievement motive. There are communities which are achievement oriented. There are other societies which believe in fate and leave everything to God. The child enters school typically at the age of five years. Before joining the school, the child gathers many experiences which become an integral part of his personality and form his attitude towards life, but even then the school can help a lot to grind already obtained experiences and extend constructive attitudes in children. The teacher can play a very crucial role in the development of achievement motive.

Parents play an indispensable role in the enlightening motivation of their children. They provide necessary facilities and educational environment which results in enhanced performance in school. Parents endorse and be glad about activities related to education and

eliminate any difficulty felt by their wards.

Parents with more edification also have a higher anticipation for their children's education which facilitates the higher educational realization for their children (Alexander et al. 1994). Well educated parents have involved more in their children's education than less educated parents. (Gronlickand et al. 1994) Such parental association in children's education is profitable. The more actively involved parents are in their children's education, the higher their children's perceptions of capability and better they execute in school and augment their achievement motivation.

Numerous studies have established the undeviating affirmative effect of parents' education on the achievement of adolescents (Kohn, 1963; Limersion et al.). Smith, Gunn, and Klebanov (1997) also found the home environment mediated the association between parents' education and children's academic achievement. Corwyn and Bradley (2002) also designated that motherly education had the most straight influence on the cognitive and behavioral development of the child.

Need and Significance of the Study

Academic presentation has been considered as an interactive meaning of many psychosocial and demographic variables. The present study attempted to discover the nature and quantity of affiliation between academic procrastination and psychosocial and demographic variables. Academic stress is cerebral distress concerning some probable annoyance associated with academic failure or even unawareness to the likelihood of such failure. Students have to face countless academic demands, for example, a school examination, answering questions in the class, showing progress in school subjects. Understanding what the teacher is teaching, contending with other classmates, gratifying teachers and parents academic expectations. These demands may tax or surpass accessible resources of the students. As a consequence, they can be under pressure, since the demand is related to the achievement of an academic goal. So, academic related to the achievement of an academic goal. Academic stress reflects the observation of individual's academic frustration, academic conflict, academic pressure and academic anxiety. Academic Stress is an significant factor accounting for disparity in academic achievement. It also contributes to chief rational health hazards, problems both physical and mental stress-related diseases. Stress makes a noteworthy contribution to the prediction of subsequent school performance and acts as a negative predictor of academic performance in school children (Ender et at., 1994). Students at either level familiarity stress from parental pressures. Parents want their kids to accomplish something in school. They want to see excellent grades, but they also want to see accomplishment in lives and other areas. In their attempts to channel their

children, parents can become one of the momentous causes of stress on students. Sometimes students did their work in time very efficient manner that means they have higher motivation level, but sometimes they do not do due to the peer group, parental stress, the mental pressure they delay all the work It means they are facing academic procrastination positively.

So the present study is to found out the psychological and demographic correlates of academic procrastination among adolescents of Punjab state wherein an attempt has been made to highlight the relationship among a multitude of correlates.

Objectives of the Study

The study is designed to accomplish the following objectives:

1. To determine the status of academic procrastination among adolescents of Punjab.
2. To highlight the level of academic achievement among adolescents of Punjab.
3. To ascertain the status of locus of control among adolescents of Punjab.
4. To examine gender, class, caste and locality-wise differences among adolescents of Punjab with respect to academic procrastination.
5. To highlight gender, class, caste and locality-wise differences among adolescents of Punjab with respect to academic achievement.
6. To demonstrate gender, class, caste and locality-wise differences among adolescents of Punjab with respect to locus of control.
7. To find out the relationship between academic procrastination, the locus of control and achievement motivation of adolescents.

Delimitations

- The study was limited to three variables, i.e., Academic Procrastination, Locus of Control and Achievement Motivation.
- The study was restricted to 576 students.
- The study was confined to three cities of Punjab namely Ludhiana, Moga, and Sangrur.
- Only those students were selected who are between 12 to 17 years.
- The only descriptive survey was to be undertaken, and no remedial will be provided.

Review of Related Literature

Academic procrastination can be named as a indication of daily postponement to

school life is defined as to impediment of duties and errands related to school, or to save them to the last minute (Haycock, McCarthy, and Skay, 1998). Procrastination behavior occurs as not completing the given assignments or interruption in preparation for examinations (Beck, Koons, and Milgrim, 2000).

Usually, the procrastinator will work on less critical responsibility, rather than fulfilling essential obligations, or he may use his or her time extravagantly in some minor activity or pleasure. In most cases, procrastinators keep themselves ready to work but end up avoiding the activity. Hence, procrastination is avoiding a task that needs to be accomplished on precedence (Yaakub, 2000).

Aziz and Tariq (2013) presented a web-based survey to measure procrastination and its impact on Pakistani students. Study-I of this research was aimed to build up a website to review procrastination and some other factors like life satisfaction and stress. Study-II was to resolve the psychometric properties of the instruments. It was accomplished that there is a definite relationship between procrastination and stress. However, on the other hand, a negative relationship was found between procrastination and life satisfaction.

Khan (2014) concluded in his study there are adverse outcomes of procrastination in the existence of students have been perceptible and also many students have come across lots of problems because of their thoughts and behaviors about procrastination. Many students were found to be cognizant of their procrastination and reported that they want to diminish its regularity in their daily routine during exams and making assignments as well as writing a term paper, so researchers should find some practical ways to help students to reduce their frequency of such behavior.

Akin (2010), found that while external academic locus of control correlated positively with learning evasion, performance-approach/avoidance goals, the internal academic locus of control associated negatively with performance-approach/avoidance goal, and the internal academic locus of control was related positively to learning approach/avoidance goals.

Nejati et al. (2012) investigated the relationship between locus of control and academic performance of students by considering the responsibility of life excellence and contentment with life. The outcomes of the study revealed that locus of control significantly correlated with the academic performance of the students.

A person who has an internal locus of control believes that his/her success /failure are the reason of his/her efforts and abilities. If she/he has external locus of control, s/he thinks that her/his success or failure is because of fake or luck (Sarıçam and Duran, 2012)

Firouzeh Sepehrian Azar (2013) observed the relationship between self-efficacy, achievement motivation, academic procrastination as predictors of academic achievement in

pre-college students. It has been concluded that there was a significant difference between boys and girls regarding the level of achievement motivation, academic achievement, and academic self-efficacy.

Singh (2014), achievement motivation is considered as a prerequisite for academic success. This study was carried out with the objectives to probe the gender-related differences, residence related differences and academic majors related differences on achievement motivation among Scheduled caste higher secondary students. The study was carried on 565 scheduled caste students of various colleges from Allahabad District. A significant difference was found between the achievement motivation of science and arts and science and commerce stream students. Achievement Motivation of male and female and rural and urban students was found not significant. The differences indicate the significant role of academic majors in achievement motivation of students and gender and residence of students does not play the significant role.

Overview

Hence forth an in-depth analysis of studies related to academic procrastination was undertaken to summarize about the past researchers:

1. The researchers of academic procrastination concluded that students are postponing their academic tasks due to lack of low self-esteem, lack of knowledge, lack of motivational conflicts. This creates psychological effects and upset, emotional problems.
2. The past researchers of locus of control show students have a low internal locus of control they show academic procrastination.
3. Locus of control positively affected the academic performance of the learners.
4. Demographic variables also positively as well as negatively affected the locus of control of the pupils.
5. The past researchers of achievement motivation show family environment directly affected the achievement motivation of the students.

Research Hypotheses

- There will be significant gender, locality, caste and class differences between academic procrastination of adolescents of Punjab.
- There will be significant gender, locality, caste and class differences between academic motivation of adolescents of Punjab.

- There will be significant gender, locality, caste and class differences between locus of control (P) of adolescents of Punjab.
- There will be significant gender, locality, caste and class differences between locus of control (C) of adolescents of Punjab.
- There will be significant gender, locality, caste and class differences between locus of control (I) of adolescents of Punjab.

Method and Procedure

The investigator selected the random sampling method for the present study. The sample of the present study consisted of 576 adolescents between ages 12-16 years (studying in classes IXth to XIIth) from three districts Ludhiana, Moga, Sangrur for the present study. The sample of 48 students in each school was selected. Further, the selected schools from three districts were 12; a total number of males and females from each district 192; 288 adolescents from urban and 288 from rural areas.

Tools

- Academic Procrastination Scale prepared by A. K. Kalia and Manju Yadav (2012) was used.
- Deo-Mohan: Achievement Motivation (N-ACH) Scale (DMAM)
- Sanjay Vohra developed Locus of Control Scale Indian Adaptation of Levensons Scale.

Data Collection

The investigator visited the respective schools and collected the data from adolescents on Academic Procrastination Scale, Achievement Motivation Scale and Locus of Control Scale. The administration of the tests commenced with distribution of test booklet followed by brief explanation of purpose of conducting the test, method to be followed while attempting the test and requisite instructions regarding time limit and scoring of the test. The time limit for taking the test was one hour so that all the students can attempt all the items. The physical factors viz. adequate lightning, minimal noise and requisite proper infrastructure for favorable administration of the test were also taken care of by the investigator. After the time was over, test booklets were taken back from the students.

Scoring

The Academic Procrastination Scale, Achievement Motivation Scale and Locus of Control Scale were scored as per scoring key respectively.

ANALYSIS AND INTERPRETATION OF THE DATA

Achievement on Academic Procrastination Scale

The achievement of the participants on academic procrastination scale with respect to varied correlates has been ascertained. The results are presented in Table 4.1 so as to highlight the status of academic procrastination in the selected participants as below:

Table 4.1. Distribution of Students on the Basis of their Achievement on Academic Procrastination Scale

Class Interval	Frequency	Percentage	Cumulative Percentage
71-80	1	0.17	100.00
61-70	1	0.17	99.83
51-60	17	2.95	99.66
41-50	70	12.15	96.71
31-40	229	39.76	84.56
21-30	190	32.99	44.80
11-20	66	11.46	11.81
0-10	2	0.35	0.35
Total	576	100	

Mean=22.67; Median=23; Mode=27; Standard Deviation=9.53; Variance=90.85; Skewness=0.417; Kurtosis=1.25; Minimum= 1; Maximum=72; Range=71

From Table 4.1 it is evident that the mean performance of students on academic procrastination Scale is 22.67 with standard deviation being 9.53. The median and mode values turned out to be 23 and 27 respectively, thereby meaning that the distribution scores is positively skewed ($Sk = 0.417$) and leptokurtic ($Ku = -1.25$). Further the distribution scores range from 01 to 72.

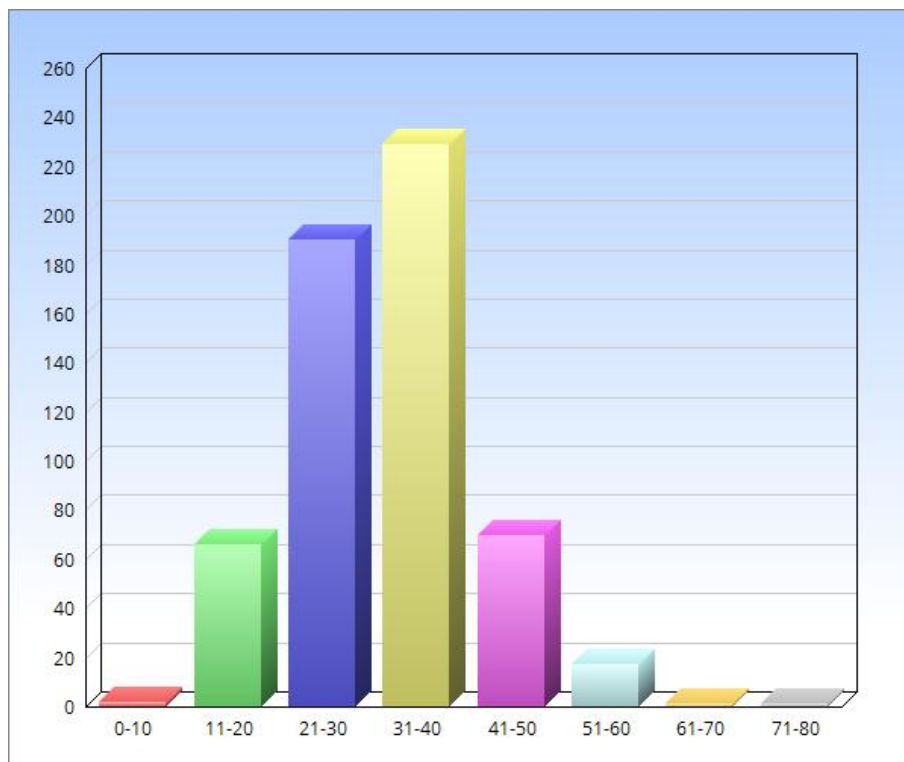


Figure 4.1. Distribution of Students on the Basis of their Achievement on Academic Procrastination Scale

When the raw scores were converted into percentage (Figure 4.1) it may be observed that 39.76% of students scored between 31-40 whereas 32.99% of students scored between 21-30 respectively thus depicting the moderate level of achievement on the academic procrastination Scale.

4.2 Achievement on Achievement Motivation Scale

The achievement of the participants on achievement motivation scale with respect to varied correlates has been ascertained. The results are presented in Table 4.2 so as to highlight the status of achievement motivation in the selected participants as below:

Table 4.2. Distribution of Students on the Basis of their Achievement on achievement motivation Scale

Class Interval	Frequency	Percentage	Cumulative Percentage
141-150	5	0.83	100.00
131-140	17	2.95	99.27
121-130	68	11.80	96.32
111-120	109	18.92	84.52
101-110	139	23.96	65.60

Class Interval	Frequency	Percentage	Cumulative Percentage
91-100	107	18.92	41.64
81-90	66	11.46	22.72
71-80	32	5.55	11.26
61-70	20	3.47	5.71
51-60	7	1.21	2.24
41-50	4	0.69	1.03
31-40	0	0	0.34
21-30	1	0.17	0.34
11-20	1	0.17	0.17
Total	576	100	

Mean=93.64; Median=94; Mode=94; Standard Deviation=18.5; Variance=344.30;

Skewness=-0.697; Kurtosis=1.39; Minimum= 6; Maximum=143; Range=137

From Table 4.2 it is evident that the mean performance of students on achievement motivation Scale is 93.64 with standard deviation being 18.50. The median and mode values turned out to be 94 and 94 respectively, thereby meaning that the distribution scores is negatively skewed ($Sk = -0.697$) and leptokurtic ($Ku = 1.39$). Further the distribution scores range from 06 to 143.

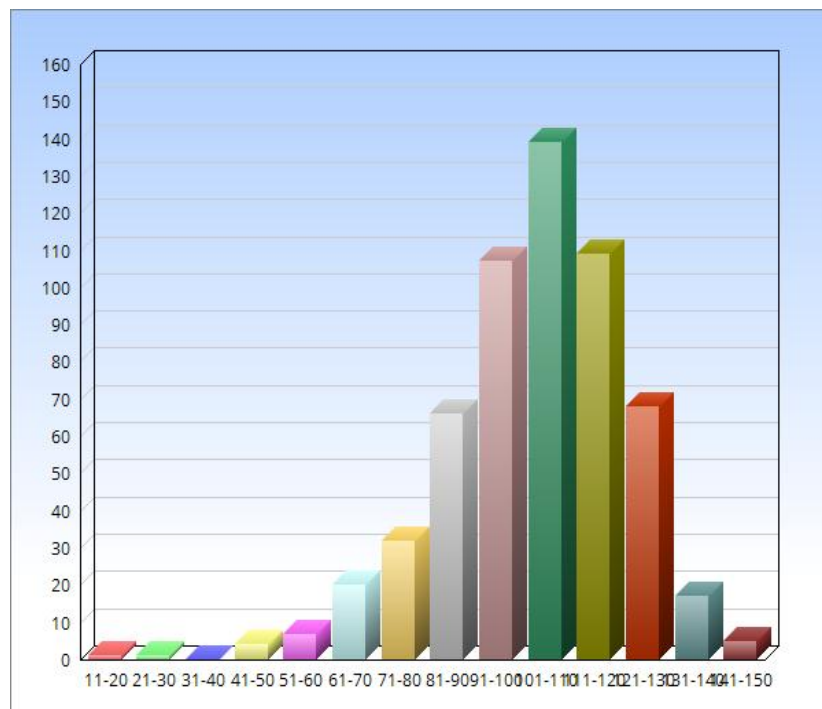


Figure 4.2. Distribution of Students on the Basis of their Achievement on achievement motivation Scale

When the raw scores were converted into percentage (Figure 4.2) it may be observed that 23.96% of students scored between 101-110 whereas 18.92% and 18.92% of students scored between 111-120 and 91-100 respectively thus depicting the moderate level of achievement on the achievement motivation Scale.

4.3 Achievement on Locus Of Control Scale

The achievement of the participants on locus of control scale with respect to varied correlates has been ascertained.

4.3.1 Achievement on Locus of Control (I) scale

The results are presented in Table 4.3 so as to highlight the status of locus of control with reference to Individual Control variable in the selected participants as below:

Table 4.3. Distribution of Students on the Basis of their Basis of their Achievement on Locus of Control (I) Scale

Class Interval	Frequency	Percentage	Cumulative Percentage
8-11	129	22.39	100.00
4-7	282	48.96	77.61
0-3	165	28.65	28.65
Total	576	100	

Mean=7.83; Median=9; Mode=10; Standard Deviation=3.49; Variance=12.17; Skewness= -2.04; Kurtosis=-0.82; Minimum= 1; Maximum=10; Range=9

From Table 4.3 it is evident that the mean performance of students on locus of control (I) is 7.83 with standard deviation being 3.49. The median and mode values turned out to be 09 and 10 respectively, thereby meaning that the distribution scores is negatively skewed (Sk= -2.04) and leptokurtic (Ku=-0.82). Further the distribution scores range from 01 to 10.

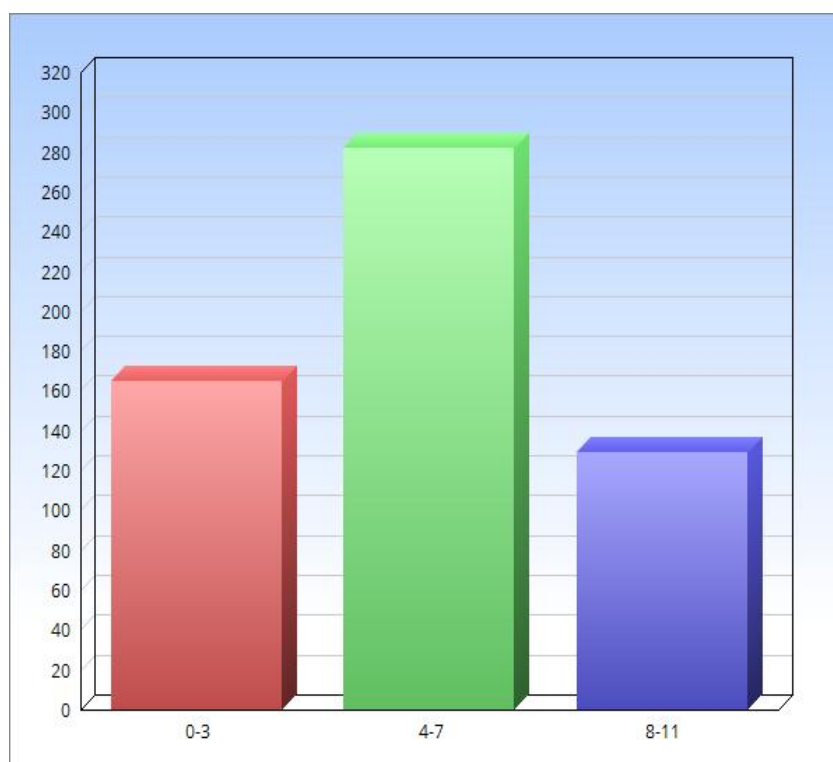


Figure 4.3. Distribution of Students on the Basis of their Basis of their Achievement on Locus of Control (I) Scale

When the raw scores were converted into percentage (Figure 4.3) it may be observed that 48.96% of students scored between 4-7 whereas 28.65% of students scored between 0-3 thus depicting the moderate level of achievement on the Locus of Control (I) Scale.

4.3.2 Achievement on Locus of Control (C) scale

The results are presented in Table 4.4 so as to highlight the status of locus of control with reference to chance control variable in the selected participants as below:

Table 4.4. Distribution of Students on the Basis of their Basis of their Achievement on Locus of Control (C) Scale

Class Interval	Frequency	Percentage	Cumulative Percentage
8-11	318	55.21	100.00
4-7	238	41.32	44.79
0-3	20	3.47	3.47
Total	576	100	

Mean=7.58; Median=8.5; Mode=10; Standard Deviation=3.91; Variance=11.50; Skewness= -1.85; Kurtosis=0.64; Minimum= 1; Maximum=10; Range=9

From Table 4.4 it is evident that the mean performance of students on locus of control (C) is 7.58 with standard deviation being 3.91. The median and mode values turned out to be 08.5 and 10 respectively, thereby meaning that the distribution scores is neagatively skewed ($Sk = -1.85$) and leptokurtic ($Ku = 0.64$). Further the distribution scores range from 01 to 10.

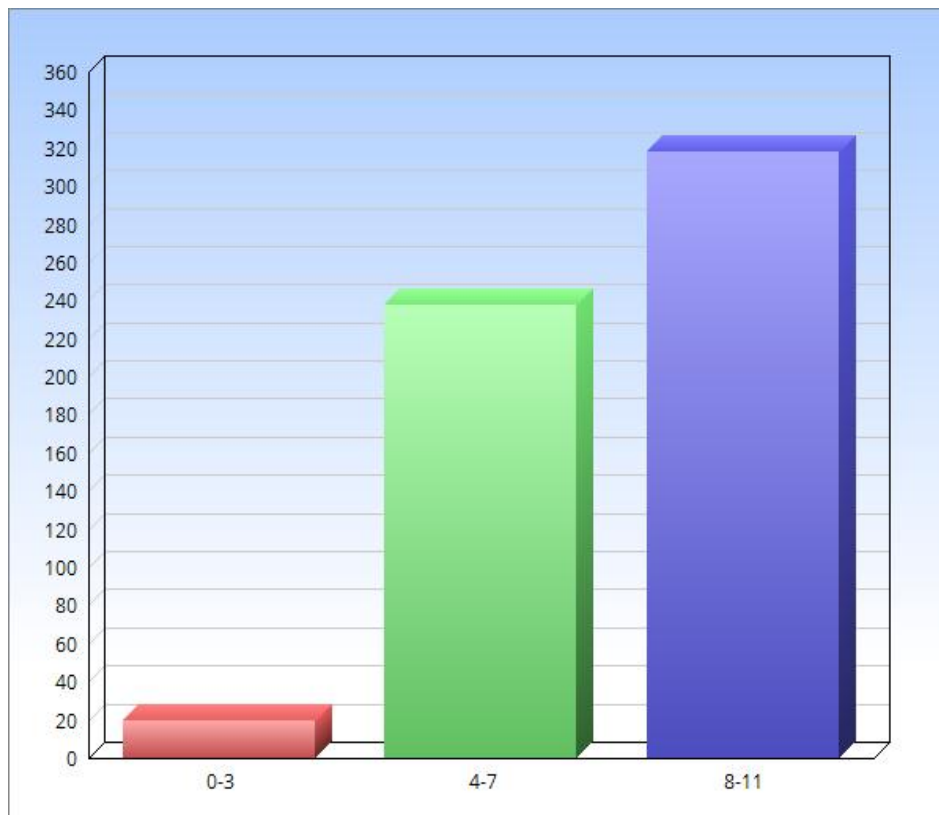


Figure 4.4. Distribution of Students on the Basis of their Achievement on Locus of Control (C) Scale

When the raw scores were converted into percentage (Figure 4.4) it may be observed that 55.21% of students scored between 8-11 whereas 41.32% of students scored between 4-7 thus depicting the high level of achievement on the Locus of Control (C) Scale.

4.3.3 Achievement on Locus of Control (P) scale

The results are presented in Table 4.5 so as to highlight the status of locus of control with reference to Powerful others variable in the selected participants as below:

Table 4.5. Distribution of Students on the Basis of their Basis of their Achievement on Locus of Control (P) Scale

Class Interval	Frequency	Percentage	Cumulative Percentage
18-20	1	0.17	100.00
15-17	0	0	99.83
12-14	117	20.32	99.83
9-11	369	64.06	79.51
6-8	84	14.58	15.45
3-5	5	0.87	0.87
Total	576	100	

Mean=8.18; Median=9; Mode=9; Standard Deviation=1.62; Variance=2.64; Skewness= -0.760; Kurtosis=1.32; Minimum= 2; Maximum=16; Range=14

From Table 4.5 it is evident that the mean performance of students on locus of control (I) is 8.18 with standard deviation being 1.62. The median and mode values turned out to be 09 and 09 respectively, thereby meaning that the distribution scores is negatively skewed ($Sk = -0.760$) and leptokurtic ($Ku = 1.32$). Further the distribution scores range from 02 to 16.

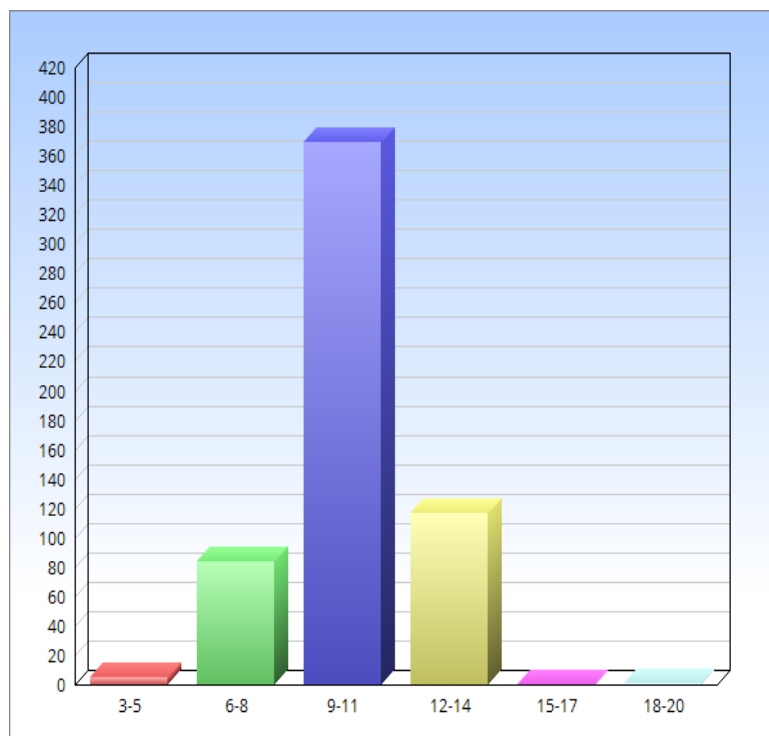


Figure 4.5. Distribution of Students on the Basis of their Basis of their Achievement on Locus of Control (P) Scale

When the raw scores were converted into percentage (Figure 4.5) it may be observed that 64.06% of students scored between 09-11 whereas 20.32% of students scored between 12-14 thus depicting the low level of achievement on the Locus of Control (P) Scale.

Comparison of Mean Achievement of students on Academic Procrastination Scale

The mean achievement of students on Academic Procrastination Scale was compared (Table 4.6) in terms of gender (boys/girls), location (rural/urban), caste (general/SC/OBC) and class (High/Middle/Low).

Table 4.6. Comparison of Mean Achievement of Students on the Basis of their Achievement on Academic Procrastination Scale

Variables	N	Mean	SD	t-value
Gender				
Boys	312	23.89	9.37	2.89*
Girls	264	21.00	9.85	
Location				
Rural	240	22.65	9.81	0.04
Urban	336	22.69	9.34	
Caste				
General	192	22.43	9.24	0.39
OBC	192	22.34	9.20	
SC	192	23.13	10.12	
Class				
High	183	18.5	9.43	2.66*
Middle	201	22.89	9.06	
Low	192	22.93	10.60	

*Significant at 0.01 level

From Table 4.6 it can be seen that mean and SD for boys (N=312) are 23.89 and 9.37 respectively and the mean and SD for girls (N=264) are observed to be 21.00 and 9.85. Further the t- value for the variable i.e. gender is found to be 2.89 which is significant at 0.01 level. It shows that mean achievement score on Academic Procrastination scale with respect to gender differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Academic Procrastination scale with respect to gender*' is rejected. Henceforth it can be said that the male and female students differ on Academic Procrastination scale. Further the mean of boys (23.89) is more than that

of girls (21.00) therein the academic procrastination behaviour is said to be more prevalent in the males as compared to the females.

From Table 4.6 it can be seen that mean and SD for rural (N=240) are 22.65 and 9.81 respectively and the mean and SD for urban (N=336) are observed to be 22.69 and 9.34. Further the t- value for the variable i.e. location is found to be 0.04 which is not significant at 0.01 level. It shows that mean achievement score on academic procrastination scale with respect to location do not differ significantly. In this context the hypothesis (Ho) namely, *'there is no significant difference in mean score of achievement on academic procrastination scale with respect to location'* is accepted. Henceforth it can be said that the rural and urban students of adolescents do not differ on academic procrastination scale.

From Table 4.6 it can be seen that mean and SD for general (N=192) are 22.43 and 9.24 respectively. Also the mean and SD for SC (N=192) are 23.13 and 10.12 respectively and the mean and SD for OBC (N=192) are 22.34 and 9.20. Further the F- value for the variable i.e. caste is found to be 0.39 which is not significant at 0.01 level. It shows that mean achievement score on academic procrastination scale with respect to caste do not differ significantly. In this context the hypothesis (Ho) namely, *'there is no significant difference in mean score of achievement academic procrastination scale with respect to caste'* is accepted. Henceforth it can be said that the general, BC, SC and OBC students of adolescents do not differ on academic procrastination scale.

From Table 4.6 it can be seen that mean and SD for high (N=183) are 18.5 and 9.43 respectively; the mean and SD for middle (N=201) are observed to be 22.89 and 9.06 and the mean and SD for low (N=192) are 22.93 and 10.60 respectively. Further the F- value for the variable i.e. class is found to be 2.66 which is significant at 0.01 level. It shows that mean achievement score on academic procrastination scale with respect to class differ significantly. In this context the hypothesis (Ho) namely, *'there is no significant difference in mean score of achievement on academic procrastination scale with respect to class'* is rejected. Henceforth it can be said that the high, middle and low students differ on academic procrastination scale. Further as the mean of low class (22.93) is more than their counterparts henceforth academic procrastination behaviour is more in the low caste students.

4.5 Comparison of Mean Achievement of students on Academic Motivation Scale

The mean achievement of students on Academic Motivation Scale was compared (Table 4.7) in terms of gender (boys/girls), location (rural/urban), caste (general/ SC/OBC) and class (High/Middle/Low).

Table 4.7. Comparison of Mean Achievement of Students on the Basis of their Achievement on Academic Motivation Scale

Variables	N	Mean	SD	t-value
Gender				
Boys	312	95.19	17.65	2.95*
Girls	264	92.67	18.92	
Location				
Rural	240	94.13	17.02	0.29
Urban	336	93.29	19.60	
Caste				
General	192	93.87	20.78	10.48*
OBC	192	84.50	28.86	
SC	192	78.97	31.52	
Class				
High	183	102.85	19.55	3.14*
Middle	201	93.61	18.06	
Low	192	94.01	18.10	

*Significant at 0.01 level

From Table 4.7 it can be seen that mean and SD for boys (N=312) are 95.19 and 17.65 respectively and the mean and SD for girls (N=264) are observed to be 92.67 and 18.92. Further the t- value for the variable i.e. gender is found to be 2.95 which is not significant at 0.01 level. It shows that mean achievement score on Academic Motivation scale with respect to gender differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Academic Motivation scale with respect to gender*' is rejected. Henceforth it can be said that the male and female students differ on Academic Motivation scale. The boys have more academic motivation their the female students as observed by mean scores of boys:girls:: 95.19: 92.67.

From Table 4.7 it can be seen that mean and SD for rural (N=240) are 94.13 and 17.02 respectively and the mean and SD for urban (N=336) are observed to be 93.29 and 19.60. Further the t- value for the variable i.e. location is found to be 0.29 which is not significant at 0.01 level. It shows that mean achievement score on academic motivation scale with respect to location do not differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on academic motivation scale with respect to location*' is accepted. Henceforth it can be said that the rural

and urban students do not differ on academic motivation scale.

From Table 4.7 it can be seen that mean and SD for general (N=192) are 93.87 and 20.78 respectively. Also the mean and SD for SC (N=192) are 78.97 and 31.52 respectively and the mean and SD for OBC (N=192) are 84.50 and 28.86. Further the F- value for the variable i.e. caste is found to be 10.48 which is significant at 0.01 level. It shows that mean achievement score on academic motivation scale with respect to caste differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on academic motivation scale with respect to caste*' is rejected. Further mean of General caste students (93.87) is more than students from other castes henceforth it can be said that the General students have more academic motivation as compared to students from other castes.

From Table 4.7 it can be seen that mean and SD for high (N=183) are 102.85 and 19.55 respectively; the mean and SD for middle (N=201) are observed to be 93.61 and 18.06 and the mean and SD for low (N=192) are 94.01 and 18.10 respectively. Further the F- value for the variable i.e. class is found to 3.14 which is significant at 0.01 level. It shows that mean achievement score on academic motivation scale with respect to class differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on academic motivation scale with respect to class*' is rejected. Henceforth it can be said that the high, middle and low students differ on academic motivation scale and this behaviour is more widespread among high class students (M=102.85) than the middle and low class students.

4.6 Comparison of Mean Achievement of students on Locus of Control (I) Scale

The mean achievement of students on Locus of Control (I) Scale was compared (Table 4.8) in terms of gender (boys/girls), location (rural/urban), caste (general/ SC/OBC) and class (High/Middle/Low).

Table 4.8. Comparison of Mean Achievement of Students on the Basis of their Achievement on Level of Control (I) Scale

Variables	N	Mean	SD	t-value
Gender				
Boys	312	5.68	2.44	0.04
Girls	264	5.72	2.57	
Location				
Rural	240	5.35	2.48	0.03
Urban	336	5.95	2.50	

Variables	N	Mean	SD	t-value
Caste				
General	192	5.63	2.39	1.02*
OBC	192	5.73	2.44	
SC	192	6.04	2.61	
Class				
High	183	6.36	2.03	0.23
Middle	201	5.96	2.42	
Low	192	6.01	2.54	

*Significant at 0.01 level

From Table 4.8 it can be seen that mean and SD for boys (N=312) are 5.68 and 2.44 respectively and the mean and SD for girls (N=264) are observed to be 5.72 and 2.57. Further the t- value for the variable i.e. gender is found to be 0.04 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (I) scale with respect to gender do not differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to gender*' is accepted. Henceforth it can be said that the male and female students do not differ on Locus of Control (I) scale.

From Table 4.8 it can be seen that mean and SD for rural (N=240) are 5.35 and 2.48 respectively and the mean and SD for urban (N=336) are observed to be 5.95 and 2.50. Further the t- value for the variable i.e. location is found to 0.03 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (I) scale with respect to location do not differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to location*' is accepted. Henceforth it can be said that the rural and urban students do not differ on Locus of Control (I) scale.

From Table 4.8 it can be seen that mean and SD for general (N=192) are 5.63 and 2.39 respectively. Also the mean and SD for SC (N=1692) are 6.04 and 2.61 respectively and the mean and SD for OBC (N=192) are 5.73 and 2.44. Further the F- value for the variable i.e. caste is found to be 1.02 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (I) scale with respect to caste differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (PI) scale with respect to caste*' is rejected. Henceforth it can be said that the general, SC, BC and OBC students differ on Locus of Control (I) scale.

Further SC students have more mean (6.04) than their counterparts which elucidates that SC students believe in more individual control over their life decisions than their counterparts.

From Table 4.8 it can be seen that mean and SD for high (N=183) are 6.36 and 2.03 respectively; the mean and SD for middle (N=201) are observed to be 5.96 and 2.42 and the mean and SD for low (N=192) are 6.01 and 2.54 respectively. Further the F- value for the variable i.e. class is found to be 0.23 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (I) scale with respect to class do not differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to class*' is accepted. Henceforth it can be said that the high, middle and low students do not differ on Locus of Control (I) scale.

4.7 Comparison of Mean Achievement of students on Locus of Control (C) Scale

The mean achievement of students on Locus of Control (C) Scale was compared (Table 4.9) in terms of gender (boys/girls), location (rural/urban), caste (general/SC/OBC) and class (High/Middle/Low).

Table 4.9. Comparison of Mean Achievement of Students on the Basis of their Achievement on Level of Control (C) Scale

Variables	N	Mean	SD	t-value
Gender				
Boys	312	7.75	1.66	0.23
Girls	264	7.35	1.94	
Location				
Rural	240	7.97	1.41	7.72*
Urban	336	7.56	1.95	
Caste				
General	192	7.57	1.88	1.03*
OBC	192	7.45	1.91	
SC	192	7.72	1.74	
Class				
High	183	7.34	2.23	4.75*
Middle	201	7.43	1.81	
Low	192	7.91	1.77	

*Significant at 0.01 level

From Table 4.9 it can be seen that mean and SD for boys (N=312) are 7.75 and 1.66 respectively and the mean and SD for girls (N=264) are observed to be 7.35 and 1.94. Further the t- value for the variable i.e. gender is found to be 0.23 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (C) scale with respect to gender do not differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to gender*' is accepted. Henceforth it can be said that the male and female students do not differ on Locus of Control (C) scale.

From Table 4.9 it can be seen that mean and SD for rural (N=240) are 7.97 and 1.41 respectively and the mean and SD for urban (N=336) are observed to be 7.56 and 1.95. Further the t- value for the variable i.e. location is found to be 7.72 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (C) scale with respect to location do not differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to location*' is rejected. Henceforth it can be said that the rural and urban students differ on Locus of Control (C) scale. Further the mean of rural students is more than their urban counterparts therefore rural students believe more in chance control for their life activities.

From Table 4.9 it can be seen that mean and SD for general (N=192) are 7.57 and 1.88 respectively. Also the mean and SD for SC (N=192) are 7.45 and 1.91 respectively and the mean and SD for OBC (N=192) are 7.72 and 1.74. Further the F- value for the variable i.e. caste is found to be 1.03 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (C) scale with respect to caste differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to caste*' is rejected. Henceforth it can be said that the general, SC, BC and OBC students of professional colleges differ on Locus of Control (C) scale and SC students (M=7.72) are found to believe in more chance control than their counterparts.

From Table 4.9 it can be seen that mean and SD for high (N=183) are 7.34 and 2.23 respectively; the mean and SD for middle (N=201) are observed to be 7.43 and 1.81 and the mean and SD for low (N=192) are 7.91 and 1.77 respectively. Further the F- value for the variable i.e. class is found to be 4.75 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (C) scale with respect to class differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (C) scale with respect to class*' is rejected. Henceforth it can be said that the high, middle and low students differ on Locus of Control (C) scale wherein low class students (M=7.91) are found to believe more in chance control than their counterparts.

4.7 Comparison of Mean Achievement of students on Locus of Control (P) Scale

The mean achievement of students on Locus of Control (P) Scale was compared (Table 4.10) in terms of gender (boys/girls), location (rural/urban), caste (general/SC/OBC) and class (High/Middle/Low).

Table 4.10. Comparison of Mean Achievement of Students on the Basis of their Achievement on Level of Control (P) Scale

Variables	N	Mean	SD	t-value
Gender				
Boys	312	8.52	1.49	24.92*
Girls	264	7.85	1.73	
Location				
Rural	240	8.50	1.53	15.92*
Urban	336	7.96	1.65	
Caste				
General	192	8.21	1.62	0.19
OBC	192	8.21	1.54	
SC	192	8.12	1.71	
Class				
High	183	7.97	1.81	2.21*
Middle	201	8.12	1.62	
Low	192	8.33	1.58	

*Significant at 0.01 level

From Table 4.10 it can be seen that mean and SD for boys (N=312) are 8.52 and 1.49 respectively and the mean and SD for girls (N=264) are observed to be 7.85 and 1.73. Further the t- value for the variable i.e. gender is found to be 24.92 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (P) scale with respect to gender differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (P) scale with respect to gender*' is rejected. Henceforth it can be said that the male and female students differ on Locus of Control (P) scale and the boys having more mean (8.52) are found to believe in powerful others for controlling their life decisions than the female samples.

From Table 4.10 it can be seen that mean and SD for rural (N=240) are 8.50 and 1.53 respectively and the mean and SD for urban (N=336) are observed to be 7.96 and 1.65. Further the t- value for the variable i.e. location is found to be 15.92 which is significant at

0.01 level. It shows that mean achievement score on Locus of Control (P) scale with respect to location differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (P) scale with respect to location*' is rejected. Henceforth it can be said that the rural and urban students differ on Locus of Control (P) scale and rural are found active believer of powerful others in their everyday affairs.

From Table 4.10 it can be seen that mean and SD for general (N=192) are 8.21 and 1.62 respectively. Also the mean and SD for SC (N=192) are 8.12 and 1.71 respectively and the mean and SD for OBC (N=192) are 8.21 and 1.54. Further the F- value for the variable i.e. caste is found to be 0.19 which is not significant at 0.01 level. It shows that mean achievement score on Locus of Control (P) scale with respect to caste do not differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (P) scale with respect to caste*' is accepted.

From Table 4.10 it can be seen that mean and SD for high (N=183) are 7.97 and 1.81 respectively; the mean and SD for middle (N=201) are observed to be 8.12 and 1.62 and the mean and SD for low (N=192) are 8.33 and 1.58 respectively. Further the F- value for the variable i.e. class is found to be 2.21 which is significant at 0.01 level. It shows that mean achievement score on Locus of Control (P) scale with respect to class differ significantly. In this context the hypothesis (Ho) namely, '*there is no significant difference in mean score of achievement on Locus of Control (I) scale with respect to class*' is rejected. Henceforth it can be said that the high, middle and low students differ on Locus of Control (P) scale and low class students are found to believe more in powerful others for controlling their life decisions.

4.8 CONCLUSIONS

The present study was conducted to assess the prevalence of academic procrastination, locus of control and academic motivation amongst students of Punjab. The following conclusions were deduced from the study thus undertaken:

4.8.1 Achievement on Academic Procrastination Scale

- The moderate level of achievement on the academic procrastination Scale was examined.
- It can be said that the male and female students differ on Academic Procrastination scale. Further the mean of boys (23.89) is more than that of girls (21.00) therein the academic procrastination behaviour is said to be more prevalent in the males as compared to the females.
- The rural and urban adolescents do not differ on academic procrastination scale.

- General, BC, SC and OBC students of adolescents do not differ on academic procrastination scale.
- The high, middle and low students differ on academic procrastination scale. Further as the mean of low class (22.93) is more than their counterparts henceforth academic procrastination behaviour is more in the low caste students.

4.8.2 Achievement on Achievement Motivation Scale

- The moderate level of achievement on the achievement motivation Scale was observed.
- It can be said that the male and female students differ on achievement Motivation scale. The boys have more achievement motivation their the female students as observed by mean scores of boys:girls:: 95.19: 92.67.
- The rural and urban students do not differ on achievement motivation scale.
- The mean of General caste students (93.87) is more than students from other castes henceforth it can be said that the General students have more achievement motivation as compared to students from other castes.
- It can be said that the high, middle and low students differ on achievement motivation scale and this behaviour is more widespreading among high class students (M=102.85) than the middle and low class students.

