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for Change and Development*

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# Voice of Research

*An International Refereed Journal for Change and Development*

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## EDITORIAL

*After the long summer, it gives me immense pleasure to present this issue of Voice of Research in green colour giving the feel of greenery all around. Whatsoever be the season and its impact but the researchers do not rest rather they strive for excellence because they firmly believe and understand that better is the quality of nutrients supplied; superior is the quality of the product. Although, the seasons change with the course of time, as per the law of nature but the season of research is all time. The researchers believe in only one law- All time is to sow and then harvest at appropriate time. The research season has no fix time of harvesting but the researchers with patience and perseverance wait for the appropriate time to harvest. It's through this law that even after this scorching summer we are here with this issue as per our commitment to be on time. It directly indicates the inculcation of research attitude amongst the researchers. The current issue highlighting mathematics, yoga and naxalism comes up with the issues and its solution related to education, psychology, management and technology.*

*Looking to the fear for a subject especially for mathematics, amongst most of the people, Murthy discusses philosophy and nature of mathematic. Highlighting the issues related to education, Surendra Singh compares the infrastructure and manpower facilities between the government and private schools; Rathore studies talks of awareness in relation to gender related crimes; whereas Shah & Mangrola reviews the professional development through feedback. Whereby, naxalism is a burning issue, and Singh & Chenrui thus discuss in brief about naxalism and rights. To highlight the issues related to psychology helpful in education, workplace and daily life, Bhattacharya talks of human being and environment, Chingthem studies attitude of parents towards private tuition; Sharma studies teachers morale; Akanksha Ritesh & Mehrotra focus on employee relationship management in IT industry; Romen Singh, Laisbram, Chongtham and Shomorendra evaluates socio-economic condition of the fishermen. Yoga has always been the talk of time. With the recent visit of the Indian Prime minister in China, and the initiative of one of the Chinese University to open Yoga College as well the Celebration of yoga day by UN, yoga has gained a tremendous momentum. To focus more on yoga Mobanty, Metri, Nagaratna and Nagendra H. R. analyse the effect of mind sound resonance technique; Srinivas & Sony Kumari relates meditation and stress; whereas Chokkalingam, Sony Kumari, Akhilesh & H. R. Nagendra studies effect of integrated yoga on agreeableness and performance of employees. On other way, Wild life and tourism sector being an attraction as well economy booster respectively, Shrivastava reviews wild life as the growing tourism sector. To add more to management, Shastri talks of corporate social responsibility; Singh and Singh continues further with their study published earlier in this journal and analyse customer satisfaction in terms of company image, consultancy & customer service; whereas Baruah discuss 'x'trapreneurship as a holistic approach to clarify entrepreneurial research.*

*On the whole this green issue of Voice of Research presents the recent trends and issues and envisages the readers for further research in the area. Along with developing the interest in mathematics, discussion about yoga, psychological variables, educational and management issue, this issue is likely be of much help to the teachers, students, researchers and the management. I am sure, this issue will envisage the enthusiastic readers and researchers and Voice of Research is able to draw the necessary attention of the concerned departments on the related issue.*

**Regards,**  
**Avdhesh S. Jha**  
**Chief Editor**

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## PHILOSOPHY AND NATURE OF MATHEMATICS

Amarnath Murthy

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## Abstract

*There is nothing in our lives, in our world, in our universe, that cannot be expressed with mathematical theories, numbers, and formulae. Mathematics is the queen of science and the king of arts; to me it is the backbone of all systems of knowledge. Mathematics is a tool that has been used by man for ages. It is a key that can unlock many doors and show the way to different logical answers to seemingly impossible problems. Not only can it solve equations and problems in everyday life, but it can also express quantities and values precisely with no question or room for other interpretation. There is no room for subjectivity. Though there is a lot of mathematics in politics, there is no room for politics in mathematics. Coming from a powerful leader two + two can not become five it will remain four. Mathematics is not fundamentally empirical —it does not rely on sensory observation or instrumental measurement to determine what is true. Indeed, mathematical objects themselves cannot be observed at all! Mathematics is a logical science, cleanly structured, and well-founded.*

**Keywords:** Mathematics, philosophy, number, vedic mathematics

Richard Feynman. Says: “To those who do not know Mathematics it is difficult to get across a real feeling as to the beauty, the deepest beauty of nature. ... If you want to learn about nature, to appreciate nature, it is necessary to understand the language that she speaks in.”

**The Role of Mathematics:** While there are exceptions, it is generally true that great mathematics is studied for its own sake and without reference to anything outside itself. Mathematics has a beauty all its own and there is, for the mathematician, an aesthetic joy that comes from solving an important problem, no matter what value society may place on this activity. In this sense, mathematics has constantly sought to free itself from its practical origins. Geometry, for example, began with rules for surveying, calculating the areas of fields and making astronomical studies and acts of navigation. Probability theory had its origins in the desire to rise gambling to a high art. But, very quickly, mathematics shook itself free from such pedestrian origins. While it is certainly true that some exceptional mathematicians have begun their studies with a concrete problem taken from the physical world, in the end, the mathematics they have developed has moved away from these specific cases in order to focus on more abstract relationships. Mathematics is not really concerned with specific cases but with the abstract relationships of thought that spring from these particular instances. Indeed, mathematics takes a further step of abstraction by investigating the relations between these relationships. In this fashion, the whole field moves away from its historical origins, towards greater abstraction and increasing beauty.