4.8.3 Achievement on Locus Of Control Scale

- The moderate level of achievement on the Locus of Control (I) Scale has been observed.
- High level of achievement on the Locus of Control (C) Scale and moderate level of achievement on the Locus of Control (P) Scale has been reported.
- The male and female students do not differ on Locus of Control (I) scale and the rural and urban students do not differ on Locus of Control (I) scale.
- It can be said that the general, SC, BC and OBC students differ on Locus of Control (I) scale. Further SC students have more mean (6.04) than their counterparts which elucidates that SC students believe in more individual control over their life decisions than their counterparts.
- The high, middle and low students do not differ on Locus of Control (I) scale.
- Male and female students do not differ on Locus of Control (C) scale.

- Rural and urban students differ on Locus of Control (C) scale. Further the mean of rural students is more than their urban counterpart's therefore rural students believe more in chance control for their life activities.
- It can be said that the general, SC, BC and OBC students differ on Locus of Control (C) scale and SC students (M=7.72) are found to believe in more chance control than their counterparts.
- High, middle and low students differ on Locus of Control (C) scale wherein low class students (M=7.91) are found to believe more in chance control than their counterparts.
- Male and female students differ on Locus of Control (P) scale and the boys having more mean (8.52) are found to believe in powerful others for controlling their life decisions than the female samples.
- The rural and urban students differ on Locus of Control (P) scale and rural are found active believer of powerful others in their everyday affairs.
- No significant difference has been reported in mean score of achievement on Locus of Control (P) scale.
- High, middle and low students differ on Locus of Control (P) scale and low class students are found to believe more in powerful others for controlling their life decisions.

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A STUDY OF THE RELATION BETWEEN ENVIRONMENTAL AWARENESS AND COGNITIVE STYLE OF LEARNING

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INTRODUCTION

The sustainability of human life on earth is in danger. Human actions are producing many harmful and possibly irreversible changes to the environmental conditions which do not support life on earth. The major threats to earth's environment includes global warming and climate change due to greenhouse effect, loss of much of the ozone layer, deforestation and species extinction, exhaustion of fisheries, agricultural land and water supplies, acid rain and toxic pollution of air and water supplies, human exposure to toxic chemicals, etc. Unless they are overcome, these changes will make human life increasingly miserable and eventually may make earth nearly uninhabitable for future generations. These threats are caused by patterns of human behaviour, particularly overpopulation and overconsumption. Alterations in peoples' awareness, attitudes, beliefs, interests and values may stimulate changes in the day to day human actions and behaviours which can lead to life styles that support global sustainability.

Environmental Awareness

Environment is the component of nature. Awareness refers to the existence of something in the consciousness with all its characteristics known, behaved or hidden. Environmental Awareness is knowledge of and concern for the components of nature with which man interacts.

Therefore, environmental awareness is not merely what is called "concern for environment". It is the existence of environment into one's consciousness and that existence is not merely a passive presence of something but an active and dynamic part of one's behavior (action), knowledge (cognition) and values and attitudes (affection).

Cognitive Factors of Awareness – It has been assumed that one who is aware of environment has urge to know everything about environment and therefore, he / she collects, possesses and stores relevant information actively or incidentally.

Affective Factors of Awareness – It has been assumed further that one who is aware of environment will have eco-friendly attitudes and values and also motivation for handling the environmental affairs. These are supposed to be more enduring dispositions in individuals

and may be manifested through readiness to know and respond in the matters related to environment.

Behavioural Factors of Awareness – Behavioural factors or action components of environmental awareness is related to the question what do the people do and how do they manipulate their daily actions to preserve the environmental resources and maintain the sustenance of ecology. Thus Environmental Awareness has been studied from two perspectives in this study in terms of their mode of manifestation.

1. Environmental Awareness in **Action**
2. Environmental Awareness in **Judgement.**

Environmental Awareness in Action

Providing opportunity for participation at all levels in working towards resolution for action on environmental issues leads to eco-friendly behavior.

Environmental Awareness in Judgement

Environmental Awareness helps people to discover the symptoms and causes of environmental degradation, develop critical thinking and ability to identify environmental problems and solutions.

Cognitive Style

The notion “Cognitive Style” grew out of research on how people perceive and organize information from the world around them.

Field Dependence and Field Independence

Witkin identified the cognitive styles of field dependence and field independence David Witkin, Moore, Good Enough & Cox, (1977). A person learning toward field dependent (FD) mode of perception is strongly dominated by prevailing field, while the field independent (FI) person perceives items as more or less separate from the surrounding field.

Impulsive and Reflective Cognitive Style

Another way of viewing cognitive style is impulsivity versus reflectiveness. An impulsive student works very quickly but makes many mistakes. The more student, on the other hand, works slowly and makes fewer errors. As with field dependence – independence, impulsive and reflective cognitive styles are not highly related to intelligence within the normal range. However, as children grow older, they generally become more reflective and for school age children, being more reflective, does seem to improve performance on school tasks such as reading (Kagan, 1983).

Learning Styles

Another concept to some extent identical with cognitive style is Learning Style. Silver, Strong and Perini (1997) have identified four types of Learning Style, they are The mastery Style Learner, The Understanding Style Learner, The Self Expressive Style Learner and The Interpersonal Style Learner.

One theme that unites most of the styles is difference between deep and surface approach to process information in learning situations. (Snow, Carno & Jackson, 1996)

Margerison and Lewis Approach of Cognitive Style (5)

The phrase “Cognitive Style” refers to the way a person approaches and attempts to solve problems encountered in the world at large, including problems faced at work. Mergerison and Lewis used Carl Jung’s Approach of typology of personality in classifying people according to their cognitive style, taking the cue from Myer Briggs Type Indicator Scale (Myer Brigg, 1990). They assumed that at the individual level, cognitive style is a way of ordering preferences for thought and action. As these preferences are incorporated into the personality they become taken for granted as natural, normal, even proper ways to think and behave. Others with different cognitive styles may then be regarded as odd, improper, (perhaps out of syne) with the way the world really works. To bridge these differing perspectives require common language and a genuine appreciation for those individuals whose cognitive styles differ from our own.

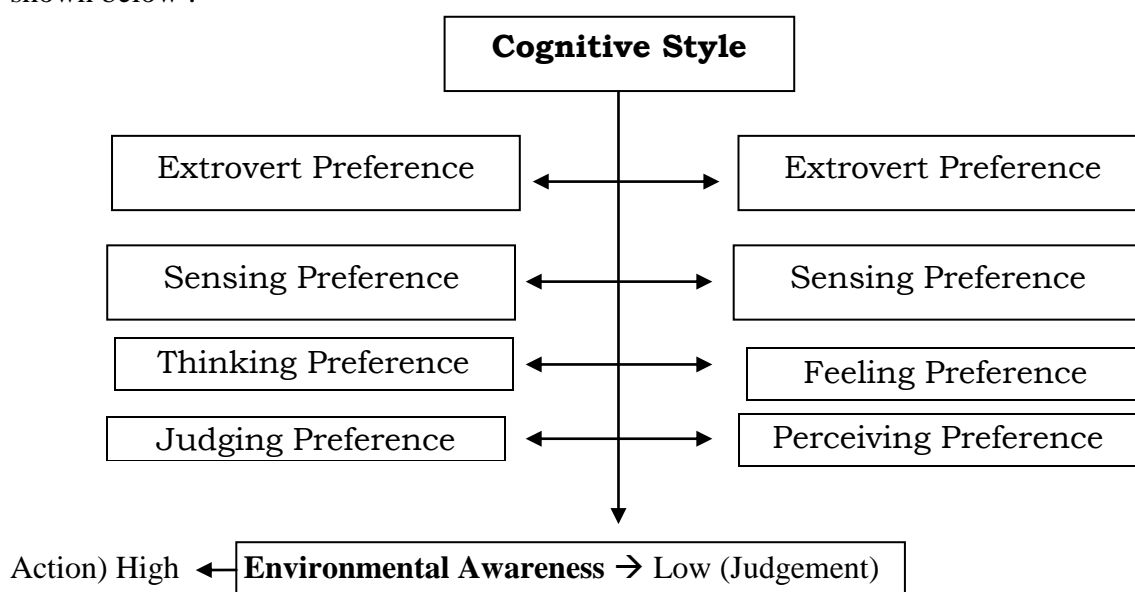
According to preferences they suggested, we can summerise these (preferences) in the following way :

E	Extrovert preference or I prefer to live in contact with others and things	or	I	Introvert preference prefers to be more self contained and work things out personally.
S	Sensing preference puts emphasis on facts, details, and concrete knowledge	or	N	Intuitive preference puts emphasis on possibilities, imagination creativity and seeing things as a whole.
T	Thinking preference puts emphasis on analysis using logic and rationality	or	F	Feeling preference puts emphasis on human values, establishing personal friendships; decisions mainly on beliefs and dislikes.
J	Judging preference puts emphasis on order through reaching decisions and resolving issues	or	P	Perceiving preference puts emphasis on gathering information and obtaining as much data as possible.

Mergerson and Lewis (Mergerison, Lewis & Hibbert, 1978) adopted the above typology from the organisational and managerial perspective. People with extrovert preference may either prefer to get in touch with the environment, work for and within the environment or may be subjectively aware of it in a self contained personal domain as one has introvert preference.

Similarly, people with sensing preference may be inclined to gather knowledge about environment while those with intuitive preference may feel for imaginary problems of environment. Those with thinking preference may try to link themselves with the environment by logical analysis of environmental problems while the opposite type, i.e. people with feeling preference may attach emotional values to the environment may perceive environment as a source of pleasure and pain as the case may be. Again people with judging preference may be inclined more to the decisions related to the issues and problems of environment and others with perceiving preference may rely more on what they gather only through their perceptual inputs.

Thus, cognitive style as categorized by other theorists, is more broad and refer to ones generalized tendency of learning and problem solving. The Jungian approach, on the other hand, more readily related to environmental awareness because it is based on enduring response tendencies due to personality. Therefore, for the present study, the four dimensions of cognitive style, suggested by Mergerison and Lewis(5) has been taken up for investigation in relation to environmental awareness. Schematically the relationship of the variables are shown below :



Flow Chart : Schematic Diagram Showing the relationship of the variable.

Review of the related literature

Schultz (Schultz, 2002) examined the implicit connections that individuals make between self and nature and impact of built environments on these implicit cognitions. A psychological model for inclusion with nature is presented containing cognitive (connectedness), affective (caring) and behavioural (commitment) components. Implications for theory design and sustainability are discussed.

Bonnett (2002) studied some problems which taken the notion of sustainable development as a policy, as the touchstone of environmental education and will explore some critical strands to understand sustainability as a *frame of mind*. It is argued that at the heart of this interpretation of sustainabilities the motion of right relationship with nature which both conditions our attitudes towards the environment and our sense of our own identity. The contribution of certain eco centric accounts to the idea of sustainability is critically evaluated and a sense of sustainability is developed which is neither anthropocentric nor eco centric. It is argued that the essence of sustainability which is so conceived is intrinsic to authentic human consciousness and some of the meta physical issues which it raises for education and modern western society are indicated.

The pristine environment was so pure, virgin, undisturbed, uncontaminated and quite hospitable for all life forms to exist. Man for the first time in his entire cultural history is facing one of the most horrible problem i.e., of ecological crisis. Though the destruction of environment in the past may be excused from the point of view of ignorance but it can't be now. Therefore, the environmental education is socially more relevant today than the past. There is a urgent need for new approach to environment which cuts across barriers of class, colour, creed and nationality. Everybody has to contribute its share for protection of environment before it is too late. In the present research paper an attempt has been made to assess the environmental awareness of students of Govt. Degree College of student of Govt. Degree college, Dharmshala, Himachal Pradesh (India), (Sharma)

The study of Kumud Ghosh (2014) attempts to study the level of environmental awareness and attitudes towards environmental education among Secondary School students of Golaghat district in the state of Assam. The sample consisted of 200 students which includes 100 boys and 160 girls. The Descriptive Survey Method was employed for the present study. The data was statistically analysed by using Z test and Karl Pearson's coefficient of correlation ('r'). Environmental awareness attitude towards environmental education among the Secondary School male and female students was found not significant; but in case of rural and urban student the attitude towards environmental education was found significant. The relationship between environmental awareness and attitude towards environmental education among the students was found strong and positive.

The main purpose of the study of Dr. Madhumala Sengupta, Dr. Jayanti Das and Pintu Maji (2010) is to understand the effect of stream (arts, Science and Commerce) and Gender on Twelfth Grade Students' Environmental Awareness and Environment Related Behaviour in Kolkata were randomly chosen as sample. Two 5 point Likert type questionnaires (Environmental Awareness-27 items and Environmental Related Behaviour 21 items) were used for this study and were standardized by the researchers. For statistical analysis (ANOVA) and Coefficient of Correlation were conducted to determine the effect of stream and Gender on Environmental Awareness and Environment Related Behaviour.

Lavish consumption of previous environmental resources by man, either due to greed of the developed countries or for need by the poorer people of developing countries caused a large scale quality deterioration of environment. The thing has created a lot of environmental problems like global warming, ozone layer depletion, climate changes etc. It is universally accepted that if the present trend of environmental imbalance continues unchecked, it will lead to annihilation of all living being from this planet. Not only in India, but in other countries too, effects have been made to deal with some environmental problems. To get rid of environmental problems, it is necessary that countries of the world should amend their environment and related policies. The education system should also be upgraded. But without awareness and involvement of people, of grass-root level, the environmental problems cannot be solved successfully. The present study was undertaken to find out the environmental awareness and responsibility among University students in Vellore, Tamil Nadu, India. (Selbam & Nazar, 2011)

Primary data using convenient sampling through questionnaire and interview method and secondary data from wide range of literature through journals have been utilized. The statistical technique of percentage analysis and ANOVA is used to determine the variables, which determine their behavior towards environmental awareness and responsibilities using University students.

The ANOVA indicates that five variables, viz., are you using environmental friendly products (0.037), prevention of water and pollution (0.049), being aware of environmental issues (0.043), ecological concern (0.023) and aware of environmental education, responsibilities and laws (0.000) have significant relationship with degree programme of the respondents. (Selbam & Nazar, 2011)

There are various research reports, which deal with cognitive style and learning style. But the scale for measuring cognitive style based on Witkin's dimension is a widely used one based on two popular concept, based on two dimensions of personality – Field Dependence (FD) and Field Independence (FI).

Watkin (2014) quantitatively summarised research based on measurement instrument used in western cultures to provide better understanding of students' learning in different cultures. A second purpose is to provide evidence of the relationship between approaches to learning and personality and contextual variables. The result indicate the personality variables of self esteem and locus of control as being related to the approach to learning a student will adopt in both western and non western countries and at both school and university levels.

Nuby and Oxford (1998) investigated the similarities and significant differences in Learning styles of Native African American students using Myer Brigg Type Indicator (MBTI). African American High School students and Native American High School students favoured Extroversion, Sensing and Thinking. Although with different degrees of preference, major differences were found between the two groups for Judging (preferred by half of the African Americans but by fewer than 25% of the Native Americans who overwhelmingly chose perceiving). Male and Female preference patterns (extrovert, sensing thinking and perceiving) were similar in broad terms, but percentages were different. Particularly on Thinking, Feeling, instructional implications for education were also discussed.

The study of Li Fang Zhang (2004) investigated the relationship between thinking styles as defined by Sternberg's theory of Mental Self Government and Learning Approaches as defined by Bigg's model of student learning. Participants were two independent groups of American University students ($N_1=67$, $N_2=65$). Participants responded to the thinking styles Inventory and the study process questionnaire. It was found that the two inventories generally were correlated in predictable ways. This findings confirmed the one obtained in an early study of two Chinese populations.

Objectives

The objectives of the research intends to address a theoretical question whether a person's environmental awareness is an outcome of enduring personality disposition not in terms of traits but in terms of typology.

Method

1. Descriptive Analysis was done for the whole sample (i.e. 593 students). Means and Standard Deviation were computed separately for all the groups and taking the groups together in various combinations.
2. The chief mode of analysis for testing the predictability of Environmental Awareness by Cognitive Style was Regression Analysis.

Design

Considering the objective of the present study a regressional design was deemed most suitable to identify the predictors of Environmental Awareness adopted for the present study.

Description of the tool

The investigator used the tool of measuring Environmental Awareness was developed by Prof. Chakraborty & Dr.Sengupta.

The self reporting questionnaire on Environmental Awareness has two parts, and consists of 48 items in total. The first part was named as questionnaire for Environmental Awareness in **Action**, which was of 27 items of five point rating scale and the second part named as Questionnaire for Environmental Awareness in **Judgement** of 21 items and/or statements and/or opinions of multiple choice response type. The Reliability and validity of the Environmental Awareness Questionnaire is given below :

Reliability

The Reliability of the Questionnaire of Environmental Awareness was determined by Kuder Richardson formula.

The reliability coefficients for Environmental Awareness in Action $r=.704$ and for Environmental Awareness in Judgement is $r=.63$.

Validity

The validity of the Environmental Awareness Questionnaire was determined in terms of item validity using Tetrachoric Correlation.

The validity of the subscale Environmental Awareness in Action was .66 and Environmental Awareness in Judgement who .67.

Cognitive Style Self Assessment Scale

The investigator used Cognitive Style Self Assessment Scale (Myer Briggs Type Indicator). There are 21 paired items or questions describing different situations and 9 paired words and phrases to indicate the preference of the testees. Scores are given for eight preferences of Cognitive Style also two full preferences.

Sample

Rural Sample was drawn from the districts of North and South 24 Parganas of the State of West Bengal while urban sample was drawn from the city of Kolkata.

Table 1. Area, Grade and Sex wise break up of the sample

Area	Class	Boys	Girls	Total
Rural	XI	177	116	293
Urban	XI	175	125	300
Total		352	241	593

Analysis

Descriptive Analysis

Mean and Standard Deviation for Rural male, Rural Female, Rural (Male and Female) Urban Male, Urban Female, Urban (Male and Female), Male (Rural + Urban) Female (Rural and Urban) and (Male and Female) + (Rural and Urban)

Table 2. Computation of Mean and SD

Group	Variable	COGNITIVE STYLE : SELF ASSESSMENT TEST										ENVIRONMENT AWARENESS		Total
		Extrovert	Sensing	Thinking	Judging	Total	Introvert	Intuitive	Feeling	Perceptive	Total	Environment Awareness for Action	Environment Awareness for Judgement	Environment Awareness
Rural Male	N=177 Mean SD	18.63 4.42	21.25 3.92	23.49 4.32	21.06 3.86	84.43 4.43	16.38 4.43	18.77 3.92	16.50 4.30	13.92 3.88	65.57 9.46	97.39 11.05	69.90 6.09	167.29 13.74
Rural Female	N=116 Mean SD	17.8 4.57	21.87 3.72	22.7 3.78	20.91 3.54	83.28 3.54	17.2 4.57	18.13 3.72	17.3 3.78	14.09 3.54	66.72 8.41	99.46 9.54	70.79 4.18	170.25 10.67
Rural Female+Male	N=293 Mean SD	18.3 4.5	21.5 3.86	23.17 4.14	21.00 3.74	83.87 9.08	16.7 4.5	18.52 3.86	16.82 4.12	13.99 3.75	66.03 9.08	98.21 10.53	70.25 5.44	168.46 12.69
Urban Male	N=175 Mean SD	19.19 4.79	21.33 4.22	22.91 4.91	20.78 3.79	84.21 9.47	15.81 4.79	28.67 4.22	17.09 4.18	14.22 3.79	65.79 9.47	95.57 11.65	69.48 6.25	165.05 15.34
Urban Female	N=125 Mean SD	18.04 5.69	21.78 3.59	22.39 4.12	20.58 3.98	82.8 8.78	16.96 5.69	18.22 3.59	17.61 4.12	14.42 3.98	67.2 8.78	101.5 8.98	71.31 4.05	172.81 10.17
Urban Male+Female	N=300 Mean SD	18.71 5.21	21.52 3.98	22.69 4.16	20.7 3.87	83.62 3.87	16.29 5.21	18.48 3.98	17.31 4.16	14.3 3.87	66.38 9.21	98.04 11.02	70.24 5.52	168.28 13.97
Male : Rural+Urban	N=352 Mean SD	18.91 4.62	21.29 4.07	23.2 4.26	20.92 3.83	84.32 9.47	16.1 4.62	18.72 4.07	16.8 4.25	14.07 3.84	65.68 9.47	96.49 11.39	69.69 6.18	166.18 14.6
Female Rural+Urban	N=241 Mean SD	17.93 5.18	21.183 3.65	22.54 3.96	20.74 3.78	83.03 8.60	17.07 5.18	18.17 3.65	17.46 3.96	14.26 3.78	66.97 8.60	100.51 9.31	71.06 4.12	171.58 10.49
Male+Female: R+U	N=593 Mean SD	18.51 4.88	21.51 3.92	22.93 4.16	20.85 3.81	83.79 9.15	16.49 4.88	18.5 3.92	17.07 4.15	14.15 3.82	66.21 9.15	98.12 10.78	70.25 5.48	168.37 13.35

N = Total Number of Sample

COMPARATIVE STUDY OF THE MEAN VALUES OF RURAL MALE AND FEMALE

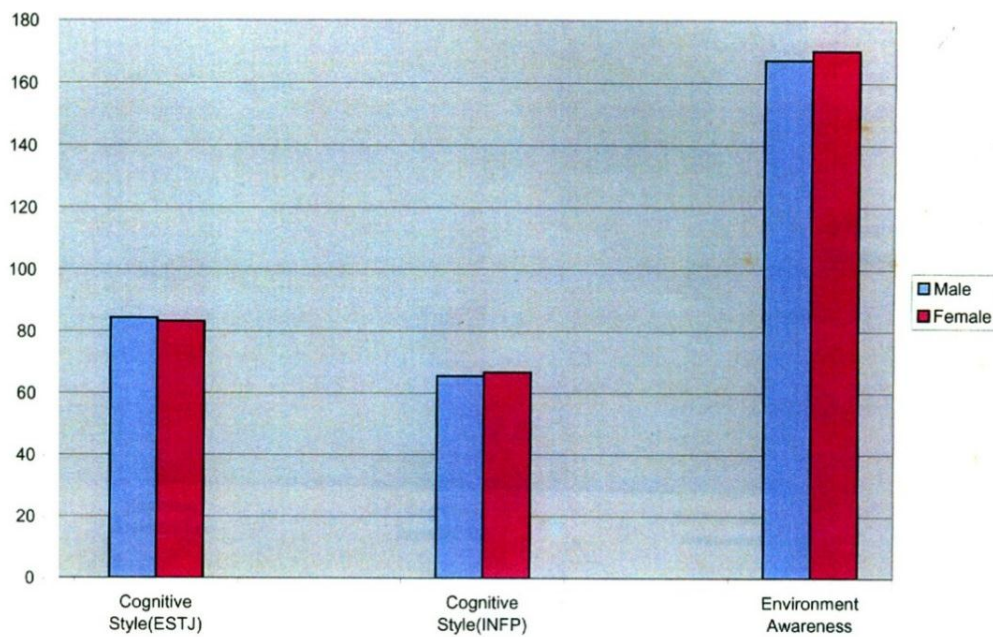


Fig. 1

COMPARATIVE STUDY OF MEAN VALUES OF URBAN MALE AND FEMALE

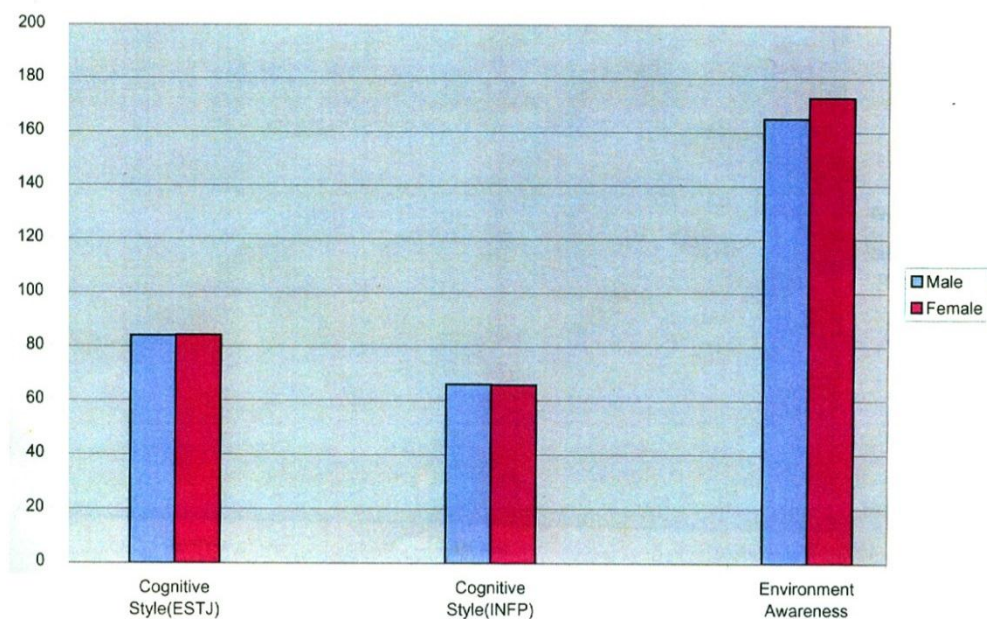


Fig. 2

Comparative study of mean values of rural(male +female) and urban (male+female)

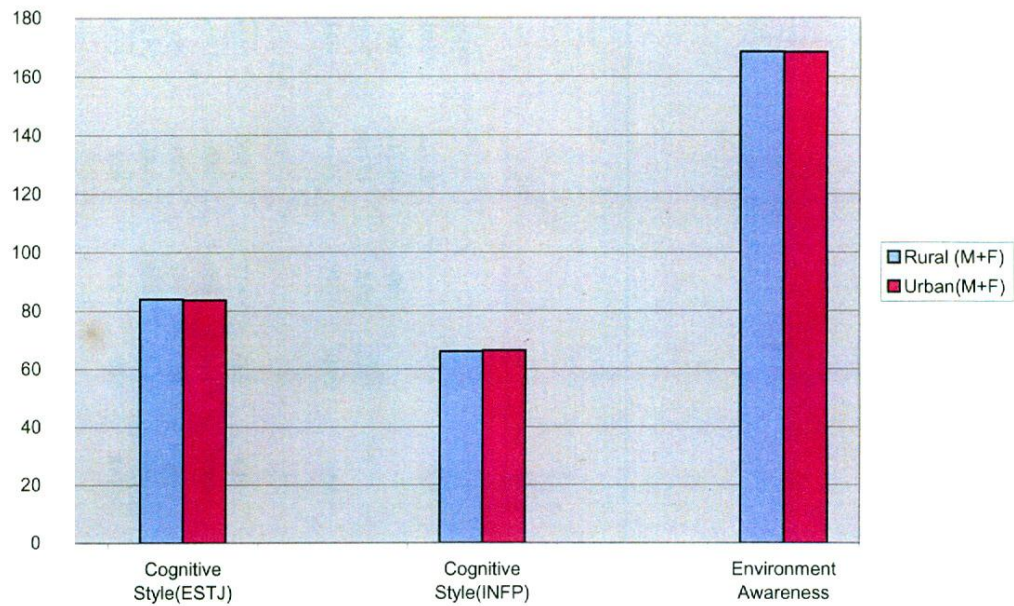


Fig. 3

Comparative study of meanvalues of male(rural+urban) and female(rural+urban)

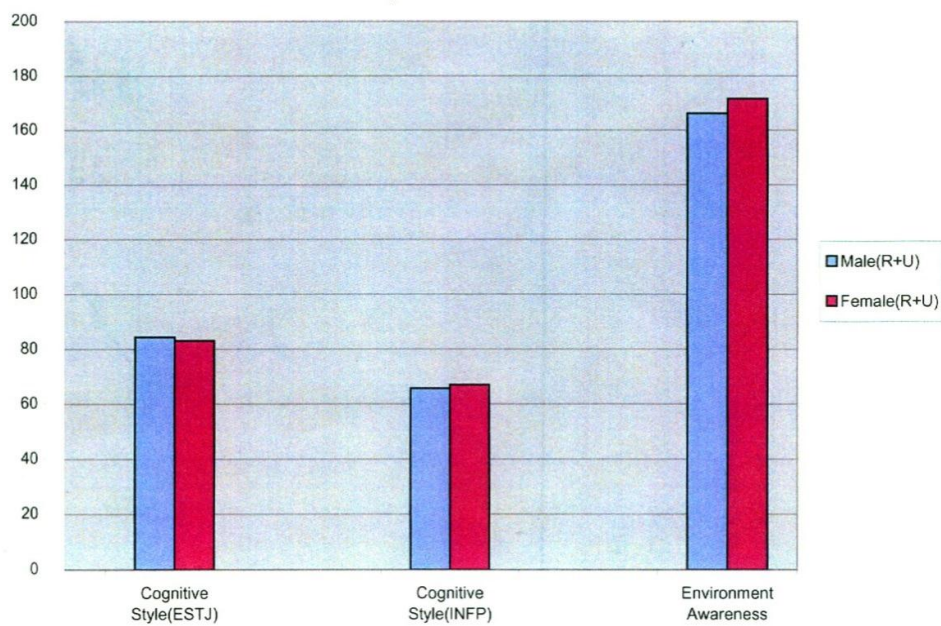


Fig. 4

Regression Analysis

Regression Analysis of Environmental Awareness was done on the variable cognitive style i.e., Environmental Awareness in Action and Environmental Awareness (in Judgement on Cognitive Style Self Assessment includes Extroversion (E), Sensing (S), Thinking (T), Judging (J) and Total Cognitive Style (Sum of the scores of E, S, T, J) and Introversion I, Intuitive (N), Feeling (F), Perceiving and Total Cognitive Style (Sum of the scores of I, N, F, P).

Table 3. Summary of Results showing level of significances of regression coefficients by groups (Dependent Variable : Environmental Awareness)

GROUPS										
VARIABLES		RURAL			URBAN			ALL (R+U)(M+F)		
		MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
Cognitive Style :	E	-	-	-	1%	-	5%	1%	-	1%
	S	-	-	-	-	-	-	-	-	-
	T	-	-	-	5%	5%	1%	1%	5%	1%
	J	-	-	-	-	-	-	-	-	5%
	Total CS (E-J)		1%	-	1%	1%	1%	1%	1%	1%
	I	-	-	-	1%		5%	1%	-	1%
	N	-	-	-	-	-	-	-	-	-
	F	-	-	-	5%	5%	1%	1%	5%	1%
	P	5%	-	5%	-	-	-	-	-	5%
	Total CS (I-P)		1%	-	1%	1%	1%	1%	1%	1%

Interpretation

From the summary of results of Regression Analysis of data show that the Environmental Awareness can be predicted by cognitive style in the case of all the groups of sample and also for the total sample group. This signifies that the process of acquiring Knowledge or one's style of cognition is more important than the knowledge itself. However, only a small proportion of variance can be predicted by cognitive styles.

Environmental Awareness in positively predicted by Extrovert, Sensing, Thinking and Judging preference whereas, it is negatively predicted by Introversion, Intuitive, Feeling and Perceiving preference for all the sub groups. This almost convinced the researcher that those who prefer to gather first hand information from the environment, can sense their implications and take decision on the basis of Judgement and Thinking have the predictability of developing maximum environmental awareness, whereas, the opposite type of people who

prefer Introversion and Intuitive way of gathering information and rely upon feeling and personal interpretation are likely to have the least Environmental Awareness.

Conclusion

Therefore, those who (extroverts) gather information directly or first hand from environment, think and judge environmental matters and problems they are more aware of but, those who are introverts i.e., those who have less contact with the outer world and environment think environment related matters according to the way they like intuitively and have subjective feeling related to environment, are not much aware of environment.

Limitations

There are always some limitations inevitable for the individual efforts to study the complexity of environment related problems.

Some of the limitations of the present study are mentioned below :-

1. Sample was drawn from a relatively smaller geographical areas. These leaves chance to bias in sampling.
2. In the research design only the science stream at the Higher Secondary stage formed the population. By contrast, sample drawn from other academic streams could reveal more distinctly the relation between Environmental Awareness and Cognitive Style.
3. In the remote rural areas of North and South 24 Parganas none of the girl student was found in the science stream only a few girls were studying in Bio Science which is not comparable to the number of boys in the rural areas.
4. The socio economic perspective and educational background of the parents of the students might be used as other dependent variables in this study.

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THE SCIENTIFIC ATTITUDE OF 10th CLASS STUDENTS SPECIAL CONSIDERATION ON LOCALITY AND SEX

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ABSTRACT:

Science education should take the responsibility to produce the researchers in our country. Science education should be for all up to secondary level in order to develop scientific temper amongst the masses. Science education provides field to a person to create something new, for the society and for the nation. Although creativity is not related to any particular subject area, but science education has much wider scope of fostering and encouraging creativity.

Keywords: 10th Class Students, Scientific Attitude, Need and Variables.

1. INTRODUCTION:

Science education has generally involved teaching not only a body of knowledge but also the processes and activities of scientific work. This view has linked the scientific uses of technology with hands-on experiences. The term "hands-on science" was descriptive of the major curriculum reform projects of the 1960s and became a label for a revolution in teaching science through the next two decades (Flick, 1993). Fifth survey of research in education (1988) on science education "If we throw a bridge between science and education, with psychology, we arrive at the concept of science education; bluntly speaking is an integrated concept. If so, it is within the sphere of possibility to link the most powerful concepts of science to the growing minds of children through active experimental pedagogy. In that case, science education need no longer remain a single-dimension activity. It would be our job then to develop the scientific and technical capabilities of our school going pupils". Indian scientists made significant contributions to the advancement of science and technology in the 1950s and '60s. This was possible because of the support extended to science education and research by the successive governments. Numerous research and development institutions were established across the country. However, over the years, in spite of continuing government support, both the quality and quantity of the research output from India has been on the decline as has been pointed out by Prof. C.N.R. Rao. It is necessary to examine the reasons for this decline and implement remedial measures.

2. STATEMENT OF THE PROBLEM:

The problem taken by the investigator for investigation is **“THE SCIENTIFIC ATTITUDE OF 10th CLASS STUDENTS SPECIAL CONSIDERATION ON LOCALITY AND SEX”**

3. NEED AND SIGNIFICANCE OF THE STUDY :

All the countries are demanding for good quality of science teachers because they understood the link between scientific advancement and development of the nation. But the research work on the qualities and abilities of the teacher is not yet taken place. Good teaching will flow with good teachers only. Who should be the teacher in the school? Any one can give the list of all positive qualities of the best human being in the world. The qualifications of the secondary teacher are graduation with professional degree. With the degree and one year professional qualifications is there any possibility of earning all the qualities of the good teacher. In these days students are depending on tuitions to understand the subject. And all the students are interested to go for tuitions and majority of these tuition masters are not trained teachers. If they are able to understand better with the tuition master then the trained teacher than what is the use of this qualification. In some cases top students in the class are also handling tuitions for their classmates. There is a need for the research in this area to identify the suitable qualities of the teacher. The main focus of the present study was, is **“THE SCIENTIFIC ATTITUDE OF 10th CLASS STUDENTS SPECIAL CONSIDERATION ON LOCALITY AND SEX”**

4. SCOPE OF THE STUDY :

The main intention of the study is to find the relation of scientific attitude of 10th class students with locality, sex and management.

5. OBJECTIVES OF THE STUDY :

The following are the main objectives of the present study.

- I) To study the influence of management on the scientific attitude of 10th class students.
- II) To study the influence of locality on the scientific attitude of 10th class students. 3. To study the influence of sex on the scientific attitude of 10th class students.

6. HYPOTHESIS OF THE STUDY :

Based on the above objectives the following hypotheses are formulated.

- I) There would be no significant influence of management on the scientific attitude of 10th class students.

II) There would be no significant influence of locality on the scientific attitude of 10th class students.

III) There would be no significant influence of sex on the scientific attitude of 10th class students.

7. VARIABLES STUDIED :

The following variables were taken into consideration in this study. Independent Variables : Management, Locality and sex. Dependent Variable: Scientific attitude of 10th class students.

8. TOOLS USED :

- a) Scientific attitude of VII class students test.
- b) The Board of District Common Examination Board half yearly marks were taken the indicates the level of academic achievement of the 10th class pupils.
- c) Socio – Demographic scale

9. SAMPLE SELECTED :

The sample for the investigation consisted of 300 10th class pupils in Kurnool district. The stratified random sampling was applied in three stages. The first stage is management i.e. Government, Private and aided the second stage is locality i.e. rural and urban and third stage is sex i.e. male and female. It is a 3X2X2 factorial design with 300 sample subjects.

10. COLLECTION OF DATA AND ANALYSIS :

The investigator personally visited secondary schools with the permission of the head masters of the schools. The students who attended to the school on the day of collection of data are considered for the purpose of the investigation. It was provided to the concerned students of the school. The students were given necessary instructions about the instruments and motivated to respond genuinely to all the items. The Errors committed by 10th class pupils in scientific attitude of 10th class students test and personal data sheet were administered. The data on each variable in the investigation is properly coded to suit for computer analysis. The analysis was carried out on the basis of objectives of the investigation and hypotheses formulated by employing appropriate statistical techniques. Measures of central tendency, measures of dispersion, skewness, kurtosis and standard error of mean were computed wherever necessary. The inferential statistical techniques such as ‘t’ test (critical ratio) and ‘F’ test were employed to test different hypotheses.

Management :

The relationship of scientific attitude of 10th class students with their management is studied in the present investigation. On the basis of management, the VII class students are divided into three groups. The Government school students form with the Group – I, Group – II forms with the Private school students and Group – III forms with Aided students. The corresponding scientific attitude of VII class students of the three groups were analyzed accordingly. The mean values of scientific attitude of 10th class students for the three groups were tested for significance by employing ‘F’ - test. The following hypothesis is framed.

Hypothesis – 1:

There would be no significant impact of ‘management’ on the scientific attitude of 10th class students. The above hypothesis is tested by employing ‘F’ - test. The results are presented in Table – 1.

Table – 1 : Influence of management on the scientific attitude of 10th class students

S.No	Management	N	Mean	S.D	‘F’-Test
1.	Government	100	227.69	35.93	34.749**
2.	Private	100	192.00	15.04	
3.	Aided	100	196.33	41.53	

Indicates significant at 0.01 level

It is found from the Table – 1 that the computed value of ‘F’ (34.749) is greater than the critical value of ‘F’ (4.68) for 2 and 297 df at 0.01 level of significance. Hence the Hypothesis – 1 is rejected at 0.01 level. Therefore it is concluded that the management has significant influence on the scientific attitude of 10th class students.

Locality :

The relationship of scientific attitude of 10th class students with their locality is studied in the present investigation. On the basis of locality, the 10th class students are divided into two groups. The rural students form with the Group – I and Group – II forms with the urban students. The scientific attitude of VII class students of the two groups were analyzed accordingly. The scientific attitude of 10th class students for the two groups were tested for significance by employing ‘t’ - test. The following hypothesis is framed.

Hypothesis – 2:

There would be no significant impact of ‘locality’ on the scientific attitude of 10th class students. The above hypothesis is tested by employing ‘t’ - test. The results are presented in Table – 2.

Table – 2 : Influence of locality on the scientific attitude of 10th class students

S.NO	Locality	N	Mean	S.D	't'-Test
1.	Rural	150	207.04	35.43	0.807
2.	Urban	150	203.64	37.50	

Indicates not significant at 0.05 level

It is found from the Table – 2 that the computed value of 't' (0.807) is less than the critical value of 't' (1.97) for 1 and 298 df at 0.05 level of significance. Hence the Hypothesis – 2 is accepted at 0.05 level. Therefore it is concluded that the locality has not significant influence on the scientific attitude of 10th class students.

Sex :

The relationship of scientific attitude of 10th class students with their sex is studied in the present investigation. On the basis of sex, the 10th class students divided into two groups. The boys form with the Group – I and Group – II forms with the girls. The scientific attitude of 10th class students of the two groups were analyzed accordingly. The scientific attitude of 10th class students for the two groups were tested for significance by employing 't' - test. The following hypothesis is framed.

Hypothesis – 3:

There would be no significant impact of 'sex' on the scientific attitude of VII class students. The above hypothesis is tested by employing 't' - test. The results are presented in Table – 3.

Table – 3 : Influence of sex on the scientific attitude of IX class students

S.NO	Sex	N	Mean	S.D	' t'-Test
1.	Boys	150	199.25	33.79	2.931
2.	Girls	150	211.43	38.10	

** Indicates significant at 0.01 level

It is found from the Table – 3 that the computed value of 't' (2.931) is greater than the critical value of 't' (2.59) for 1 and 298 df at 0.01 level of significance. Hence the Hypothesis – 3 is rejected at 0.01 level. Therefore it is concluded that the sex has significant influence on the scientific attitude of 10th class students.

11. CONCLUSIONS :

In the light of the findings presented in preceding pages, the following conclusions are drawn.

1. Sex has significant influence on the scientific attitude of IX class students.
2. Management has significant influence on the scientific attitude of IX class students.
3. Locality has not significant influence on the scientific attitude of IX class students.

12. EDUCATIONAL IMPLICATIONS:

1. Management is highly influence on the scientific attitude of IX class students. The administrators to provide physical facilities for various types of managements.
2. Sex is highly influence on the scientific attitude of IX class students. The administrators to provide facilities for Girls.
3. The Science teachers should create interest in students thorough their effective teaching.
4. The teachers should encourage the students on doing practical in science by giving sufficient number of demonstrations.
5. The school management should take care in providing proper infrastructure sufficient materials for the Science laboratories etc.
6. The students should be given correct and proper knowledge about the objectives of learning Science.
7. Relevant science books and reference books should be purchased for the school library for ready reference.
8. Science exhibitions should be conducted at school level district level and state level to inculcate creative ability and interest in students in science field.

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STUDIES ON CHEMICAL EDUCATION: ROLE OF SUPPORTED NANO-GOLD CATALYSIS IN CHEMICAL SYNTHESIS

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Abstract:

Catalytic activity of supported gold nanoparticles is utilized in organic transformations which may attract the interest of organic chemists and researchers on green and sustainable chemistry. The convergence of homogeneous and heterogeneous catalysis in the study of gold nanoparticles has been discussed. The main part of this review is constituted by sections, in which the reactions catalyzed by supported gold nanoparticles are described, particularly selectivity in organic synthesis. Special emphasis is made on the unique ability of gold catalysts to promote additions to selective hydrogenation, oxidation reaction, benzannulations, etc.

Keywords: Gold-nanoparticles, Chemical synthesis, Selectivity, Green chemistry.

1. Introduction:

Nanocatalysis is a rapidly growing field which involves the use of nanomaterials as catalysts for a variety of homogeneous and heterogeneous catalysis applications. Heterogeneous catalysis represents one of the oldest commercial practices of nanoscience; nanoparticles of metals, semiconductors, oxides, and other compounds have been widely used for important chemical reactions. Benefits of nanocatalysts in the chemical industry are as follows:

- i) Increased selectivity and activity of catalysts by controlling pore size and particle characteristics.
- ii) Replacement of precious metal catalysts by catalysts tailored at the nanoscale and use of base metals, thus improving chemical reactivity and reducing process costs.
- iii) Catalytic membranes by design that can remove unwanted molecules from gases or liquids by controlling the pore size and membrane characteristics.