**Power and beauty of Mathematics:** Where we find certainty and truth in mathematics we also find beauty. Great mathematics is characterized by its aesthetics. Mathematicians delight in the elegance, economy of means, and logical inevitability of proof. It is as if the great mathematical truths just have to be that way and no other. This light of logic is also reflected back to us in the underlying structures of the physical world through the mathematics of theoretical physics. Mathematics is the part of science you could continue to do if you woke up tomorrow and discovered the universe was gone. Galileo said: “We cannot understand [nature] if we do not first learn the language and grasp the symbols in which it is written.” Mathematics is truly a common language that will

always express the same quantity, event, or position. Focus on expressing the same quantity in theory; in our world, two plus two equals four. This is because “twoness” and “fourness” are real entities that hold up. In another world where atoms were the size of houses, people walked on their hands instead of their feet, and galaxies were not shaped like spirals but like rectangles and squares, two plus two would still be four. Though physical properties may differ in different worlds, mathematics still holds true. Mathematicians are mad tailors: they are making “all the possible clothes” hoping to make also something suitable for dressing... The dream of structuring the world according to mathematical principles began long before the rise of modern science. No theory however abstract in mathematics has ever gone unutilized or wasteful. Theories which were developed by pure mathematicians just for their own delight and aesthetic joy with no relation to any physical/world problem then, have also found astonishing applications unimaginable by the discoverer. In 1864 James Clerk Maxwell proved mathematically through his equations the existence of electromagnetic waves. And based on that in 1887 Heinrich Hertz sent and received wireless waves, using a spark transmitter and a resonator receiver. *One surprising example of the utility of mathematics is, even the difficulty of being able to solve a problem i.e. prime factorization has the most modern application in ‘cryptography’ the science of using mathematics in encryption and decryption of coded messages in military intelligence and computer security. One can, in a way pass it (the difficulty involved in solving a problem) on to the enemy. The military intelligence power of a nation is rated and based on strength and availability of this science i.e. the largest prime number known. The NSA National Security Agency of USA is said to be the largest single employer of mathematicians in the world. The NSA is estimated to have about 40,000, employees. The acronym NSA is aptly said to stand for “Never Say Anything.” There is a saying that “these days the purest of the pure mathematicians is in danger of being applied. Relations between pure and applied mathematicians are based on trust and understanding. Namely, pure mathematicians do not trust applied mathematicians, and applied mathematicians do not understand pure mathematicians.*

**The most elegant equation in mathematics:** The seven most important symbols in mathematics are e, i,  $\pi$ , 1, 0, + and = Using these symbols each only once, Euler had derived a beautiful equation which in my opinion is the most powerful



and elegant result in mathematics.  $e^i + 1 = 0$  Pythagoras theorem of course is the oldest most useful and beautiful result in mathematics.

**History of mathematics:** Babylonian and Egyptian mathematics emphasized arithmetic and the idea of explicit calculation. But Greek mathematics tends to focus on geometry and increasingly relied on getting results by formal deduction. For being unable to draw geometrical figures with infinite accuracy this seemed the only way to establish anything with certainty. And when Euclid around 330 BC did his work on geometry he started from 10 axioms and derived 465 theorems. Euclid's work was widely studied for more than two millennia and viewed as a quintessential example of deductive thinking. But in arithmetic and algebra which in effect dealt mostly with discrete entities, a largely calculational approach was still used. In 1600s and 1700s, however, the development of calculus and notions of continuous functions made use of more deductive methods. Often the basic concepts were somewhat vague, and by mid 1800s, as mathematics became more elaborate and abstract, it became clear that to get systematically correct results a more rigid structure would be needed. The introduction of non-Euclidian geometry in 1820s, followed by various forms of abstract algebra in the mid 1800s, and transfinite numbers in 1880s indicated that mathematics could be done with abstract structures that have no obvious connections to everyday intuition. Set theory and predicate logic were proposed as ultimate foundations for all of mathematics. But at the very end of 1800s paradoxes were discovered in these approaches. And there followed an increasing effort- notably by David Hilbert to show that everything in mathematics could consistently be derived just by starting from axioms and using formal processes of proof. Gödel's theorem showed in 1931 that at some level this approach was flawed. In any system rich enough to support the axioms of arithmetic, there will exist statements that bear a truth value, but can never be proved or disproved. Mathematics cannot prove its own consistency. But by 1930s pure mathematics had already firmly defined itself to be on the notions of doing proofs and indeed for the most part continues to do so even today. In recent years, however the increasing application of explicit computation has made proof less important, at least in most applications of mathematics.

**Vedic mathematics:** The Vedas are the most ancient record of human experience and knowledge, passed down orally for generations and written down about 5,000 years ago. Medicine, architecture, astronomy and many other branches of knowledge, including maths, are dealt with in the texts. Vedic Mathematics is the name given to the ancient system of Mathematics which was rediscovered from the Vedas between 1911 and 1918 by Sri Bharati Krsna Tirthaji (1884-1960). According to his research all of mathematics is based on sixteen Sutras or word-formulae. For example, 'Vertically and crosswise' is one of these Sutras. These formulae describe the way the mind naturally works and are therefore a great help in directing the student to the appropriate method of solution. The simplicity of Vedic Mathematics means that calculations can be carried out mentally (though the methods can also be written down). There are many advantages in using a flexible, mental system. Pupils can invent their own methods; they are not limited to the one 'correct' method. This leads to more creative, interested and intelligent pupils. But the real beauty

and effectiveness of Vedic Mathematics cannot be fully appreciated without actually practising the system the whole approach of Vedic maths is suitable for slow learners, as it is so simple and easy to use.

**Mathematical ideas:** Mathematics is not just about calculations but about ideas. Not all ideas are mathematics but all good mathematics must contain an idea. Five distinct sources of mathematical ideas are Number, Shape, Arrangement, Movement and Chance

**Number:** Originally the number concept must have arisen through counting: possessions, days, enemies. Measurement of lengths and weights led to fractions and the real numbers. With the creation of imaginary numbers mathematics was never quite the same.

**Shape:** Shape or form leads to geometry (Euclidian) and the modern offspring such as topology, singularity theory, Lie groups and gauge field theory. Novel geometric forms: fractals, catastrophe, fibre bundles, strange attractors etc.

**Arrangement:** Ways to arrange objects according to various rules lead to combinatorics, parts of modern algebra and number theory and what is known as "finite mathematics" the basis of much of computer science.

**Movement:** Of Cannon balls, planets, or waves inspired calculus, theory of ordinary and partial differential equations, calculus of variations, and topological dynamics. Many of the biggest area of mathematical research concern the way system evolve in time.

**Chance:** A more recent ingredient is chance or randomness, (Probability and statistics). Only for a couple of centuries has it been realised that chance has its own type of pattern and regularity (Fractals).

#### Classification of mathematics

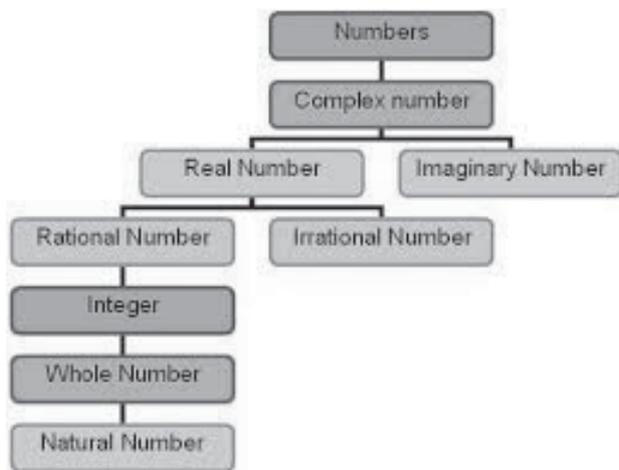
MATHEMATICS			
DESCRETE		CONTINUOUS	
ABSOLUE	RELATIVE	STATIC	DYNAMIC
ARITHMETIC	MUSIC	GEOMETRY	ASTRONOMY

**What is Number?** We use numbers every day and tend to take them for granted. But how did the idea of numbers arise? Is counting intuitive or did it arise to solve particular problems? Some of the oldest evidence of counting so far discovered comes from ancient artifacts belonging to groups of hunters and gatherers. For example, a wolf bone, dated about 30,000 BC, has been discovered with a series of notches carved in it, which seem to represent a tally of some kind. Tallying seems to be the earliest methods of keeping a record of quantities and appears in many cultures. But is this really counting? For example, a tally system might be used to keep track of a flock of sheep. A small stone might be put in a pile for each sheep as it is let out to graze in the morning and then a stone could be removed from the pile again for each sheep as it was collected in at night. Any pebbles left over would indicate that some sheep were missing. This is really only a straight comparison between two sets of objects, the stones and the sheep. No idea of the actual number of sheep in the flock. This is counting through mapping (one to one correspondence). At some developmental stage of a culture different number words were being used depending on the context e.g. there might be one word for four people and another for four stones. At some stage an abstract idea of



number develops and the concept of, “threeness”, where a group of three fish and three stones are perceived to have something in common, is incorporated into the system. One, Two, Many Systems, There were cultures that had number systems consisting only of words for one, two, and many with words for different types of “many” only being developed later.

**Types of numbers:** 1). *Cardinal numbers:* how many objects? 5, 7... 2). *Ordinal numbers:* Order (position) of an element in a set. (3<sup>rd</sup>, 4<sup>th</sup>) 3). *Tag numbers:* Gives a unique name to an object: bus number, telephone number etc. The number concept evolved as, natural numbers, zero, integers (positive and negative), rational numbers ( $\frac{1}{2}$ ,  $\frac{3}{5}$ ...), irrational numbers which included algebraic numbers ( $2^{1/2}$ ,  $3^{1/2}$ ...) and transcendental numbers ( $\pi$ ,  $e$ ...), and finally imaginary numbers/complex numbers. Complex numbers are like God!!! Here is the analogy. Can you imagine that there is a task which you and I are capable of doing but God is not. Surprising!!! What is that? In case I am angry with someone I can ask him to get out of my house but can God do it? God cannot. Because God cannot disown his creatures and also there is no limit to its territory. Set of rational numbers disowns  $\pi$  and  $2^{1/2}$ , real numbers can disown imaginary numbers but complex numbers like God cannot disown any number. Every number can be written as  $(a + bi)$  which means every number is a complex number.