There are so many nano-catalyst such as nano-Gold, nano-Palladium, nano-Silver, nano-Magnesium, nano-Zinc etc. are utilized in chemical synthesis. In this brief review I will discuss in the recent development in application of nano-Gold catalysis in chemical synthesis.

Catalysis using gold nanoparticles is a topic of much current interest. The catalytic activity of gold is directly related to the particle size in the nanometer length scale. The interest in catalysis by gold nanoparticles is the fact that it was believed for a long time that Au was devoid of any catalytic activity, until the exciting discovery that gold possessed

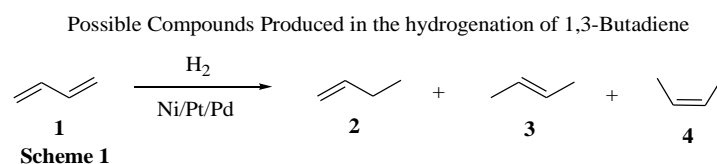
unique catalytic activity in the oxidative elimination of carbon monoxide^{1,2} and ethyne hydrochlorination³. Thus, understanding the reasons of this catalytic activity, expanding the scope to other reactions, optimizing and finding the reaction mechanisms for gold catalyzed reactions is a new field in heterogeneous catalysis. Finally, the importance of the research in gold nanoparticles comes from the fact that since very small colloidal or supported gold particles have to be prepared, one can imagine that catalysis by gold nanoparticles represent a bridge between homogeneous and heterogeneous catalysis.⁴ Today the “yellow metal” is considered as the catalyst of choice for many reactions such as oxidation of alcohols and aldehydes, epoxidation of propylene, hydrochlorination of ethyne, carbon-carbon bond formation, and so on.

2. Selective hydrogenation reactions:

Catalytic hydrogenation is one of the most important reactions extensively employed in industry. Traditionally, selective hydrogenation was catalyzed by VIII-X group metals such as Ni, Pd, Ru, and Pt. At the end of the 1980s catalyst researchers was awakened suddenly that gold metal was an active catalyst when its particle size was minimized into nanoscale and immobilized onto different supports with proper methodology. Thus, gold has been tested again in hydrogenation reactions. It acts as a very promising catalyst, especially in selective hydrogenation reactions.

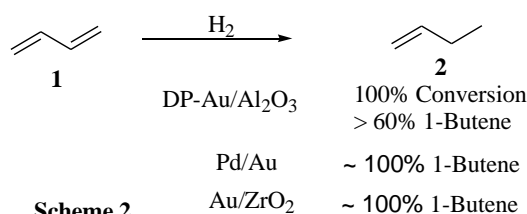
2.1 Hydrogenation of 1,3-Butadiene:

Usually selective hydrogenation of 1,3-butadiene **1** (C₄H₆) produced three isomers of butene (C₄H₈), *i.e.*, 1-butene **2**, *cis*-2-butene **3**, and *trans*-2-butene **4** (Scheme 1).



Okumura et al. prepared a series of alumina-immobilized nano-gold catalysts with different methods and tested their activity in 1,3-butadiene hydrogenation.⁵ Among all the catalysts Au/Al₂O₃ prepared with the deposition-precipitation method (DP) exhibited the best performance. Conversion of 1,3-butadiene was ~100%, and good selectivity to 1-butene was obtained, which was normally > 60%. The results suggested that hydrogenation of 1,3-butadiene over Au catalysts was somewhat insensitive to the Au particle size and composition of metal oxide support. Piccolo et al.⁶ reported that gold as an additive can promote the catalytic efficiency of Pd in the selective hydrogenation of 1,3-butadiene. For comparison, several catalysts including Au(111), Pd-Au(111), Pd-Au(110), and Pd(111) were prepared. All catalysts were characterized by LEED, AES, and LEIS. The study revealed that

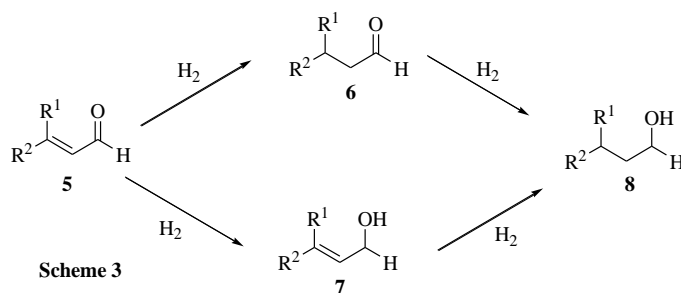
the bimetallic catalyst could improve the selectivity to butenes effectively, which reached ~100% on the Pd₇₀Au₃₀- (111) lattice plane. Gold may favor butene desorption from catalyst surface. Further, Xu *et al.* reported a simple method for preparing zirconia-supported nano-gold catalyst with low gold loading (<0.1%).^{7,8} This Au/ZrO₂ catalyst possessed high activity for selective hydrogenation of 1,3-butadiene without any butane by product formation. (Scheme 2)



Scheme 2

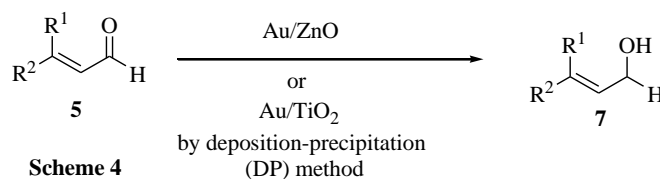
2.2 Hydrogenation of α,β -Unsaturated Aldehyde:

As a challenging topic in chemistry, selective hydrogenation of α,β -unsaturated aldehydes **5** to unsaturated alcohols **7** has been investigated for a long time^{9,10} (Scheme 3). However, normally, it was found that the major products are saturated aldehydes **6** or saturated alcohols **8** when conventional hydrogenation catalysts were used. This result is reasonable because hydrogenation of the C=C bond of R¹R²C=CH-CH=O is thermodynamically more favorable over hydrogenation of the C=O bond.⁹ Moreover, the C=C bond is more reactive than the C=O group due to kinetic reasons.



Scheme 3

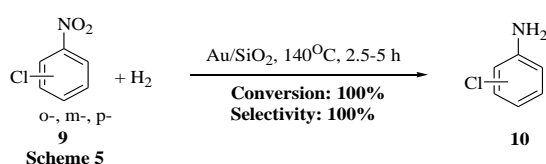
However, hydrogenation of crotonaldehyde **5** over Au/ZnO catalysts gave >80% crotyl alcohol **7** selectivity with 7.7% crotonaldehyde conversion.¹¹ Further, Touroude et al. presented the Au/TiO₂-catalyzed liquid-phase hydrogenation of crotonaldehyde.¹² The catalysts were prepared by the deposition-precipitation (DP) method with urea and pretreated under hydrogen or air flow before use. (Scheme 4)



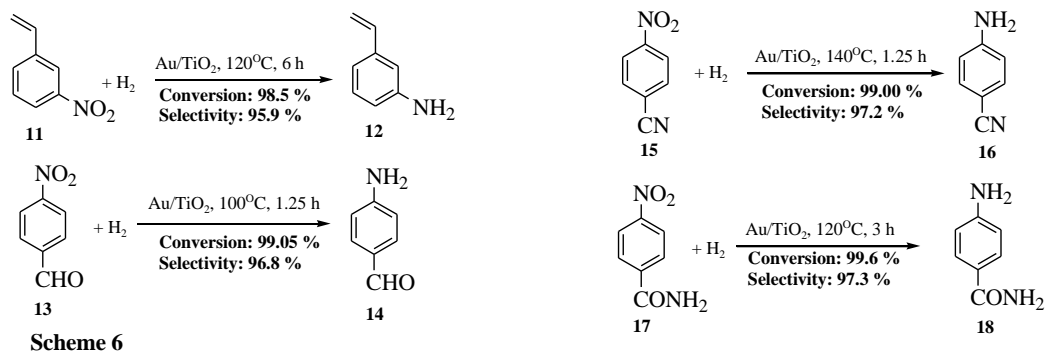
Scheme 4

2.3 Hydrogenation of Nitro Group:

Catalytic hydrogenation of chloronitrobenzenes has been studied extensively,¹³ but the hydrodechlorination reaction significantly limits the selectivity to chloroanilines. Nano-gold catalysis provides a new choice to solve this problem. One of the pioneering works of nano-gold-catalyzed selective reduction of chloronitrobenzenes was reported by Chen *et al.* using Au/SiO₂ catalyst.¹⁴ Under the optimized reaction conditions, the conversion of *o*-, *m*-, or *p*-chloronitrobenzene **9** and the selectivity to the corresponding chloroaniline **10** were all close to 100% at 140°C, 4.0 MPa H₂, and 2.5-5 h, (**Scheme 5**). This catalyst was active for hydrogenation of other nitrobenzenes with different functional groups.



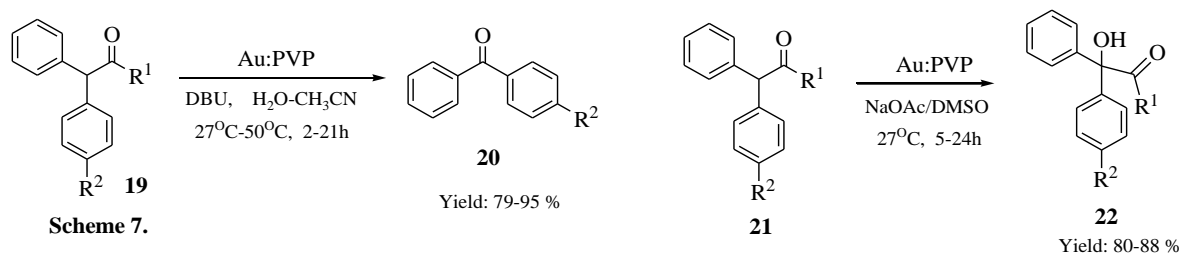
A general method about nano-gold-catalyzed selective hydrogenation of nitrobenzenes with excellent functional group tolerance was reported by Corma *et al.*¹⁵ Under the optimized reaction conditions, nitro compounds with olefin, aldehyde, nitrile, and amide groups were selectively hydrogenated into the corresponding amines with >99% conversion and >90% selectivity (**Scheme 6**).



3. Selective Oxidation Reactions:

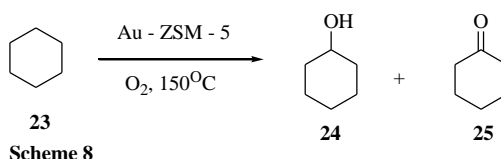
3. 1 Oxidation of Benzylic Ketones:

Under ambient conditions, selective oxidation of benzylic ketones was realized with good selectivity using the Au:PVP catalyst system,¹⁶ In the H₂O-CH₃CN system, 79-95% C-C bond oxidative cleavage products were obtained. When applying the reaction in DMSO, hydroxylation was the major reaction with 18-88% yields (**Scheme 7**).



3. 2 Oxidation of Cyclohexane:

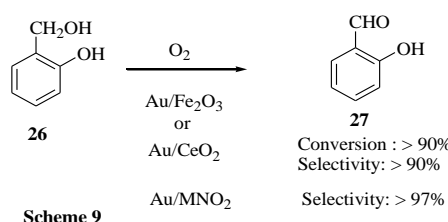
Selective oxidation of cyclohexane **23** to mixture of cyclohexanol **24** and cyclohexanone **25**, is still a challenge in chemical industry.¹⁷ Pioneering work on nanogold-catalyzed cyclohexane oxidation was reported by Suo *et al.* with Au/ZSM and Au/MCM-41 catalysts.¹⁸ Under optimized reaction conditions 92% selectivity to KA oil was obtained with up to 16% conversion using Au/ZSM-5 catalyst (**Scheme 8**).



3. 3 Oxidation of Alcohols:

3. 3.1 Monoalcohol Oxidation:

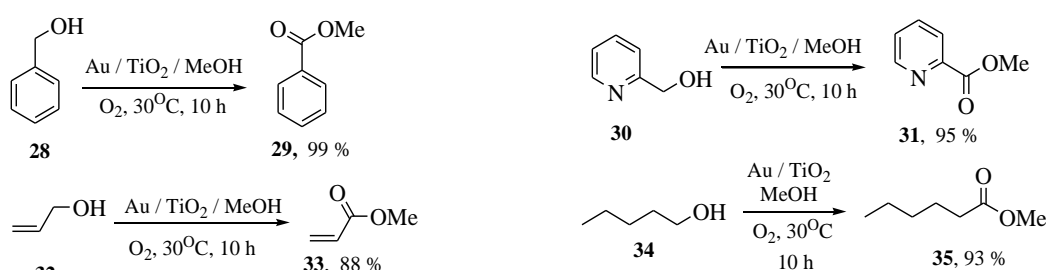
In early work, it was reported that gold on iron oxide was an effective catalyst for selective oxidation of *o*-hydroxybenzylalcohol to *o*-hydroxybenzaldehyde but the conversion and selectivity were not very high.¹⁹ A series of nano-gold catalysts immobilized by different inorganic supports were used in the benzyl alcohol oxidation to benzaldehyde under solvent-free conditions²⁰ (**Scheme 9**).



Addition of inorganic base could improve the catalytic efficiency of benzyl alcohol to benzaldehyde using Au/C catalyst.²¹ Under base-free conditions, the conversion and selectivity were ~10%. Under the same reaction conditions, with addition of 1 mol % NaOH as cocatalyst, the conversion and selectivity reached ~ 90%. The role of alkali in the reaction was ascribed to formation of Au-OH sites, which were helpful to promote alcohol oxidation.

3. 3. 2. Oxidative Esterification of Alcohols in Methanol:

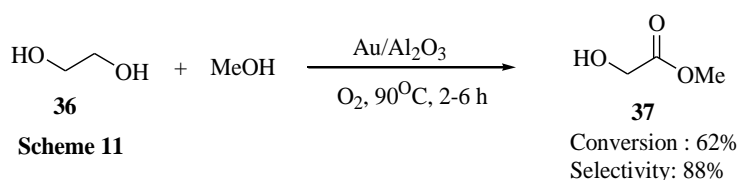
Oxidative esterification of alcohol is an important reaction in fine chemical synthesis. Addition of base is commonly crucial to gain high activity. Christensen *et al.* tried the oxidative esterification of various alcohols to the corresponding methyl esters with Au/TiO₂ as the catalyst and NaOCH₃ as the additive.²² Conversion of the alcohols and the selectivity to the corresponding methyl esters was 88-99 % . By this procedure they are able to convert benzyl alcohol **28** to methyl benzoate **29**, allyl alcohol **32** to methyl acrylate **33**, pantanol **34** to methyl pentanoate **35** (Scheme 10).



Scheme 10

3. 3. 3. Selective Oxidation of Ethylene Glycol in Methanol to Methyl Glycolate:

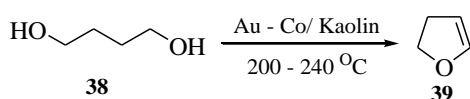
Selective oxidation and esterification of on one of the hydroxy group of glycol was possible by oxidative esterification of glycol using supported nano-gold catalyst and by this procedure methyl glycolate **37** was synthesized *via* ethylene glycol **36** oxidation in methanol using inorganic oxide (Al₂O₃)-supported nano-gold catalysts (Scheme 11).²³ The Au/Al₂O₃ catalyst exhibited high selectivity for the synthesis of methyl glycolate. After optimization, 88% selectivity and 62% conversion were obtained.



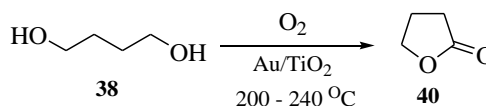
Scheme 11

3. 3. 4. Selective Oxidation of 1,4-Diols:

In the absence of oxygen 1,4-butanediol **38** was underwent cyclodehydration to 2,3-dihydrofuran **39** with > 60% yield using Au-Co/kaolin catalyst (Scheme 12).²⁴ By applying oxygen as oxidant, 1,4-butanediols **38** is transformed to lactones. γ -Butyrolactone **40** was produced quantitatively *via* Au/TiO₂-catalyzed selective oxidation of 1,4-butanediol **38** using air as oxidant at 140 °C (Scheme 13).²⁵ Here both cyclodehydration and oxidation occurs in single one pot operation. The catalyst was reused for 3 runs without deactivation.



Scheme 12

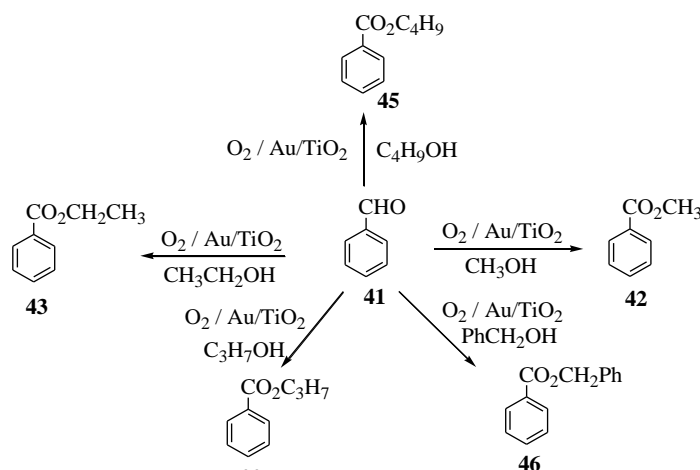


Scheme 13

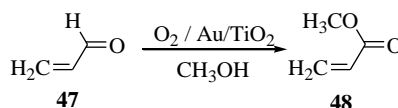
3. 4 Oxidation of Aldehyde:

Christensen et al. reported the Au/TiO_2 -catalyzed aerobic oxidative esterification of benzaldehyde **41** in different alcohols including methanol, ethanol, 1-propanol, 1-butanol, and benzyl alcohol, to obtain methyl benzoate **42**, ethyl benzoate **43**, propyl benzoate **44**, butyl benzoate **45**, benzyl benzoate **46**, and the yields to the esters were $> 80\%$ except for butyl benzoate **45**, which was $\sim 60\%$ (Scheme 14).²⁶

Further when oxidative esterification of acrolein **47** was carried out in methanol using Au/ZnO as catalyst and the yield of methyl acrylate **48** was $> 80\%$ (Scheme 15). Subsequently, mechanistic investigation of the gold-catalyzed aerobic oxidation of aldehydes was performed.²⁷



Scheme 14

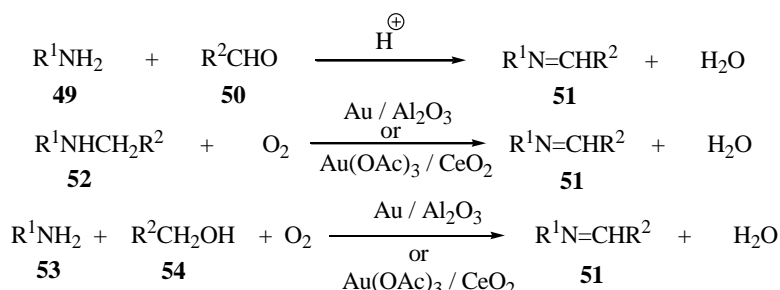


Scheme 15

3. 5. 1 Selective Oxidation of Amines and synthesis of imine:

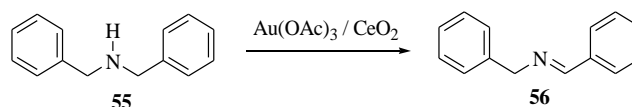
The classical methodology for imine **51** synthesis is through addition of amines **49** and carbonyl compounds **50**. Catalytic oxidation of N-alkyl amine **52** or oxidative imination of alcohol **54** with primary amine **53** should be one of the choices to develop a green and economic method to yield the corresponding imine **51**. Angelici *et al.* reported the oxidative dehydrogenation of secondary amines **52** in the presence of Au powders to produce imine **51** (Scheme 16).²⁸ Au loading is quite high in comparison with the common nano-gold catalyst

system. Normally, 1 g of Au powders was used for oxidation of 0.2 mmol of secondary amine, and up to 93% yield was obtained under optimized reaction conditions. An Au/Al₂O₃ catalyst was prepared and used for oxidative dehydrogenation of secondary amines, and up to 98% yield was obtained.²⁹



Scheme 16

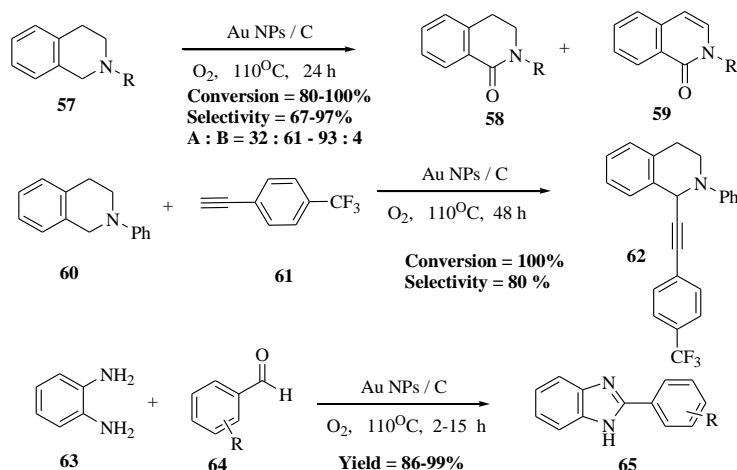
An interesting result was shown by Aschwanden *et. al.* using Au(OAc)₃ as catalyst or catalyst precursor for oxidation of dibenzylamine **55** to the corresponding imine **56** with 76-97% yield (Scheme 17).³⁰ TEM characterization suggested in-situ formation of nano-gold particles during reaction. High catalytic activity was achieved when Au(OAc)₃ was immobilized onto CeO₂ by adding CeO₂ to Au(OAc)₃ solution under vigorous stirring. Despite the simplicity of the method, the activity of the catalysts was comparable to other known catalysts for oxidative dehydrogenation of amines.



Scheme 17

3. 5. 2 Graphite-Supported Nano-Gold Catalyzed Oxidation of amine and synthesis of lactams:

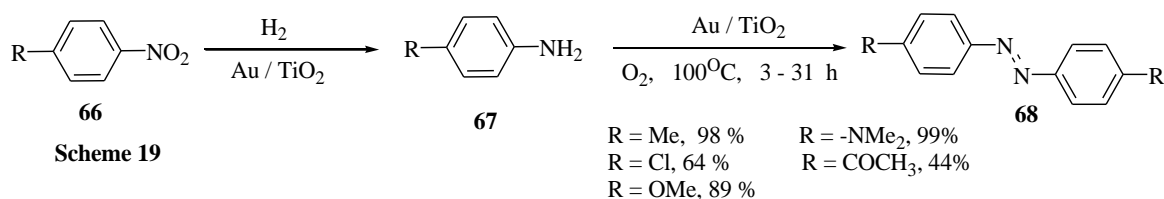
Che *et al.* reported the oxidation of cyclic tertiary amines **57** to the corresponding lactams **58**, **59** by graphite-supported nano-gold, *i.e.*, AuNPs/C, with up to 93% yield.³¹ When using 2-phenyl-1,2,3,4-tetrahydroisoquinoline **60** and 1-ethynyl-4-(trifluoromethyl)benzene **61** as starting materials, addition of nucleophile 1-ethynyl-4-(trifluoromethyl)benzene **61** to cationic iminium intermediate could occur and the yield of the desired product **62** was 80% (Scheme 18). Moreover, by applying the same AuNPs/C catalyst, benzimidazoles **65** were synthesized from oxidative coupling of benzaldehyde derivatives **64** and benzene-1,2- diamine **63** with 90-99% yields (Scheme 18).



Scheme 18

3.5.3 Aromatic Azo Compound Synthesis through Aniline Oxidation:

By applying the Au/TiO₂ catalyst, Corma *et al.* reported an effective and clean process for the synthesis of azobenzene derivative **68** via selective oxidation of anilines **67** in 22 h, with up to 98% yield.³² The azobenzene was synthesized via a one-pot/two-step reaction. A mixture of nitrobenzene **66** and Au/TiO₂ catalyst was treated with hydrogen to give aniline **67** with > 95% conversion and selectivity. Then the reaction mixture was exposed to molecular oxygen to afford azobenzene **68** with 92% yield (Scheme 19). This nano-gold catalyst has good generality for selective oxidation of anilines in high yield.



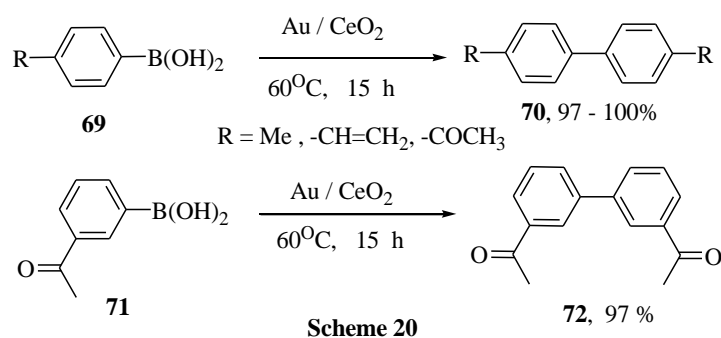
Scheme 19

4. Carbon-Carbon Bond Formation Reactions:

Carbon-carbon (C-C) bond formation reactions are one of the powerful and versatile tool in synthetic organic chemistry. Several Carbon-Carbon bond forming reaction have been discovered and their application in organic chemistry have been well documented in literature. The most important ones including the Aldol reaction³³, Reformatsky reaction,³⁴ Claisen rearrangement,³⁵ Friedel-Crafts reaction³⁶, radical reaction³⁷ and transition metal mediated reactions.³⁸ Traditionally, C-C bond formation was catalyzed by a homogeneous catalyst system,³⁹ which was complicated and difficult to be isolated and reused. Preparation and application of nanopalladium catalyst in Carbon-Carbon bond formation reactions have been studied extensively in the past decade, and great progress has been achieved.⁴⁰ Although application of nano-gold it is not as general as palladium catalyst, nano-gold exhibited specific activity in some cases.

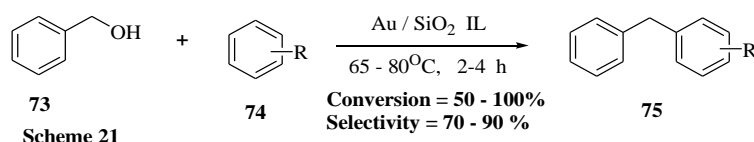
4.1 Homocoupling Reaction of Phenylboric Acid Derivatives:

Nano-goldcatalyzed homocoupling of phenylboric acid **69** was reported previously by Tsukuda *et al.* using PVP-stabilized nano-Au clusters with a 1-2 nm particle size⁴¹ with about 72% yield. Subsequently, Corma *et al.* successfully developed the Au/CeO₂-catalyzed homocoupling of phenylboric acid with high conversion and selectivity.⁴² The catalytic activity derived from CeO₂ or leached Au species was excluded carefully. In the blank experiments using ceria, no conversion was observed. This simple nano-gold catalyst was applied in the homocoupling reaction of phenylboric acid derivatives with 97-99% yield (Scheme 20).



4.2 Benzylation by Benzyl Alcohol:

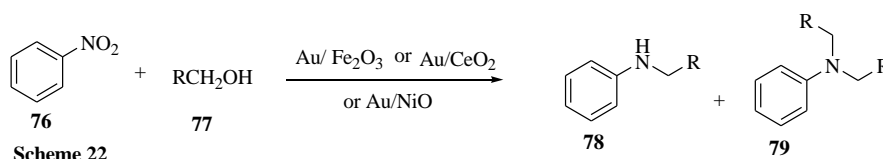
Benylation of aromatic compounds can be possible using benzyl alcohol **73** as the alkylation reagent was catalyzed by Au/SiO₂,⁴³ The key step to achieve the highly active catalyst was using ionic liquid [C₄mim][NTf₂] as the deposition medium for preparation of nano-gold catalyst. Applying the alkylation of toluene with benzyl alcohol as a model reaction, 84.1% benzyl alcohol conversion and 92.9% selectivity to benzyl toluene was obtained with 1.5% Au/SiO₂ IL, which was prepared in ionic liquid [C₄mim][NTf₂], as catalyst (Scheme 21).



5. C-N Bond Formation Reaction:

5. 1 Amination Reactions:

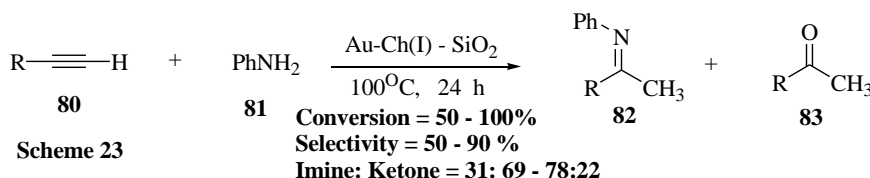
The one-pot reductive amination of nitro compounds **76** with alcohols **77** could progress well using nano-gold catalysts without additional organic ligand and inorganic base.⁴⁴ Several metal oxide-supported nano-gold catalysts such as Au/ Fe₂O₃, Au/CeO₂, Au/NiO, and Au/Co₃O₄ were used in the reaction, and Au/Fe₂O₃ or NiO exhibited the best performance (Scheme 22).



Scheme 22

5.2 C-N Bond formation by Nucleophilic Addition: Hydroamination of 1-Octyne to Yield Amine and Ketone:

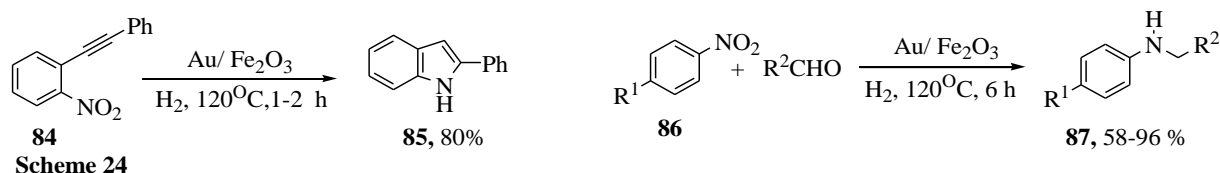
It was found that nano-gold supported on polysaccharide (chitosan)/SiO₂ (Ch/SiO₂) was an effective catalyst for regioselective hydroamination of alkynes in the absence of acid promoter and under inert atmosphere.⁴⁵ Au- Ch/SiO₂ was prepared through deposition of chitosan onto SiO₂ to gain Ch/SiO₂, and then gold species was deposited onto Ch/ SiO₂. This Au-Ch/SiO₂ catalyst was active for hydroamination of alkynes **81** to form an amine **82** and ketone **83** after hydrolysis. The hydroamination reactions of different anilines on terminal alkynes **80** could achieve 43-91% yields of the imine **82** and the ketone **83** products (Scheme 23).



Scheme 23

5.3 One-Pot Synthesis of Indoles and N-Alkylated Anilines from Nitrobenzenes:

Tokunaga *et al.* reported the one-pot synthesis of indoles derivatives **85** and aniline derivatives **87** catalyzed by Au/Fe₂O₃ under hydrogenation conditions,⁴⁶ Under optimized reaction conditions the isolated yield of 2-phenyl-1H-indole reached 87%. When an intramolecular reductive amination was performed with 2-(2- nitrophenyl)acetaldehyde **84**, indole was formed in 71% yield. This catalyst is active for nitrobenzene reduction-reductive amination reactions, which normally gave ~80-90% yield to the desired N-alkylated aniline **87** (Scheme 24).

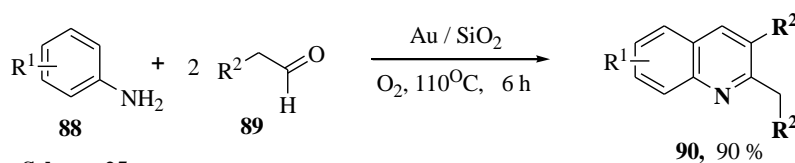


Scheme 24

5.4 AuNPs/SiO₂-Catalyzed One-Pot, Tandem Aerobic Oxidative Cyclization of Anilines with Aldehydes to Quinolines:

Recently, Che *et al.* reported the synthesis of quinoline **90** via the one-pot, tandem aerobic oxidative cyclization of anilines **88** with aldehydes **89** using Au/SiO₂ catalyst.⁴⁷ A series of quinoline derivatives with different substituent groups was successfully synthesized with up

to 95% ¹H NMR yield. The catalyst was recovered and reused for 7 runs without any deactivation (**Scheme 25**).



Scheme 25

6. Conclusion:

Since the beginning of nano-gold catalysis in fine chemicals synthesis at the end of the 1980s, more than 20 years have passed and many excellent studies have been done. A unique catalyst was discovered for elimination of environmentally harmful compounds such as carbon monoxide, nitrogen oxides, ozone, halocarbons, sulfur dioxide, dioxins, and volatile organic compounds (VOC). Several important reactions that could not proceed well with traditional noble metal catalysts such as Pd, Ru, and Rh, etc., were realized by gold catalysis. Increase the range of application to industrially interesting chemical reactions, nano-gold catalysis can play a significant role in the development of green chemistry and green technology. It offers new opportunities in developing sustainable chemical industry.

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FIGHTING CHILD MARRIAGE: A CASE OF CASH TRANSFER SCHEME I.E. 'KANYASHREE PRAKALPA' IN WEST BENGAL

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Abstract:

A longstanding problem of girl child marriage is still being practice in huge number especially in developing and poor countries. South Asia is considered as epicentre of this social evil practice. Within south Asia, India and within India West Bengal's place in girl child marriage is very alarming. Lot of initiations were undertaken either during British colonial rule or in the post independent era in collaboration of number of public and private agencies, but this problem is still existing. In 2013, the Government of West Bengal launched a cash transfer scheme known as '**Kanyashree Prakalpa**' aiming encouraging girl education and fighting girl child marriage. Date suggests a lesser number of girl child marriages in recent past, but West Bengal still has to go a long way to eliminate such practice. This paper evaluates policy of fighting girl child marriage in West Bengal.

Key Words: Girls empowerment, '**Kanyashree Prakalpa**', Girl Child Marriage

Introduction:

Discrimination of girls/women is being done through several ways in India. In day to day life large numbers of cases are being reported where girls/women are being subjected of minor or major violence in everyday life. Despite their massive success at par with male in almost every field, Indian society is yet very hesitant to change negative perception of considering them as burden in Indian society. As a result, Indian does have evil practice of wishing only male child not baby girl in the family and tendency of killing girl child even before birth. Discrimination between girl and boy in a family can witnessed through several ways like distribution of food stuff, access of education, freedom space, deciding age of marriage etc. Thousands of lakh of Girls child always given lesser food share in compare to boy in a family. In such cases, girls are being force into child marriage, which always results into fatal consequences in their life.

Generally child marriage means a marriage of individuals who marry before the minimum legal age, which 18 years for girls & 21 years for boys. Convention on the Rights of the Child (CRC) refers to child marriage is a marriage of a child younger than 18 years old. Child marriage occurs particularly in developing countries in Sub-Sahara Africa, Latin America, and South& South-East Asia. Almost half of the child marriages occur globally in South Asia. India is one of the countries in this region where girl child marriage is an unbending social problem. As per the National Family Health Survey (NFHS, 2005-06) a

slight improvement occurs during last two decades in the prevalence on child marriage in India but the fact is that the improvement occurs mainly in urban areas, the situation in rural India remains as it was. The incidence of child marriage in rural areas is alarming as it stands 52%, when compared to urban areas 28%. Data shows, child marriage is common in India prevalence highest in Bihar, Rajasthan, Jharkhand, UP, MP, Chhattisgarh, AP & West Bengal (NFHS-3).

According to UNICEF, 47% of girls are married by 18 years of age & 18% are married by 15 years of age. Majority of girls who were married below 18 years are from poor & below poverty line families. These marriages are often performed without the consent of the girls involved in the marriage. Indian law has made child marriage illegal, but it is still widely practiced across the nation. The highest rates are seen particularly in the rural states in India. In most cases young girls get married off to older men, when they are still children. Child marriages must be viewed within a context of force & coercion, involving pressure & children's lack of choice or capacity to give their full consent.

Many factors are responsible for child marriage. First, Child marriage is rooted in gender inequality & the belief that girls are inferior to boys. In many communities girls are seen as a burden on their family. Families closely guard their daughter's sexuality & protect the family honour. Second, child marriage is a traditional practice and it has been practicing for generations after generations. In some communities, when girls start to mature they become women in the eyes of the community. Marriage is the next step to giving a girl her status as a wife & mother. People feel that the traditions and norms are stronger than the law which leads child marriage. More than half of girls, those are the case of child marriage, belongs from the poorest families in the developing countries. Giving a daughter in marriage allows parents to reduce family expenses. Female children are often denied equal access to common resources & victimized by poverty of the family. Society does have perception that a married woman is safer against offenses than unmarried women. Many parents marry their daughters early because they feel her safety in areas where girls are at high risk of harassment & physical or sexual assault. To be secure from offences, assaults, parents are in a hasty to give away girl in marriage soon after she attains puberty or earlier. In all developing as well as poor countries female receive less education and they are treated as burden on the family economy. Due to this discrimination, girls are given less or no priority. If girl is educated groom should be more educated than bride then more dowries are required. Educated girls are increasing marriage expenditure. So people think it is easier to get marriage of girl soon after attaining puberty or even before at the age of 13 or 14 than to educate her.

Likewise in rest of world, India has a long history of fighting such discrimination in the society. Prior to India's independence, British regime as well as lot of other forces i.e.

social reform movements, this is outside government forces, worked for upliftment of girls/women including fighting against social evil practice of child marriage. But total success against child marriage and bringing girl at par with boy was not achieved. In such circumstances, Indian government as well as others undertook lot of efforts to fight against such social evil and bring women/grils equal to male. At government level, the National Ministry of Women & Child Development, as the nodal agency for women & children has developed a convergent national strategy & a plan of action on child marriage to guide all states to prevent the problem. Key components of the action plan include: law enforcement, quality education, social norms, empowering adolescents, sharing knowledge and monitoring. The government of India is also implementing national programmes aimed at protecting & promoting the development of child, while states are supporting these initiatives through states level schemes. Many of the programmes focus on cash transfer schemes to keep girls in school (UNICEF). The “Beti Bachao Beti Padhao” scheme was launched by the Prime Minister, Narendra Modi on 22nd January 2015. It is a social campaign of the Government of India that aims to generate awareness & improve the efficiency of welfare services intended for girls.

Likewise Central governments, state governments too took lot of initiations to work of upliftment of girl child. One of the strategies of such initiations is too help girl child while making cash transfer aiming to felicitate girl education. Many states government have launched conditional cash transfer scheme to hold girls child in school for delaying their marriageable age. Rajasthan government lunched, ‘Raj Lakshmi Scheme’ in 1992. Haryana initiated ‘Apni Beti Apni Dhan’ in 1994. This was the first conditional cash transfer scheme which provides Rs 500/- to the mother on the birth of a girls to cover her post-delivery needs. Further the government invests Rs 2500/- in the girls name that can be cashed Rs 25000/- when she reached in 18 years. Karnataka lunched the ‘Bhagyalaxmi scheme’ in 2004. Delhi introduced ‘Ladli Yojana’ & Madhya Pradesh introduced ‘Ladli Laxmi Yojana’.

Cash Transfer Scheme i.e. ‘Kanyashree Prakalpa’ in West Bengal

The government of West Bengal lunched ‘Kanyashree Prakalpa’ a conditional cash transfer scheme for girls’ students. It provides Rs 500/- per students per year from class viii to xii & provides Rs 25000/- one time for the girls students at the age of 18. Only unmarried girls can get benefits of this scheme. Above all the schemes has been delayed the age of marriage for girls to prevent early marriages (K. guideline, 2013). Department of Women Development and Social Welfare have done regular monitoring activities. They have commissioned several independent assessment to provide feedback into the schemes designed and implementation. The assessment conducted in September 2014 in twelve schools in six districts showed that attendance rate has improved from 72% in 2011-12 to 75% in 2013-14

while 73 cases of child marriage were identified by schools. Instituted in 2013, Kanyashree Prakalpa is a conditional cash-transfer scheme aimed at improving the status and well-being of the girlchild. Official statistics say there are around 41.2 lakh beneficiaries (as of July 25, 2017) of the scheme, implemented through 15,826 institutes and schools. West Bengal was a ripe case for such a scheme. Although child marriage is prohibited by law, the State was among the top five when it came to early marriages. Further, in districts such as Murshidabad, Birbhum, Malda and Purulia, every second girlchild was found married off before 18. These are also districts where trafficking of girls is fairly common. Now, National Family Health Survey statistics show that the number of women married before 18 has dropped from 53.3% in 2004-05 to 40.7% in 2015-16, though still above the national average of 26.8%. Experts say the launch of the cash incentive scheme has convinced many families to send their daughters to school and also delay their marriage (the scheme offers a one-time grant of ₹25,000, apart from annual scholarships, when the girl turns 18 and if she is studying in school or undergoing vocational training).

In 2013-14 54 cases have been reported. The assessment conducted in June 2015 in selected schools in the districts of Malda, Purulia and North 24 Parganas suggested that because of implementation of the Kanyashree scheme school enrolments had marginally increased in October 2013 while dropouts had significantly reduced. While 132 cases of child marriage were identified by schools in 2013-14, in subsequent academic year only 89 cases were identified.

During the period 2013-15 the Kanyashree scheme generated unprecedented enthusiasm and good will and it became a household word. The huge response from the bottom-up and the leadership and commitment from the top made the scheme vibrant and sustainable. To become a Kanyashree girl is a matter of prestige and parents of Kanyashree girls speak less of their marriages and more of other achievements their daughters can aim for. In the year 2015-16, significant policy changes were made to strengthen the scheme's design and implementation. The annual scholarship amount enhanced from RS 500/- to RS 750/-. While Kanyashree's enrolments have exceeded expected targets, in each and every district Kanyashree.

The UN has awarded a scheme by the West Bengal government aimed at promoting girls' education with its highest Public Service Award. 'Kanyashree Prakalpa' scheme was chosen among 552 projects from 62 countries which were nominated for the award (The Hindu, 5th August, 2017). The scheme has motivated young girls, especially in the rural and semi-urban areas, and encouraged them to stand up for themselves. In many places, Kanyashree Sanghas (associations) have been formed and according to reports, these are now the first line of defence against child marriages. The sanghas also help identify girls who have dropped out of school.

Conclusions:

Child marriage is one of the worst practices in West Bengal that put evil effects on the society and worst effect on girl health. The government of West Bengal is talking number of initiations the most notably the Cash Transfer Scheme i.e. 'Kanyashree Prakalpa'. Good sign of decreasing number of child marriage from 53.3% in 2004-05 to 40.7% in 2015-16, though still above the national average of 26.8% is coming out. But still lots of efforts are supposed to be done so that child marriage of any form will not be practiced. For this task, the state of West Bengal has to work closely with various stake holders. The government of India has taken various constitutional & legal policies to prevent child marriage. Partnerships with government and civil society are a crucial part of these efforts but much more can be done. The initiatives of the civil societies, NGOs are essential to remove child marriage in India and off course in West Bengal.