Cantor shocked the world by showing that the real numbers are not countable... there are “more” of them than the integers! In a way he proved that there are infinitely many kinds of infinities.

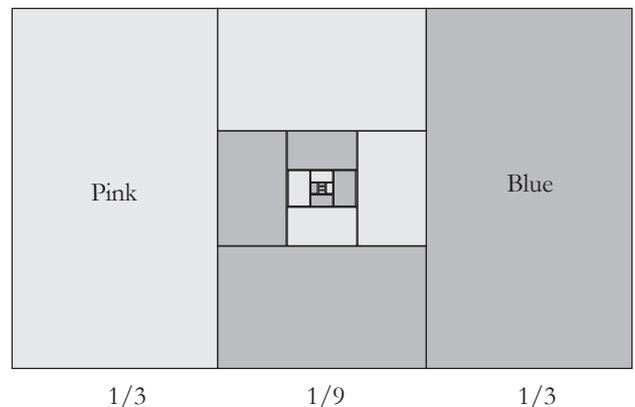
Some terminology: A theorem is a statement that can be shown to be true (via a proof). A proof is a sequence of statements that form an argument. Axioms or postulates are statements taken to be self evident or assumed to be true. A lemma is a theorem useful within the proof of a theorem. A corollary is a theorem that can be established from theorem that has just been proven. A proposition is usually a ‘less’ important theorem. A conjecture is a statement whose truth value is unknown.

The idea of proof in mathematics: Mathematicians (and scientists to a large extent) live in a world in which some things are certain. Mathematicians have Euclid’s (and other people’s) axioms, postulates, and theorems. Physicists have Newton’s (and other people’s) laws. These are ideas that are so basic that it would be silly to deny them (under normal circumstances). And mathematicians and scientists use these postulates, theorems, and laws to deduce other theorems and laws. This is proof. Given these postulates then this is a result. (if –

then). “Mathematical proofs, like diamonds, are hard and clear, and will be touched with nothing but strict reasoning.” (John Locke). Mathematical proofs are, in a sense, the only true knowledge we have. They provide us with a guarantee as well as an explanation (and hopefully some insight).

Various types of proofs: *Existence proof:* Usually, to show that some things with certain properties exist, just show an example. To prove there is an even prime number, just mention 2. If an example cannot be found, this can be a very difficult kind of proof indeed. *Proof by contraposition:* If we have a statement of the form A implies B (If A then B), then the contrapositive is: not B implies not A. A statement is always equivalent to its contrapositive. If you have proved one, you have proved the other. *Backward proof:* Assume the intended theorem is true. See that it leads to basic truths. This is a flawed method; it is not a proof. It may help one discover a proof, however. It is necessary to see if one can make the backward proof go forward. The backward proof is sometimes diabolical. At worst, you can assume something that is false and end up with some obvious truth, and you think you proved your false statement. At best, you assume something that is true, and end up mistakenly thinking you have proved it. The following erroneous proof is too obvious to fool anyone: Assume  $3=2$ . Then by the commutative law,  $2=3$ . Add the two equations, and we get  $5=5$ . Subtract 5 from both sides, and we get  $0=0$ , which I happen to know is true. Therefore  $3=2$ . Not! To actually try to prove that  $3=2$ , we would have to start with  $0=0$  and end with  $3=2$ . And that won’t work. *Proof by Contradiction:* To prove a statement p is true you may assume that it is false and then proceed to show that such an assumption leads a contradiction with a known result. Examples (1) Pythagoras’ proof that the square root 2 is not a rational number. (2) Euclid’s proof that there are infinitely many primes.

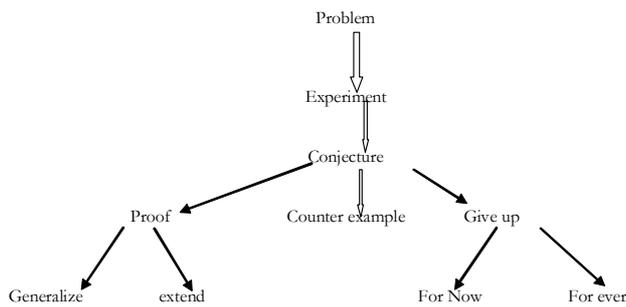
*Proof by mathematical induction:* Guess at a formula, and then prove it. This proof is stated informally. Example:  $(1+2+...+n)=n(n+1)/2$ . *Proof by infinite descent:* Fermat proved that sum of two integer cubes cannot yield a third cube by proving that if such an example exists then there exists yet another case with smaller numbers and so on. *Impossibility proof:* (1) trisection of an angle using ruler and compass. (2) Squaring a circle. (3) Doubling a cube etc. *Proof without words:*  $1/3 + 1/9 + 1/27 + \dots + 1/3^n = 1/2$



The pink area = The blue area =  $\frac{1}{2} = \frac{1}{3} + \frac{1}{9} + \frac{1}{27} + \dots + \frac{1}{3^n}$  *Proof by cases:* Sometimes it is easier to prove a theorem by breaking it down into cases and proving each one separately. *Proof by exhaustion:* Proofs which analyse and

document every instance of an assertion in a case-wise analysis can be used in finite cases. This is a cumbersome method of proof and is really only suitable when dealing with fairly small sets. A more involved use of proof by exhaustion is the proof of the Four-Colour Theorem. The proof has broken down the four-colour problem into subsets and a four-colour proof was applied to each of these by a computer. This proof has not currently been verified by a human and is hence not considered fully proven. No matter how many examples you give, you can never prove a theorem by giving examples (unless the universe of discourse is finite in which case it is called an exhaustive proof). Counter examples can only be used to disprove universally quantified statements.

**Flowchart of growth of mathematics**



Some funny definitions of a mathematician: 1. A math professor is one who talks in someone else’s sleep. 2. A Mathematician is a device for turning coffee into theorems. 3. A blind man looking for a black cat in a dark room which is not there. 4. A statistician can have his head in an oven and his feet in ice, and he will say that on the average he feels fine.

Smartness of a mathematician: One day a farmer called up an engineer, a physicist, and a mathematician and asked them to fence off the largest possible area with the least amount of fence. The engineer made the fence in a circle and proclaimed that he had the most efficient design. The physicist made a long, straight line and proclaimed “We can assume the length is infinite...” and pointed out that fencing off half of the Earth was certainly a more efficient way to do it. The Mathematician just laughed at them. He built a tiny fence around himself and said “I declare myself to be on the outside.”

Right approach towards mathematics: The world today is full of complex systems and mathematics is the subject that’s supposed to provide models, framework and metaphor for thinking quantitatively about those things. Mathematical skills are essential for children if they are to flourish to their fullest in the fast moving technological world of tomorrow. *Calculation and rule- following only make up a small part of big picture in terms of what students need to know, but because they are the easiest skills to measure, that’s what schools emphasize. And children who don’t grasp it right away don’t enjoy doing it often end up fearful of all mathematics.* Bookish mathematics divorced from life and its everyday problems can be boring and seem meaningless; cripple the enthusiasm and dull the inquiring mind of the young student. But when it is learned as a key to the solution of everyday problems, mathematics can be exciting, give students a sense of power and achievement. The

most beautiful thing about mathematics and its study is that you don’t require a formal education to start learning it. In fact if your slate is clean you will learn faster and enjoy more. The basic assumptions are very few and with these you can embark upon a journey that is thrilling, absorbing and highly rewarding. And if you continue this process of learning, on your way you will have discovered the real meaning of this life and after life. You can start this journey alone and still not get bored even for a single moment. Recall the great Indian self-taught mathematician Srinivasa Ramanujan. In fact mathematics can be enjoyed as one enjoys music with the only a difference that one can enjoy music without knowing anything about it but to enjoy mathematics some basic knowledge is essential and afterwards there is no looking back. It is also true that trained musicians enjoy music much more than the listeners. And to learn music or mathematics it requires dedication. I do not know if it is true - that when one of the kings was trying to learn geometry from Euclid he complained that it was difficult. And Euclid said, “There is no royal road to geometry”. Mathematics gives shortcuts to everything but there is no shortcut to learning mathematics.

Final word: All life is biology. All biology is physiology. All physiology is chemistry. All chemistry is physics. All physics is math.”(Marquardt, 2001) Mathematics is obviously the most interesting, entertaining, fascinating, exciting, challenging, amazing, enthralling, thrilling, absorbing, involving, fascinating, mesmerizing, satisfying, fulfilling, inspiring, mindboggling, refreshing, systematic, energizing, satisfying, enriching, engaging, absorbing, soothing, impressive, pleasing, stimulating, engrossing, magical, musical, rhythmic, artistic, beautiful, enjoyable, scintillating, gripping, charming, recreational, elegant, unambiguous, analytical, hierarchical, powerful, rewarding, pure, impeccable, useful, optimizing, precise, objective, consistent, logical, perfect, trustworthy, eternal, universal subject in existence full of eye catching patterns. So many adjectives might irk anybody but truly ... It is independent of time and space. Applied mathematics is the science of patterns and order and the study of measurement, properties, and the relationships of quantities; using numbers and symbols. Mathematics is the key to understanding our world around us. It is perhaps the purest of the pure mental endeavor of humankind. Mathematics is such a beautiful game of numbers, notions and notations designed and created by humankind that even nature behaves mathematically. Mathematics is fun.

**References**

abinitiodotgre.wordpress.com  
 A History of Mathematics viny - Academia.edu  
 F David Peat - *From Certainty to Uncertainty*  
*homepages.ibug.co.nz/~sai/peat\_uncertainty.htm*.  
[http://en.wikibooks.org/wiki/Mathematical\\_Proof/Methods\\_of\\_Proof/Other\\_Proof\\_Types](http://en.wikibooks.org/wiki/Mathematical_Proof/Methods_of_Proof/Other_Proof_Types)  
 Ian Stewart *Problems of Mathematics*  
 NUMBER SYSTEM [Theory 01] | Ab-initio-gre  
[www.academia.edu/6136577/A\\_History\\_of\\_Mathematics\\_viny](http://www.academia.edu/6136577/A_History_of_Mathematics_viny)



## A COMPARATIVE ANALYSIS OF INFRASTRUCTURE AND MANPOWER FACILITIES BETWEEN THE GOVERNMENT AND PRIVATE SCHOOLS IN MANIPUR