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SUPERSTITIOUS ATTITUDE OF RURAL FEMALE TEACHERS AND URBAN FEMALE TEACHERS IN SPECIAL RELATION TO THEIR MENTAL HEALTH

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ABSTRACT

This study was conducted to study the impact of superstitious attitude on the mental health of women Teachers. The sample consisted of 200 women teachers belonging to rural and urban area from Ludhiana district of Punjab state. Superstitious attitude scale developed by Shailja Bhagwat was used to collect data. The statistical techniques such as Mean, Standard-Deviation, and t-test and coefficient of correlation were employed. The results revealed that there exists a significant difference in superstitious attitude and mental health of rural and urban women teachers and also there is a significant but inverse relationship between superstitious attitude and mental health of women teachers.

This study was conducted to study the impact of superstitious attitude on the mental health of women Teachers. The sample consisted of 200 women teachers belonging to rural and urban area from Ludhiana district of Punjab state. Superstitious attitude scale developed by Shailja Bhagwat was used to collect data. The statistical techniques such as Mean, Standard-Deviation, and t-test and coefficient of correlation were employed. The results revealed that there exists a significant difference in superstitious attitude and mental health of rural and urban women teachers and also there is a significant but inverse relationship between superstitious attitude and mental health of women teachers.

KEYWORDS : Superstitious attitude, mental health, women teachers.

INTRODUCTION:

Superstition is an old Concept. It has thrived in all cultures. The world has never been free of superstitions at any stage in the history. In fact, this is one thing that has been common to all cultures. Not many would share Edmund Burke's observation that Superstition is the religion of feeble minds. Even some of the best minds among philosophers and politicians have been superstitious. Generally speaking, superstitions are more prevalent in unenlightened or tribal cultures than in advanced culture, which means that ignorance and superstitions have a close relationship. Due to superstitions and wrong beliefs man becomes idle and is worried about the occurrence of certain events which he considers bad. He is not willing to try to understand situation properly. He is inclined to see the situation fallaciously

and believes that coming events cast their shadows before. It is rather difficult to break the bonds of such beliefs. It has been said that there is no remedy to do away with this superstitious way of thinking.

A superstition is an irrational or invalid belief about the relation between the certain actions (often behaviours) and other action such as fear of the number of 13. The word 'superstition' is derived from Latin word 'Superstitio.' The literal meaning of the word "Superstition" indicates "Irrational fear" of or "Unreasonable belief". It means we believe in something without considering whether it is reasonable or not.

Webster's Dictionary(1975) defines superstition as 'any belief or attitude that is inconsistent with the known laws of science but is generally considered in the particular society as true and rational such as belief in charms, omens and supernatural power etc.'

Superstitious attitude is generally based on mysterious and irrational fear of unknown. Instead of having scientific attitude towards life, people take decisions totally based on superstitions. They do not think rationally and logically and thus take wrong decisions. Such attitude makes man totally rely or dependent on their fate which in turn has effect on their physical and mental health. Like Physical health, mental health is also an aspect of the totality of an individual. It is a combined outcome of five types of health i.e. physical, emotional, moral, spiritual and social health. Mental health is main aspect of the total health of a person because it is both cause and effect of the other types of health. There are mainly three aspects of an individual which are very useful to maintain good mental health.

(i) Right thoughts

(ii) Right attitude

(iii) Right actions

Hadfield (1952) has clearly defined mental health as 'the full and harmonious functioning of the whole personality.' Mental health can also be called as the process of human self realization, self satisfaction and full existence. Mental health of a person among other things is chiefly concerned with his total sense of growth and development, adjustment, peace, success, happiness and effective membership of group or community. A careful review of literature shows that many researchers have studied superstitious attitude and mental health but none has observed the impact of superstitious attitude on mental health. However, **Gupta (1999)** found that law students were more prone to superstitions in comparison to other professional students. There was no significant difference in the superstitious behaviour of medical and engineering students; male and female professional graduates in. Hostellers were found to be more superstitious than day scholars. **Kaur,M.**

(2005) conducted a study on 'Mental health as related to 'Teacher Adjustment' and found that there is a significant relationship between Mental Health and adjustment of teachers.

JUSTIFICATION OF THE STUDY:

According to Indian Constitution (51A), it is a citizen's fundamental duty to evolve scientific temper, humanism, spirit of enquiry and reform. Scientific temper and good mental health gives us the power of reasoning and reforms and it is directly against the idea of superstitious beliefs and practices. Mentally healthy person has far less tendency to fall victim of superstitions as compared to a person with poor mental health. Since, it is the teacher who has responsibility to develop scientific attitude among students to keep them away from superstitions resulting in an adverse affect on learners' health and personality. It is must that the teacher himself should have scientific temper and attitude. Since, it has been observed that women are more prone to such blind faiths, in the quest of solution to the problem of deep rooted superstitious beliefs, the investigator therefore believed that it is utmost important to look into attitude of Women teachers in particular, towards superstitions in relation to their mental health.

OBJECTIVES:

1. To study and compare superstitious attitude in rural and urban women teachers.
2. To study and compare mental health of rural and urban women teachers.
3. To find out the relationship between superstitious attitude and mental health of women teachers.
4. To find out the relationship between superstitious attitude and mental health of rural women teachers.
5. To find out the relationship between superstitious attitude and mental health of urban women teachers.

HYPOTHESES:

1. There exists no significant difference in superstitious attitude in rural and urban women teachers.
2. There exists no significant difference in mental health of rural and urban women teachers.
3. There exists no significant relationship between superstitious attitude and mental health of women teachers.

4. There exists no significant relationship between superstitious attitude and mental health of rural women teachers.
5. There exists no significant relationship between superstitious attitude and mental health of urban women teachers.

DESIGN OF THE STUDY:

Method and Sample:

The method of the present study was descriptive study and survey method was used to collect data. The sample of the study consisted of 200 Women teachers from Ludhiana district.

Tool Used:

1. Superstitions Attitude Scale by Dr. (Smt.) Shailaja Bhagwat (2006)
2. Mental Health Check-List by Pramod Kumar(1992)

Statistical techniques used:

Mean, Standard Deviation, t-value, coefficient of Correlation was computed.

INTERPRETATION AND ANALYSIS:

Table 1: Mean scores of superstitious attitude among rural and urban women teachers

Superstitious Attitude	N	Mean	S.D	SE	t-value	Level of Significance
Rural	100	64.28	10.33	1.60	2.50	Significant at 0.05 Level
Urban	100	60.29	12.15			

Table 1 shows mean scores of superstitious attitude among rural and urban women teachers are 64.28 and 60.29 respectively. S.D. of both groups is 10.33 and 12.15 respectively.

Obtained t-value, 2.50 is more than the table value and is significant at 0.05 level. This indicates that rural and urban women teachers differ significantly on the scores of superstitious attitude.

Therefore, **Hypothesis 1:** There exists no significant difference in superstitious attitude of rural and urban women teachers are rejected.

Table 2 : Mean scores of mental health of rural and urban women teachers

Mental Health	N	Mean	SD	SED	t-value	Level of Significance
Rural	100	24.52	5.07	0.75	2.56	Significant at 0.05 Levels
Urban	100	22.61	5.47			

Table 2 shows the mean scores of mental health of rural and urban women teachers are 24.52 and 22.61 respectively.

S.D. of both groups is 5.07 and 5.47 respectively. Obtained t-value is 2.56 is less than table value and is significant at 0.05 level. This indicates that rural and urban women teachers differ significantly on the scores of mental health. Therefore,

Hypothesis 2: There exists no significant difference in mental health of rural and urban women teachers is rejected.

Table 3: Relationship between superstitious attitude and mental health of women teachers

Section no.	Variable	N	'r'
3a.	Superstitious Attitude	200	-0.135
	Mental health	200	
3b.	Superstitious Attitude (Rural teachers)	100	-0.132
	Mental health(Rural teachers)	100	
3c.	Superstitious Attitude (Urban teachers)	100	-0.20
	Mental health (Urban teachers)	100	

Hypothesis 3: There exists no significant relationship between superstitious attitude and mental health of women teachers is rejected.

Section 3a of table 3 represents co-efficient of Correlation between superstitious attitude and mental health of women teachers. The value of r is -0.135 showing a significant but negative relationship between superstitious attitude and mental health of women teachers.

Section 3b of table 3 represents co- efficient of Correlation between superstitious attitude and mental health of rural women teachers. The value of 'r' is -0.132 showing a significant but negative relationship between superstitious attitude and mental health of rural women teachers.

Section 3c of table 3 represents co- efficient of Correlation between superstitious attitude and mental health of urban women teachers. The value of 'r' is -0.20 showing a significant but

negative relationship between superstitious attitude and mental health of urban women teachers.

Hypothesis 4: There exists no significant relationship between superstitious attitude and mental health of rural women teachers are rejected.

Hypothesis 5: There exists no significant relationship between superstitious attitude and mental health of urban women teachers are rejected.

RESULTS AND CONCLUSIONS:

The results can be summarized as:

1. Rural and urban women teachers differ significantly on scores of superstitious attitude. Rural teachers have been found more superstitious than urban teachers. This may be due to the effect of background and environment of rural teachers
2. Rural and urban women teachers differ significantly on scores of mental health. Rural teachers have been found to have poor mental health than urban teachers..
3. There is significant but inverse relationship between superstitious attitude and mental health of women teachers. Scores of superstitious attitude adversely affect scores of mental health.
4. There is significant but inverse relationship between superstitious attitude and mental health of rural women teachers.
5. There is significant but inverse relationship between superstitious attitude and mental health of urban women teachers.

EDUCATIONAL IMPLICATIONS:

The study can be beneficial for psychologists, guidance workers and counselors to understand superstitious attitude, causes and its effects among teachers particularly, women teachers.

Further, it will help them to devise strategies to combat superstitious attitude. It will also help them to find out ways to maintain good mental health. Since, the teachers act as a role model for their students, it will help the teachers & motivate them to adopt scientific thought and temperament to eliminate irrational thinking blind faith and prejudice among

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REPRESENTATION OF CORRUPTION IN MAINSTREAM MOVIES

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Abstract:

Movies are the most popular representations of reality in visual form. Different relevant social issues are discussed and analysed through movies. Corruption as an issue is not only a part of polity. It is an inseparable component of entire society. There are several types of corruption in developing societies like India. Among them most happening incidences are shown in the sphere of economy, polity, society as a whole. Each and every component is clearly present in popular movies. Examples can be cited from movies like Simabaddho, Criminal, [economic corruption], Aakhri rasta [political corruption], Hirok rajar deshe, Traffic signal [social corruption], Daman, Sholey [individual corruption], Aakhey [organized corruption] and several others. Use of corruption as a concept is not a new entry in the world of movies. There are many examples of old hit movies which are centered on corruption. Aaponjon is such an example. Actually the perspective of application has gone through a sea change during the last two decades. According to different sources from movies it can be said that the 'units of analysis' are mainly politicians, officials, policeman, business people, criminals and even common people. Movies can give some suggestions for controlling corruption. Restoration of Honesty [among politicians, officials and common people], maintenance of law and order [through court], change in value system, growth of civic sense, administrative as well as legislative measures are prescriptions given by movies. The fact is that movies are sometimes related with idealized picture. Reality is much more complicated. So that kind of presentation appears to be hypothetical as well as utopian to the viewers. The impact of realistic corruption can't be ignored by the world of movies. Hence commoners can gain some information of corruption from the sources of movies. It can be said that practical significances are associated with these kinds of movies undoubtedly.

KEY WORDS: CORRUPTION, MOVIES, LAW, IMPACT

Introduction:

Corruption is a common place event in today's world. Especially in developing countries the existence of corruption is seen in almost all spheres of life. In some cases corruption becomes a regular activity. In spite of its origin and cause, corruption is nothing other than a malpractice. Different social institutions are affected by corruption undoubtedly. Actually corruption is the abandonment of expected standard of behaviour by those in authority for the sake of unsanctioned personal advantage. It should be remembered that expected behaviour varies from one society to another. Thus the definition of corruption can't be fixed in social periphery. Contextualization is the determining factor here. Corruption as a phenomenon is not limited to political sphere only. All aspects of society are associated with different kinds of corruption. Economic as well as societal corruptions are well known to people in general. Yet there is increasing evidence of corruption on individual basis. So it can

be said that corruption can be collective as well as individualistic in terms of orientation. Movies are the most popular representation of reality through visual aid. Among all other mass media, movies occupy the top most position. Hence mainstream movies are at the apex of cultural hierarchy of popular culture. Eminent journalists and scholars express their concerns on the centrality of films in the Indian Diasporas worldwide. Movies are recognized as an art form and a medium of entertainment. Actually movies reflect a zone where the questions of nationalism, identity and culture come together as well as face to face. The influence of the first world is too prominent with supplanting native cultural norms for the global scenario. Economic liberalization has an immense impact in film production sector of the film industries of India with special mention to Bollywood. As a consequence a consumer centric, self reflexive, visually spectacular and nostalgic style of movie making becomes prevalent in India. This can be taken as an indication of shift of entire film industry into post modern territory. [Neelam: 2009]

Effects of social transmission of cinema are related to large media space. It includes symbiotic exchanges between long standing epic – mythological attributes of Indian popular cinema, visual idioms of MTV, consumer advertising, travel film, gadgetry and images of technology. Each and every aspect of social reality is represented in movies through its own semiotics. Corruption is no exception. Corruption in India is going through the phase of ‘filmization’. Modern Indian films are affected by metropolitan life styles, managerial codes of free market, individualism, consumer desire and non liberal imperatives of polity and government.[Basu:2005] In movies corruption is analyzed on the basis of types, causes and even remedies.

OBJECTIVES ---- There are some specific objectives in the present paper. These are –

- 1] To examine the way of representation of economic, political, social as well as individual corruption through mainstream movies,
- 2] To analyze the causes of corruption in movies,
- 3] To determine the units of analysis of corruption on the basis of different movies and
- 4] To discuss various suggestive measures to control corruption through movies.

METHODOLOGY: The research design used here is centred on explanation. The main aim is to highlight the description of causal explanation of various kinds of corruption with respect to mainstream movies. So, descriptive research design will be the most appropriate application here. The movies are selected on the basis of the existence of corruption. Hence purposive sampling method is used in this analysis.

EXISTENCE OF DIFFERENT TYPES OF CORRUPTION IN MAINSTREAM

MOVIES: Presence of corruption in different mainstream movies can be direct as well as indirect. There are several evidences of direct connection of movies and corruption. Political corruption is the most known sector in Indian scenario. Movies like *Andha kanun* [1983—director T. Rama Rao], *Aakhree Raasta* [1986—director Bhagyaraj], *Raajneeti* [2010 – director Prakash Jha], *No one kill Jessica* [2011- director Rajkumar Gupta] and *Bagh bandi khela* [1975 – director Pijush Basu] are such examples. Super hit movie *Zanjeer* [1973—director Prakash Mehra] portrays a story of a police officer who works outside the boundaries of law. This image is introduced as the ‘angry young man’ to the movie screen. This character portrayal focuses on a disaffected, cynical, violent and rebellious people. The hero is seen single handedly fighting with powerful businessmen, ineffectual and corrupted politicians. ‘It is the articulation of the anguish of the marginalized sector.’ [Rao: 2007] Economic corruption is an age old phenomenon in Indian society. This type of corruption is related with spicy filmy representation. Sometimes the treatments of the problems appear to be superficial from the aspect of reality. Sometimes this type of film turns into ‘masala movie’. It will be able to attract mass because of the familiarity of the problem. Examples are *Seemabaddha* [1971—director Satyajit Ray], *Guru* [2007 – director Mani Ratnam], *Dirty picture* [2011 – director Milan Luthria] and *Chaak De .India* [2007—director Shimit Amin]. *Namak Haram* [1973—director Hrishikesh Mukherjee] elaborates the fights for the cause of social justice and egalitarian principles. The context of the film is the labour rights after the passage of MRTP Act (1969) and Contract Labour Regulation and Abolition Act (1970). Rajyadhyaksha and Willemen (1973: 418) [referred in the writings of Neelam] analyse the movie as a ‘buddy melodrama in an industrial work black marketing and hoarding of essential commodities were highly paying illegal businesses of those days.’ Villains are black marketers in *Roti Kapra Aur Makan* [1974 – director Manoj Kumar]. In the movie *Saaransh* [1984—director Mahesh Bhatt] a portrayal of bureaucratic delay is clearly visible. Films like *Khalnayak* [1993—director Subhash Ghai], *Mr. India* [1987—director Shekhar Kapur] and *Roja* [1992—director Mani Ratnam] are well established with the issue of terrorism. Famous movie *Hare Rama Hare Krishna* [1971—director Dev Anand] can be seen as a strong plea against drugs.

Some movies are associated with holistic corruption. *Hirak Rajar Deshe* [1980 – director Satyajit Ray], *Traffic signal* [2007 – director Madhur Bhandarkar], *Page 3* [2005—director Madhur Bhandarkar] are instances of social corruption dealing with entire society. Sometimes, individual takes own initiative to punish the offenders. In such cases the individual normally has to break the rule. There is a clear chance of accepting corrupted way. In different movies these tendencies are shown as individual corruption. *Sholay* [1975 –

director Ramesh Sippi] and Daman [2001—director Kalpana Lajmi] are such examples. Corruption can be represented in an indirect manner. Famous stories of Feluda are translated in film language in such a way. ‘Joy Baba Felunath’ [1979—director Satyajit Ray], ‘Sonar Kella’ [1971—director Satyajit Ray], ‘Kailashe kelenkari’ [2007—director Sandip Ray] are related with this genre of corruption.

According to J. L. Gustafson ‘police corruption films have granted the public an intimate look into a very low visibility and mystifying phenomenon, shaping the way people think about the police and their deviant behaviour.’ Clarens [1997], Leitch [2002] and Rafter [2006] [referred in the article of Gustafson] have done serious research work on crime films. The procedural safeguards of the law and criminal justice system are disregarded by a vigilante cop film hero. To catch the criminals sometimes they have to adopt violent paths. Criminal cops are there also. The battle is taken place between police and criminals in vigilante cop films. In corrupt cop films the battle is done between morally correct and incorrect police. Both vigilante and corrupt cop film heroes fight the bad guys and both may resort to similar tactics, but in a corrupt cop film the traditional good guys (cop) become the bad guys with whom the hero must contend [Gustafson: 2007]. On the basis of a typical narrative pattern, it can be said that in corrupt cop film there is an honest or repentant cop as protagonist. Sometimes he has to fight with his department. It is observed that he has separated himself from his corrupt counterpart. Then the person begins to prepare plans to stop illegal activities. Urban background is logically associated with corrupt cop films. These types of films include large police department as well as organized crime. There are instances like battle with bureaucrats and influential people though battles with underworld are also commonplace phenomenon. Initially the focus of corrupt film was linked with macro set up of top brass collusion and organized criminal involvement. Recently the context has changed with the emphasis on smaller pockets of officers.

CAUSES OF DIFFERENT TYPES OF CORRUPTION USED IN MAINSTREAM MOVIES:

Incidences of political corruption are discussed by many examples. Rajneeti is all about the scenario of election. Here a close connection of correlates like corruption, money and power are visualized. Existence of instruments of corruption is very prominent. These are manipulation, cheating and treachery. So, the main cause of corruption here is the dysfunction of democratic system. Another problem is the lack of adequate machinery to deal with corruption. Maqbool [2004—director Bishal Bharadwaj] demonstrates the operation of a gangster through cooperation of cops and politicians. It is a reflection of current state of affair. The enforcement system was inactive. Cops play a strategic role so that the conflict begins to destroy the group. The members are fighting with each other. No one killed Jessica

has become an important part of the national Indian discourse on corruption. This movie is a landmark of anti corruption movement in India. [Bollywood and India's Anti corruption movement – Anita Joseph] Dibakar Banerjee's film 'shanghai' [2012] [adopted from a Greek novelist's work] is a story of revenge of a common man. His targets are those people who have money. Powerful people are exploiting the middle class people. Banerjee 'Indianised' the story. The central focus of the movie is corruption, the cause against which Anna Hazare has united the whole nation. According to Banerjee, there is a whole wave of corruption in the country because of some corrupt politicians who only work to serve their interest.

Corruption in terms of economy can be analyzed through several movies. Guru [2007] sets out for a debate on ethical practice in the industrial field. It focused on Indian situation of 1950 to 1980. This period was popularly known as pre liberalization period. During that period it was very difficult for a new entrepreneur to get a proper establishment. Indian trade world was dominated by a handful of rich and privileged. Only they got the license. They had the quotas. Unethical means can be used for the rise in business circuits. The story explains the fight against this kind of corruption. Dirty Picture is cantered on the easy process of getting fame in film world. This process crosses the limits of ethical consideration sometimes. Commercial attitude and money mindedness are the reasons behind this kind of corruption.

Corruption in a total social context can be illustrating parts of movies. In Page 3 a complete change of value system is marked with special reference to the world of media. Corruption in terms of relationships, interaction and entire life style can be subject of discussion here. Corporate as a specific issue based movie focuses on the corruption in various aspects of corporate culture. Hiraak Rajar Deshe is an excellent movie where whole society is under the pressure of corruption. Interlocking of economic and political power is taking place in the country. The nature of corruption becomes more complicated in presence of this linkage.

Corruption on the basis of individual situation is rare but there are some references in the movies. Daman is an example of individualistic corruption. The heroine is absolutely frustrated with the system of law and order. She took the revenge in her own initiative. Organized corruption can be explained by Apanjan [1968 – director Tapan Sinha] where group based quarrel is very common. Akheir [2002 – Vipul Amrutlal Shah] can be drawn as an example of organized as well as planned corruption.

In case indirect corruption causes are more or less similar. Joy Baba Felunath is related with an indirect fight between Feluda and an illegal business person. So, the reason of

corruption is definitely economic. In Sonar Kella Bhabanando is also associated with malpractice for the sake of acquiring wealth.

CONSEQUENCE:

Several consequences are visualized in movies depending on the content as well as the treatment of the script. There are some positive, negative and even neutral results of corruption. Nayak [2001—director S.Sankar] is centred on the story of a journalist who interviews the chief minister of the state. The journalist was made the C. M. of the state for one day only. He set up several toll free numbers for receiving complaints. Ultimately he became the chief minister of the state and took many measures to control the corruption. The consequence is mainly related to political activity. In this story the finite human attributes of human persona are heightened cinematically. As a result of this transformation an immanent image of a messianic hero of the city has emerged. 'It becomes a manifest leadership which is dispersed immediately and universally throughout the milieu'. [Neelam: 2009] It facilitates a decisive communication between the horizontal as well as multidirectional flows of social life. Shivaji can be seen on the screen as a problem solver with his cinematic presence. The existence is not anthropomorphic representation. It is the role of temporal power that brings about dynamic compacts between man and milieu. Foci are Shivaji with shanty town and Shivaji with bureaucratic corridors. Thus different aspects of corruption were analysed from several angles. Chak De India is associated with economic consequence. The story is based on reality of Indian sports scenario. Before some years Indian national women's hockey team had a problem. This issue was discussed in the film 'Chak de India'. Indian sports personalities [except cricketers] have to deal with corrupt officials. They face humiliation and poverty. The coach of Indian hockey team met a politician in Bangalore. The politician has a relative who ran a garment company. The coach asked him to donate tracksuits to the team. The person agreed on condition that the brand name will be featured prominently there. The coach did not accept his proposal. At last the team has got recognition after playing the match exceptionally well. Thus this kind of corruption is ended with fair play. This is an extraordinary evidence of not only economic corruption but sports related corruption also. Daman is an example of individual initiative against corruption. Here the main character has taken drastic step against her unruly and corrupt husband. She killed him herself. The message brought by the movie is focused around the fact that all kinds of exploitation end with the establishment of justice. If justice does not come from law then individual can take necessary step to control corruption. Consequences in terms of total society are analyzed in Hirak Rajar Deshe. The story narrates a vivid description about exploitation of common mass. People are annoyed with the ruler and the associates as well as with the bureaucrats. They all participate consciously to make an unholy nexus of power. Goopi and Bagha give

them sufficient courage to stand against the ruling sector. Actually people are completely disillusioned about the political as well as economic authority. Their apathy is consolidated under the effective guidance of Goopi – Bagha. Their agitation ultimately takes the shape of a revolution. At the end there is a splendid sequence of tag of war. The real climax lies with the fact that Hirak raja himself joins the revolutionaries to break his statue. This could be taken as a symbolic representation of revenge. Hirak Rajar Deshe explains corruption as dispersion from the ethical factor. Hence the consequence is viewed through the occurrence of revolution. Ideally after revolution peace begins to come in the surface. Thus Hirak Rajar Deshe concludes with a note of harmony. Sonar Kella ends with punishment of the corrupt psychologist Bhabanando. The honest psychologist Dr. Hazra meets Mukul, Feluda and Topse. This proves honesty wins over corruption. In Joy Baba Felunath end comes with revenge of feluda against Maganlal meghraj. Feluda catches Machlibaba and corrupt business person Maganlal with the help of police. Thus faith on law and order is established with individual effort of Feluda to combat corruption.

Corruption can be indirectly happened in the cultural sphere also. Several films like Dilwale Dulhaniya Le Jayenge [1995—director Aditya Chopra], Kuch Kuch Hota Hai [1998—director Karan Johar], Kabhi Kushi Kabhi Gham and so on show two opposite portrayal. NRI s are sometimes corrupted by westernized culture. As a result of this they can be completely detached from their motherland. In some other movies it is observed that self reformation and self realization have instigated a feeling of yearning to return to their cultural origin. Such depictions are largely based on stereo types and caricatures. The resultant factor is the fixation of non resident Indian as a homogenized representation. Sanjay Srivastava (1998) says that Bollywood films delude themselves by creating a Westernized Indian- ness, a real ‘identity which is fabricated and contradictory to actual identity’ [Srivastava: 196]. [Referred in the writings of Neelam]. According to Satyajit Ray ‘popular Indian films had in some ways become a source of shame. He blamed the negative influence of American cinema, which depicted a way of life – so utterly at variance with that of Indians, and instead presented Italian neo- realism as a positive role model, arguing that it would be impossible for India to ever achieve Hollywood’s high- tech polish.’ He opined that ‘what Indian cinema needed was not more gloss, but integrity and a more intelligent appreciation of the limitation of the medium, and that it needed to adopt more unique and recognizably Indian iconography.’ [Satyajit Ray: 1976]. The rate of corruption is increasing day by day. Hrishikesh Mukherjee’s Satyakam [1969] was vocal against the rising poison of corruption.

UNITS OF CORRUPTION:

Units of corruption can be a common person [from any profession] like doctor, engineer, journalist, teacher and so. Sources from different movies confirm the fact. Common

place evidences of corruption are shown through police, politician, and business people. There are some exceptional presences of character related to corruption. Birinchibaba [Mahapurush 1965—director Satyajit Ray] is such an example of religious corruption. Bhaskaran, Director of Intelligence Department, of Kaahani [2012—director Sujay Ghosh] is held responsible for helping Milan Damji, the enemy of the country. Corruption is linked with Intelligence Bureau also. So, the unit of corruption can be anyone and everyone.

CONTROLLING MEASURE:

Honesty among politicians, public servants and business people will be the first and foremost need. The existence of honest business people is seen frequently in movies like Kabhi Khushi Kabhe Gham [2001—director Karan Johar], Movies like Vir Zaara [2004—director Yash Chopra] highlight the strength of legal matter with honest lawyer. Social values are changing rapidly. Especially young people are very conscious about corruption related activity. The role of young journalist in Antaheen [2009 – director Aniruddha Raychowdhury] portrays such a picture. General public awareness can control corruption most efficiently. Goopi Gyne Bagha Byne [1969—director Satyajit Ray] is such a movie. Role of legislative measure can be important in this matter. The scope of showing such mechanism is limited in film. Same is true for administrative mechanism. Normally movies can give ideas about the controlling aspects of corruption.

CONCLUSION:

Movies are mostly representations of imaginary world. Some movies are linked with reality based events undoubtedly. In case of corruption both of these aspects are present. Especially types of corruption are related to modern society. Problem lies with controlling measure of corruption. Most of the movies end with a happy note. Sometimes this happiness becomes an imposition. It can be levelled as filmy solution of real problem. Movies portray an ideal picture with ideal people and ideal situation. The reason is that common people want some dramatic messages from the movies. Controlling measures of corruption are dealt with these floating and unreal solutions. In reality control of corruption is not so easy. Viewers know that reality is much more complicated. Movies are associated with twisted portrayal of punishment. Viewers like to have a rosy picture though hypothetical as well as unrealistic to refrain from the tough fight of life. The impact of realistic corruption can't be ignored by the world of movies. Hence commoners can gain some information of corruption from the sources of movies. It can be said that practical significances are associated with these kinds of movies undoubtedly.

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ETHICS OF GAUTAM BUDDHA: VALUABLE ROLE IN PRESENT SCENARIO

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Abstract:

Today's Globalized world is full of social evils viz. Violence, Crime, Drug Addiction, Women Abuse, Child Labour, Poverty, Homelessness, Unemployment, Uneducated, etc. Buddha taught ethical principles regarding the social, economic, and political well-being of people, the main theme in Buddhism was personal liberation from suffering was the centre of attraction. Since social and political conditions have changed tremendously in the present world scenario. I maintain that Buddhism needs a structural vision and a new emphasis on Buddhist ethics to counter new emerging challenges. Buddhist social ethics must do more than advocate mindfulness and the ideal of simplicity. To construct a healthier Buddhist society requires a change of the economic structure into one or more local decentralization, with moral and cultural values ethics adapted to a contemporary context. Only then can Buddhist social ethics take root in society as it did in the historical past. Buddhist teachings state how one could fall into such an error by reason of attachment (*chada*), hatred (*dosa*), fear (*bhaya*), and ignorance (*moha*). These four are regarded as four ways of falling into injustice.¹ Until we see that way to be free from suffering is through mindfulness and nonviolence, there is little possibility of overcoming suffering, either personally or socially.

From Buddhist ethical perspective, the solution of modern problems is three fold. First, Buddhist base communities should be linked, forming a grass-roots movement to combat social injustice. Second, Buddhist intellectuals should learn more from the oppressed. Third, a more just society could be obtained on the national level by pushing for political reforms. It is noteworthy that the Dalai Lama saw *"nothing wrong with material progress provided man takes precedence over progress. In fact it has been my firm belief that in order to solve human problems in all their dimensions we must be able to combine and harmonize external material progress with inner mental development."*²

Introduction:

In this article will deal with a relatively Buddhist social ethics and how it's develop into a well organized discipline for reduce the crises from the new global society. The spirited revival of interest in Buddhism is due to a variety of reasons and foremost among these are the contradictions arising from the juxtaposition of present day scientific achievements and the conventional religious systems, fractured with cults, sects, arid fundamentalism and the profound disenchantment with the new cultural ethos of unfettered greed and selfishness in post industrial societies. There is no doubt that Buddhism is a profoundly subversive force in post modern consumer society. Those who think that Buddhism is interested only in lofty ideals, high moral and philosophical thought, and ignores any social and economic welfare of

people, are wrong. The Buddha was interested in the happiness of all being. To him happiness was not possible without leading a pure life based on moral and spiritual principles. But he knew that leading such a life was hard in unfavourable material and social conditions.

Buddha taught ethical principles regarding the social, economic, and political well-being of people, the main theme in Buddhism was personal liberation from suffering was the centre of attraction. Since social and political conditions have changed tremendously in the present world scenario. I maintain that Buddhism needs a structural vision and a new emphasis on Buddhist ethics to counter new emerging challenges. Buddhist social ethics must do more than advocate mindfulness and the ideal of simplicity. To construct a healthier Buddhist society requires a change of the economic structure into one or more local decentralization, with moral and cultural values ethics adapted to a contemporary context. Only then can Buddhist social ethics take root in society as it did in the historical past. We have to translate his essential teaching to address the problems of today. Until we see that way to be free from suffering is through mindfulness and nonviolence, there is little possibility of overcoming suffering, either personally or socially.

Today's Globalized world is full of social evils viz. Violence, Crime, Drug Addiction, Women Abuse, Child Labour, Poverty, Homelessness, Unemployment, Uneducated, etc. These social evils are manifested by suffering and folly in the world that arise from poverty, war, oppression and other social conditions. Buddhist teachings state how one could fall into such an error by reason of attachment (*chada*), hatred (*dosa*), fear (*bhaya*), and ignorance (*moha*). These four are regarded as four ways of falling into injustice.¹ Their grossest forms are those, which are harmful to others. Human behaviour and thought are too often governed by deeply ingrained habits or powerful impulses, which clearly are also the root causes of all social evils. Human craving has become cemented into all forms of social structures and institutions.

By Buddhist Social Ethics, I mean the many different kinds of way intended to benefit mankind. These range from simple individual acts of charity, teaching and training, organized kinds of service, "Right Livelihood" in and outside the helping professions, and through various kinds of community development as well as to political activity in working for a better society. The enormous literature of Buddhism is not a literature of revelation and authority. Instead, it uses ethics and meditation, philosophy and science, art and poetry to point a way to counter social evils.

The Buddhist way is, with its compassion, its equanimity, its tolerance, its concern for self-reliance and individual responsibility, the most promising of all the models for the New Society which are an on offer which must be constituted of:

- a. Help people to overcome ego-centeredness
- b. Offer to each a freedom and emphasis should be on the undogmatic acceptance of a diversity of tolerably compatible. There are no short cuts to utopia, whether by “social engineering” or theocracy.
- c. Concern itself primarily with the material and social conditions for personal growth.

It is noteworthy that the Dalai Lama saw *“nothing wrong with material progress provided man takes precedence over progress. In fact it has been my firm belief that in order to solve human problems in all their dimensions we must be able to combine and harmonize external material progress with inner mental development.”*² Clearly, all the above must ultimately be conceived on a world scale. *“Today we have become so interdependent and so closely connected with each other that without a sense of universal responsibility, irrespective of different ideologies and faiths, our very existence or survival would be difficult”*³ This statement underlines the importance of Buddhist internationalism and of social policy and social action conceived on a world scale. Progress would be as conflict-ridden as the spiritual path of the ordinary Buddhist and the world may never get there anyway.

Therefore Buddhism focuses attention on the need to promote the welfare of people in respect of the conditions of their material living. However, from Buddhist point of view such a pursuit is not an end in itself. It is perhaps on that ground that Buddhism has introduced the concepts of two persons of great benefit to mankind. What may concluded from the above discussion is that Buddhism can be credited with a much more comprehensive notion of social welfare than a narrow notion of social welfare that takes into account only the material aspects of human needs. It is this more comprehensive approach of Buddhism that attributes a greater value to spiritual welfare that is misconstrued as a life denying, asocial and salvation doctrine. Given that the key tenets and principles of Buddhism extol the virtues of reason, human freedom and moral responsibility, man in contemporary society, especially in a highly scientific and technological age, can profitably engage in a meaningful dialogue with Buddhist thought and practice to determine its relevance to one’s individual and social needs.

The religious leaders as well as intellectuals have extensively discussed these problems above from social, political and economic points of view, they remain. To achieve a sustainable society, however, we need education that is based on the right concept of

personality, and thus it can bring true happiness for humankind. In particular, Buddhism offers many different ways of learning in daily life, and people are becoming interested in the peaceful philosophy of Buddhism. Buddhist education did not start a religion, but it inspired the blossoming of a whole civilization of humankind. To change our environment, Buddhism seeks to change ourselves, and this can best be achieved by overcoming spiritual experiences. As a mental culture, Buddhism has been dominated by its education of loving-kindness and compassion, non-self, and selflessness at all levels: within each person, among persons in society, and within the universe, of which human is but a part. The world being pre-occupied by craving (*tanha*), social problems cannot be avoided. The attempt to eradicate social problems totally is an utopian but futile one. The best approach is to understand these problems and come to terms with them. Such an attitude helps us to keep the social problems under control, which is the practical Buddhist sociological solution.

Above all, to achieve the desired end, all of us, especially Buddhists, have to practice the Buddha's words in their daily lives to counter the social evils that prevailed in the modern society which is reflected in one of the verse of *the Dhammapada*, "*Practice what you preach. Behave the way you want others to behave. One skilfully taming oneself thus tames others. How difficult is it to tame thyself.*"⁴

In conclusion, we may say that the Buddhistic way of life should be revived. We need not be saffron-dressed monks in a large scale; but we should follow the ideals propagated by Buddha since honest life, good deeds and universal love can save this terror-ridden world.

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TOWARDS TEACHER EDUCATION: A REVOLUTIONARY EVOLUTION

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ABSTRACT:

The history of Teacher Education on India reflects the famous sayings, “Teachers are literally the arbiters of a nation’s destiny.” In spite of the proverb, ‘teachers are born, not made’, in the contemplated education reconstruction, the most important factor is the teacher-his personal qualities, his educational qualifications, his professional training and the place that he occupies in the school as well as in the community. Since the Vedic period, though not in formal mode always, the programme of teacher education has been facing many reformations and reconstructions, resulting in the up gradation of curriculum and the expansion of that programme. In this context, Privatization is a new comer, claiming SWOT analysis for the systematic evaluation of Teacher Education Programme in India. In this article, the concept and scope, the objectives and the historical background of Teacher Education are discussed and the present scenario of Teacher Education Programme in India is presented through a SWOT analysis to uphold the revolutionary characteristics of that evolution, followed by the recommendations for the upliftment of Teacher Education in future.

Key Words: Teacher Education, Present scenario, recommendations

Introduction:

Since ages teacher has been looked upon by the society as the wisest man of the community, enjoying very respectable status in the society. In the words of Prof. Humayun Kabir, “Teachers are literally the arbiters of a nation’s destiny.” A teacher is the successful bearer of the intellectual tradition from one generation to the next. He is the expected participant of the social revolution in the country. As stated by NCTE (1998) in Quality Concerns in Secondary Teacher Education, “The teachers are the most important element in any educational programme. It is the teacher who is mainly responsible for the implementation of the educational process at any stage.” This shows that it is imperative to invest in the preparation of teachers, so that the future of a nation is secure. The importance

of competent teachers to the nation's education system can in no way over emphasized. The well established tradition of teaching and learning has retained its internal strength even under adverse circumstances. The history of Teacher Education is as old as the history of education and the history of Indian education is as old as the history of human civilization. The history of Teacher Education in India was started from the very ancient period, passing through the system under so many rulers in Pre-Independence Era and it has been going through under revisions and recommendations for improving its quality in the Post-Independent India, resulting in the modern appearance with the incorporation of Globalization, Privatization and Autonomy. An SWOT analysis is needed to explore the virtue and vice of the present system of Teacher Education in India.

Objectives of Teacher Education in India:

According to Education Commission (1964-1966), popularly known as Kothari Commission the objectives of Teacher Education as formulated by the commission are as follows-

1. To develop Gandhian values of education such as non-violence, truthfulness, self-discipline, self- reliance and dignity of labour.
2. To act as a liaison between the school and the community and employ suitable ways and means for integrating community life and resources
3. To perceive his role as an agent of social change in the community.
4. To perceive his role not only as a leader of the children for that of a guide to the community.
5. To help in the conservation of environmental resources and prevention of historical monuments and other cultural heritage.
6. To process warm and positive attitude towards children and their academic, socio-emotional and personal problems and skills to guide and counsel them.

Concept and Scope of Teacher Education in India:

An educational institution can play the role in building the theoretical foundation of one's knowledge while it achieves a policing effect in the empirical world when comes into the touches of professional training. In the light of Kilpatrick's thought, only animals can be trained, not human. It has been also reflected in the modern notion of teacher education programme. It has been considered as a programme that is related to the development of teacher proficiency and competence that would enable and empower the leader to meet the requirements of the profession and face the challenge therein.

According to National Council for Teacher Education, Teacher Education is “A programme of education, research and training of persons to teach from pre-primary to higher education level.”

The programme of Teacher Education comprises of Teaching Skills, Pedagogical Theory and Professional Skills.

With the advent of modern technologies, the traditional route of teaching and learning has been changed to a more tech-savvy intellectuality. The programme of Teacher Education in India is mainly consisted of three tiers:

- 1. Primary/Elementary Level:** Teacher Education Programme aiming at preparing competent teachers for the Elementary level (Class I-VIII), formally known as D.Ed. or D.El.Ed. Programme of two years duration. The programme is generally provided in various Govt. and self-financed institutions.
- 2. Secondary Level:** Teacher Education Programme that prepares teachers for teaching in the Secondary Level (IX-XII), is known as B.Ed. Programme of two years duration. The programme is accessible in Govt., Govt. aided and self-financed institutions, affiliated to a university of the concerned state.
- 3. College Level:** With the aim of preparing competent teachers at the college level, the Teacher Education Programme, arranged by University Departments and other Govt. and self-financing institutions is M.Ed. Programme of two year duration.

There are also the courses named B.A. B.Ed. and B.Sc. B.Ed. which offer four year integrated course of Bachelor and Teacher Education degree.

Three year integrated B.Ed. and M.Ed. Degree is also offered in some of the Teacher Education institutions in India.

All the programme, mentioned above are running under the recognition of National Council for Teacher Education (NCTE).

Historical background: The history of Teacher Education in India can be divided into two periods: Pre- Independence Era and Post- Independence Era.

Pre-Independence Era:

India has a very glorious past so far as its history of Teacher Education is concerned and it plays the role of torch bearer in the realm of knowledge in the world. The Pre-Independence Era concerning the history of Teacher Education in India can be divided into following ages-

1. Ancient and Medieval Period: 2500 B.C. to 500 B.C.
2. Buddhist Period: 500 B.C. to 1200 A.D.
3. Muslim Period: 1200 A.D. to 1700 A.D.
4. British Period: 1700 A.D. to 1947 A.D.

1. Ancient and Medieval Period:

In Ancient and Medieval Period the profession of teaching was maintained only by the Brahmins and the content of teaching was concerned about Vedas. No formal programme of Teacher Education was noticed in this period.

2. Buddhist Period:

In the Buddhist Period the profession of teaching was no longer in the hands of the Brahmins only, any wise man of the community could be a teacher by profession. It is notable that the formal system of teacher education was emerged in this period. But, to propagate Buddhism was the only purpose of teaching.

3. Muslim Period:

During the Muslim Period, no formal system of Teacher Education existed and only the Mahammadans were allowed to teach in Maktab and Madrasahs.

4. British Period:

The initiatives for Teacher Education came from the British for the first time. Danish Mission, established in Serampore, West Bengal was the first step in this regard. Three Normal Schools were also established for Teachers Training in Madras, Bombay and Calcutta.

- **Wood's Despatch (1854)**, known as the 'Magna Carta of English Education in India' advocated the need of establishing teachers training institutions.
- In **Education Policy (1904)**, Lord Curzon expressed the need of teachers training in the Govt. Of India Resolution in Education Policy :

"If the teaching in Secondary schools is to be raised to a higher level-if the pupils are to be cured of their tendency to relying upon learning notes and textbooks by heart, if, in a word, European knowledge is to be defused by the methods property to it-then it is most necessary that the teacher's should themselves be trained in the art of teaching."

- **Calcutta University Commission (1917-19)**, under the Chairmanship of Sir Michael Sadler, made recommendations for a Dept. Of Education in each universities with a Professor of Education as its head.
- **Hartley Committee (1929)** recommended for the upgrade took of teachers training programme for Primary teachers.
- **Sergeant Report (1944)** on 'Post-War Educational Development', made recommendations for the selection procedure, course contents, structure of fees and Refresher Courses.

Post-Independence Era:

Just after the Independence, the Govt. of India took the responsibility of reconstruction of Education system with a special emphasis on the aspect of Teacher Education. Different commissions and committees were appointed to review the then situation and make recommendations in the field of Teacher Education.

- **University Education Commission (1948-49):** The University Education Commission, under the chairmanship of Dr. S. Radhakrishnan reported, "Our main criticism of the existing courses (but we repeat that it does not apply to all) is that too little time is given to school practice, too little weight is given to practice in assessing the student's performance, and conditions of school practice are often unsatisfactory...." Probing a remedy to this problem, the Commission stated, "We consider that in a year's course not less than twelve weeks should be spent by the students in supervised school practice."
- **Secondary Education Commission (1952-53):** Secondary Education Commission supervised the condition of Teacher Education in India: "During this one year training of graduate teacher should be trained in methods of teaching at least two subjects....We feel that the scope of teacher-training, particularly in its practical aspects, should be broadened to include some of its activities that a student teacher will be expected to perform when he becomes a full-fledged teacher."
- **Pires Committee (1956):** Pires Committee recommended that practical work of teacher education should be given as much weightage as the theory portion. The examination papers should be reduced to four, as stated below:
 - a. Principles of Education and School Organisation
 - b. Educational Psychology and Health Education
 - c. Methods of Teaching on two school subjects
 - d. Current Problems in Indian Education

- **Education Commission (1964-66):** Education Commission, under the Chairmanship of Dr.D. S. Kothari felt that a sound programme of professional education of teacher is essential for the qualitative improvement of education.” The commission wanted the reorientation of the subject knowledge of the trainees. It recommended for a carefully planned content course including a study of fundamental concepts and their implications for the school syllabus and of the textbooks and emerging source materials to assist teaching at the school stage.
- **First Asian Conference on Teacher Education:** The First Asian Conference on Teacher Education, jointly sponsored by Association of Teacher Education and the International Council on Education for Teaching (ICET) was held from 14th to 19th June, 1971 at Bangalore. It recommended for the modifications of the programmes of school education and teacher education to meet the new challenges.
- **National Education Policy (1986):** It emphasized on the role of teachers and the co operation of the Govt. and community to create a congenial environment for teachers on constructive and creative lines.
- **Acharya Rammurti Committee (1990):** This committee, as a review of NPE 1986, observed that an “internship model is firmly based on the primary values of actual field on the development of teaching skills by practice over a period of time.
- **Yashpal Committee (1993):** This committee noticed the inadequate programme of teacher preparation leads to unsatisfactory school learning. It recommended that the duration of B.Ed. programme should be either one year after graduation or four years after higher secondary. The curriculum of the programme should be restructured to ensure its relevance to the changing need of school education.
- **National Knowledge Commission (2007):** The commission has made considerable progress in school education since independence with emphasize on universal literacy, infrastructure and universal access and enrolment in schools.
- **National Curriculum Framework for Teacher Education (NCFTE) 2009** opined that the education and training of a prospective teacher will be effective to the extent that it has been delivered by teacher educators who are competent and professionally equipped for the profession. In this respect NCTE takes a guardian role in the quality improvement of Teacher Education by joining hands to National Assessment and Accreditation Council (NAAC).

The Present Scenario of Teacher Education in India: A SWOT Analysis:

The present scenario of Teacher Education in India, can be said, intersects the quality concern as specified by the Education Commission (1964-66), “Investment in Teacher Education can yield very rich dividends because the financial resources required are very small when measured against the resulting improvements in the education of millions. The essence of a Teacher Education programme is its ‘quality’ without which, it becomes, not only a financial waste, but also a source of overall deterioration in educational standards.”

The incessant search for quality is an instinctive urge of human being expanding from the primitive society to the industrial society and now entering into the knowledge society. The quality related to teacher education now-a-days has been emerged from the field of management in general and more specifically, from the customer-focused perspective. The quality training of trainee teachers is a serious problem of today’s teacher education system. Self-financed institutions claim that they offer quality education, but the reality is far removed from the projected picture, profit making becomes an area of priority. In fact Govt. colleges and Universities share the blame too. The pupils, aspiring to be teachers in future run behind the Teacher Education course without least bothering about its qualitative aspects. The blame cannot be placed only on the institution, but the attitude of the learners are also a factor behind the quality deterioration of Teacher Education.

So, the present system of Teacher Education inevitably claims a SWOT Analysis which can help in the future improvement of this programme.

STRENGTH

- Provision for creating adequate competent teachers are created for the entry of Privatization in the field of Teacher Education.
- Admission procedure is followed according to the merits of the candidates, as specified by NCTE.
- Almost equal curriculum is followed all over the country.

WEAKNESS

- Lack of manpower or competent faculties in Govt. and Govt. Aided training colleges is a remarkable weakness of the present Teacher Education system.
- In most of the institutions, the infrastructure for the execution of teaching-learning activity according to the specified norms, is very poor.
- The eligibility criteria of the teachers in most of the self-financed institutions still lags behind.

- The motive for profit-making has been prioritized in most of the self-financed institutions.

OPPORTUNITY

- The dream of making provision for the Universalisation of Elementary and Secondary Education has been actualized with the help of opening new opportunities through the expansion of the Teacher Education institutions for producing competent teachers.
- Unemployment is a burning problem now -a-days. Provisions for making suitable employment through Govt. undertaking is not so encouraging. In such a situation, the employment, done through the incorporation of private efforts, can be called a ray of light, though it is often blamed as 'underemployment'.
- Opportunity is also created for the poor students to be admitted in Govt. or Govt.-Aided institutions, indirectly by the pupils, who are able to bear the expenditure of education, received at self-financed institutions.

THREAT

- The mushrooming of Self-financed institutions can create an alarming effect in the quality of Teacher Education.
- The present system of Teacher education has been 'an everybody's cup of tea' as enough provision is available to them, after fulfilling the minimum eligibility criteria.
- The tension of underemployment, created among the self-financed institutions hampers their academic attitude.
- The lack of teaching professionals in Govt. and Govt. Aided institutions also deteriorates the quality of education.

Recommendations:

The following remedial measures would be recommended for making the revolutionary evolution in the field of Teacher Education a fruitful one:

1. Adequate teaching faculties should be recruited in all the Govt. and Govt. Aided training colleges as per NCTE norms.
2. The Self-financed institutions should also take necessary steps in recruiting adequate eligible teaching professionals according to NCTE norms and regulations.
3. The needed infrastructure, as specified by NCTE, should be implemented in both Govt. and public institutions.

4. The teaching staff of Self financed should be provided with suitable salaries as per the State Govt. rules.
5. There must have a system of regular inspection and supervision on the part of NCTE for maintaining quality in Teacher Education.

Conclusion:

There is no doubt that the journey towards Teacher Education has been a revolutionary evolution in preparing efficient, competent and skillful teachers. In spite of that a vast discrepancy is noticed regarding the difference between qualitative and quantitative progress of Teacher Education institutions, situated in Govt. or Private initiative. According to V. Modi (2006), "The quality of education we provide to our children depends to large extent upon the quality of teacher we inject to the education system. The quality of teacher in turn depends on the quality of teacher preparation", which strengthen the view "towards preparing Professional and Humane Teacher", as determined by NCFTE (2009). A SWOT analysis on the part of the Teacher Education institutions, followed by the recommendations is required to be ahead in such a society where its destiny is to be shaped in the classroom.

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IMPORTANCE OF RAMAYANA IN INDIAN CULTURE AND EDUCATION

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Abstract

In this article we have tried to investigate the cultural and educational values of the society of Indian as we already found in the history of Indian Epic Ramayana. This epic is not a religious epic it is the thought of scientific knowledge about aeroplanes from the concepts of Ravana Puspa Ratha and also the political knowledge from the concepts of conflict between Rama and Ravana. Rama used some techniques to recovery of Sita from Ravana which is the political tends to the cultural life of India, Nepal and many south-east Asian countries such as Thailand and Indonesia. It is also point to be noted that Ramayana is also a symbolic epic of world brotherhood and it serves as a source of eternal inspiration, helpful idea and moral behavior for millions of people all over the world. This epic also shows the various relation of family life. This Epic has lessons in the presentation of motives, action and reaction. They are applicable for all times and all human conditions of life. So, peoples are highly influenced and inspired by the ideals of Ramayana. Rabindranath Tagore shows the Ramayana contains the history of conflict in three social stratum, such as Aryan and non-Aryan civilization, the Brahmins and the Ksatriyas, supremacy of the sacrificial ritual and the knowledge of self.

Introduction:

Sanskrit language and Sanskrit literature are most prestigious language and literature enriched in numerous scriptures and literary texts. The Ramayana was an important influence on later Sanskrit poetry and also in social, political, religious culture. The Ramayana is not just a story, it presents the teaching of ancient Hindu story in narrative allegory, philosophical and devotional elements. The character Rama, Sita, Lakshmana, Bharata, Hanuman and Ravana are all fundamental to the cultural life of India, Nepal and many south-east Asian countries such as Thailand and Indonesia. The Ramayana is the first Epic in Sanskrit which is composed by Valmiki is one of the five Epic of the world. The Sanskrit epics Ramayana is not only a epic it is most importance of our Indian society, culture and literature of its various character like Rama, Sita, Lakshmana, Ravana etc. Ramayana is not important in Sanskrit literature it is also written in others language. So, it is very useful to the various languages peoples of India. If we look into the great epic, all the traditional characteristics of Indian civilization, along with its magnanimity as well as deficiency will be unveiled. Fr. C. Blucke rightly says that “the popularity of the Valmiki Ramayana and the voluminous Rama-Literature of many centuries is a monument to the idealism of India. The story of Ramayana reveals the conquest of good over evil. Valmiki composes the epic, merging religion with morality and statesmanship with common sense, in such a manner that it presents an excellent combination of sociology, philosophy, Arthasastra, History and ethics.

The Ramayana comprises 24000 verses, divided into seven books, styled Kandas. Winternitz thinks that the original Ramayana was composed in the third century B.C. It is very popular and universal epic. This epic tends to affirm the values of the social order, duties including those to spouse, parents, elder brother, ruler and the kingdom. Influenced of the Ramayana, Tagores are produced cultural and history. He shows rare insight in assessing the historical evolution of India, literary as well as the moral and ethical significance of the Ramayana.

Ramayana is a mirror of the social life of ancient India.

It shows us that all good attributes like faithfulness, sincerity, obedience, truthfulness etc. are the spine of the civilized social order prevailing in those days. The high ideals of life as portrayed in the epic, influence the Indian people in the field of their daily activities. Thus, it helps us to build our character in young age.

Ramayana also influences the religious life of the Indian society

Religion is a part of the social life of a nation, which plays a great role in moulding the socio-cultural life of that particular race. Ramayana songs are performed before huge audience composed with people of all the caste and classes. Ramayana also inspire millions of lives in India and abroad in the past, inspires today and will inspire in the future.

Four social divisions or castes of the Hindu society (Caturvarna) viz. Brahmanas, Ksatriyas, Vaisyas and Sudras and Caturasrama i.e. the four stages of life, viz, Brahmacharya, Garhasthya, Vanaprastha and Sannyasa and Caturvarga, i.e. four object of human pursuit, viz, virtue (dharma), riches (ortha), lust (kama) and final beatitude (moksa) etc.

The Civilization of the Epics Ramayana

The theme of the Ramayana is in the essence that conflict between Rama and Ravana, embodiments respectively of the Aryan and non-Aryan embodiments respectively of the Aryan and non-Aryan civilizations. The Ramayana depicts a verna divided and state based society in which the Vaishyas appears as principal producers and taxpayers. The King should fill up his exchequer without hurting the brahmanas and kshatriyas who enjoyed immunity in the payment of taxes. The Ramayana depicted an instution called ashrama intended to serve the needs of a developed society. In the later age, this ashrama served as educational institutions for princes and others.

In the epic period social divisions had not become as rigid as in later times. *Shanti Parva* makes a bold statement that there is no distinction of castes. Women were accorded a place of honour in the epic society and were allowed a considerable degree of freedom. Three

things become impure – women, gems, and water. The novel sentiments about women were reflect in the tales of Savitri, Sita, Shakuntala and Damyanti. Epic heroines received a liberal education in their father houses. In epic stories find girls choosing their own husband. Women led a free life and came out of the seclusion of their house.

Tagore influenced by Indian Epic Ramayana and explained it for the culture of people:

Rabindranath influenced about the importance of Ramayana. At twenty century, he wrote his first drama – opera: *Valmiki Pratibha* (The genius of Valmiki). In it the pandit Valmiki overcomes his sins, is blessed by Devi Saraswati and compiles the Ramayana. He analyzed that Ramayana as allegorical creation and it has brought out the suggestion of certain words of Rama, Sita, Lakshmana. Tagore says the word Rama means *ramaniyata*, i.e, pleasantness, Sita means *halakarsanarekha* i.e, the line of ploughing on the soil, Lakshmana means *Laksmivatta* i.e, wealth. Janaka, the learned philosopher king of Mithila used to plough the soil himself and Sita originated from that. So she was the symbol of agriculture. Tagore's thinking Ramchandras character did not escape. His thought – Rama's character as a maintainer of familiar and social laws and that the very fact that to the broadness of love. Also Tagore with his rare poetic imagination has thus explained the basis thought of the Ramayana this way- Sita stands between the verdant beauty of Ramchandra, and the prosperity i.e, Lakshmana. On the other hand there exists the golden city of Lanka, which is the capital of Ravana. The wealth accumulated therein is the consequence of his brutal forces. Ravana means one who makes loud sounds, *ravakarayita*, *ravanam lokaravanam* (Ramayana, utara kanda 16.37.3). Tagore has pointed out that the Ramayana contains the history of conflict in three social steps. This epic describes on one side the expansion of the Aryan civilization and it's clash with non-Aryans. The culture of Aryan gradually extended from the north-western India to southwards, whereas non-Aryan civilization was being slowly diminished because of the clashes between the two. These fact are suggested in the story of Ramayana according to Tagore.

Secondly, one can find out the hint of the conflict between the two upper castes of the Aryans – the Brahmins and the Ksatriyas. So, Tagore has to feel a hidden conflict of the Brahmins and the Ksatriyas. He also thinks that Rama was a follower of a new social wave. In this present time Ksatriyas were the social supremacy of the Brahmins. So, Rama, a Ksatriya prince, challenged and defeated Parasurama, a Brahmin hero.

Thirdly, there was a conflict regarding the supremacy of the sacrificial ritual and the knowledge of self, the supremacy of Lord Brahma and Visnu. In the words of Tagore whenever a Vedic God is someone other than a man then he could be worshipped.

Rabindranath Tagore characterizes the Ramayana as the epic of the relations of family life. Such relation between father and son, brother and brother, husband and wife are not relations which can be believed as sources of feelings which support epic poetry. But Rabindranath points out that this feeling of the critics had been falsified by the experience of Indian readers over many countries. So, Ramayana is not only a religious work but poetry giving high literary delight.

Conclusion:

The conclusion of this article is that in Indian social, political, education and ritual life, the importance of Ramayana is very much. The epic has laid the foundation of the Indian way of life. The great poet Tagore also deeply influenced by the epic of Ramayana. He saying that Ramayana is the ideal of culture as well as education in the civilized society. It has given a direction to Indian culture and has endowed the social life with greatness. Ramayana is also a mirror of the social life of ancient India. It shows that all good attributes like faithfulness, sincerity, obedience, truthfulness etc. are the spine of a civilized social order prevailing in those days. We have also imagine the scientific knowledge from the idea of Ravana *Puspa Rath* and also thought educational institution from ashrama. Tagore also explained that the historical conflict of Aryan and non-Aryan, the Bramins and the Ksatriyas, supremacy of the sacrificial ritual and the knowledge of self. So, we can say that Ramayana is not only a literary treasure but also a source of improve influence of the relationship of men and also improve the changing of political, philosophical, moral and spiritual essence of the people of India.

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USE OF ICT AND DEVELOPMENT OF TEACHING-LEARNING ACTIVITIES: A MICRO-STUDY IN THE DISTRICT OF PURBA BURDWAN, WEST BENGAL

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Abstract:

The present paper attempts to analyze the impact of ICT on development of teaching-learning activities among the students and teachers of the surveyed schools in Purba Burdwan district of West Bengal. The study comprises of 120 students and 80 teachers of few selected schools. A non-parametric chi-square test has been used to examine the relationship between use of ICT in school and development of teaching-learning activities among the teachers of the surveyed areas. Also, students' 't'- test has been applied to know whether any significant differences in awareness among the teachers regarding the application of ICT in school and development of teaching-learning activities with respect to gender(Male Female teacher), residing place(Urban Rural) and status of appointment(PGT&TGT).

Key words: ICT, teaching-learning activities, Male Female teacher, Urban Rural areas and PGT&TGT.

Introduction:

Information and Communication Technology (ICT) is usually and universally acknowledged as an important catalyst for social transformation and national development. Understanding and using ICT is, therefore, a pivotal for national continual social and economic development. Information communication technology is any computer based tool that people use to work with information and support the information. It includes computers and its related technologies. It can help the teacher and the student having up-to-date information and knowledge. With ICT becoming more accessible, reliable, mature, the prospect use of ICT for education is becoming increasingly feasible. ICT enabled teaching-learning encompasses a variety of techniques, tools, content and resources aimed at improving the quality and efficiency of the teaching- learning process. Ranging from projecting media to support a lesson, to multimedia self-learning modules, to simulations to virtual learning environments, there are a variety of options available to the teacher to utilize various ICT tools for effective pedagogy. Each such device or strategy also involves changes in the classroom environment and its effectiveness. Availability of a wide range of such

teaching-learning materials will make use of ICT enabled classrooms. The provision of quality education is the fundamental right of all the students in India. With the help of ICT integrated education the student's performance is enhanced. The students perform better by the teaching of ICT. ICT determines how well the learning opportunities are available to students to reach the aim of education through appropriate, effective teaching-learning, evaluation and support system etc. The ICT enriches the vast distribution and easy access to information and representation of information changes learner's perception and understanding of the content. It has influenced all aspects of Teacher Education. It provides the capacity to store, retrieve and to process e-content both fast as well as accurate.

PURPOSE OF THE STUDY

The study sought to investigate the effective use of ICT for development of teaching-learning activities in the secondary schools in the surveyed areas.

Objectives of the study

The specific objectives of the present study are the following:

1. To study the important ways of communication in education through ICT;
2. To examine the significant association between ICT and development of teaching-learning activities in school;
3. To study the level of awareness of the teachers belong to male and female category on application of ICT through effective communication in school ;
4. To study the level of awareness of the teachers residing in urban or rural area on application of ICT through effective communication in school ;
5. To study the level of awareness of the teachers having the appointment in Post Graduate Teacher(PGT) and Trained Graduate Teacher(TGT) on application of ICT through effective communication in school.

Hypotheses

The present study tested the following hypotheses:

H₀₁: There is no doubt an association between ICT and development of teaching-learning activities in school among the respondents in the study area.

H₀₂: There is no significant difference in awareness among the teachers belongs to male and female category about application of ICT in school and development of teaching-learning activities.

H₀₃: There is no significant difference in awareness among the teachers residing at urban and rural areas about application of ICT in school and development of teaching-learning activities.

H₀₄: There is no significant difference in awareness among the teachers having the appointment in PGT or TGT level about application of ICT in school and development of teaching-learning activities.

Tools used in the study

This study is mainly empirical in nature. A self-made structured questionnaire has been used to collect the primary data from 25 schools comprising of 120 students and 80 teachers of Purba Burdwan district in West Bengal during the period of 2016-17.

Methodology

The following statistical methods are used to substantiate the present study:

1. Chi-square test to examine the association between ICT and development of teaching-learning activity.
2. Student's t-test to examine the differences in awareness among the teachers regarding the application of ICT in school and development of teaching-learning activities with respect to gender(Male Female teacher), residing place(Urban Rural) and status of appointment(PGT&TGT).

Analysis pertaining to application of ICT and Development of teaching-learning activities in school

The present study was conducted to make an assessment of perceptions of the teachers and the students about the role of ICT in development of teaching-learning activities in terms of non-parametric 'Chi-square' analysis and student's t-tests. The opinions of the respondents collected from the field survey have been expressed in the following tables.

Table 1

Showing Opinions of the respondents about association between ICT and development of teaching-learning activities selected for the present study

Respondents	Yes	Uncertain	No	Total	Value of χ^2	Level of significance
Teacher	50	20	10	80	4.78	Not Significant (0.05)
Student	85	30	05	120		
Total	135	50	15	200		

Source: Field Survey, 2016-17

Interpretation:

It is evident from the table - 1 that the observed value of Chi-square (χ^2) i.e., 4.78 is not significant at 0.05 % level. Therefore, the null hypothesis is accepted indicating a strong association between ICT and development of teaching-learning activities among the respondents in the study area.

Table -2

Showing the 't' value between mean scores of awareness of teachers in male and female towards application of ICT in school

Gender	N	M	SD	SED	t	Level of significance
Male	40	0.95	0.21	0.07	2.71	0.01
Female	40	0.76	0.42			

Source: Authors' calculation based on field survey, 2016-17

Interpretation:

The value of 't' 2.71 is significant at 0.01 level, meaning thereby, male and female teachers in the district of Purba Burdwan differ significantly about application of ICT in school and development of teaching-learning activities . Results also indicate that the awareness towards application of ICT in school of male teacher was higher than the female teacher. Therefore, the gain was in favour of male teacher. Thus, the null hypothesis is rejected.

Table -3

Showing the 't' value between mean scores of awareness of teachers residing in rural and urban areas towards application of ICT in school

Residing area	N	M	SD	SED	t	Level of significance
Urban	40	0.82	0.38	0.09	1.77	0.01
Rural	40	0.66	0.47			

Source: Authors' calculation based on field survey, 2016-17

Interpretation:

The value of 't' 1.77 is significant at 0.01 level, meaning thereby, teachers residing at urban and rural areas in the district of Purba Burdwan differ significantly about application of ICT in school and development of teaching-learning activities . Results also indicate that the awareness towards application of ICT in school of urban teacher was higher than the rural teacher. Therefore, the gain was in favour of urban teacher. Thus, the null hypothesis is rejected.

Table -4

Showing the 't' value between mean scores of awareness of teachers according to status of appointment in the institution towards application of ICT in school

Status of appointment	N	M	SD	SED	t	Level of significance
PGT	40	0.95	0.21	0.05	0.09	Not significant (0.05)
TGT	40	0.92	0.10			

Source: Authors' calculation based on field survey, 2016-17

Interpretation:

The table – 4 shows that the observed t-value i.e., 0.09 is not significant at 0.05 % level. So, the null hypothesis is accepted indicating a strong association in awareness among PGT and TGT about the application of ICT in school and thereby, development of teaching-learning activities.

Concluding Remarks:

Information and communication technology (ICT) is an essential for the progressive people, community or society. It is most important tool for teachers and students for searching and creating knowledge. It helps them at all levels and for all purpose and processes of education. The teaching learning process makes impressive and effectively by ICT based activities for teaching contents of various subjects. The teaching learning process make effective by using new methods with suitable environment and ICT. Across the world, ICT has made many innovations and changes in the field of teaching and learning. Paperless and painless classrooms are possible by using ICT. The learners are enjoying the learning experiences. Therefore, integration of ICT in school education has become necessary to enhance the quality of education. It has become natural, automatic and integral part of teaching learning process in school level education. There is no denying the fact that ICT has brought about astounding change in education. The teaching learning process with the help of ICT may change the actual lacking in availing the quality education, even in school. By employing ICT in teaching learning process qualitative improvement is possible. A lot of quality improvement is possible after careful and planned implementation of ICT in education by various stakeholders.

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ETHICAL VALUES VS MODERN SOCIETY

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Abstract :

This article will deal with the different shades contribute to the development of man-nature relationship. Awareness for Geo-hygiene issues help in protecting earth from man's ruthless exploiting to ensure a friendly relation between man and nature which is essential for man's own survival.

Every society known to us there has been some prohibition on the taking of life. Presumably no society can survive if it allows its members to kill one another without restriction. Precisely who is protected, however, is a matter on which societies have differed. In many tribal societies the only serious offense is to kill innocent member of the tribe itself – members of other tribes may be killed with impunity. In more sophisticated nation's territorial boundaries, although there have been cases like slave-owing states – in which a minority was excluded. Nowadays most agree, in theory if not in practice, that apart from special cases like self-defense, war, possibly capital punishment, and one or other doubtful areas, it is wrong to kill human beings irrespective of their race, religion, class, or nationality.

We shall try to understand the ecological crisis we face, which is necessary for the survival of the planet and her creatures. Such an understanding is inevitable for searching an alternative path for survival and it is the foundation for environmental ethics. Interaction between man and environment has not always been friendly. His love for nature has often been overshadowed by his desire of exploiting her resources. Colonial activities brought radical change in the relation between man and nature.

The most obvious reason for valuing the life of a being capable of experiencing pleasure or pain is the pleasure it can experience. If we value our own pleasures – like the pleasures of eating, of sex, of running at full speed and of swimming on a hot day – then the universal aspect of ethical judgments requires us to extend our positive evaluation of own experience of these pleasures to the similar experiences of all who can experience them. But death is the end of all pleasurable experiences. Thus the fact that beings will experience pleasure in the future is a reason for saying that it would be wrong to kill them. Of course, a similar argument about pain points in the opposite direction, and it is only when we believe that the pleasure that beings are likely to experience outweighs the pain that are likely to suffer, that this argument counts against killing. So what this amounts to is that we should not cut short a pleasant life. Some say that it is anthropocentric, even speciesism, to order the value of different lives in a hierarchical manner. Before concluding let us take note of the positive contribution that the different ecological theories have to offer.

Key Word: impunity, ecological crisis, sanctity, instrumental values, experiencing pleasure.

In this paper will deal with a relatively new branch of ethics which has been developed into a well organized discipline over the years and its different shades contribute to the development of man-nature relationship. Awareness for Geo-hygiene issues help in protecting earth from man's ruthless exploiting to ensure a friendly relation between man and nature which is essential for man's own survival.

People often say that life is sacred. They almost never mean what they say. They do not mean, as their words seem to imply, that life itself is sacred. If they did, killing a pig or pulling up a cabbage would be as abhorrent to them as the murder of a human being. When people say that life is sacred, it is human life they have in mind. But why should human life have special value?

In discussing the doctrine of the sanctity of human life I shall not take the term 'sanctity' in a specifically religious sense. The view that human life has unique value is deeply rooted in our society and is enshrined in our law.

In every society known to us there has been some prohibition on the taking of life. Presumably no society can survive if it allows its members to kill one another without restriction. Precisely who is protected, however, is a matter on which societies have differed. In many tribal societies the only serious offense is to kill innocent member of the tribe itself – members of other tribes may be killed with impunity. In more sophisticated nation's territorial boundaries, although there have been cases like slave-owning states – in which a minority was excluded. Nowadays most agree, in theory if not in practice, that apart from special cases like self- defence, war, possibly capital punishment, and one or other doubtful areas, it is wrong to kill human beings irrespective of their race, religion, class, or nationality. The moral inadequacy of narrower principles, limiting the respect for life to a tribe, race, or nation, is taken for granted.

At this point we should pause to ask what we mean by terms life 'human life' or 'human being'. These terms figure prominently in debates about, for example, abortion. 'is the fetus a human being?' is often taken as the crucial question in the abortion debate; but unless we think carefully about these terms such questions can not be answered.

It is possible to give 'human being' a precise meaning. We can use it as equivalent to member of the species *Homo sapiens*. whether a being is a member of a given species is something that can be determined scientifically, by an examination of the nature of the chromosomes in the cell of living organisms. In this sense there is no doubt that from the first moments of its existence an embryo conceived from human sperm and eggs is a human being; and the same is true of the most profoundly and irreparably intellectually disabled human being, even of an infant who is born anencephalic—literally, without a brain.

We have broken down the doctrine of the scarcity of human life into two separate claims, one that there is special value in the life of a member of our species, and the other that there is special value in the life of a person. We have seen that the former claim cannot be defended.

Although preference utilitarianism does provide a direct reason for not killing a person, some may find the reason- even when coupled with the important indirect reason that any from of utilitarianism will take into account—not sufficiently stringent. Even for preference utilitarianism, the wrong done to the person killed is merely one factor to be taken into account, and the preference of the victim could sometimes be outweighed by the preferences of others. Some say that the prohibition on killing people is more absolute than this kind of utilitarian calculation implies. Our lives, we feel, are things to which we have a right, and right are not to be traded off against the preference or pleasures of others.

Again, we shall try to understand the ecological crisis we face, which is necessary for the survival of the planet and her creatures. Such an understanding is inevitable for searching an alternative path for survival and it is the foundation for environmental ethics. Interaction between man and environment has not always been friendly. His love for nature has often been overshadowed by his desire of exploiting her resources. Colonial activities brought radical change in the relation between man and nature. Some European nations colonized many countries of Asia and America for exploitation of natural resources. It led to transformation in four main areas energy, population, industrialization and urbanization.

Development and expansion of science and technology have transformed the earth to such a critical situation that man himself feels insecure regarding his survival on it because valuable and non- renewable energy resources and feeding materials are diminishing gradually. Pollution of seas and oceans by the discharge of oil product has deteriorated the photosynthetic activity of sea-algae which affects the production of oxygen and results in the death of innumerable sea-birds and aquatic animals increasing population is reducing the quality and quantity of fresh water reserves. Release of million tons of carbon-di-oxide from industries has caused atmospheric pollution. Global warming is cause of melting of glaciers which results in the rise of sea-level. Automobile exhausts give birth to cardiac problem, respiratory disease and carcinoma. Deforestation and other developments have damaged the oxygen producing system and left many birds and its rare varieties homeless and endangered.

Depletion of ozone layer and global warming are the phenomena of our concern today. Ozone layer protects our planet from ultra-violet rays and emission of chloro-fluro carbon is depleting the ozone layer hence ultra-violet rays affecting lives on this earth causing various carcinogenic diseases. Environmental crises has urged thinkers of evolve a new ethics

to address such issues. The growing awareness and anxiety for future catastrophe urge people to change their behavior with nature. Here it is worthy to mention Leopold observation who insists on changing present behavior towards nature to develop “an ethics of conservation”.

Anthropocentric view holds that nature has mainly instrumental value and man stands at the center of universe and living and non-living entities exist only to serve human purpose. Edward Wilson in his book “The Diversity in life” shows that humans take care of nature because it serves our various ends. Firstly particular species of plants and animal supply medicines food and raw materials. Secondly, eco-system helps to sustain health of human species. The third reason is that diversity of natural world helps in understanding human nature. Anthropocentric view upholds such a value there by. Another view envisages man moral responsibility towards non-human nature and urges that nature is valued for its own sake.

Intrinsic value and instrumental value signify two different type of relation. An object has instrumental value if it serves varied purpose of the subject. But when subject value an object in its own right the object has intrinsic value to the subject. Both are valuable to us in different manner. Scientific discoveries of the recent past have shown that all living things are inter-related and inter-dependent to each other. All things including human beings are integral part of nature, so our inclination to think ourselves superior and hence having the right to exploit nature is baseless. Nature has its value instrumental as well as intrinsic which depend on realization and recognition. Nature has its value means there is some one to realize it. The question whether values depend on human being. A group of philosophers would say without sentient beings none can ascribe any value to nature. On the contrary some philosophers insist that things is the world have value, even intrinsic value independently. G.E.Moore is of the opinion that without human beings the world might have but only very insignificant value. He recognizes that anything can have value, whatever and however it is even in absence of any subject.

Traditional ethical theory considered the concept of virtue to be the central theme to lead a good life. Aristotle thought is necessary to develop a good character which will have right character traits “It involves developing and using the capacities that distinguish us a human including the capacities of mind”. He divided virtues into virtues of character and virtues of intellect. In short virtue refers to the property which enables to do work well and then applied to human beings virtue refers to power and capacities to live a truly good life. Men who posses good understanding and are rational judicious, thoughtful imaginative and inventive are said to be virtuous from the intellectual perspective and obviously they lead a good life. In this context environmental ethics speak of developing new virtues that will enable us to act and interact with nature and all her entities.

Environmental ethics is one of the greatest philosophical movement of 20th century. The new ethics urges man to give up his arrogance and develop caring attitudes towards mother nature and her creatures. American thinkers like John Moor, Aldo Leopold and German Philosopher Albert Schweitzer who made significant contribution to environmental ethics John Moor believed that non-human and plants are not created for man's happiness. He had deep respect for nature and to him all beings are spark of divine soul. According to Schweitzer we should have reference for all life which reminds us of 'ahimsa' of Buddhist principle. He used a word 'Ehrfurcht' – which means something more than respect but his stand for justification of flesh – eating and destruction of germs to fight disease was in contrast to his previous thoughts. However, the fact remain that he made considerable contribution to environmental ethics.

There are many beings who are sentient and capable of experiencing pleasure and pain, but are not rational and self – conscious and so not person. I shall refer to these beings as conscious being. Many non-human animals almost certainly fall into this category; so must newborn infants and some intellectually disabled humans.

The most obvious reason for valuing the life of a being capable of experiencing pleasure or pain is the pleasure it can experience. If we value our own pleasures – like the pleasures of eating, of sex, of running at full speed and of swimming on a hot day – then the universal aspect of ethical judgments requires us to extend our positive evaluation of own experience of these pleasures to the similar experiences of all who can experience them. But death is the end of all pleasurable experiences. Thus the fact that beings will experience pleasure in the future is a reason for saying that it would be wrong to kill them. Of course, a similar argument about pain points in the opposite direction, and it is only when we believe that the pleasure that beings are likely to experience outweighs the pain that are likely to suffer, that this argument counts against killing. So what this amounts to is that we should not cut short a pleasant life. Some say that it is anthropocentric, even speciesist, to order the value of different lives in a hierarchical manner.

Before concluding let us take note of the positive contribution that the different ecological theories have to offer. Though different in many respect, these theories have an enlightened vision which has enabled man to rethink his place in this earth. They remind that man's duty is not to destroy other forms of life but to protect and preserve them as far as possible. They have helped man to realize that he is neither permanent nor irreplaceable and that other creatures may replace him in the process of evolution.

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DEVELOPMENT OF CHEMICAL EDUCATION: SONOGASHIRA REACTION AND CHEMICAL SYNTHESIS

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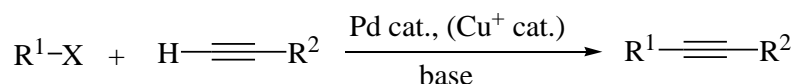
Abstract:

Sonogashira acetylide-coupling followed by base-induced cyclization in a one-pot operation have been recognized as one of the simplest and useful tools for regio- as well as stereoselective syntheses of carbo- and heterocyclic compounds. In this review article, I have summarized the various ways of constructing heterocyclic rings by palladium-catalyzed Sonogashira acetylide-coupling followed by base-induced cyclization in a one-pot operation.

Keywords: Sonogashira coupling, palladium catalyst, base promoted cyclization, fused heterocycles, regioselectivity, stereoselectivity

Introduction

Arylalkynes and conjugated enynes are important intermediates in organic synthesis of natural products [1], biologically active molecules [2], pharmaceuticals, molecular organic materials [3], and polymers [4]. The cyclization of the alkyne or enynes intermediates to reach the desired heterocyclic moieties of natural products, pharmaceuticals, and molecular organic materials should be effective either by iodo-cyclization [5], or by base-mediated [6] or by transition metal-mediated [7] cyclization. The most important method, which is the key step in natural product synthesis and in the preparation of molecular organic materials [3] for preparation of arylalkynes and conjugated enynes are the palladium-catalyzed sp^2 - sp coupling reaction between aryl or alkenyl halides or triflates and terminal alkynes, with or without the presence of a copper(I) co-catalyst (**Scheme 1**).



R^1 = aryl, hetaryl, vinyl; R^2 = aryl, hetaryl, alkenyl, alkyl, SiR_3

X = I, Br, Cl, OTf

Scheme 1

This reaction is generally known as Sonogashira coupling, reported by Sonogashira and Hagihara in 1975 that addition of small amount copper(I) iodide as co-catalyst in presence of Pd-catalyst and base greatly accelerate the reaction (compared to Heck [8] and Cassar [9] reaction) and alkynylation can be performed at room temperature [10]. Therefore, the Sonogashira-Hagihara protocol became the most popular procedure for the alkynylation of aryl or alkenyl halides. Even primary alkyl bromide or iodides [11] and secondary alkyl bromides [12] have been alkynylated using Sonogashira protocol.

The Sonogashira reaction is usually performed using a palladium-phosphane ligand complex as catalyst in the presence of a catalytic amount of a copper (I) salt and a base, usually an amine, which can act as a solvent under homogeneous conditions. Generally used catalysts are triphenylphosphane-related complexes, $\text{Pd}(\text{PPh}_3)_4$, with the more stable and soluble $\text{Pd}(\text{PPh}_3)_2\text{Cl}_2$ being the most common, although catalysts with bidentate ligands such as $\text{Pd}(\text{dppe})\text{Cl}_2$, $\text{Pd}(\text{dppp})\text{Cl}_2$, or $\text{Pd}(\text{dppf})\text{Cl}_2$ have also been employed. Bulky phosphanes such as $\text{P}(\text{tBu})_3$ have also been employed. Here the catalyst is generally being generated *in situ* by combination with a weakly ligated palladium source such as $\text{Pd}(\text{OAc})_2$, $\text{PdCl}_2(\text{PhCN})_2$, or $\text{Pd}_2(\text{dba})_3$. A ligand with a steric demand has the advantage of an easier dissociation from the Pd^0L_2 resting state, which is necessary prior to oxidative addition [13].

In recent years, however, significant progress has been made in this reaction and an efficient copper-free catalyst system has been developed to avoid the homocoupling products of the terminal alkyne [14]. Further, copper salt in organic solvent are found to be environmentally unfriendly. The copper-free methodologies are usually called copper free Sonogashira coupling and several copper-free Sonogashira coupling protocols have been reported recently [15]. Copper-free procedures also uses those normal catalysts as mentioned above.

Mechanism: The copper co-catalyzed Sonogashira reaction is believed to take place through two independent catalytic cycles as shown in **Figure 1**. The generally accepted catalytic cycle is based on an initial fast oxidative addition of $\text{R}^1\text{-X}$ **1** (R^1 = aryl, hetaryl, vinyl; X = I, Br, Cl, OTf) to the real catalyst *i.e* palladium (0), generated from the initial palladium complex to form the σ -alkyl palladium complex **2**. The oxidative addition step is dependent on the characteristics of the $\text{R}^1\text{-X}$ substrate and this step is facilitated if X = I or OTf (general reactivity, vinyl iodide \geq vinyl triflet $>$ vinyl bromide $>$ vinyl chloride $>$ aryl iodide $>$ aryl triflet \geq aryl bromide \gg aryl chlorides) and if the electronic density is reduced on the C-X bond by the presence of electron-withdrawing groups. The next step in the Pd-cycle would connect with the cycle of the copper co-catalyst (the Cu-cycle). Thus, a usually rate-determining transmetalation from the copper acetylide **5** formed in the Cu-cycle would generate a $\text{R}^1\text{Pd}(\text{-CCR}^2)\text{L}_2$ **6** species, which gives the final coupled alkyne **7** after *trans/cis* isomerization and reductive elimination with regeneration of the catalyst. It should be mentioned that the generally employed amines are usually not basic enough to deprotonate the alkyne in order to generate the anionic nucleophile that should form the copper acetylide **5**. Therefore, a π -alkyne-Cu complex **4** could be involved in the cycle [16], thus making the alkyne proton more acidic for easier abstraction. It is assumed that copper acetylide is formed *in situ* as intermediate, but it has never been proven, although recent indirect evidence has been found [16].

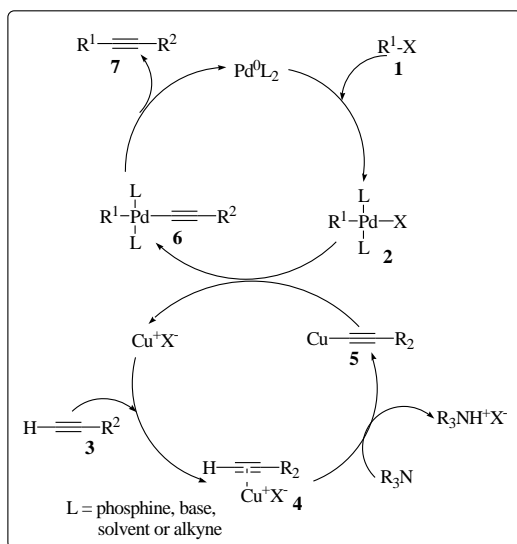


Figure 1: Copper-cocatalyzed mechanism

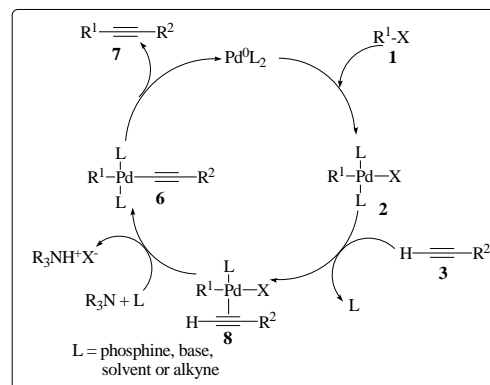
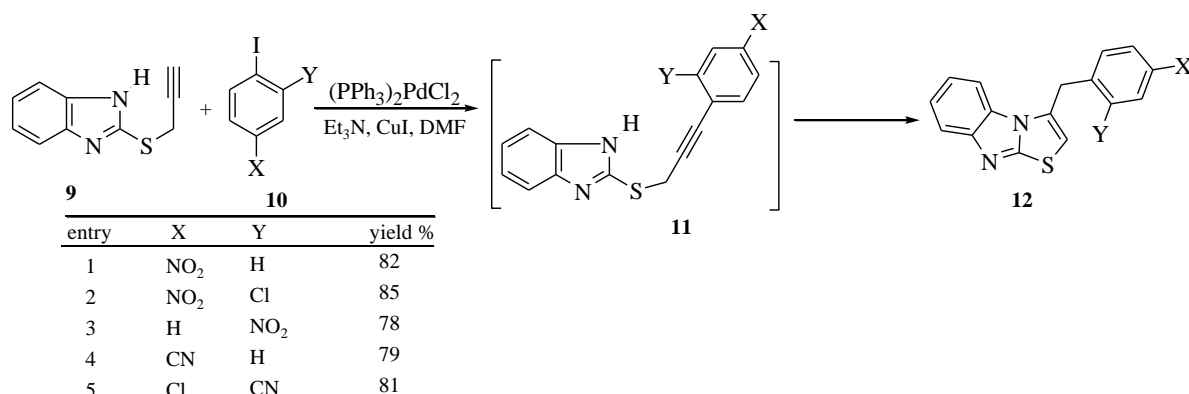


Figure 2: Copper-free mechanism

The mechanism of the copper-free Sonogashira reaction is not well known. The first step is the oxidative addition of R^1-X **1** to the palladium(0) complex to form the σ -alkyl palladium complex **2**. However, the second step is under debate. As already mentioned, the amines generally employed are usually not able to deprotonate the alkyne for the reaction with the *trans*- R^1PdXL_2 ; therefore, complexation of the alkyne to the complex is supposed to proceed first with displacement of one ligand to give intermediate complex **8** [17]. The amine then able to deprotonate ligated alkyne more easily, forming the new complex $R^1Pd(-CCR^2)L_2$ **6**. Reductive elimination of the complex **6** gives the final coupling product R^1-CC-R^2 **7** (Figure 2).