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### Abstract

*The infrastructure and manpower of the school plays great role for the functioning of an institution. Without which no institution can run. So, with the enforcement of RTE (Right to Education) and RMSA, every institution should have minimum infrastructure and manpower to facilitate primary and secondary education throughout the nation. Now, it is time to examine infrastructural and manpower position of Government and private high schools within the greater Imphal area, Manipur. Therefore, the study was conducted to know the status of infrastructure and manpower of govt. and private schools. It also suggested remedial measures in order to improve both govt. and private schools in Manipur.*

**Keywords:** infrastructure, manpower, government and private schools, manipur

Infrastructure and manpower facilities play a great role in the successful conduct of programmes and activities, which is one of the main task of school. It is the basic organizational structure needed for the operation of a society or enterprise or the services and facilities necessary for an economy to function. A school should be set up in a suitable atmosphere. Its location has enormous significance. It must have plenty of space with shady trees around, far away from the noise of the crowded city and polluting atmosphere. There should be a calm and quiet atmosphere which is conducive to teaching and learning. It should have space, utility and attractiveness. The school building should be attractive, have adequate lighting, comfortable seating, useful service facilities such as library, multipurpose rooms, functional playground, classrooms, chalk and bulletin boards, sinks, work areas, filing and storage space and lockers for pupils and teachers etc. Manpower is the power of human physical strength, power in terms of the workers available to a particular group or required for a particular task. Manpower planning which is also called as Human Resource Planning consists of putting right number of people, right kind of people at the right time, right place, doing the right things for which they are suited for the achievement of goals of the organization. Staffing is one of the most essential functions for every organization. In fact, in the absence of a good staffing system, no organization can exist for a long duration because in every organization, all the resources like money, material, machine etc are utilized properly through manpower. Hence, it is too important that all the personnel in organizations should appoint at the job according to their ability, talent, aptitude, and specializations which can only be possible through a good staffing system. Thus, it is clear that staffing is too important for every organization. In schools, teachers may provide instruction in literary and numeracy, craftsmanship or vocational training, the arts, religion, civics, community roles or life skills. Teachers make a big difference. Students spend most of their day with teachers, and schools spend most of their money on teachers. Effective teacher can substantially offset or even eliminate the disadvantage of low socio-economic background. If

poor children consistently get great teachers, the achievement gap could disappear.

**Review of the related literature:** GOYAL J. C., SABHARWAL, TIWARI, A D, Development of a Model for Forecasting Teacher Manpower Requirements, Dept. of Teacher Education, NCERT, New Delhi, 1982. The major findings: (a) The total enrolment, teachers strength and number of sections increased significantly in all the year under reference with respect to the base year. The enrolment and teachers increased per section in all the group of schools in all the years when compared to the base year. (b) The enrolment, teachers strength and teachers per section showed an increasing trend in all the years with respect to the base year in the categories of urban government girls, rural government girls and rural government boys schools. Besides, the teacher strength also increased in the categories of urban private girls, and urban private boys schools. (c) The teacher-pupil ratio and pupil-section ratio showed significance variance among the groups and categories of schools. GCPI: A study of the Condition of Libraries and Reading-rooms in Government Higher Secondary Schools; Allahabad (1981) The findings: (a) The condition of the libraries in the government higher secondary schools was not satisfactory. The buildings were insufficient; equipment was inadequate; there was no provision for reading-rooms except in double-shift schools; there were no full-time trained libraries. (b) Library services were usually not available. (c) There were no provisions for fixed grants to the libraries for purchase of new books or magazines; keeping in view the number of the students the number of magazines in the reading-rooms was insufficient. BHARGAVA S.M. (1990) Conducted, "A study of the growth of Educational facilities and enrolment at the elementary stage in india". The major findings were: There had been a steady growth of educational facilities at the primary stage. In 1957, 59.75% children had schooling facilities within a distance of one kilometer, but this was available to 80.34% in 1986. Among the states, Nagaland has the highest and Tripura, the lowest facilities. The other states that followed Nagaland and Mizoram were Gujarat and Punjab. But Uttar Pradesh, Goa and Himachal



Pradesh had the lowest percentages; Educational facilities for girls and ST and SC improves from 38.05% in 1978 to 74.46% in 1986; middle-stage Education facilities within 1km have also increased from 313 in 1978 to 13.25 in 1986, and Jamagadh District(Gujarat) has the highest facilities for middle stage Education. ALIN NINGOMBAM, Manipur University, (2000) Conducted a study on the infrastructure and manpower problems of government elementary schools in Imphal West District. The major findings: (a) The use of teaching aids was largely confined only to ordinary classroom appliances and some charts and maps only.(b) It was found that the government efforts for the last 15 years to improve the infrastructure of all the Govt. Elementary Schools still remain unsatisfactory. (c) Some schools had more students than the desk & benches available and in some schools the number of desk & benches are more than the number of students. On the basis of the above review of related literature in the field of infrastructure and manpower facilities in government and private schools both in India and Manipur can be concluded as it is new area of study. The trend of development of infrastructure and manpower facilities in government and private schools will help in further studies.