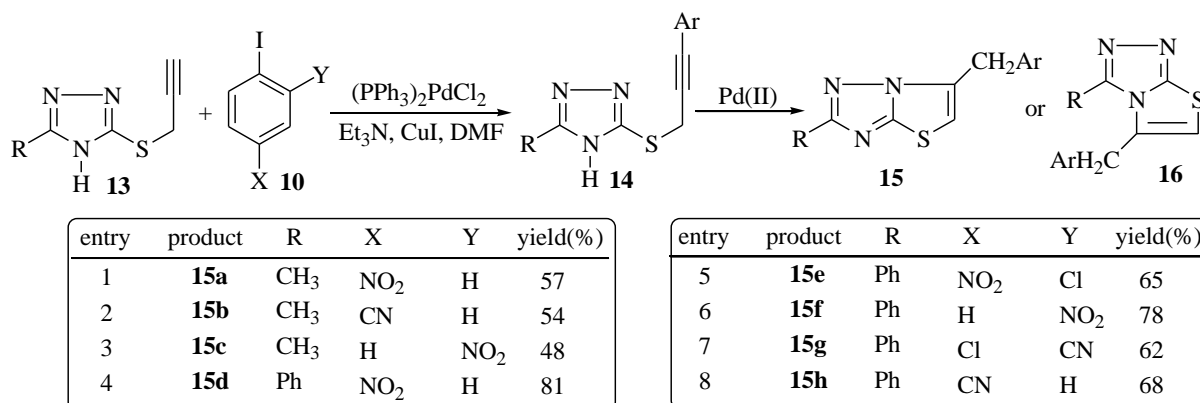
Synthesis of Heterocyclic Compounds:

Hervavi *et al.* reported [18] the synthesis of 3-Benzylthiazolo [3,2-*a*] benzimidazole **12** via a Sonogashira cross coupling followed by cyclization. When 2-propargylmercaptobenzimidazoles **9** were treated in DMF with aryl iodide **10** and triethylamine in the presence of bis(triphenylphosphine)palladium chloride and copper iodide at room temperature, 3-benzylthiazolo-[3,2-*a*]benzimidazole **12** were obtained in good to high yields. The reaction is believed to take place in two step, first a standard Sonogashira coupling to produce **11** and known Pd(II) catalyzed intermolecular cyclization of the nucleophilic nitrogen moiety onto the triple bond followed by base-induced aromatization. The presence of electron withdrawing groups such as $-NO_2$, $-Cl$, $-CN$ on the aryl iodide seems to be essential (Scheme 2).



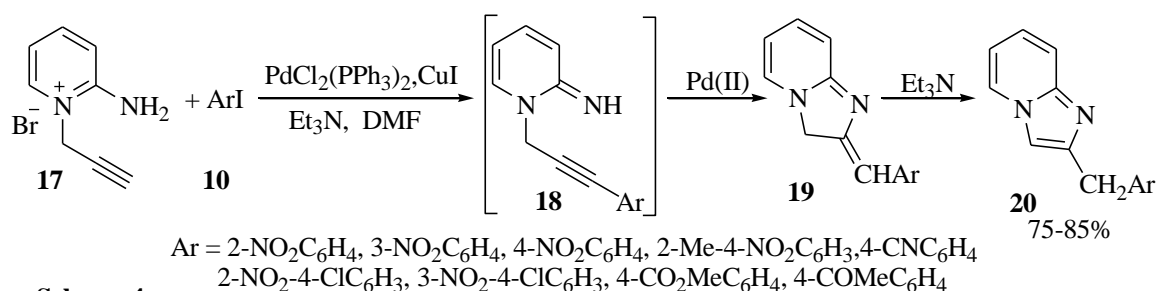
Scheme 2

Reaction of 3-mercaptopropargyl-1,2,4-triazoles **13** with various iodobenzenes **10** catalyzed by PdCl₂(PPh₃)₂ and CuI in the presence of triethylamine in DMF to the regioselective formation of 6-benzylthiazolo[3,2-*b*]1,2,4-triazoles **15**. [19] Here probably a two-step process occurred: a standard Sonogashira coupling followed by a Pd(II)-catalyzed intermolecular cyclization of either nitrogen 2 or nitrogen 4 onto the triple bond followed by base-induced aromatization to form product **15** or **16** respectively. The product was characterized as 6-benzylthiazolo[3,2-*b*]1,2,4-triazoles **15** by XRD. Here also the aryl iodide must contain an electron-withdrawing group (Scheme 3).



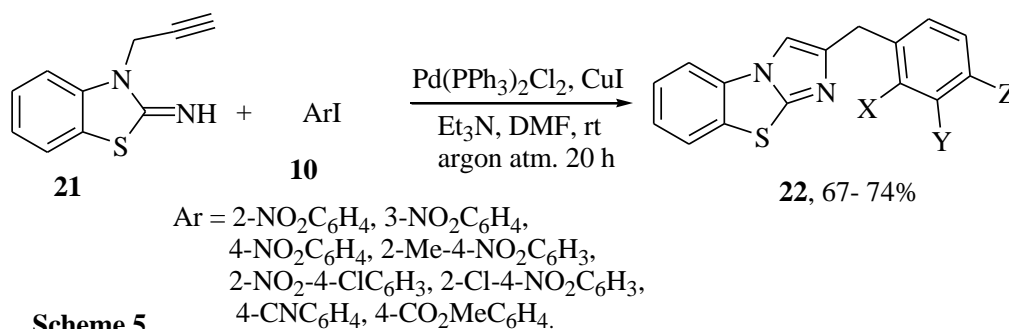
Scheme 3

Bakherad *et. al.* reported [20] that when 2-amino-1-(2-propynyl)pyridinium bromide **17** was treated with the aryl halides **10** and triethylamine in DMF in the presence of bis(triphenylphosphine) palladium chloride(II) and copper(I) iodide at room temperature, the 2-substituted imidazo[1,2-*a*]pyridines **20** were obtained in good to high yields (Scheme 4). Compound **17** was prepared by the treatment of 2-aminopyridine with propargyl bromide in refluxing ethanol. Here also the presence of an electron withdrawing group such as NO₂, Cl, CN or CO₂Me on the aryl iodide is essential.



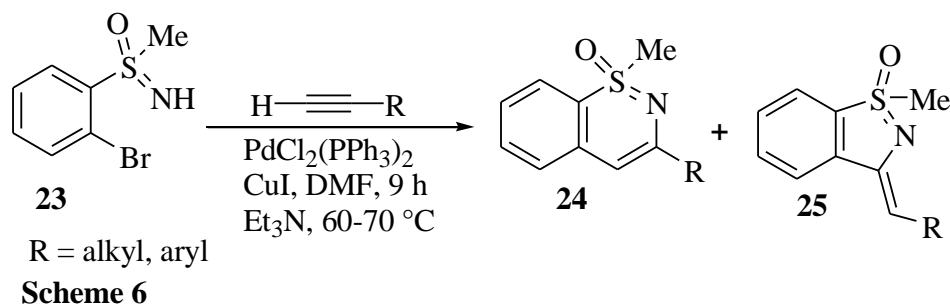
Scheme 4

The same group also reported [21] the synthesis of 2-benzylimidazo[2,1-*b*][1,3]benzothiazoles **22** via palladium-catalyzed heteroannulation of 2-imino-3-(2-propynyl)-1,3-benzothiazole **21** with various iodobenzenes **10**. The reactions were performed in DMF with triethylamine in the presence of bis(triphenylphosphine)palladium(II) chloride and cuprous iodide at room temperature to give 2-substituted imidazo[2,1-*b*][1,3]benzothiazoles **22** in moderate to high yields (**Scheme 5**). The aryl iodide must contain electron-withdrawing groups such as -NO₂, -Cl, -CO₂Me or -CN for the success of the reaction.



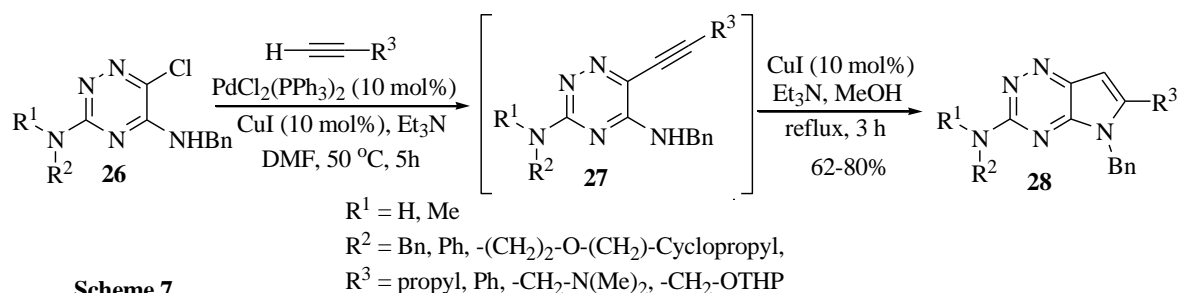
Scheme 5

One-pot reaction of *S*-2-bromophenyl-*S*-methylsulfoximine **23** with terminal alkynes in the presence of a catalyst Pd(PPh₃)₂Cl₂, co-catalyst CuI, base Et₃N in DMF at about 60-70 °C for 9h resulted in the formation of both 1,2-benzothiazines **24** and 1,2-benzoisothiazoles **25**. A preference for compounds **24** was observed with alkylalkynes, while the compounds **25** were preferentially formed with alkynylarenes (**Scheme 6**) [22].



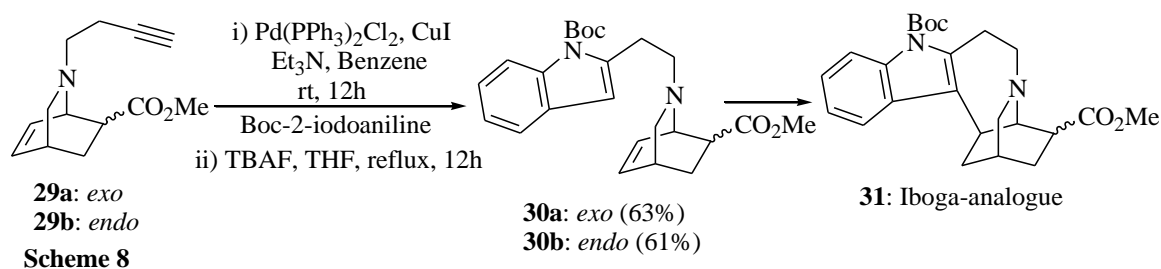
Scheme 6

The Sonogashira cross-coupling reaction followed by heteroannulation on 3,5-diamino-6-chloro-1,2,4-triazines **26** in a one pot reaction was investigated by Nyffenegger *et al.* [23] Prolonged reaction of pent-1-yne in the presence of $\text{PdCl}_2(\text{PPh}_3)_2$, CuI, Et_3N , in DMF, at about 50 °C or elevated temperatures provided always mixtures of desired products **28** and acetylenic intermediates **27**. Cyclized compound was obtained with an optimum yield when a two-step procedure was utilized. Thus, compounds **26** were first subjected to Sonogashira reaction in the presence of pent-1-yne, $\text{PdCl}_2(\text{PPh}_3)_2$ (10 mol %) and CuI (10 mol %) for 5 h at 50 °C. The mixture was then concentrated in vacuo and the crude intermediates **27** were refluxed in MeOH/ Et_3N solution (3:1) with a catalytic amount of CuI for 3 h to obtain compounds **28** in 62–82 % yields (**Scheme 7**).



Scheme 7

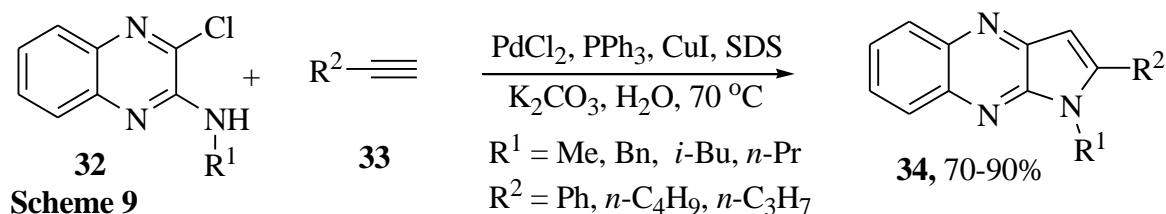
Very recently, a concise route to synthesis of iboga-analogues **31** has been developed by Sinha *et al.* [24] The key intermediates **30a** and **30b** for this synthesis have been obtained *via* Pd-catalyzed Sonogashira coupling and then cyclization. Sonogashira coupling of terminal alkynes **29a** and **29b** with *N*-Boc-protected 2-iodoaniline was achieved by treatment with $\text{Pd}(\text{PPh}_3)_2\text{Cl}_2$ (5 mol %), CuI (10 mol %) and NEt_3 in benzene at rt for 12h to give a mixture of products. The Sonogashira coupling products efficiently cyclized to 2-substituted indole **30a** and **30b** (*exo*- and *endo*- isomers) on treatment with tetrabutylammonium fluoride (TBAF) under refluxing condition in one pot. These intermediate **30a,b** have been used for the synthesis of iboga-analogues (**Scheme 8**).



Scheme 8

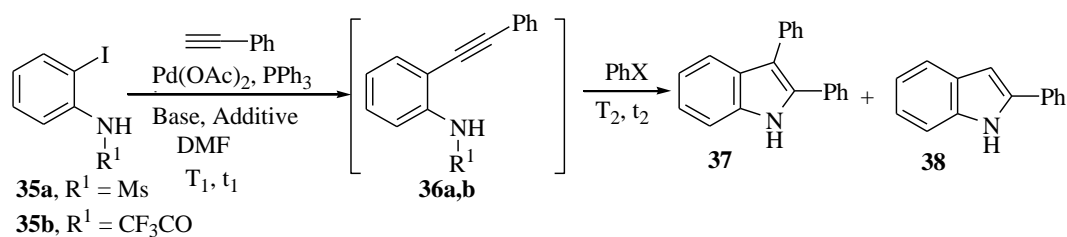
Pd-catalyzed Sonogashira reaction can also be performed in aqueous medium. Very recently, Keivanloo *et al.* reported [25] one pot synthesis of 1,2 disubstituted pyrrolo[2,3-*b*]quinoxalines **34** *via* Pd-catalyzed heteroannulation in water. Treatment of *N*-alkyl-3-

chloroquinoxaline-2-amines **32a-d** with alkynes **33a-c** in the presence of PdCl₂, PPh₃, CuI, sodium lauryl sulfate and K₂CO₃ at 70 °C in water under an argon atmosphere afforded 1,2-disubstituted pyrrolo[2,3-*b*] quinoxalines **34a-f** in 70-92% yields (**Scheme 9**).



The synthesis of 2, 3-disubstituted indole was reported by a one-pot regioselective three component process *via* consecutive Pd-catalyzed copper free Sonogashira coupling, amidopalladation, and reductive elimination. Thus, treatment of *N*-protected 2-iodoaniline, 2-iodo-*N*-methanesulfonyl **35a** or trifluoroacetylanilide **35b** with phenylacetylene in the presence of catalyst Pd(OAc)₂ (5 mol%), ligand PPh₃ (20 mol%), base K₂CO₃ in DMF at about 60°C afforded Sonogashira addition products **36a,b** and subsequent cyclization *in situ* with bromobenzene gave the indole derivatives **37** and **38** (**Scheme 10**) [26].

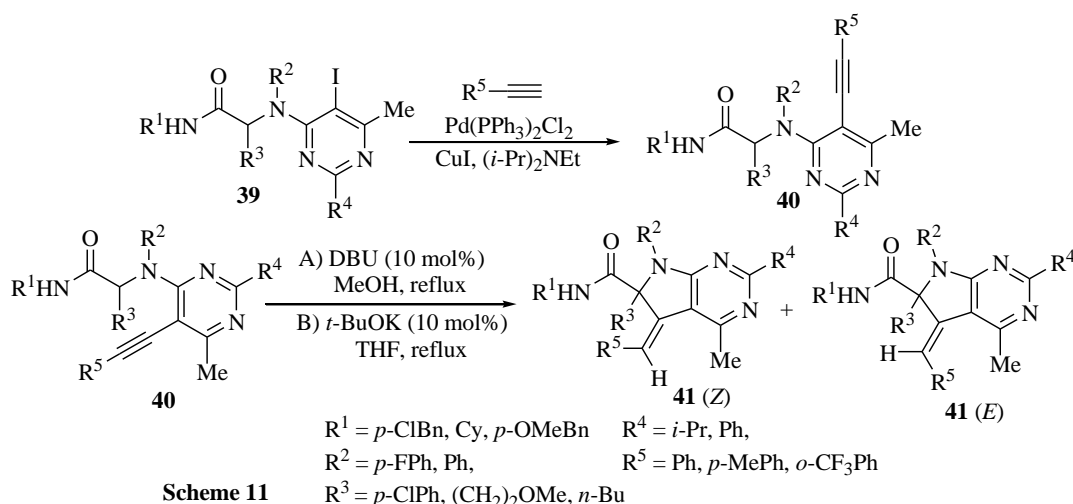
Several important parameters such as base, solvent, temperature and ligand were examined. The Sonogashira coupling of **35a** and phenylacetylene with KOAc or K₂CO₃ in DMF at 50 °C was complete in 1 h, but conversion of **36a** into **37** did not occur at the same temperature even after 17 h (**Scheme 10**, entries 1 and 3). In contrast, conversion of **36a** into cyclized product occurs at 50 °C, in the presence of *n*-Bu₄NOAc giving **37** and **38** in the ratio of 68/32 (entry 2). Using a combination of tetramethylguanidine (TMG) and *n*-Bu₄NOAc as bases, **36** was converted into **37/38** within 1h at 100 °C, but the ratio of **37** *vs* **38** decreased (entry 4). Similarly, with *n*-Bu₄NOAc as base, the Sonogashira coupling of **35b** with phenylacetylene was complete in 19 h at ambient temperature, while the conversion of **36b** into **37/38** took 7 h at 60 °C, affording **37** and **38** in a 70:30 ratio (entry 5). These results and some other results are summarized in **Scheme 10**.



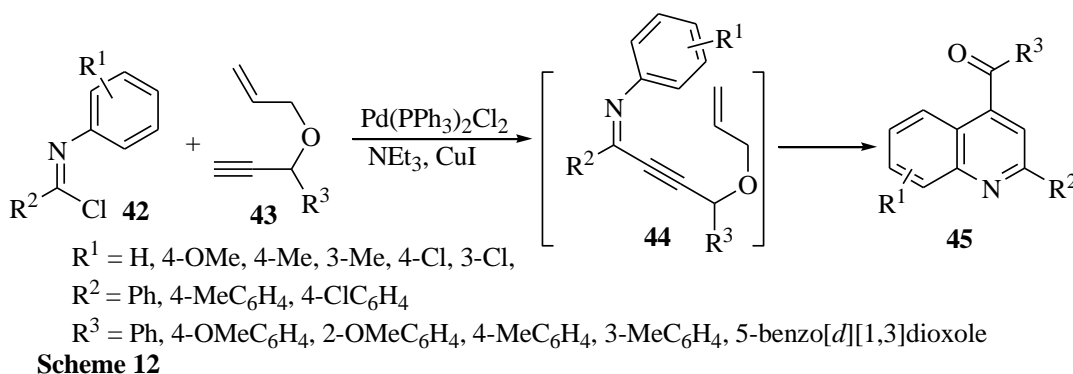
entry	substrate	ligand	base(equiv))	T ₁ /t ₁ (°C/h)	T ₂ /t ₂ (°C/h)	36/37/38
1	35a	Ph ₃ P	KOAc(3)	50/1	50/17	90/0/10
2	35a	Ph ₃ P	<i>n</i> Bu ₄ NOAc(3)	50/1	50/17	0/68/32
3	35a	Ph ₃ P	K ₂ CO ₃ (3)	50/1	50/17	56/0/44
4	35a	Ph ₃ P	TMG(2) + <i>n</i> Bu ₄ NOAc(1.5)	50/1	100/1	0/58/42
5	35b	Ph ₃ P	<i>n</i> Bu ₄ NOAc(4)	22/19	60/7	0/70/30
6	35b	Ph ₃ P	K ₂ CO ₃ (4)	60/0.5 (t ₁ + t ₂)		0/98/2
7	35b	(2-furyl) ₃ P	K ₂ CO ₃ (4)	60/7 (t ₁ + t ₂)		0/86/14
8	35b	(<i>p</i> -Tol) ₃ P	K ₂ CO ₃ (4)	60/0.5 (t ₁ + t ₂)		0/97/3
9	35b	(<i>p</i> -Me-OPh) ₃ P	K ₂ CO ₃ (4)	60/23 (t ₁ + t ₂)		0/100/0

Scheme 10

Wagschal *et al.* reported [27] a new route to the synthesis of highly substituted pyrrolo[2,3-*d*]pyrimidines by Ugi-Smiles/Sonogashira cascade followed by an efficient base-catalyzed intramolecular cyclization. Ugi-Smiles adducts **39** on treatment with 1.2 equiv. of alkyne, 5 mol% of Pd(PPh₃)₂Cl₂, 5 mol% CuI and 1 equiv. of diisopropylethylamine afforded the Sonogashira adduct **40** (Scheme 11). Compound **40** was subjected to different basic conditions to afford pyrrolo[2,3-*d*]pyrimidines **41**. Substrate **40** and various amounts of DBU in acetonitrile gave the compound **41** as a mixture of two diastereomers. Both isomers can be selectively formed using a catalytic amount of either DBU in refluxing methanol (conditions A) or potassium *t*-butoxide in refluxing tetrahydrofuran (conditions B). For most starting alkynes, only one diastereomer can be isolated under conditions A, but the conditions B gave a mixture of both (Scheme 11). More interestingly, a one-pot procedure can be performed for the Sonogashira/cyclization step by adding DBU in the mixture after the palladium-catalyzed step. Under these conditions, the substrate **39** afforded both isomers **41(Z)**/**41(E)** in a 4:3 ratio in a 60 % overall yield.

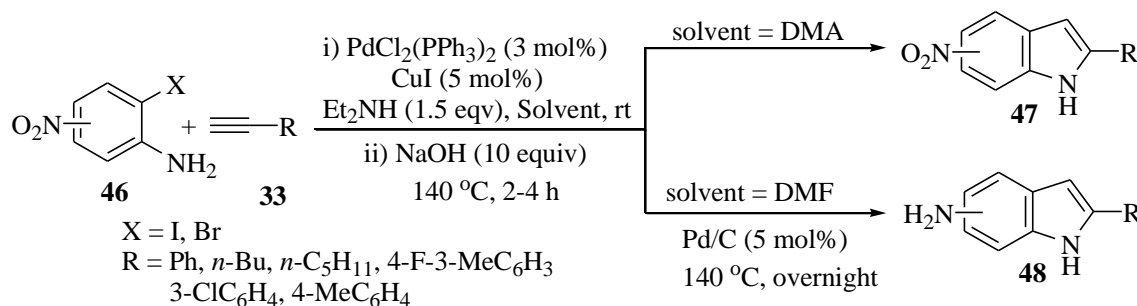


Liang *et. al.* developed [28] a domino reaction for the synthesis of quinoline derivatives *via* palladium-catalyzed Sonogashira coupling of benzimidoyl chlorides with 1,6-enynes followed by cyclization. Thus, reaction of *N*-phenylbenzimidoyl chlorides **42** with 1-(allyloxy)prop-2-ynylbenzenes **43** under the optimized reaction condition Pd(PPh₃)₂Cl₂ (0.05 mol), CuI (0.015 mol) in Et₃N at 80 °C were stirred for 7 h to give the unexpected quinoline products **45** in excellent yields (**Scheme 12**). Furthermore, to expand the scope of this reaction, they used R³ = H, alky but no expected quinoline product **45** was formed under the optimized conditions, and only the Sonogashira coupling products **44** were isolated.



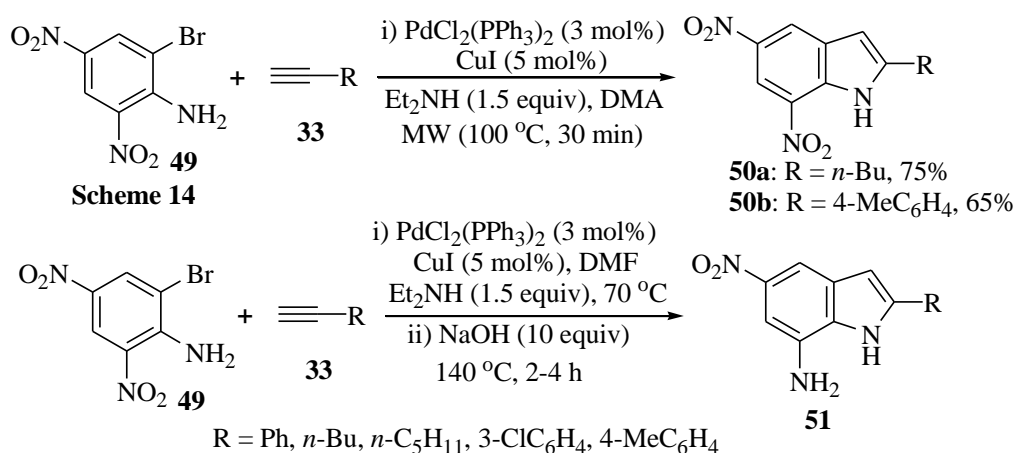
Sanz *et. al.* reported [29] an interesting example of one-pot synthesis of 2-substituted nitro or amino-indoles selectively, only by varying solvent used in tandem Sonogashira coupling heteroannulation reaction. When differently nitro substituted 2-halonitroaniline **46** was reacted with different alkynes **33** under Sonogashira condition [PdCl₂(PPh₃)₂ (3 mol%), CuI (5 mol%), Et₂NH (1.5 equiv), rt and then NaOH (10 equiv), 140 °C, 2-4 h] using DMA as a solvent yielded nitroindoles **47** in excellent yields (80-90%). On the other hand, treatment of **46** under same reaction condition only by varying solvent to DMF, reduction of nitro to the amino-group took place allowing the preparation of aminoindole **48** in moderate

yields (40-65%). Here, hydrogen was generated in the said reaction condition in DMF solvent. However, addition of Pd/C (5 mol%) to the reaction mixture effected the complete reduction (**Scheme 13**).



Scheme 13

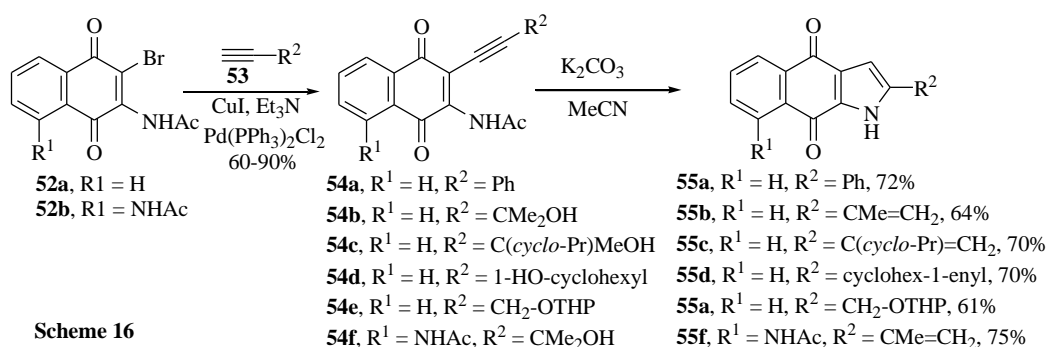
They also reported [29] that, for the substrate 2-bromo-4,6-dinitroaniline **49**, the intermediate *o*-alkynylaniline was cyclized to give the corresponding 2-substituted 5,7-dinitroindole **50** without the addition of a base, due to strong electron-withdrawing effect of the two nitro groups (**Scheme 14**). An interesting observation is that, when they carried out the same reaction between **49** and terminal alkynes **33** under the reaction condition described as above for the synthesis of aminoindoles **48**, (*i.e.*, by using DMF as solvent instead of DMA and with the addition of NaOH after the Sonogashira coupling), they obtained the indole derivatives **51** where only one of the two nitro groups had been reduced to the corresponding amino group. In this case, the reaction does not require the additional treatment with Pd/C catalyst (**Scheme 15**).



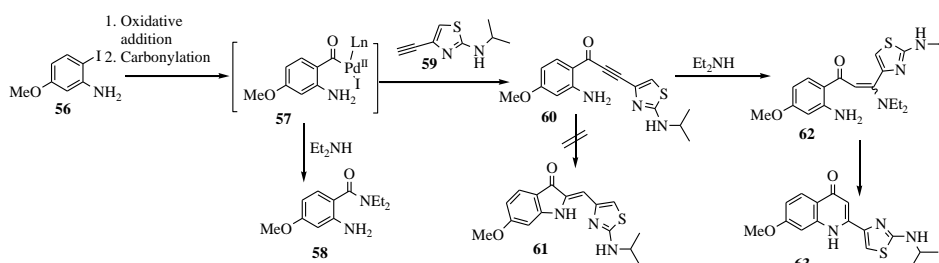
Scheme 15

Shvartsberg *et. al.* reported [30] that 3-acetylamino-2-bromo-1,4-naphthoquinone **52a** and its 5-acetylamino derivative **52b**, reacted smoothly with various cuprous acetylides in the presence of $\text{Pd}(\text{PPh}_3)_2\text{Cl}_2$ in a mixture of DMSO and CHCl_3 for 15-40 min at rt to afford alkynyl naphthoquinones **54a-f** in 60-90% yield. The acetylides were prepared *in situ* from the

equivalent quantities of terminal acetylenes **53**, CuI, and Et₃N. Cyclization of naphthoquinones **54a-f** bearing acetylenic and amido substituents on the non-aromatic quinone ring was carried out by an equimolar quantity of powdered K₂CO₃ in MeCN at 80 °C in 15–40 min. The cyclization was followed by deacetylation which led to 2-substituted benz[*f*]indole-4,9-diones **55a-f**. Acetylenic alcohols **54b,c,d,f** also underwent dehydration to form alkenyl-substituted indolequinones **55b,c,d,f** (Scheme 16).



A convergent synthesis of quinolone **63**, key structure of the protease inhibitor **BILN 2061**, was developed by Haddad *et. al.* [31] based on the palladium-catalyzed carbonylative Sonogashira coupling of 2-iodo-5-methoxyaniline **56** with thiazolylacetylene **59**. The reaction was performed under the optimized condition [PdCl₂(PPh₃)₂] as catalyst in presence of 250 psi CO at about 120 °C in Et₂NH] provided the desired quinolone **63** in 71% assay yield along with 3.8 % amide **58** and no detectable amount of **61**. Et₂NH provides a good balance of basicity and steric hindrance for carbonylative coupling/cyclization of iodoanisidine **56** with thiazolylacetylene **59**. They were able to minimize the formation of the corresponding amide **58** and promote formation of a six- vs five-membered ring by selective 6-*endo*-cyclization, by routing reactive intermediate **60** through intermediate **62**, and therefore direct the ring-closure to provide, regioselectively, the desired quinolone **63** (Scheme 17).

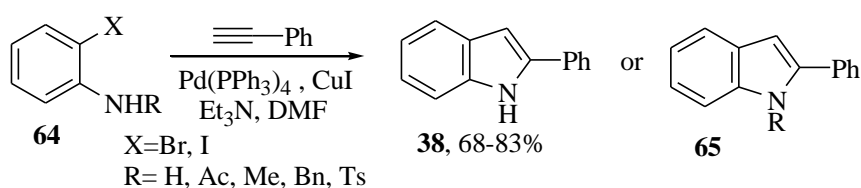


Catalysts effect on the Carbonylative Sonogashira Coupling/Cyclization

Entry	Catalyst	Time h	condition	amide 58 (%)	Yield 63 %
1	PdCl ₂ (PPh ₃) ₂	6	250 psi CO, 120 °C, Et ₂ NH	3.8	71
2	PdCl ₂ (dppf)	6	250 psi CO, 120 °C, Et ₂ NH	2.9	73
3	Pd(OAc) ₂	6	50 psi CO, 50 °C, DBU, Et ₂ NH	68.3	25
4	PdCl ₂ (PPh ₃) ₂	24	50 psi CO, 50 °C, Et ₂ NH	10.4	<20
5	PdCl ₂ (dppf)	24	250 psi CO, 120 °C, Et ₂ NH	5.3	60

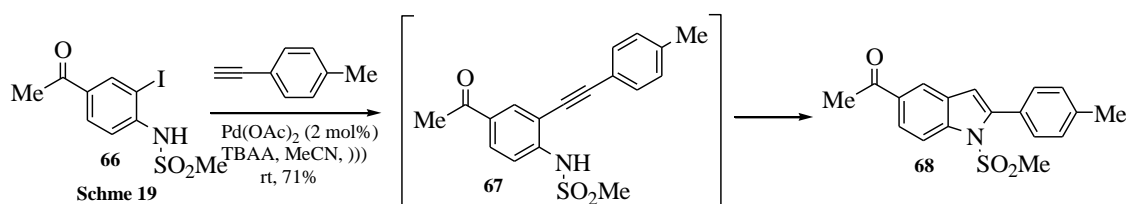
Scheme 17

Reaction of 2-haloanilines **64** (0.075 mmol) with phenylacetylene (1.5 mmol), in the presence of $\text{Pd}(\text{PPh}_3)_2\text{Cl}_2$ (0.025 mmol), CuI (0.055 mmol) and triethylamine (2 mmol) in DMF (5 mL) at ambient temperature afforded 2-phenylindole **38** as the major product [32]. Further, the reaction of *N*-acetyl-2-iodoaniline with phenylacetylene in the above-mentioned condition also gave 2-phenylindole **38** as the major product, instead of the expected *N*-acetyl-2-phenylindole **65**. The deprotection of the acetyl group in the indole likely occurred as a result of the basic conditions of the reaction. *N*-methyl, *N*-benzyl and *N*-tosyl 2-haloanilines effectively reacted with phenylacetylene and the corresponding 2-phenylindole derivatives **38** were obtained in good yields (**Scheme 18**).



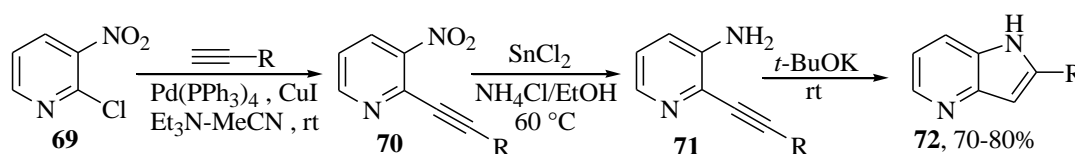
Scheme 18

Indoles can be prepared [33] from *N*-protected *o*-haloanilines by a one-pot palladium-catalyzed Sonogashira reaction followed by intramolecular cyclization. A convenient ligand-, copper-, and amine-free palladium-catalyzed one-pot cyclization to indoles starting from *N*-tosylated or *N*-mesylated *o*-iodoanilines has been developed, as shown in the reaction of iodinated sulfonamide **66** and *p*-tolyl acetylene affording indole **68** through Sonogashira intermediate **67** using palladium acetate as catalyst at room temperature in the presence of TBAA. Ultrasonic irradiation significantly improves the reaction rate (**Scheme 19**).



Scheme 19

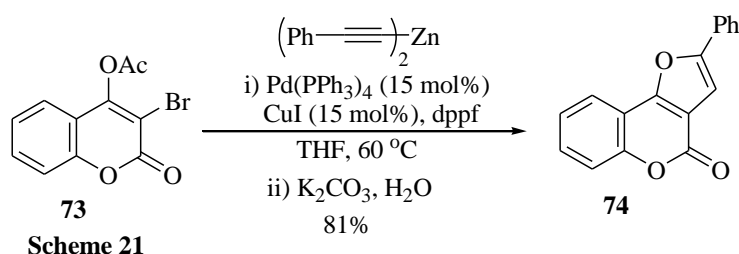
Sun *et al.* reported [34] a novel and efficient strategy for the synthesis of 2-substituted 4-azaindoles **72** via Sonogashira cross-coupling followed by base induced cyclization. Thus, compound 2-chloro-3-nitropyridine **69** through Pd-catalyzed Sonogashira cross coupling afforded **70**, which was reduced to **71**. The compound **71** on treatment with *t*-BuOK, afforded 4-azaindoles **72** (**Scheme 20**).



Scheme 20

R = Ph, TMS, *n*-Pr, $(\text{CH}_2)_3\text{CN}$, $(\text{CH}_2)_3\text{OH}$

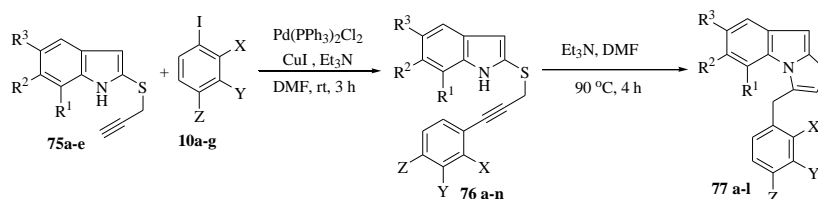
Synthesis of furocoumarins-4*H*-furo[3,2-*c*]chromen-4-ones **74** has been successfully achieved using one-pot sequential coupling/cyclization strategy with easily available starting materials 3-bromo-4-acetoxycoumarins and terminal alkynes.[35] This process involves Pd/Cu-catalyzed alkynylation with *in situ* prepared dialkynylzinc followed by intramolecular hydroalkoxylation. The reaction of 3-bromo-4-acetoxycoumarin **73** with phenylacetylene using Pd(PPh₃)₄, CuI in presence of 1,1'-bis(diphenylphosphino)ferrocene (dppf) as additive gave the desired furocoumarin in 29% yield together with 14% of cross-coupling product in 5 h. When an additional hydrolysis procedure (K₂CO₃, H₂O) was employed in one-pot, a much higher yield (51%) of the furocoumarin **74** was obtained. More satisfactory result was obtained when the reaction was performed in the presence of zinc acetylides, which can be prepared *in situ* by direct metallation of 1-alkynes with Me₂Zn.[36] Di(phenylethynyl)zinc was found to be very effective in the related transformation, generating the cascade coupling/cyclization product **74** in very good yield (81%) under the same one-pot condition (Scheme 21).



Thiazoles are useful heterocycles and building blocks and a prominent structural moiety of compounds relevant to treatment of cancer, bacterial, fungal and viral infections [37] and are known to exhibit pharmacological activities. [38] Recently we reported [39] the synthesis of thiazole derivatives, 3-benzylthiazolo [3,2-*a*]indoles by Sonogashira acetylide-coupling followed by triethylamine-induced regioselective cyclization in a one-pot operation. The required precursors 2-(prop-2-ynylthio)-1*H*-indoles **76** were synthesized according to the published procedure.[40] When Sonogashira coupling reaction were performed on 2-(prop-2-ynylthio)-1*H*-indoles **75** with aryl iodide in the presence of *bis* (triphenylphosphine) palladium (II) chloride (3 mol%) as catalyst, cuprous iodide (3mol%) as co-catalyst and base triethylamine in anhydrous DMF at room temperature for 3 h, the expected Sonogashira coupling product **76** was obtained. The compound **76** was heated at 90 °C under basic condition for 4h to yield the desired 3-(4-acetylbenzyl)thiazolo[3,2-*a*]indole derivatives **77** in 82 % yield (Scheme 22).

It was found that substituents on the phenyl ring of the substrate **76** plays a vital role in this cycloisomerisation reaction. It was found that the presence of electron withdrawing groups such as -COCH₃, -NO₂, -CO₂Et on the phenyl ring of the substrate **76** is essential for

successful cycloisomerization. Aryl iodides without electron withdrawing substituents undergo Sonogashira coupling readily but Et₃N-induced cyclization does not occur even after long heating at elevated temperature. The absence of atleast one electron withdrawing substituents on the phenyl ring of the substrate **76** inhibits the Et₃N induced cyclization (**Scheme 22**).



entry	substrate	R ¹	R ²	R ³	X	Y	Z	product/ yield(%)	product/ yield(%)
1	75a/10a	H	H	H	H	H	COCH ₃	76a , 80	77a , 82
2	75a/10a	H	H	H	H	H	COCH ₃	- ^a	77a , 80
3	75b/10a	Me	H	H	H	H	COCH ₃	- ^a	77b , 78
4	75a/10b	H	H	H	H	H	CO ₂ Et	76c , 85	77c , 82
5	75a/10c	H	H	H	H	H	NO ₂	- ^b	77d , 85
6	75b/10c	Me	H	H	H	H	NO ₂	- ^b	77e , 75
7	75a/10d	H	H	H	H	NO ₂	H	- ^a	77f , 80
8	75c/10d	H	H	Me	H	NO ₂	H	- ^a	77g , 60 ^c
9	75d/10d	Me	Me	H	H	NO ₂	H	- ^a	77h , 65 ^c
10	75e/10d	Me	Cl	H	H	NO ₂	H	- ^a	77i , 70 ^c
11	75e/10b	Me	Cl	H	H	H	CO ₂ Et	- ^a	77j , 80 ^c
12	75a/10e	H	H	H	Cl	H	NO ₂	- ^b	77k , 75 ^c
13	75b/10e	Me	H	H	Cl	H	NO ₂	- ^b	77l , 73 ^c
14	75a/10f	H	H	H	H	H	Cl	76m , 73	n.r
15	75a/10g	H	H	H	H	H	H	76n , 75	n.r

^a product was not isolated, one-pot reaction was performed.

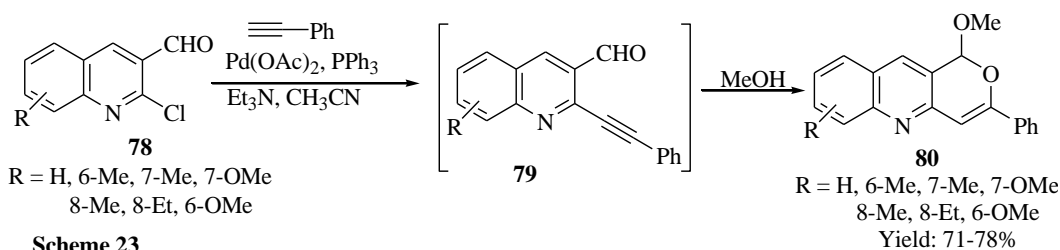
^b product could not be isolated, cyclization occurs at room temperature.

^c products were isolated in pure form by column chromatography but decomposes at room temperature while recording the NMR spectrum.

n.r - No reaction

Scheme 22

Synthesis of 1,3-disubstituted pyrano[4,3-*b*]quinolines **80** from 2-chloro-3-formylquinolines **79** has been reported by a convenient one-pot, copper-free, Pd-catalyzed Sonogashira coupling-annulation methodology.[41] Initially, they observed that reaction of **78** with phenylacetylene using 5 mol % of Pd(OAc)₂, 10 mol % of PPh₃, 2 equiv of Et₃N in acetonitrile, and methanol (4.0 mL) as a nucleophile at 80 °C for overnight did not give the desired cyclized product **80** at all, and the starting material **78** was recovered. On the other hand, when methanol was added to the reaction mixture and heated for further 2.5h after the formation of the Sonogashira product **79**, using optimized copper-free Sonogashira coupling conditions provided the cyclized product **80** along with uncyclized **79**. This procedure not only gave the improved yields of the cyclized products **80** but also reduced the reaction time (**Scheme 23**).



Conclusion:

The Sonogashira reaction is a process particularly suitable for the synthesis of enynes and arylacetylenes. This cross-coupling process combined with an internal electrophilic cyclization has been generally applied to the synthesis of many heterocyclic systems. In this brief review, synthesis of heterocyclic compounds by the application of Sonogashira coupling followed by heteroannulation reactions has been summarized. It is needless to mention that it is a difficult task to cover all aspects of the topic in this brief review. Therefore, discussions are limited mainly to one-pot synthesis or base-mediated cyclization of arylalkynes and conjugated enynes intermediate leading to the formation of normal-size heterocycles. The reaction proceeds under relatively mild conditions in one step and tolerates a wide variety of functional groups. Finally, it may be concluded that the application of Sonogashira reaction in organic synthesis, still offer enormous scope for the synthesis of heterocyclic compounds and Sonogashira reaction will continue to be a fast-moving topic for the next several years.

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SIGNIFICANCE OF BUDDHA AND TAGORE'S AHIMSA THEORY ON MODERN CIVILIZATION: AN ANALYSIS

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Abstract:

The world today is torn into pieces and the warring nations are divided into maps hostile to each other. The Buddha's message for the well-being of the sentient world did not remain confined to ancient India only but impressed upon a large number of people of Asia who found solace and peace in his words. We are always under tension with the multiplicity of our expectations and non-fulfilment of desires. The best and the only way for the easing of our tension and healing of our diseases is to cast off egoism and purify the mind. True to the spirit and ideal of India, the land of religious tolerance, there has not been even a semblance of intolerance in the words and attitude of the Buddha. On no occasion do we see the Buddha losing his temper and making any angry or uncharitable observation even to a hostile critic.

In presenting the process of the eightfold Noble Path the Buddha has stressed upon the formation of a pleasant personality of determination with a formidably noble character who can render to the society service of great values. The whole of the Buddha's discipline as coming under the *Path* can be divided into three sections, viz., *sila*, *citta* and *panna*, physical, mental and intellectual practices. In the ethical quest and philosophic achievement of Buddhism these three concepts have come to occupy a very significantly important role.

Tagore says, "As we become conscious of the harmony in our soul, our apprehension of the blissfulness of the spirit of the world becomes universal, and the expression of beauty in our life moves in goodness and love towards the infinite. This is the ultimate object of our existence."

Introduction:

Over two thousand five hundred years ago the Buddha, the perfectly enlightened one, the Great Teacher of mankind lived and worked in this world for the amelioration of the condition of the suffering humanity, and while we reflect on his words now we are struck with wonder and grateful reverence to realize how much relevant are his words even in the present context of things!

The world today is torn into pieces and the warring nations are divided into mps hostile to each other. No ray of hope is discernible for the survival of mankind, rather a more horrible nuclear war seems to be staring us at the face! Views on Lies of life have totally changed, there has been a total degeneration of human nature and moral values. In the midst of our consideration for personal gain and loss we fail to realize that the removal of wrong and evil by the observance of right and good can only help us establish harmony in the society and create a world free from strifes. To achieve this it is necessary to cultivate loving

friendship, feeling of equanimity, a compassionate mind inspired by a spirit of service to fellow beings etc. which have been so convincingly explained by the Buddha in his advice.

The Buddha's message for the well-being of the sentient world did not remain confined to ancient India only but impressed upon a large number of people of Asia who found solace and peace in his words. To them the Buddha was not only Universal Love personified but was also a symbol of Perfect Wisdom, They sought in him a shelter for their distressed mind and considered his teachings as the remedy for all the evils that could confront a worldly man! The *Lalitavistara* addresses the Buddha as the king of physicians to indicate the importance of his teachings in respect of the world of beings:

*Cirature jivaloke klesa-vyadhi-paapidite
Vaidyarat tvam samutpannah sarva-vyadhi-pramocakah.*

'In this world, long sick and suffering from the disease of passions, O you, the supreme physician, have appeared to cure all diseases'.

But what are the ailments and afflictions the Buddha as the physician is expected to remove and with what medicament? The time of the Buddha's advent has been said to be the age of spiritual Quest (*esana*) and we have to remember that Gautama took to the state of homelessness with the urge to find out the root of ills and evils causing suffering to mankind and as a seeker of *truth* it was his *one* mission to indicate to the distressed and tormented humanity the *path* which would lead to make an end of sufferings. He discovered the four Noble Truths and pointed out *ignorance* at the root of all human evils. In this world of sin suffering and impermanence he wandered for about forty five years delivering his message of truth, love and non-violence. His teachings are no doubt religious in the true connotation of expression, but at the same time they are ethical, philosophical and universal in character. He has explained the impure mental states and passions which afflict our minds and create conditions for us to fall in the cycle of births and consequential sufferings in the *samsara*, in the whirlpool of existence. We are always under tension with the multiplicity of our expectations and non-fulfilment of desires. The best and the only way for the easing of our tension and healing of our diseases is to cast off egoism and purify the mind. He wanted men to be purified within by an internal bathing - *sinato antarena sinanena*, and not within the touch of holy waters. He has not favoured a negative avoidance of evil but has asked for the positive performance of good and inward cleansing :

*sabbapapassa akaranam kusalassa upasampada,
sacitapariyodapanam etam Buddhana sasanam.¹*

The discarding of all evils, the perfecting of noble deeds, the purifying of one's mind, —this is the teaching of the Buddhas.

It is again said that purity and impurity depend on oneself, none can purify another

suddhi asuddhi paccattam nanno annam visodhaye²

The Teacher repeatedly instructed his disciples to follow practical methods to arrive at the Truth. Practice not belief is the foundation of his teachings. He has pointed out that the highest seat of authority is the voice of the spirit in us and an individual is his own saviour without reference to any external force - *atta hi attano natho ko hi natho para siya!*³ He asks his followers to set themselves aright before they leach others :

*attanam eva pathamam patirupe nivesaye
atha annam anusaseyya na kilisseya pandito⁴*

Let one first establish himself in what is proper, then let him teach others. The wise man will not suffer (if he acts in this way).

He makes out that the hope of salvation lies in the regeneration of our nature. He advises to look into the acts of commission and omission of one's own self and not to explore the unworthy actions of others:

*na paresam vilomani na paresam katakatam
attano va avekkheyya katani ca akatani ca.⁵*

He points out that it is easy to find out the faults of others and there is a proneness to hide one's own faults from others:

*sudassam vajjam annesam attano pana duddasam
paresam hi so vajjani opunati yathabhusam
attano pana chadeti kalim va kitava satho⁶*

True to the spirit and ideal of India, the land of religious tolerance, there has not been even a semblance of intolerance in the words and attitude of the Buddha. On no occasion do we see the Buddha losing his temper and making any angry or uncharitable observation even to a hostile critic. Sometimes we see him sitting by the side of the sacred fire of a Brahmin and giving a religious discourse without denouncing the latter's belief and worship. At some other time we hear him urging a new convert (he erstwhile Jaina believer Siha, to give food and gifts as before to the Jaina monks who might frequent his house. The Master is least concerned with a change of creed. Once we see him bitterly repulsed by a householder with most abusive words. [With](#) perfect expression of courtesy and friendly attitude he questions the man, 'Dear friend, if any householder sets food before a beggar and the beggar refuses to accept the food, to whom does the food then belong ?' The man replies. 'Of course, to the householder'. The Lord remarks. 'Then if I refuse to accept your abuse and ill-will, it must return to you, but I must go away the poorer because I have lost a friend !'

The creation of an egalitarian society was never the aim of the Teacher, he wanted a radical cure of all tensions and unhappy situations to establish enduring peace and happiness for all. He exhorts his adherents to fill their hearts with the feeling of amity for all creatures and remove the evil propensities like hatred, enmity etc. He points out that enmity can never be ended by enmity, it can be ended only by amity:

*na hi verena verani sammantidha kudacanam
averena ca sammanti esa dhammo sanantano*⁷

He has further explained that victory breeds hatred because the vanquished one-remains in sorrow :-

Jayam veram pasavati dukkham seii parajito...

His message was something new for the age inasmuch as it held out the promise of happiness and eternal bliss without the belief in a personal god. He has discouraged all academic speculations about the *beyond*, and to him all doctrinal controversies are prejudicial to inward peace. What he treats as most important is the removal of ignorance, thirst and attachment by the comprehension of the four Noble Truths. He has explained that the phenomenal world has no real existence; it is to the ignorant and unreflective mind that certain causes and conditions make a thing appear to exist. He has brought out the metaphysical schemes of the origin and cessation of our sufferings and has prescribed the *Middle Path* and the comprehension of the Noble Truths as, the medicament.

The whole of the Buddha's discipline as coming under the *Path* can be divided into three sections, viz., *sila*, *citta* and *panna*, physical, mental and intellectual practices. In the ethical quest and philosophic achievement of Buddhism these three concepts have come to occupy a very significantly important role.

Sila or physical practice is a comprehensive moral code comprising *samma vaca* (right speech), *samma kammanto* (right action) and *samma ajiva* (right livelihood), i.e., the five most important elements of morality, non-thieving, non-adultery, non-lying, non-taking of intoxicating drinks, non-following of an immoral means of livelihood. From sociological point of view these prohibitions are very significant.. These relate to the physical discipline after which comes the mental training *or citta* that culminates in contemplation consisting of *samma vayamo* (right exertion), *samma sati* (right mindfulness) and *samma samadhi* (right meditation). The mental discipline which is so vital in Buddhist ethics and philosophy does not imply only the concentration of mind but includes a careful scrutiny of one's own nature and propensity. The third aspect is *panna*, the intellectual discipline, denoted by *samma sankappo* (right determination) and *samma ditthi* (right views). In these three sections we get the eight precepts in the formulae of the Noble Path.

In presenting the process of the eightfold Noble Path the Buddha has stressed upon the formation of a pleasant personality of determination with a formidably noble character who can render to the society service of great values. By bringing in morality and contemplative concentration together the Buddha has shown the way for the deepening of the sense of morality. It is the inner worth that counts most in Buddhism and the type of the integrated personality which the Path projects is of much necessity to the society for its well-being. It is true, that the promulgated *Path* primarily concerns the community of Buddhist ascetics but the sociological values underlying the eight concepts as analysed cannot be lost sight of. The ethics or morality preached through the *Path* is not to remain confined to academic discussions but to help the cultivation of benevolent will, moral striving, alertness in body and mind, and an earnest mind completely free from passion and any form of ill-will.

The other ethical process in Buddhism which when properly cultivated and attained can go a long way in easing and removing our earthly problems and tensions. The process known as the *Brahmavihara* consists of four ennobling categories which go in close relationship with the eightfold Noble Path. The ideal represented by the four categories is remarkable for its moral qualities and altruistic values. The four are known as *metta* (*maitri*), *karuna*, *mudita* and *upekkha* (*upeksa*) and in Buddhism these are not ideas only but *bhavanas* or form of meditation to be achieved by putting into practice. The highest type of altruism is expressed through these four concepts which when fully practiced can make the society worth living.

These four categories have been explained also by the Samkhya system but a difference between the two systems in this regard lies in the broadness of attitude, universality and a dynamic altruism advocated by Buddhism.

Metta i.e., *metta-bhavana*, the first of the *Brahma-viharas*, is an important ethical concept having great social implication. It enjoins on a Buddha-follower to be always solicitous for the well being and happiness of all creatures in the universe, known or unknown, born or yet to be born. *Sabbe satta bhavantu sukhitatta*, let all beings be happy, has been set forth as the ideal for one practicing this form of *bhavana*. But only the cultivation in mind of the wish for the good and happiness of all is not sufficient, the aspirant should intently work for the well-being of all creatures, high and low, with a heart overflowing with boundless love for all. This is ultimately related with the concept of *ahimsa*, and the cultivation and practice of these two categories generate an internal harmony, a fraternity which can be of beneficial consequences in this growingly industrialized impersonal modern civilization.

Karuna-bhavana, the second in the process helps the cultivation of a feeling of universal compassion for all creatures including even a convict who is being led to the gallows. Not a passive compassionate feeling only but an active service for redressal is required for the practice of this *bhavana*. He should be actively engaged in translating his feeling into action and cannot rest content till he has succoured the suffering world.

Mudita, the third *Brahma-vihara*, is an important moral altitude which consists in the practice to have a feeling of joy at the happiness of others including enemies.

A feeling of equanimity is generated by the practice of *Upekkha*, the last in the scheme of the *Brahma-viharas*.

Properly put into practice these four ideals can play significant roles in the radical eradication of all disquieting sentiments existing in the world and can be of great help to create a sense of fraternity and foster a feeling of solidarity among men of different climes and interest. Buddha's idea of ennobling and purifying of the heart through love, amity and compassion along with his message *anicca* (*anitya*), *anatta* (*anatma*) and *dukkha* (*duhkha*) hold out to the world the promise of deliverance from their troubles and miseries. By nature worldly beings are self-centred and desire or (*tanha-trsna*) is the root cause of this self-centeredness. The Buddha has pointed out this basic fact and has suggested remedies for the same. He has shown that virtue and wisdom purify each other.⁸ While failure to grasp the principle of causation stands at the root of all the sufferings of the world.⁹

At this critical juncture of human history when mankind and the whole creation face annihilation owing to the gathering gloom of malice and hatred, passion and violence, distrust and jealousy, suspicion and hostility, perhaps the Buddha and his message can kindle the light of hope and deliverance for us, can show us the correct way and help us in restoring love and amity, peace and friendship in our life and society. Perhaps at no time of human history was the message of the Buddha more relevant and necessary than it is today. Buddhistic thought had made a great impact on Rabindranath Tagore's life. Tagore says, "Through our sense of truth we realize law in creation, and through our sense of beauty we realize harmony in the universe."¹⁰ For him the unity of truth and beauty means the harmony of the law of universe. Such harmony of universal law (*dharma*) can be perceived only in the human consciousness. Tagore says, "As we become conscious of the harmony in our soul, our apprehension of the blissfulness of the spirit of the world becomes universal, and the expression of beauty in our life moves in goodness and love towards the infinite. This is the ultimate object of our existence."¹¹

Rabindranath has invoked,¹² in his characteristic style a descent of the Buddha in his world made with violence and ridden with intolerance.

*Nutana taba janma lagi katara jata prani
Kara trana mahaprana ana amrta bani.*

“The whole creation is crying in earnestness for a new descent of yours, O you, the Great soul, save us, bring in your nectar-like message”.

References:

1. Dhammapada -183
2. Dhammapada -165
3. ibid 160
4. ibid 158
5. ibid 50; cf.- 252
6. ibid 252
7. Radhakrishnan, Dhammapada-Intr. P.5
8. cf. Sonadanda sutta
9. cf. Mahanidana sutta
10. Rabindranath Tagore, Sadhana, P.335
11. Ibid. P. 335-336
12. Rabindra Rachanavali, Birth Centenary Edn. 4/128.

SOME ASPECTS OF RESOURCES MOBILIZATION AND EXTENSION OF EDUCATION IN INDIA

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Abstract:

According to NPE (1986) Equality of education means it is to provide for equal opportunity to all not only in access but also in the conditions of success. Equality of educational opportunity has been adopted as equalization of access by as suitable manipulation of educational inputs like physical facilities and equipment in schools, quality of teachers and curriculum, and financial assistance for the poor. The present paper has attempted to focus thematically on some aspects of resources mobilization and extension of education in India

Introduction:

The Article 38(1) stated that 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. The article 41 stated that 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 undeserved want. Equality means sameness, uniformity and equivalence and focuses on a students' access to educational resources. Equity highlights that all groups of students attain the goals of the curriculum to approximately the same degree with same quality of education taking into consideration of students' access on knowledge. Educational equity focuses on a cohesive set of policies, programme and practices that assure high level of expectations and positive achievement patterns and equal access to educational opportunity for all learners including students and teachers. The Article 45 stated that the state shall endeavour to provide, within a period from 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.

The Indian Education Commission (1964-66) has observed that one of the important social objectives of education is to equalize opportunities enable the backward or underprivileged classes and individual to use education as a lever for the improvement of their condition. Every society that must values social justices and is anxious to improve the lot of the common man and cultivate all available talent must ensure progressive equality of opportunity to all sections of the population. This is the only guarantee for the building up of

an egalitarian human society in which the exploitation of the weaker will be minimised. Inequality in educational opportunity arises due to so many socio-economic factors e.g poverty, unemployment, illiteracy and lack of socio-economic awareness. Education is considered as an equalising factor. Education attempts to create employment opportunities and ensure income. Education facilitates for resources mobilization and creates skilful occupations and self-employment which in turns pave the way for sustainable development. It also helps common masses to participate actively in socio-economic activities through empowerment which in turns may lead to sustainable development. So, the present paper has tried to focus thematically on some aspects of resources mobilization and extension of education in India.

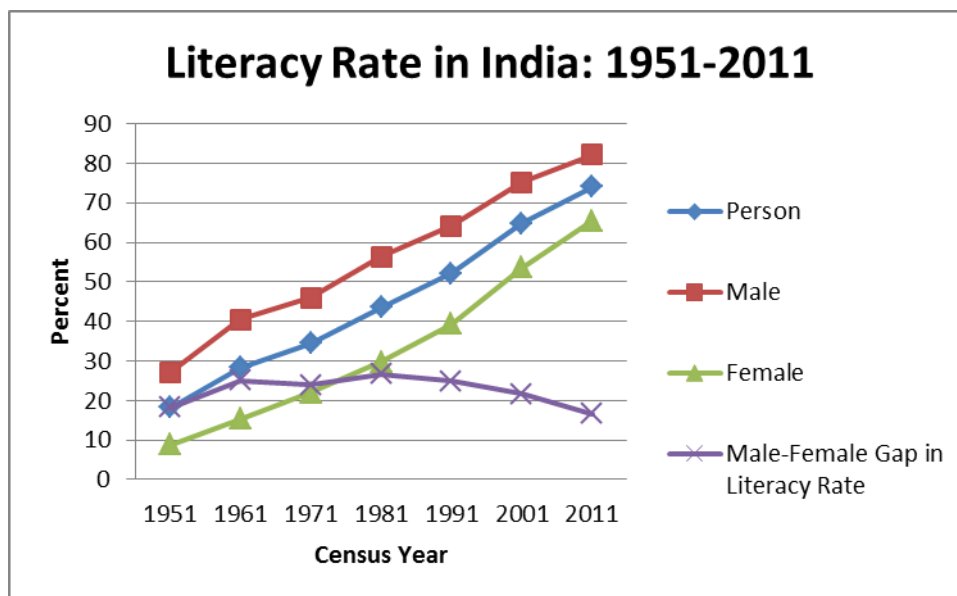
Table-1: Literacy Rate in India: 1951-2011

Census Year	Persons (%)	Male (%)	Female (%)	Male-Female gap in literacy rate
1951	18.33	27.16	8.86	18.30
1961	28.3	40.4	15.35	25.05
1971	34.45	45.96	21.97	23.98
1981	43.57	56.38	29.76	26.62
1991	52.21	64.13	39.29	24.84
2001	64.83	75.26	53.67	21.59
2011	74.04	82.14	65.46	16.68

Sources: Census of India-2001, 2011

Table-1 reveals that trends of literacy in india during 1951 to 2011. It is observed that the literacy rate increased from 18.3 % in 1951 to 74.04 % in 2011 in India. During the same period the literacy rates of male and female enhanced from 27.16 % and 8.86 % in 1951 to 82.14 % and 65.46 % in 2011 respectively. The male-female gap in literacy rate declined slowly from 18.30 % in 1951 to 16.68 % in 2011 taking into account for a little fluacting rate during the same period in India.

Diagram-1: Literacy Rate in India: 1951-2011



The diagram 1 also highlights (i) increasing trends of total literacy , male literacy and female literacy during 1951 to 2011 in India.(ii) Male literacy is higher as compared to female literacy and (iii) a slow decreasing rate of male-female literacy gap during the same period in India

Causes of Inequalities of Educational Opportunities:

- The greatest obstacle in the path of equality of educational opportunity is the lack of national education system
- There exist at present high imbalances of educational development in different parts of the country taking into consideration of primary, secondary and colleges.
- The cause of inequality of educational opportunity arises due to poverty of a large section of the people. The idea that the concept of poverty is essentially one of the inequalities has some immediate plausibility. After all, transfers from the rich to the poor can make a substantial dent on poverty in most societies. Even the poverty line to be used for identifying the poor has to be drawn with respect to contemporary standards in the community in question, so that poverty may look very like inequality between the poorest group and the rest of the community (Sen, 1981).
- There exist differences in the educational standards of schools and colleges.
- Home environment plays an important role for inequality of educational opportunities.

- The high disparity between the education of boys and girls at all the stages and in all sectors of education may cause inequality of educational opportunities.
- A higher disparity of educational development prevails between the advance classes and the backward classes e.g. the scheduled caste and the scheduled tribes.
- High private costs of education hold the responsibility for inequality of education.
- Lack of appropriate teacher –student ratio.
- There are some areas of the country which remain inaccessible and isolated with small habitation, particularly in hilly areas.
- Lack of suitable qualified teachers.
- Inequality of employment opportunity.
- Lack of socio-economic awareness of the some guardians from weaker section of the society.

Some Recommended Programmes by different education commissions and policies for equalization of educational opportunities:

In order to overcome the above difficulties it is necessary to promote the general standard of living of the population. The steps may be adopted as follows.

- The first step to be taken in this regard is the nationalization of the system of education. Uniform education facilities can only be supplied in a nationalized education system.
- Regional imbalance in respect of educational development must be eradicated.
- Differences in respect of urban and rural educational opportunity must be minimized.
- Proper educational opportunities should be provided to the minorities, socially depressed classes, scheduled castes and scheduled tribes.
- Women should be given equal opportunity of education with men.
- There should be special arranged for the children with special needs (CWSN).
- Free distribution of test books is an important step towards equality of educational opportunity.
- Other private costs should be provided tuition free.
- Socio-economic awareness (SEA) of the parents in the weaker section of the society should be increased. Education should be provided tuition free.

- Introduction of a common school system of a public education .The main components of common schooling are (i) all schools will be open to all children irrespective of caste, creed, community, economic conditions or social status, (ii) In common school system good education will rely not on wealth but on talent, (iii) Adequate and uniform standards will be maintained in the most of the schools,(iv) In common schooling no tuition fees will be imposed.
- Financial crisis of Government for development of education system must be removed as much as possible.
- For social justice and effective family planning women's education must be essential.
- Transport facilities should be supplied to reduce the cost on hostels and scholarships
- Hostels facilities should be arranged for the students on the priority basis.
- Library facilities should be made available for the all students.
- Facilities for students to earn and pay a part of their educational expenses should be developed
- The scholarship should be given on regular basis to the poor but talented students for promotion of their education. Scholarship should be arranged for study abroad.

Equalization and Universalisation of Elementary Education (UEE):

Universalization of elementary education in India implies that all children in the age – group of 6-14(class 1 to VIII), belonging to rich and the poor, the male and female, the rural and the urban and in places which are accessible with difficulty must be provided with elementary education. Universalisation of elementary education involved the following three stages-(i) universalization of provision, (ii) universalisation of enrolment and (iii) universalisation of retention. Universalization of provision focuses that school facilities should be provided to all the children between the age group 6 to 14 years in the country with the walking distance of a child. We have achieved this provision as much as possible. Universalisation of enrolment indicates that all children between the age group 6 to 14 years must be enrolled. But this provision has not been achieved successfully so many socio-economic reasons. Universalisation of retention implies that once a child attends a primary /elementary school he must complete all VII classes.

Social Significance of UEE and Equalisation of Educational Opportunities:

It is universally accepted that the provision of UEE is considered as the real indicator of the socio-economic development of the country. UEE does have a pivotal role in the following aspects

- Improvement of life and living of an individual.
- Preservation and enrichment of culture.
- Development of vocational efficiency.
- Promotion of basic and upgraded skills.
- Development in the quality of followership and leadership.
- Creation of new knowledge and getting facilities from new knowledge.
- Improvement of main essentials for healthy life.
- Promotion of values for emotional integration and national unity.
- Removal of elements for fatalism and superstitions. Inclusion of scientific attitudes.

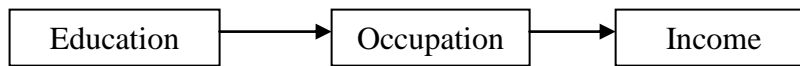
New Schemes for the UEE:

For the qualitative as well as quantitative enhancement of elementary education and attaining the aims of UEE, several schemes have been launched by the Government of India, Ministry of Human Resource Development (MHRD).

- District Primary Education Programme (DPEP).
- Elementary Education a Fundamental Right and RTE Act-2009.
- Minimum Levels of Learning (MLN).
- National Elementary Education Mission (NEEM).
- National Programme of Media Publicity and Advocacy of UEE.
- Non-Formal education.
- National Programme of Nutritional Support to primary education (NP-NSPE).
- Operation Blackboard.
- Shiksha Karmi Project (SKP).
- Teacher Education: Restructuring and Reorganisation
- Sarva Shiksha Abhiyan(Education For All)

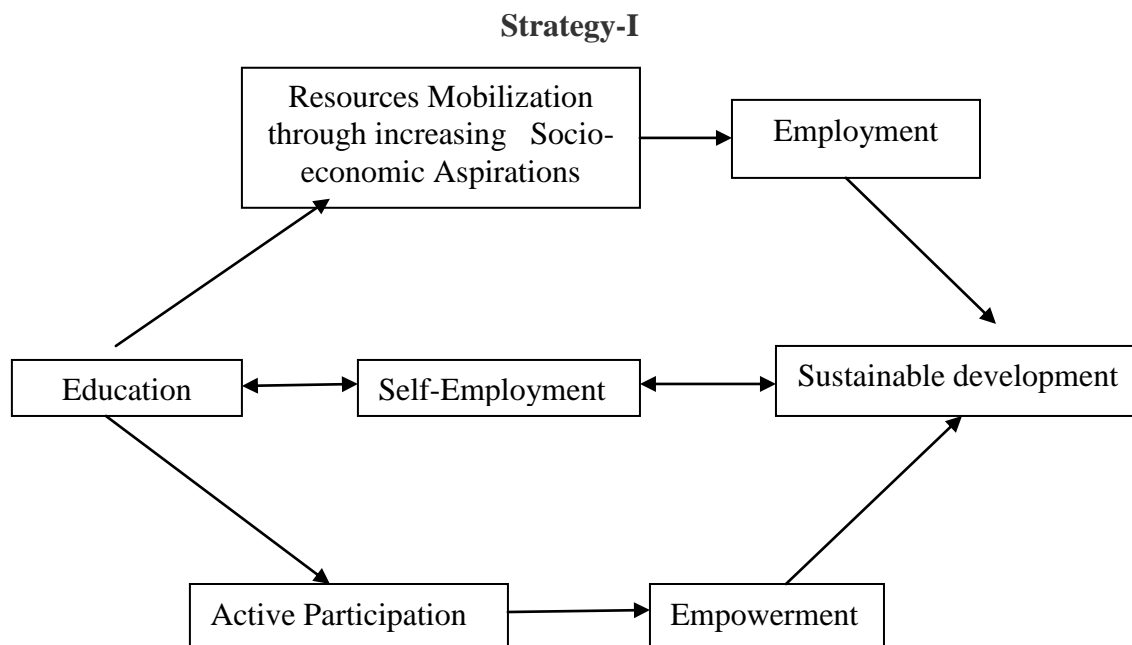
Strategies for Resources Mobilization and Scope for Equalization in Education

SEI).Socioeconomic Index (SEI) estimates the attributes of occupations that transfer a person's main resource (education) into a person's main reward (income). A simple model of the stratification process highlights as



Occupation can be considered as an intermediate position similar to a latent variable that converts education into income. SEI relates to prestige more as cause than as consequence or as a parallel measure. This is consistent with existing theories of occupational prestige (Ganzeboom, 1992) which argues prestige is awarded on the basis of power resources and that education (cultural resources) and income (economic resources) are the main forms of power in modern societies. SEI is defined as intervening variable between education and income that maximizes the indirect effect of education on income and minimizes the direct effect. Socio-economic index (SEI) is considered as Intervening Variable .

Diagram- 1: Development Strategy for the People.



Strategy II

The development Strategy II of the Model in diagram 1 focuses that educational leads to improvement of socio-economic interaction of people. Such socio-economic interactions influence participants for education. While the development Strategy I explains, education increases the ability of planning, controlling, motivation and aspiration, management, execution, evaluation and mobilization of resources (getting from Microfinance Institution (MF) institutions), and it makes a positive attitudes for resource creation in future. The socio-economic participations and proper resource mobilization together empower the people

through enhancing their financial stability alleviating poverty and enhancing acceptability within and outside the family. For example, a successful loan utilization programme would, over time, enhance ability of the people to take and repay larger loans which are conducive to administer (Mayoux, 2000). Such positive attitude of an empowered people however easily transfers into their next generations. Hence the process ultimately directs them towards the path of sustainable development by making a self-sustain ability in them that would be conducive to attain sustainable development of the people largely.

Conclusion:

The Article (38) stated that 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. The concept of equality of educational opportunity has passed through various stages of evolution in India. At present equality of educational opportunity has been explained as the opportunity to start together, to benefit from staggered starts, to reign or progress together. The philosophy of equality of opportunity that the equal chance should be given to every citizen for the development of his capability or ability and nothing could be allowed to impede one's path of development. It is our constitutional right. The Education commission (1964-66) strongly recommended the idea of providing equal opportunities of education to all sections of society irrespective of caste, creed, sex, and social and economic status. It is hoped that everyone should get equal opportunity in a democratic and socialistic society. Inequality in respect of educational opportunity attempts to enhance social cleavage and segregation. Equal opportunity does not imply identical education. Equal opportunity implies that rich and poor alike should have access to this education system and programme without any hindrance or obstacle. All materials barriers should be removed. Caste, colour or creed should not put any cheek on individual to pursue course of education in accordance with this ability and aptitude. Major findings of the study may be focused as:

- Government adopted various schemes should be utilised taking into account of planning, organizing, motivating, controlling and evaluating for realization of equalization of educational opportunities.
- Resources should be mobilised properly through expansion of education which would be helpful for self-employment and sustainable development.
- Active participation of socio-economic and political activities of the people should be enhanced through expansion of education which would be conducive to empowerment of people and sustainable development.

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**AN IMPACT STUDY OF SELF-HELP GROUPS ON WOMEN
EMPOWERMENT IN GOBINDARAMPUR VILLAGE OF KAKDWIP
BLOCK OF SOUTH TWENTY-FOUR PARGANAS DISTRICT,
WEST BENGAL**

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ABSTRACT

In India, women produce thirty percent of all food commodities consumed but get only ten percent of the property or wealth of the country. Against this scenery, micro-finance interventions are well-recognized world over as an effective tool for poverty alleviation and improving socioeconomic status of rural poor. There is a growing realization that rural women have been underestimated and discriminated against all walks of life, despite their substantial contribution to the household economy and in turn, the national economy as such. The present study has been carried out to assess the impact of micro-finance on socio-economic status of Scheduled women in Gobindarampur village of Kakdwip block of South Twenty-four Parganas District, West Bengal. This paper tries to link all the relevant points mentioned above namely Micro Finance, SHGs, and Women Empowerment. The paper would take some of the interesting cases, news and occurrences that would try to demonstrate that women in South Twenty-four Parganas District can pro-create themselves, if they get opportunities.

Key words: Micro-finance, women empowerment, poverty alleviation, socioeconomic, credit

INTRODUCTION:

Women have been the most underprivileged and discriminated strata of the society not only in West Bengal but in India also. It is observed that, in spite of safe guards provided in many of the development programmes in India; women in rural areas, especially from poor families could not be benefited. The self help group is a viable organized setup to disburse micro-credit to the rural women for the purpose of making them self dependant and encouraging them to enter into entrepreneurial activities. Because self help group programme mainly focuses on the generation of empowerment for rural women and making them financially, socially and politically capable. The empowerment of women through self help groups would give benefit not only to individual women but also for the family and community as a whole. Micro finance through Self Help Group (SHG) has been recognized internationally as the modern tool to combat poverty and for rural development. Micro finance and SHGs are effective in reducing poverty, empowering women and creating awareness which finally results in sustainable development of the nation. Women have been the most underprivileged and discriminated strata of the society not only in India but the world over. In spite of all Government and Non-Governments' efforts, they have been highly

ignorant clients of the financial sector. In the recent times, microfinance has been emerging as a powerful instrument for empowering women particularly, the rural women. Apart from the informal sector of finance the formal and semi formal sectors like commercial banks, NGOs etc. are taking much interest in providing microfinance to women considering it to be a profitable commercial activity. Women are also participating in the microfinance movement by availing the microfinance services being provided by the various financial channels.

CONCEPT OF MICROFINANCE

Microfinance is defined as the provision of thrift, credit and other financial services such as money transfer and micro insurance products for the poor, to enable them to raise their income levels and improve living standards. It refers to the entire aspect of financial services such as savings, money transfers, insurance, production as well as investment credit and includes the need for improvement in skill and entrepreneurial development that would help them to overcome poverty. Micro finance programs have significant potential for contributing to economic and social empowerment to members of SHGs. Access to savings and credit can initiate or strengthen a series of interlinked and mutually support the way of women empowerment (Niranjana Babu Reddy, 2010). Majority of microfinance programmes focus women with a view to empower them. There are varying underlying motivations for pursuing women empowerment. Some argue that women are amongst the poorest and the most vulnerable of the underprivileged and thus helping them should be a priority. A more feminist point of view stresses that an increased access to financial services represent an opening opportunity for greater empowerment. Such organizations explicitly perceive microfinance as a tool in the fight for the women's rights and independence. Finally, keeping up with the objective of financial viability, an increasing number of microfinance institutions prefer women members as they believe that they are better and more reliable borrowers. According to Zaman (2001) self-help groups intermediated by microcredit have been shown to have positive effects on women, with some of these impacts being ripple effects.

CONCEPT OF SELF-HELP GROUP (SHG)

The origin of Self-Help Groups (SHGs) is the brainchild of Grameen Bank of Bangladesh, which was founded by Mohammed Yunus. SHGs were started and formed in 1975. In India NABARD is initiated in 1986-87, but the real effort was taken after 1991-92 from the linkage of SHGs with the banks. A Self-help group is a small, voluntary association of people from the similar socio-economic background, which have been established for the purpose of solving social and economic problems through self-help and mutual understanding. Thus a SHG basically comes together to: Save small amounts regularly;

Mutually agree to contribute to a common fund; Meet their emergency needs; Have collective decision making; Resolve conflicts through collective leadership and mutual discussion; Provide collateral-free loans on terms decided by the group at market rates.(Srivastva; 2004).

OBJECTIVES OF THE STUDY

The major objectives of the present study are as follows:

- To identify and assess the socio economic conditions of members of SHGs from study area.
- To study the role of micro finance in women empowerment.
- To study the performance of SHGs in the study area.
- To analyze the empowerment which women members get in SHGs.

RESEARCH METHODOLOGY:

Data Sources: The study is exploratory in nature and is based on both primary and secondary data. Secondary data was collected from various journals, articles, working papers, NGO reports etc. Primary data was enumerated from a field survey in the study area.

Sampling: The study was conducted in the Gobindarampur village of Kakdwip block of South Twenty-four Parganas District, West Bengal through a field survey to get an insight of the benefits and challenges faced by women in SHGs.

Sample Size: 50 samples (SHG member) from 9 SHGs from the area of study have been considered to conduct the present study.

Method for data collection: An interview schedule was prepared and used for collecting data from the women SHG member. Both open ended and close ended questions were included in the schedule.

Statistical tools: This is purely a descriptive study. Therefore no complicated models and tools were used; only percentage and average were used for the analysis.

LOCATION OF THE STUDY AREA:

For the present study Gobindarampur village of Kakdwip block of South Twenty-four Parganas District, West Bengal has been selected and surveyed.

ANALYSIS OF THE DATA AND INTERPRETATION

Economic Situation & Educational Qualification of the Respondents

43% of the women are illiterate and 30 % of the women have completed up to secondary level education. It is noticeable that only 6% of the respondents are graduates. From the field survey it is found that a large number of the respondents have no occupation in the pre-SHG stage. The works they perform were labour intensive and there was no choice of work.

Purpose of Loan:

More than 45% of the beneficiaries use the loan for starting a new business or for expanding the existing business. It is interesting to note that 19 % of the respondents take loan for the repayment of an existing loan. However, 15 % of the respondents take loan for the education of their children, which signifies their awareness.

Occupation of the Respondents in before and after SHG Stage:

From the calculation it is found that 35% of the respondents have no occupation in the pre-SHG stage whereas in the Post-SHG stage, none of the respondents is without occupation. The occupation chosen by the members depends on demand of products & availability of resources.

Income of the Respondents in before and after SHG Stage:

The income of the respondents in pre and post-SHG stage shows that before joining SHGs 35% of the respondents had no income and none of the respondents had income of above Rs.2500. After joining SHGs no respondents is without any income, and 17% of them have income of above Rs. 3500.

Reduction of Poverty

From the study it is observed that more than 90% of the respondents believe that microfinance has reduced their poverty levels to a greater extent.

CONCLUSION

It is found from the study that, 1. Women are economically and socially empowered after getting micro finance as maximum of the respondents reported that poverty level has reduced by participating in micro finance program. 2. Micro finance improved the literacy levels of the respondents and also improved their awareness on child education. 3. Maximum number of respondents accepted that microfinance has brought economic development directly and indirectly and thus happiness and peace in the family. 4. More than 90 %

respondents said that they play an important role in decision making and they were consulted for making important decisions of the family. This is an important factor of economic empowerment. 5. There is a significant improvement in the income of the respondents after joining SHG. Thus it can be concluded from the above study that microfinance is playing a vital role in the social, psychological as well as economic empowerment of women in the study area. Though different studies conducted at various levels show different conclusions, it can be acknowledged from the present study that despite of bottlenecks, microfinance is capable of helping the poor backward class women to upscale themselves to a better living and playing a significantly positive role in upgrading women empowerment. Microfinance loan and its productive utilization found to be having a profound role and impact on backward class women empowerment. The findings of the study suggests that microfinance has a reflective influence on the economic status, decision making power, knowledge and self worthiness of women participants of self help group linkage program in study area.

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WOMEN'S EDUCATION IN NORTH-EAST INDIA: A STEP TOWARDS RIGHT BASED SOCIETY

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Introduction:

The education of women in any civilized society plays a significant role in improving living standards of that country. A higher women literacy rate improves the living quality by encouraging and promoting education of children, especially female children, and in reducing the infant mortality rate. As an independent group, women constitute 48% of the total population of India and are a valuable human resource of the country. Their development in the socio-economic perspective leads for sustainable growth of the country. The principle of gender equality is enshrined in the Indian Constitution in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles of the State Policy. The Constitution grants equality to women and also empowers the State to adopt measures of positive discrimination in favor of women. The term "gender equality" does not mean that men and women are necessarily exactly the same or that differences do not exist, but that they have equal rights, opportunities, responsibilities and access to resources as well as the enjoyment of them (Wall, 2014). Education plays a crucial role in maintaining social justice and equality of status and opportunity. An explicit recognition of this role can be found in Article 46 of the Constitution of India, which enjoins upon the State: To promote with special care the educational and economic interests of the weaker sections of the people ... and ... protect them from social injustice and all forms of exploitation. Since the need for knowledge, skills and information is universal, every individual has an inherent right to receive education. The Universal Declaration of Human Rights (UDHR) establishes that everyone is entitled to the right to education by virtue of being human, irrespective of race, ethnicity, gender, age, nationality, socio-economic condition, or any other status. The right to education extends beyond the notion of "basic learning needs". Its intrinsic nature is described in the World Declaration on Education for All, 1990, Article 1(1), which says: Basic learning needs ... comprise both essential learning tools (such as literacy, oral expression, numeracy and problem solving) and basic learning content (such as knowledge, skills and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in

dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions and to continue learning. The scope of basic learning needs and how they should be met varies with individual countries and cultures and inevitably, changes with the passage of time. The significant role of education in facilitating social and economic progress and sustainability is well accepted in all countries. But, the accessibility to education has become critical in terms of benefiting from emerging opportunities which are accompanied to economic growth. In the view of this accepted fact, there has been an emphasis on girls' education since independence in order to bridge the gender gap in education in India. In this regard, Free and Compulsory education upto the age of 14 has been declared as the responsibility of the State. The fulfillment of this obligation is critical for the improvement in educational condition of girls and that of gender equality in universalization of elementary education. Education was a State subject till the year 1976. Since its transfer to the Concurrent list by the 42nd Constitutional Amendment, a new thrust was provided to girls' education in the National Policy on Education (NPE) 1986. It provided a broad vision for the education of women and girls and recognized the cross cutting issues that inhibited the realization of this goal. The revised policy of NPE, 1992 articulates that "Education will be used as an agent of basic change in the status of women."

Rational of the study:

The major initiative taken by govt. for women education in India are Sarva Shiksha Abhiyan (SSA), Kasturba Gandhi Balika Vidyalaya (KGBV), Ensuring Gender Sensitive Learning Materials, Special Models of Alternative Schools for Girls, Special Coaching Classes, Scheme of Construction & Running of Girls Hostel for Students of Secondary & Higher Secondary Schools, Mahila Samakhya (MS), Rashtriya Madhyamik Shiksha Abhiyan (RMSA) are worthy to mention. In other way it may be said that these are the path to meet the right to education in India for women. The North-East Region is one of the under developed regions of India. The region accounts for 7.9% of the total land space of the country. Near about 50 percent population of North-East region are women. In the developing countries, women's lower status is reflected not only in their work being underpaid, un-recognized, but also in their limited access to productive resources and support services such as health and education (Das, 2013). Apart from Assam and Tripura dominant inhabitants of other six states is tribal population belonging in different communities in the region having their distinct culture. Generally, it is thought that the status of women is comparatively better in tribal society (Burman, 2012). In this study an attempt has been made to examine the initiative made by govt. for women education in North-East India.

Objectives:

1. To focus on the various govt. initiatives taken at school level for enhancement of women education in North-east India
2. To point out the various govt. initiatives taken at higher education level for enhancement of women education in North-east India.

Methodology:

This study is based on secondary data collected from various official data sources of govt. of India such as Department of School Education and Literacy, Department of Higher Education, Ministry of Human Resource Development, Statistics of School Education, 2010-11, All India Survey on Higher Education 2011-12. The data have been analyzed and represented systematically in tabular and descriptive form.

Results & Discussion: the analysis of various qualitative and quantitative data reveals the following results.

At school education level government has taken the following initiatives:

Right of Children to Free and Compulsory Education (RTE) Act, 2009 - Sarva Shiksha Abhiyan (SSA) in North Eastern Region: RTE - SSA is being implemented on a Central: State funding pattern of 90:10 to give impetus to development of elementary education in North Eastern States.