**Rationale of the study:** Infrastructure systems include both the fixed assets, and the control systems, software required to operate, manage and monitor the systems, as well as any accessory buildings, plants, or vehicles that are essential part of the system. Manipur has witnessed a massive expansion in educational field. It has a large school going population. Infrastructure and Manpower being the framework of proper functioning of school, it is imperative for schools to provide proper and good infrastructures and proper staffing so as to achieve quality results. Infrastructures should be maintained and adequate infrastructures should be available in schools to achieve quality results. An efficiently trained teacher brings out best out the learners. Hence, it is necessary to know the condition of infrastructures and manpower in private and government schools. The results emerging from this study

maybe of practical value to the learners and the policy makers in formulating policies relating to the improvement of infrastructure and manpower facilities in schools.

**Objectives:** To study the infrastructure availability in private and government schools. To study the staff availability in the private and government schools and To make a comparative analysis between the private and government schools in term of the pupils' availability.

**Hypothesis:** There exist adequate infrastructure in both government and private school, There exist proper staffing in both the government and private school, and Student's enrolment is more in private school as compared to government school.

**Research design:** The problem area of the present study was confined only to Infrastructure and Manpower Facilities during academic session-2013-14. Geographic areas- The present study was confined only to one private and one government school in Greater Imphal, Manipur. For the propose study, case study approach under the descriptive research adopted. For the present study Survey Method was adopted. The survey method of research has undoubtedly been the most popular and widely used research method in education. The population of the present study consists of one government school and one private school located in Greater Imphal, Manipur. For the present study Lilasing Khongnangkong High School, Imphal (Government) and D. Regina English High School, Imphal (Private) have taken up through purposive sampling. For the present study, self-developed school survey schedule was used for the collection of data. Self-developed school survey schedule was used by the investigator for the present study to collect information. The investigator went to two schools and sought permission from the concerned authorities. With their consent, the investigator personally surveyed the campuses of both the schools. The investigator took the help of the concerned school authority's clarification.

**Analysis and Interpretation of Data**

**Ho<sub>1</sub> There exist adequate infrastructure in both government and private school.**

Table 1

Sl. No.	Type of management	Land		Type of school building			Conditions of school building		
		Own	Rent	Pucca	Semi pucca	Kutchra	Good	Better	Poor
1	Government	Yes	--	--	Yes	--	Yes	--	--
2	Private	Yes	--	Yes	--	--	Yes	--	--

Table 2

Sl. No.	Type of management	number of rooms				
		Classrooms	Headmaster/Principal room	Teachers room	Library	Store room
1	Government	10	1	1	1	1
2	Private	10	1	1	1	1

Table 3

Sl. No	Type of management	Computer room	Total No. of computers	Game room
1	Government	Yes	10	yes
2	Private	Yes	7	yes

Table 1 indicates that both the schools of (govt and private) have their own land. And, It also shows that the type of school building of government is semi-pucca, whereas that of private school is pucca. But, both the conditions of school building are good. Table 2 shows that both the government and private school have same number of classrooms i.e. ten numbers.



Both the type of management has separate headmaster/principal room. Both the management has the facility of library room and store room. Table 3 focus that both the government and private school have the facility of separate computer room and recreation room. The table also shows that number of computers in the government school is ten in number and that of private school is seven in number. Thus it can be said that the first hypothesis that was constructed for testing “There exist adequate infrastructure in both government and private school” is accepted here, as both are having enough infrastructures.

**Ho<sub>2</sub> There exist proper staffing in both the government and private school.**

Table 4

Sl. No	Type of management	No. of teachers		Total	Non-teaching staff		Total
		Female	Male		Female	Male	
1	Government	15(55.6)	12(44.4)	27	1	1	2
2	Private	9(64.3)	5(35.7)	14	1	1	2

(Figure under parenthesis indicates percentage)

Table 4 shows the number of teaching staff and non teaching staff in both the government and private school. The table also shows the percentage of female teacher and male teacher is 55.6% and 44.4% in the government managed school and 64.3% and 35.7% in the private managed school. Thus it can be said that 2<sup>nd</sup> hypothesis that was constructed for testing “ There exist proper staffing in both the government and private school is rejected “as the staffing pattern/strength of govt is more than private school.

**Ho<sub>3</sub> Student’s enrolment is more in private school as compared to government school.**

Table 5

Class	Type of management					
	Government			Private		
	No. of students			No. of students		
	Male	Female	Total	Male	Female	Total
I	06	10	16	12	12	24
II	06	10	16	13	14	27
III	02	04	06	10	15	25
IV	02	11	13	11	12	23
V	04	03	07	15	12	27
VI	05	07	12	11	10	21
VII	16	08	24	09	10	19
VIII	14	03	17	10	08	18
IX	06	04	10	07	07	14
X	10	07	17	09	07	16
<b>Total</b>	<b>71</b> <b>(51.4%)</b>	<b>67</b> <b>(48.6%)</b>	<b>138</b>	<b>107</b> <b>(50%)</b>	<b>107</b> <b>(50%)</b>	<b>214</b>

Table 5 indicates No. of students in both the government and private schools. From the said table, No. of students 138 of the government school, 51.4% constitutes the male student and 48.6% constitutes the female students. However, total No. of students 214 of the private school, 50% are male students and the other 50% are female students. Thus it can be said that 3<sup>rd</sup> hypothesis that was constructed for testing that “Student’s enrolment is more in private school as compared to government school” is accepted “as we find more enrollment in private school than govt. school.