Rashtriya Madhyamik Shiksha Abhiyan (RMSA): The RMSA is being implemented on the basis of Central: State funding at 90:10 sharing pattern.

Kendriya Vidyalayas (KVs): 103 KVs are functioning in this region with an enrolment of 72,472 (boys 39,441 and Girls 33,031).

Girls' Hostel Scheme in North East Region: This Scheme being implemented from 2009-10 aims at construction of a hostel with the capacity of 100 girls in each of about 3479 Educationally Backward Blocks (EBBs) in the country. The girl students in the age ranges between 14-18 years studying in classes IX to XII belonging to SC, ST, OBC, Minority Community and BPL families come under the Scheme. Students passing out of KGBVs are given preference in admission in hostels. At least 50% of girl students should be from SC, ST, OBC and Minority Communities. As on 1st January, 2014, 116 hostels have been sanctioned in North-East region for construction and Rs. 87.16 crores have been released to NE States. The govt. Recurring grant release is 0.53 crore.

Table-I: Represents detail of grant released under the Scheme till March, 2014 is given below (in crore):

Sl. No.	State	No. of hostel sanctioned	Non Recurring grant released
1.	Arunachal Pradesh	5	1.96
2	Assam	80	58.80
3	Meghalaya	9	6.95
4	Mizoram	1	1.06
5	Nagaland	11	10.61
6	Tripura	5	4.92

Table-I shows the number of sanctioned girls' hostel in the north east region. The number of hostel sanctioned and grant released is highest in Assam whereas it is lowest in Mizoram.

Saakshar Bharat Programme: With the aim to further promote and strength Adult education with special emphasis for women, this program was launched on the International Literacy Day, 8th September, 2009 by extending educational options to those adults who lost the opportunity of access to formal education. This Programme in the 12 Five Year Plan provides for paradigm shift from basic literacy to lifelong learning with the aim of improving knowledge, skills and competence within personal, civic social and for employment selected perspective.

Model Schools Scheme: All the North-Eastern States are eligible for model schools except Sikkim under State Sector component of Model School Scheme. It is operational since 2009-10, till March, 2014. 94 Model Schools have been sanctioned and grants worth `Rs.169.37 crore released to 5 States namely Mizoram, Nagaland, Assam, Meghalaya and Tripura.

Jan Sikshan Sansthan (JSS): JSS offers skill development opportunity for those who are non-literate or have rudimentary level of literacy. There are five State Resource Centres (SRC) in the region. They provide academic and technical resource support to Saakshar Bharat Programme. SRC, West Bengal also provides support to Saakshar Bharat Programme in the state of Sikkim.

Table-II: Represents state wise ratio of girls to boys in total enrollment (2013-14)

SL. No.	State	Ratio of Girls to Boys in total enrollment
1	Arunachal Pradesh	0.97
2	Assam	1.01
3	Meghalaya	0.96
4	Mizoram	0.94
5	Nagaland	0.97
6	Tripura	0.96
7	Sikkim	0.96
8	Manipur	0.99

Table-II focuses on the ratio of girls to boys in total enrollment. The average ratio in national scenario is 0.94. The table shows that the North-East region has above and above average ratio in girls' enrollment. Thus, all the states in this region seem to be far more supportive of girl's education at school level.

In the higher education level government has taken the following initiatives:

Central Universities and Degree Colleges in the North East: Nine Central Universities have been established in the North East Region, namely, Assam University, Tezpur University, Mizoram University, North Eastern Hill University (NEHU), Manipur University, Nagaland University, Rajiv Gandhi University (Arunachal Pradesh), Tripura University and Sikkim University.

Special Scheme of Construction of Women's Hostels for Colleges in North East States: The demand for hostels has been raised as a result of increased mobility of students to seek the level of education they desire. Accordingly, the UGC has been providing hostels and other infrastructural facilities to achieve the goal of enhancing the status of women and also to bring about gender equity and equal representation of women through a special scheme 'construction of women's hotels'. The main objective of the scheme is to support all the eligible colleges for construction of hostels for women in order to provide a residential place for women students, researchers, teachers and other staffs. The Colleges which come within the purview of the UGC and are fit to receive central assistance under Section 12(B) of the UGC Act are eligible to receive financial assistance.

Indira Gandhi National Open University (IGNOU) in North East Region States: Indira Gandhi National Open University was established by an Act of Parliament in

1985 with the dual responsibilities. To enhance access and equity to higher education through distance mode and to promote, coordinate and determine standard in open learning and distance education systems. Educational development of North –East Region (NER) is a major area of IGNOU's contribution. Nine Regional Centres including regional centre at Jorhat (Assam) are situated in the NER. The University established three Centres to identify the type of knowledge and skills necessary for the development of the region to design academic and training programmes.

Table-III: Represents state wise Students' enrollment in Universities and Colleges (2013-14)

SL. No.	State	Total enrollment	Women enrollment	Percentage to women
1	Manipur	50589	23202	45.86
2	Meghalaya	47224	25414	53.82
3	Mizoram	16901	8082	47.82
4	Nagaland	23611	11948	50.60
5	Sikkim	12241	5008	40.91
6	Tripura	46224	20079	43.44
7	Arunachal Pradesh	20495	7599	37.08
8	Assam	304471	146833	48.23

Table-III reveals that whereas the average percentage of women enrollment in the country is 43.28, all the states in the North-East region except Arunachal Pradesh shows above average performance in women enrollment at higher education level. Among this region, Meghalaya indicates the highest enrollment followed by Nagaland and Assam.

Conclusion:

In North-East India government has taken major initiative to encourage and promote women education as well as is supportive enough to meet educational right for all including women. The various special schemes such as SSA, RMSA, KVs, Girls' Hostel scheme, Saakshar Bharat Programme, Model Schools Scheme, and JSS are functioning to extent girls and women education at school level in this region. Similarly, the higher education for women has seen a bright light because of the govt. initiative such as establishment of Central Universities and Degree Colleges, Special Scheme of Construction of Women's Hostels for Colleges, IGNOU study centers opening. The school enrollment ratio for girls to boys has become average and above average in comparison to the national situation. In Meghalaya, Nagaland and Assam the percentage of enrollment in higher education shared by women is

near 50% of the total enrollment. All the states in the North-East region except Arunachal Pradesh show above average performance in women enrollment at higher education level. Among this region, Meghalaya indicates the highest enrollment followed by Nagaland and Assam. Thus, it may be uttered that government is showing positive approach and has become supportive to access the right to education for the women in North-East region of India.

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ENSURING QUALITY CRITERIA AND MAINTAINING RIGOR IN CASE STUDY RESEARCH

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Abstract

The case study approach in research has faced many changes over time for its expansion and development in wider academic communities. The issues and challenges of ensuring quality criteria and maintaining rigor in case study researches has been an emerging debate in academic arena. The trend and pattern of conducting case studies in the past has felt many twists and turns. This paper tries to discuss about the philosophical and empirical basis of defending challenges in case study research. The perspectives of scholars from different time have been analyzed from the view point of conducting case study research. Despite the criticism, researchers have continued to deploy the case study method particularly in studies of real life situation governing social issues for the welfare of schooling people. It can be claimed that the availability of different modalities of case studies, our practices of managing data from the very beginning, exploring depth information and chance of getting enriched data from different models of case studies, have given a hope in conducting the comprehensive case study environment. It can be concluded that the challenges of analyzing and reporting the case study research can be mitigated by rigorous training and prolonged engagement in the process. Different social classes and ethnic community scholars have also added value for enriching research outputs.

Key Words: Quality Criteria, Rigor, Ethical Issues, Case Study Design, Constructivism

Introduction

Case study has been commonly referred to the collection and presentation of detailed information about a particular participant or small group and has been taken as a form of qualitative descriptive research. There has been a long journey crossed to develop case study as the scientific methodology in qualitative research approach. Conducting case study has faced different challenges in various aspects of the research study.

The diversity of case studies reported in the published literature, and ongoing debates about credibility and the use of case study in qualitative research practice suggests that difference in perspective on case study methodology may prevent researchers from developing a mutual understanding of practice and rigor. The experienced qualitative researchers have identified case study research as a standalone qualitative approach (Denzin & Lincoln, 2011). However, it seems relevant to analyze different problems and challenges before starting the journey of case study research. This paper has focused on the analysis of

methodological literatures to carry out the discussion about the challenges of conducting case studies in education sector. The main purpose of the paper is to discuss about the growing trends of challenges and opportunities of the case studies related to the education sector with special focus on public schools. The paper has suggested some ways of mitigating challenges getting benefits from the opportunities taking special reference to Nepalese public schools. This paper has been divided into five sections covering epistemological and methodological challenges, challenges on designing case studies in educational research and ways of mitigating them.

Epistemological Challenges

An epistemological base which considers the appropriate function for the study of society and its manifestations provides the underlying philosophical basis for the arguments supporting the validity of a research strategy (Schell, 1992). Under an empiricist/ subjective theory of being, the views of actors, as communicated through case studies, are the empirical point of departure. Stake (1995) and Yin (2003) propose their approach to case study on a constructivist paradigm. Constructivists claim that truth is relative and that it is dependent on one's perspective. This paradigm recognizes the importance of the subjective human creation of meaning, but does not reject outright some notion of objectivity. Constructivism is built upon the premise of a social construction of reality (Yin, 2003). One of the advantages of this approach is the close collaboration between the researcher and the participant, while enabling participants to tell their stories (Crabtree & Miller, 1999).

As researchers and research methodologists, Yin, Merriam and Stake have their own epistemic commitments which impact their perspectives on case study methodology and the principles. Yin demonstrates positivist leaning in his perspective on case study (Yazan, 2015). Crotty (1998 as cited in Yazan 2015) suggests that three notices are fundamental in positivistic orientation in research: objectivity, validity and generalizability. From a Yinian outlook, case study researcher is supposed to maximize four conditions related to design quality including construct validity, internal validity, external validity and reliability (Yazan, 2015). How investigators deal with those aspects of quality control is highly crucial in every step of the case study research.

Yin does not explicitly articulate his epistemological orientation in his text, but the way he approaches case study or research in general and the aspects he emphasizes most indicate that his philosophical stance is towards the positivistic tradition (Ibid). To overcome this difficulty, constructivism and existentialism (non determinism) has been considered as the epistemologies that orient and inform the qualitative case study research since most contemporary qualitative researchers hold that knowledge is constructed rather than

discovered (Stake, 1995 as cited in Yazan, 2015). In terms of epistemological stance, Merriam also seems to be much closer to Stake's view. According to her reality is constructed by individuals interacting with the social world (Merriam, 1998, p. 6 as cited in Ibid).

Methodological Challenges

Case studies are the preferred strategies when 'how' or 'why' questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real life context. Such explanatory case studies also can be complemented by exploratory and descriptive case studies. Regardless of the type of case study, investigators must exercise great care in designing and doing case studies to overcome the traditional criticisms of the method (Hamel, 1993).

Although the case study is a distinctive form of empirical inquiry, many research investigators consider case studies as a less desirable form of inquiry than either experiments or surveys. Perhaps the greatest concern has been over the lack of rigor of case study research. Too many times, the case study investigator has been sloppy and has allowed biased views to influence the direction of the findings and conclusions. The possibility also exists that people have confused case study teaching with case study research. In teaching, case study materials may be deliberately altered to demonstrate a particular point more effectively. In research, any such step would be strictly forbidden. Every case study investigator needs to work hard to report all evidence fairly. What is often forgotten is that bias also can enter into the conduct of experiments (Eisner, 1991) and the use of other research strategies, such as designing questionnaires for surveys (Erickson, 1986) or conducting historical research (Gobo, 2004). The problems are not different, but in case study research, they may have been more frequently encountered and less frequently overcome.

Next concern about case studies is that they provide little basis for scientific generalization. "How can you generalize from a single case?" is a frequently heard question. The answer is not a simple one (Eisner, 1991). However, if we ask same question about an experiment like "How can you generalize from a single experiment?" In fact, scientific facts are rarely based on single experiments. They are usually based on a multiple set of experiments, which have replicated the same phenomenon under different conditions. The same approach can be used with multiple-case studies but requires a different concept of the appropriate research designs. The short answer is that case studies, like experiments, are generalizable to theoretical propositions and not to populations or Universes. In this sense, the case study, like the experiment, does not represent a sample and the investigator's goal is to expand and generalize theories (analytic generalization) and not to enumerate frequencies (statistical generalization). The social scientists describe in their single case study, the goal is to do a generalizing and not a particularizing analysis (Flyvberg, 2006).

The frequent complaint about case studies is that they take too long, and they result in massive and unreadable documents. This complaint may be appropriate, given the way case studies have been done in the past (Gobo, 2004), but this is not necessarily the way case studies must be done in the future. This incorrectly confuses the case study strategy with a specific method of data collection, such as ethnography or participant observation. Ethnographies usually require long periods of time in the field and emphasize detailed observational evidence. Participant observation may not require the same length of time but still assumes a huge investment of field efforts. In contrast, one could even do a valid and high quality case study without leaving the library and the telephone, depending upon the topic being studied.

Despite the fact that these common concerns can be taken, as above, one major lesson is still that good case studies are very difficult to do. The problem is that we have little way of screening or testing for an investigator's ability to do good case studies. People know when they cannot play music; they also know when they cannot do mathematics; and they can be tested for other skills. Somehow, the skills for doing good case studies have not yet been defined, and as a result, most people feel that they can prepare a case study, and nearly all of us believe we can understand one.

Maintaining Rigor while Designing Research

After considering the different categories of case study, we may begin to design our study. Research design is the string of logic that ultimately links the data to be collected and the conclusion to be drawn to the initial questions of the study like what questions to study?, what data area relevant?, What data to collect?, and How to analyze that data?. The well known case study researcher such as Stake (1995), and Yin (2009) have written about case study research and suggested techniques for organizing and conducting the research successfully. The steps that can be used in the process may be as determining and defining the research questions, selecting the cases and determining data gathering and analysis techniques, preparing to collect the data, collecting data in the field, evaluating and analyzing the data and preparing the report. After preparing case study, the researcher uses representation audience groups to review and comment on the draft document. Based on the comment the researcher rewrites and makes revisions.

Yin (1984) discusses three types of arguments against case study research. First case studies are often accused of lack of rigors. Yin (1984 cited in Zaidah, 2007) notes that too many times, the case study investigation has been sloppy, and has allowed biased views to influence the directions of the findings and conclusions. Case studies provide very little basis for scientific generalization since they use a small number of subjects (Ibid). Case studies are

often labeled as being too long, difficult to conduct and producing a massive amount of documentation (Yin, 1984). A further concern about case study design is that since neither experiment nor statistical controls can be used in case study research, internal validity may be hard to establish. Despite this criticism, researchers continue to deploy the case study method particularly in studies of real life situation governing social issue and problems.

Challenges in Designing Case Study in Educational Research

In educational research, there seem challenges in designing case study research following a particular approach. Yin (2003) suggests four types of design that case study researchers can make use of it including holistic design, single embedded design, multiple holistic designs and multiple embedded designs in educational research. Holistic designs require one unit of analysis, whereas embedded designs require multiple units of analysis (Yazan, 2015). From Yinian perspective, case study research design is comprised of five components: a study question, its propositions, if any, its units of analysis, the logic linking the data to the propositions and the criteria for interpreting the findings. Another point about Yin's view of case study design, he suggests measuring the quality of the design against four criteria which include construct validity, internal validity, external validity and reliability (Yazan, 2015).

Contrary to Yin who suggests a really tight and structured design for case study method, Stake argues for a flexible design which allows researchers to make major changes even after they proceed from design to research (Ibid). Stake gives important advice about the initiation of the two types of case studies: for intrinsic case study, case is dominant, the case is of highest importance, for instrumental case study, issue is dominant (Stake, 1995 as cited in Yazan, 2015).

Merriam (1998 as cited in Yazan, 2015) presents very informative and clear guidelines and advice regarding the review of the relevant literature for the construction of the theoretical framework that may guide the inquiry. Her discussion includes conducting literature review, constructing a theoretical framework, identifying a research problem, crafting and sharpening research questions and selecting sample in a case study. There exist different challenges in educational case study research while collecting data, analyzing them and in reporting the outputs.

Challenges in Gathering Data

From a Yinian perspective, case study research should rest upon multiple sources of evidence, with data needing to converge in a triangulating fashion, and benefit from prior development of theoretical propositions to guide data analysis and collection (Yazan, 2015).

Yin suggests the researchers make use of six evidentiary sources: documentation, archival records, interviews, direct observations, participant observation and physical artifacts, each which has its own strength and weakness (Ibid). For instance, as opposed to Yin who argues for the exact planning for every step of the inquiry, Stake (1995) argues that there is no particular moment when data collection begins since data collection can lead to some fundamental alterations in the inquiry process. Stake's protocol suggests for preparing a data gathering plan which should include definition of case, list of research questions, identification of helpers, data sources, allocation of time, expenses, intended reporting (Stake, 1995). As for the data collection instruments, Stake suggests the use of observation, interview and document review in qualitative case study research (Yazan, 2015). As opposed to Yin, he denies the use of quantitative data sources since his version of case study is exclusively qualitative.

It is important for the case study researcher to be aware of the potential challenges they may face when using different data collection methods for the case studies. Most of the challenges discussed here assume that the case study researcher is collecting data on established relationship rather than tracking individual.

According to Yin (2003) the demands on the case study writer are far greater than those adopting other research strategies. This is because the data collection process is not in routine. There is little room for a traditional research assistant; rather a well-trained and experienced case study researcher is needed to conduct a high quality case study because of the continuous interaction between the theoretical issues being addressed and the data being collected. Such a case study researcher is needed to take advantage of unexpected opportunities and to exercise sufficient care against potentially biased procedures.

One challenge is that the case study researcher can miss certain learning if it is not documented from the beginning. Without processes and mechanisms in place for data collection, it can be difficult to try and capture this accurately at a later stage of the data collection process (Stake, 1995). The case study writer may also find it difficult to reconstruct history. Whether the case study researcher is internal or external to the partnership they need to establish their credentials as a case study researcher. These credentials include an understanding of their skills, the power balance and the researcher, the importance of remaining impartial and unbiased. Another challenge outlined by the practitioners at the case study is the challenge of time limitations. The case study researcher may find it difficult to understand the amount of time they have. There is no doubt that the time will be restricted and this may impact how much they can really get. This is especially true for external case study writers who may know little about the subject and need to learn more about the basics such as who all the people are, their mission and activities and key stakeholders. This restricts

the time when the researcher may have to collect more detailed data to capture the process (Ibid).

When conducting case study research, the researcher is dealing with organizations and individuals with their own goals and objectives. These entities within a case study may exert their influence in order to affect a situation, either within or external to the scope of the research and the researcher must be aware of how these influences may relate to and affect the conduct of the research.

Quality Criteria in Analyzing Data

Yin's (2002) definitions of analysis consist of examining, categorizing, tabulating, testing or otherwise recombining both quantitative and qualitative evidence to address the initial propositions of a study. Yin addresses his criteria for quality research, namely validity and reliability, while discussing the analytic procedure in case study (Yazan, 2015). From Yinian perspective, researchers control these criteria through well-defined and well structured data analysis procedure. Stake (1995) defines analysis as a matter of giving meaning to first impressions as well as to final compilations. As common trend in qualitative tradition, he suggests that researchers should conduct data collection and analysis processes simultaneously. Stake describes two strategies to analyze data: categorical aggregation and direct interpretation. Then he presents specific techniques for finding the patterns which is an essential part of the two general strategies. It is the process of making meaning (Merriam, 1998, p. 178). Merriam's definition of qualitative data analysis seems a more through application of constructivist epistemology in research and provides more concrete guidance for the researchers (Yazan, 2015).

Yin explains (construct, internal and external) validity and reliability in traditional sense at the outset of his text prior to describing the procedures of case study design and deems there as the criteria to judge the quality of the research (Yazan, 2015). He suggests that case study researcher should make sure that they take these criteria into consideration while designing and implementing the entire inquiry. According to Yin (2003), case study researchers need to guarantee construct validity, internal validity, external validity and reliability. Stake offers four strategies for triangulating data, data sources, triangulation, investigator triangulation, theory triangulation and methodological triangulation (Stake, 1995). Merriam's notes one of the assumptions underlying qualitative research is that reality is holistic, multidimensional and ever changing, it is not a single, fixed, objective phenomenon waiting to be discovered, observed, and measured as in quantitative research (Merriam, 1998). Validity and reliability are the concepts which were first postulated in natural sciences and borrowed by quantitative research in social sciences (Yazan, 2015). The

novice researchers of qualitative case study would make more use of the descriptions and guide lines provided by Merriam along with Stake's recommendation of triangulation (Yazan, 2015).

Challenges in Theory Building

Building theory from case studies is a research strategy that involves using one or more cases to create theoretical constructs, propositions and/or mid range theory from case-based, empirical evidence. Case studies are rich, empirical descriptions of particular instances of a phenomenon that are typically based on a variety of data sources (Yin, 1994). The central notion is to use cases as the basis from which to develop theory inductively. The theory is emergent in the sense that it is situated in and developed by recognizing patterns of relationships among constructs within and across cases and their underlying logical arguments. But while theory building from cases is increasingly prominent, challenges in writing publishable manuscripts using this research strategy exist. Some reviewers who work on large-scale, hypothesis testing research may misunderstand the method. The challenge of justifying inductive case research partially depends on the nature of the research question. For theory-driven research questions that extend existing theory (Lee, Mitchell, & Sabylnski, 1999), a researcher has to frame the research within the context of this theory and then show how inductive theory building is necessary.

Another frequent challenge to theory building from cases concerns case selection. Some readers make the faulty assumption that the cases should be representative of some population, as are data in large scale hypothesis testing research (Hamel, 1993). A key response to this challenge is to clarify that the purpose of the research is to develop theory, not to test it, and so theoretical (not random or stratified) sampling is appropriate. In a single-case study, the challenge of presenting rich qualitative data is readily addressed by simply presenting a relatively complete rendering of the story within the text. Since different readers have their own preferences, they often ask, why did you format the theory this way? A useful way to cope with this challenge is to write the theory in multiple ways.

Finally, a surprising challenge can arise from readers who are disappointed by cost conscious theory. When readers are more familiar with the particular detail of some single case research, they may expect the complicated theory that can arise from such cases. Somewhat surprisingly, single cases can enable the creation of more complicated theories than multiple cases, because single-case researchers can fit their theory exactly to the many details of a particular case.

Theory building from case studies is an increasingly popular and relevant research strategy that forms the basis of a large number of influential studies (Gobo, 2004). But like

the other research method, some predictable challenges that the case studies face, emerged precisely because research relying on rich qualitative data is becoming more common. The good news is that legitimate challenges can be mitigated through precise language and thoughtful research design including careful justification of theory building, theoretical sampling of cases, interviews that limit informant bias, rich presentation of evidence in tables and appendices, and clear statement of theoretical arguments. The result is fresh theory that bridges well from rich qualitative evidence to mainstream deductive research.

Funding as a Key challenge

The problem of the fund deficiency is everywhere a major challenge in every project. If there is a shortage of funding this may not allow the researcher all the opportunities that would assist them in capturing the information they need. It could result in there being limited funds to visit key sites where partnership activities are taking place or not allow them the opportunity to meet with key stakeholders that can provide more detailed information. The cost of the development of research tools and arrangement of the field visit demands a huge challenge and the researcher has to compromise with the number and size of the locations and varieties of ways to gather the information for ensuring the triangulation. The consistency of the information can only be possible after having repeatedly gathering of information and prolonged engagement of the researcher with the participants and these situations again demands the large amount of funds. The researcher might have delimited the research process because of the fund limit. The funding also contributes to the maintenance of rigor in the research process and help to reduce the crisis of representation. The way of mitigating such funding challenge is that the researcher can use the cheapest alternative ways of data collection including use of ICT tools and use of local technology having low cost and even the materials with no cost. Even the selection of the site and the right size of participants also determine the cost of the research process.

Mitigating Challenges and Exploiting Opportunities

The risks and problems of conducting effective case studies in Nepalese educational institutions can be enlisted from varied perspectives. The rigorous study may approach reality but the studies conducted in the past have not been focused more about the context of validity and reliability. The coverage of the areas for representation was another problem of the study. The SLC studies conducted in 2004, took two years to produce the report and it raised different controversial issues in educational interventions (SLC Study, 2004). The qualitative case studies have been fallen under the crisis of representation (lack of policy, cluster and other established method). The cultural and geographical diversity of the country and problem of generalization has been the other areas to be addressed in the future. Some hallo

effects can be seen on the reports produced by DOE, NFEC and CERID conducted research studies (Awasthi, 2003). The continuous follow up and building relationship might help to mitigate the challenges to get data in depth. There is hardly available integrated data and information in limited sources and even they are contradicting and not authenticated. Language and cultural barrier have also added difficulty to deal with the local people from different ethnic background so that the researcher reaches into a valid and reliable conclusion.

On the other hand, the opportunities existing at present for the effective case study research can be availability of different modalities, research milieu, chance of getting enriched data, and different models of schooling in practice. It can be addressed through the large number of population of the students covered in the study (Yin, 2003). Different class and different ethnic community students are available in different schools of the country for enriching research outputs.

Some of the challenges of the case studies as discussed above can be mitigated through the comprehensive and rigorous intervention as well as triangulation of the data (Stake, 1995 as cited in Yazan, 2015). Another way of mitigation can be through the multiple use of methodologies while gathering information. The different varieties of case studies including multiple case study method can be used for the validation of the research outputs.

The case study approach is, as with all research, not without its limitations. When investigating the formal and informal ways researchers accumulate a large quantity of data. The volume of data, together with the time restrictions in place, impacts on the depth of analysis that is possible within the available resources (Yazan, 2015). This highlights a more general point of the importance of avoiding the temptation to collect as much data as possible; adequate time also needs to be set aside for data analysis and interpretation of what are often highly complex data sets. Case study research has sometimes been criticized for lacking scientific rigor and providing little basis for generalization (producing findings that may be transferable to other settings). There are several ways to address these concerns, including the use of theoretical sampling (drawing on a particular conceptual framework); respondent validation (participants checking emerging findings and the researcher's interpretation, and providing an opinion as to whether they feel these are accurate); and transparency throughout the research process.

In the case of transparency, it can be achieved by describing in detail the steps involved in case selection, data collection, the reasons for the particular methods chosen, and the researcher's background and level of involvement that is being explicit about how the researcher has influenced data collection and interpretation. Seeking potential, alternative

explanations, and being explicit about how interpretations and conclusions were reached, help readers to judge the trustworthiness of the case study report.

While designing major case studies, the factors to be considered may be study of a contemporary phenomenon within its real life context, especially when the boundaries between context and phenomenon are not clear; how and why research questions, especially those where there is little investigation control (building out a controlled experiment) and/ or a focus on contemporary events (ruling out a historical research design) and choice of suitable form and sources for a case study (Schell, 1992).

The cases viewed over a prolonged period of time may provide for greater generation. Case study research design is more time consuming at each stage of the study and is likely to be more skill intensive than other forms of research. Researcher for this type of study is likely to require more training and ability than those controlling other forms of research, a condition demanded by the requisite flexibility of the method. Execution of the case study research may lead to practical problems like access to information, value imputation by different actors, manipulation by actors and bias introduced due to inter/intra organizational political processes (Yin, 2009). There may be certain difficulties generalizing case information to other situations. This is especially true when there are few cases of a critical phenomenon, and little delineation of the phenomenon by the use of deviant examples. Developing criteria for evaluating case study methodology requires logical tests of the validity and reliability of the research tactics that have been used or are planned. Validity and reliability can thus be built into a case study programs overcoming many of the key criticisms (Ibid).

Case studies are often presented in social issues evaluation. They are used to highlight participants' stories of the impact of development activities. A well written case study needs powerful convey of the impacts. However, weak or poorly presented case studies can undermine credibility. Evaluation case studies are not necessarily research, but they can be strengthened by drawing on good research practice. Case study research involves an in depth consideration of issues including the research question, case selection, representation, reporting and ethics. Case studies offer a means of presenting a rich and detailed picture and telling a strong story about different aspects of a project. The content of the case study is generated by a process of collection and analysis. The description may be thick and it may not interact with the literatures. The style of reporting may be rhetoric and generalization to theory building demand more evidences.

Conclusion

This paper has focused on the challenges of conducting case studies in social science within the premise of education sector. The case study approach in research has faced many

changes over time for its expansion and development in wider academic communities. It may change both in the hands of the researcher and the audiences. Despite the criticism, researchers have continued to deploy the case study method particularly in studies of real life situation governing social issues for the welfare of schooling children. Some halo effects can be seen on the research reports produced in education sector. The educational institutions have only been able to produce some superficial information at present and here is hardly any integrated data available and information obtained from various sources are contradicting to each other. The challenges of case studies in education sector have been discussed under the epistemological and methodological premises so that the researchers can be informed for ensuring quality criteria. However, availability of different modalities of case studies, our practices of managing data from the very beginning in present context, depth information yet to be explored and chance of getting enriched data from different models of schooling, have given a hope in conducting the comprehensive case study environment. The challenges of analyzing and reporting the case study research can be mitigated by rigorous training and engagement in the process. Different social classes and ethnic community scholars have also added value for enriching research outputs.

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A STUDY ON ATTITUDE AND ACHIEVEMENT OF BENGALI MEDIUM STUDENTS ON HISTORY SUBJECT IN WEST BENGAL

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ABSTRACT:

In this study focused on the attitude and achievement towards History subject of bengali medium higher secondary students in at Paschim Midnapore district in West Bengal. The subject of the present study was selected purposefully six higher secondary schools from Paschim Midnapore in West Bengal. The total 200 higher secondary students were randomly selected for this purpose. The criteria measured in this study were levels of attitude and achievement towards History subject. The investigator tries to construct names of total (Questionnaire) and applying the selected total number of higher secondary students. All this check list data were analyzed by Mean, SD (Standard Deviation), t-test and co-efficient of correlation (r) to find out significant. The result of findings, following suitable discussion to draw conclusive remarks.

KEYWORDS: Attitude, Student Achievement, History subject.

INTRODUCTION:

History is a store house of information, knowledge and culture. The progress, welfare and prosperity of a nation depends on rapid, planned and sustained growth in the quality and extent of education and this can be achieved only with peace and stability in the country in which informative subject like history can play a pivotal role. The subject of history is a very vital element in building a modern and developed country in terms of values, attitudes, identity, unity, and also individuals that are ambitious to achieve progress in line with current development. Growth and development in the world's education system has also triggered the minds of researchers and educators in our country to be more advance in the rapid development of knowledge. Hence, the subject of history has become the starting point towards a more developed and competitive country if it is learned and acknowledged better by students. Thus, history as a subject becomes a priority area in education. This knowledge, information and culture can preserve the unity in diversity. It has the power to check the fissiparous tendencies by enriching the cultural life of the nation by developing the culture of the various groups as part of a single nation. History forms a part of the curriculum in general education for the first ten years of schooling. The course up to this stage is aimed at acquainting the pupil with important trends and developments in history of India and the

world. The subject has been incorporated in the curriculum with varied aims and objectives, some of which are: teach tolerance, cultivate a forward look, foster nationalism, develop international understanding, give training to handle controversial issues, help resolve our contemporary social and individual problems etc. The purpose is to fight the tendencies of parochialism, linguist, communalism, egoism, etc. In order to retain our hard won freedom, national emotional integration has to be our natural tune. For this, a right attitude towards history is the greatest need of the hour. History learning should help to preserve the unity in diversity, ensure rapid social, economic and educational progress, enrich the cultural life of the nation and ensure security from internal and external dangers. The children should be exposed to this store house of information through the right methods of teaching and the right kind of teachers.

STATEMENT OF THE PROBLEM:

The present researcher has taken up the present descriptive study entitled as “**A study on Attitude and Achievement of Bengali Medium Students on History Subject in West Bengal**”.

NEED AND SIGNIFICANCE OF THE STUDY:

In this context the present researcher has taken significance as follows:

- The present study has helped to know the attitude and academic achievement of bengali medium high secondary students at the district of Paschim Midnapore in West Bengal.
- To conduct this study the present researcher have constructed one attitude and academic achievement Questionnaire for students which will be very helpful for other researchers to conduct future research in the field of History subject.
- This research work will be helpful to understand that if there is any basic difference among rural & urban students in respect to their attitude towards History subject.
- If there is present any difference among them, future research, also can carry on, for finding the reason, behind these.
- The researcher determines, to conduct the study so that she could reveal the weakness of the students & detect the negative attitude towards History subject & to take appropriate measures to overcome them.
- This study has helped the student to emphasis on those influential determiners which help good attitude about History subject.

- The study like this will be relevant to the field of higher education.
- This study will grow more interest among the students towards History subject.

REVIEW OF RELATED LITERATURE:

- **Abdul Razak Habib and Rashidi Azizan (1997):**

In their study of the relationship between learning styles and achievement in Science and Mathematics learning styles emphasise three of Selmes Learning Styles model, the motivation of style, depth and surface. Their findings indicate that despite the positive relationship between the three learning styles, motivation, positive relationship style with deep style is more powerful in influencing the academic achievement of Science and Mathematics.

- **Abdul Razak Ahmad (1999):**

In his study of the relationship between students' learning styles and achievement in the History subjects evaluates the different learning styles of students in the subjects by gender, ethnicity and location in the History subject. According to him, these findings demonstrate the learning styles of students in the History subjects are flexible and diverse.

- **Sadiah (2002):**

In their study of identifying learning styles practiced by the students, especially in secondary schools is important because individuals are different from each other. A different learning style among students is one of the various categories of students' needs because it can provide important implications for teaching and learn (Felder & Brent, 2005). In addition, awareness about learning style is very important for teachers to plan to teach structure due to a variety of strategies to promote learning.

OBJECTIVES OF THE STUDY:

The objectives of the present study are as follows:

- To compare the attitude towards History subject of higher secondary students in respect of Gender variation at Paschim Midnapore district in West Bengal.
- To compare the attitude towards History subject of higher secondary students in respect of Location variation at Paschim Midnapore district in West Bengal.
- To find out the relationship between attitude and achievements of higher secondary students on History subject at Paschim Midnapore district in West Bengal.

HYPOTHESIS OF THE STUDY:

Based on the above objectives of the study the following three major null hypotheses have been formulated.....

Ho1: There is no significant difference between Boys and Girls students with regard to their attitude on History subject at Paschim Midnapore district in West Bengal.

Ho2: There is no significant difference between rural and urban students with regard to their attitude on History subject at Paschim Midnapore district in West Bengal.

Ho3: There is no significant correlation between attitudes and achievements on History subject at Paschim Midnapore district in West Bengal.

SCOPE OF THE STUDY:

Studies done in this area is very rare. This study might promote the consciousness about the norms and standard for schools according achievement and attitude towards History subject to the future researcher as well as academicians. This study might also be helpful to understand the student to emphasis on those influential determiners which help good attitude about History subject. It will help to understand the basic difference among rural & urban students in respect to their attitude towards History. It also helpful to understand the norms and standard of History subject. It will further helpful for any researcher in field of History. Students not only affect his behavioral in the classroom but also influences field of History subject. Academic achievement among the student will contribute towards the betterment of whole society. Since the high school students have the closest access to the young generation, investigation in to their awareness is essential for the building up of an enlightened society. It will help the teacher to deal with the students in a better manner. The study will help to understand the weakness of the education system in the particular district in Paschim Midnapore in West Bengal. With the help of this study future problems related to education can be resolve. This study will give the attitude and achievement a not only the high secondary school students but also all the student in West Bengal, it will help to fulfill the needs of the students as well as the teachers. Finally it will help to reconstruct the education system in the Paschim Midnapore district of West Bengal.

DETERMINERS OF THE STUDY:

Determiners of the study mean the items which are attitude towards History subject. The determiners which are found depending on the subject are as follows:

- Information relating to Cognitive aspect of students.
- Information relating to Teaching method.

- Information relating to Socio economic and parent's education.
- Information relating to Teacher facilities.
- Information relating to School infrastructure/ School environment.
- Information about the Curriculum and syllabus.
- Information relating to Teaching learning material.

DELIMITATION OF THE STUDY:

- The Present study has been delimited to the following extent:
- The researcher has been chosen only students of higher secondary level as sample.
- The researcher has been chosen only 200 Samples.
- The study has been delimited only on 'History' students.
- The researcher has been carrying forward his research only at Paschim Midnapore district in West Bengal (India).
- The study has done only 6 schools in West Bengal only.
- The sample has been chosen only from Government Aided schools in Paschim Midnapore district.
- The study has been taken from both rural and urban area of Paschim Midnapore district.

METHODOLOGY:

Nature of the study	Descriptive study (Present oriented study) one kind of Normative survey studies.
Variables	<u>Dependent variables:</u> Students Attitude at Higher Secondary Level. Students Academic Achievement at Higher Secondary Level. <u>Independent variable:</u> History Subject <u>Demographic variables:</u> Gender of Students: Boys & Girls. Location of schools: Rural & Urban.
Population	The students of six Bengali medium Higher Secondary Level schools affiliated by W.B.B.S.E. under Paschim Midnapore District (West Bengal).

Sample	200 students (Male & Female) of six Higher Secondary Level schools have selected randomly. (Random sampling method)
Sampling techniques	Probability sample technique has been used in this study.
Tools used	<p>Formulate English and Bengali versions Questionnaires. (Quantitative & Qualitative both)</p> <p><input type="checkbox"/> Kind of Attitude scale and Academic Achievement test</p> <p><input type="checkbox"/> <u>Attitude scale:</u> Questions/Item number: 30. Measure options –The Five point scale... Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D), Strongly Disagree (SD). Time – 60 Minutes</p> <p><input type="checkbox"/> <u>Academic Achievement test:</u> Questions/Item number: 20. Measure options –The two point scale... Yes and No. Time – 20 Minutes</p>
Collection of Data (Tools)	The researcher visited the randomly selected schools and the scale was administered to selected students for data collection.
Scoring Procedure	<p>For Attitude scale, A score of '4','3', '2', '1','0', are given to the responses of the sample in the given order for the favorable statements and they are reversed for the unfavorable statements.</p> <p>For Academic Achievement test, A score of '1','0' are given to the responses of the sample in the given order for the statements.</p> <p>The grant score has used to interpret the overall attitude and academic achievement of the students.</p>
Statistical Techniques	Collection of Data (Score) has analysis by using statistical techniques like Mean, SD (Standard Deviation), t-test and co-efficient of correlation (r).
Validity & Reliability	<p>The check list score has a high content and constructed validity as expressed by three experts of psychology and then the scale has been applied to students.</p> <p>The 't' value for the scale has found to be significant at 0.01 level. Test retest reliability method apply Result = +0.94 (Very highly positive co-relation)</p>

ANALYSIS AND INTERPRETATION OF DATA:

In this study the researcher collected data from the 200 higher secondary students at Paschim Midnapore district in West Bengal. All the data are collect by questionnaire. The collected data will of no meaning, if it would not put on the process of analysis and

interpretation. Simply, from the raw data it will not possible to bring any kind of inference. Keeping in view the objectives of the study and their corresponding hypothesis, the data has been statistically processed using appropriate design and technique.

There are three hypothesis regarding attitude and academic achievement of bengali medium high secondary students at the district of Paschim Midnapore in West Bengal. All the hypotheses are analyzed individually. The attitude and academic achievement of high secondary students is understood using Mean, S.D, t-test. All the hypotheses are analyzed and interpreted under each category. Besides all the results have compared between the categories.

TESTING OF THE HYPOTHESIS:

Ho1: There is no significant difference between Boys and Girls students with regard to their attitude on History subject at Paschim Midnapore district in West Bengal.

After observing the checklists of the total number of sample (200 samples of them 100 Boys and 100 Girls) then a descriptive table was prepared to make the conception clear in respect of percentile.

Table 1:- Mean, S.D. and 't'- Ratio showing difference in Boys and Girls students with regard to their attitude on History subject.

Variable	Groups	N	Mean	S.D	Mean Difference	df	t-value	Levels of Significant
Gender	Boys	100	176.2	19.2	3.12	136	-1.07	Not Significant
	Girls	100	169.8	18.8				

Ho2: There is no significant difference between rural and urban students with regard to their attitude on History subject at Paschim Midnapore district in West Bengal.

After observing the checklists of the total number of sample (200 samples of them 100 Urban students and 100 Rural students) then a descriptive table was prepared to make the conception clear in respect of percentile.

Table 2:- Mean, S.D. and 't'- Ratio showing difference in rural and urban students with regard to their attitude on History subject.

Variable	Groups	N	Mean	S.D	Mean Difference	df	t-value	Levels of Significant
Locality	Urban	100	181.5	18.4	2.62	127	2.30	Significant
	Rural	100	180.7	17.3				

Ho3: There is no significant correlation between attitudes and achievements on History subject at Paschim Midnapore district in West Bengal.

After observing the checklists of the total number of sample 200 attitude and 200 achievements of students, then a descriptive table was prepared to make the conception clear in respect of percentile.

Table 3:- Mean and co-efficient of correlation (r) showing difference in attitudes and achievements on History subject.

Variables	N	df	r	Remarks
Attitude	200	217	0.925	Significant
Achievement	200			

MAJOR FINDINGS OF THE STUDY:

The major findings of this study are reported here. A section of this chapter also points out the limitations of the present work in order to overcome these limitations and arrive at more comprehensive and more reliable result; some suggestions for further research have been made.

Ho1: Observation of Table 1 reveals that Mean and S.D values of Boys and Girls students is 176.2, 169.8 and 19.2, 18.8. Calculated t-value is -1.07 which is not significant at 0.05 level. Hence the calculated t-value is more than the table t-value. Hence Null Hypothesis is accepted and alternative hypothesis rejected. It means that Boys and Girls students have different attitude on History subject. It is therefore, concluded that there is no significant difference between Boys and Girls students with regard to their attitude on History subject at Paschim Midnapore district in West Bengal.

Ho2: Observation of Table 2 reveals that Mean and S.D values of Urban and Rural students is 181.5, 180.7 and 18.4, 17.3. Calculated t-value is 2.30 which is significant at 0.05 level. Hence the calculated t-value is less than the table t-value. Hence Null Hypothesis is rejected and alternative hypothesis accepted. It means that Urban and Rural students have different attitude on History subject. It is therefore, concluded that there is significant difference between Urban and Rural students with regard to their attitude on History subject at Paschim Midnapore district in West Bengal.

Ho3: Observation of Table 3 reveals that co-efficient of correlation (r) values of attitudes and an achievement is 0.925. Calculated df-value is 217 which are significant at 0.05 levels. It is therefore, concluded that there is significant correlation between attitudes and achievements on History subject at Paschim Midnapore district in West Bengal.

CONCLUSION:

From the above study researchers conclude that, attitude of the higher secondary students (Grade-XI-XII) towards History is changeable in respect of their location, but not changeable in respect of gender of students. Therefore, to create attitude towards history subject among the higher school students, habitat or living area has play a significant role in Paschim Medinipur District, West Bengal. In case of gender variation no influence happened. Attitude and achievement in history subject has a strong positive correlation in Bengali medium schools, affiliated by WBBSE. Here, it is suggested that, subject teacher have to take such initiatives or approaches to increase attitude towards their subject, consequently achievement will be higher. Finally researchers concluded that, this study will play a role in developing new understandings about these situations and investigating ways to improve the teaching and learning of history subject in school contexts.

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