Findings: The first hypothesis that was constructed for testing “There exist adequate infrastructure in both government and private school” is accepted here, as both are having enough infrastructures. The 2<sup>nd</sup> hypothesis that was constructed for testing “ There exist proper staffing in both the government and private school is rejected “as the staffing pattern/strength of govt is more than private school. The 3<sup>rd</sup> hypothesis that was constructed for testing that “Student’s enrolment is more in private school as compared to government school” is accepted “as we find more enrollments in private school than govt. school.

Suggestions for Improvement: Good infrastructure and manpower facilities enhance teaching-learning process. Quality education helps them to achieve personal growth and professional success. Therefore, it is essential to invest in children’s future by providing them with the best possible education that only a good school can provide. The following are the suggestions for the improvement in regards to infrastructure and manpower facilities in government and private managed schools: Details of land area, no. of rooms, classes from to what, govt. or private, district, and state should be displayed to the front gate of the school, so that people will know the details of school. School buildings should be constructed well as per RTE norms. Construction of school buildings should be by the certified construction body for quality control, otherwise, it will be risky the life of students. School should have enough land its own, where building construction and playground can be done. Land is limited whereas population is increasing day by day, so, vertical construction of pucca building should be planned, while school is planned and established. Earthquake resistance technology should be adopted while construction is done for the safety of students. Building is the main thing of the school. It should be attractive and well designed by architect, so that parents will like to get their children. Fire safety measure should be taken up at schools. Smart board and computer facility should be provided in the class room. Fully qualified professional teachers should be recruited from time time, when vacancy arises. All the vacancies of teacher and non-teaching staff should be filled up as soon as possible as per NCTE norms, so that there will be no shortage of man power at schools for the full-functioning. Inspection team of government agency should be there to monitor whole infrastructural and teacher facilities being provided at the school. Transfer and posting policy should be framed the state govt. for healthy posting and transfer. Library facility is must at the school, so that, there will be no shortage of its facility. There will be enough game facility and room at the school. Student Enrollment at school must be checked by the concerned authority from time to time for the SSA scheme like mid day meal facility. Parent teacher association should be there to reduce the gap between teachers and parents in order to solve students’ problem. So that students enrollment will increase, if parents are satisfied to school teachers.

**References**

Government of India : Kothari Commission Report (1964-66) Manager of Publication, New Delhi, 1966.  
 Jamini, Ch: Education in Manipur Rai Pravian Brother, Imphal, 1989.  
 Lokesh Koul : Methodology of Educational Research Vikas Publishing House, New Delhi,1997.  
 Right to education, extra ordinary gazette, part-ii, section-1 ministry of law and justice, govt. of India. 27<sup>th</sup> august, 2009,  
 RP Yadav, Right to education, 2014,jain book agency, New Delhi-01



## DEVELOPING AWARENESS AMONG PRE-SERVICE TEACHERS AGAINST GENDER RELATED CRIMES

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### Abstract

*Women's equal dignity and human rights as full human beings are enshrined in the basic instruments of today's international community. From the Charter of the United Nations' endorsement of the equal rights of men and women, to the Universal Declaration of Human Rights and the subsequent international treaties and declarations, the rights of women are central to our vision of a democratic society. But the fine words of these documents and of the Vienna Declaration in 1993 and the declaration of Beijing in 1995 stand in sharp contrast to the daily reality of life for millions of women. Of the 1.3 billion people living in poverty, 70 per cent are women; the majority of the world's refugees are women; female illiteracy is invariably higher than male illiteracy. Women and girl-children are treated as commodities in cross-border prostitution rackets and the pornography industry. Millions of girls are still subject to genital mutilation, while women in every country are regular victims of domestic violence. In many countries, women lack access to reproductive health care and every day women are targeted in armed conflicts. Women's economic, social and cultural rights continue to be neglected.*

**Keywords :** *Awareness, Pre-service Teachers and Gender Related Crimes.*

Women's equal dignity and human rights as full human beings are enshrined in the basic instruments of today's international community. From the Charter of the United Nations' endorsement of the equal rights of men and women, to the Universal Declaration of Human Rights and the subsequent international treaties and declarations, the rights of women are central to our vision of a democratic society. But the fine words of these documents and of the Vienna Declaration in 1993 and the declaration of Beijing in 1995 stand in sharp contrast to the daily reality of life for millions of women. Of the 1.3 billion people living in poverty, 70 per cent are women; the majority of the world's refugees are women; female illiteracy is invariably higher than male illiteracy. Women and girl-children are treated as commodities in cross-border prostitution rackets and the pornography industry. Millions of girls are still subject to genital mutilation, while women in every country are regular victims of domestic violence. In many countries, women lack access to reproductive health care and every day women are targeted in armed conflicts. Women's economic, social and cultural rights continue to be neglected.

**Need of Equal Rights for Women:** There can be no peace, security or sustainable economic development in societies which deny human rights, including the human rights of women. Fighting for women's human rights is a positive struggle which recognizes the quality of a woman's contribution in every aspect of the community: in politics, industry, commerce, education, academia, agriculture and the home. Women are also the true peacemakers and the peace-builders at the negotiating table and in war-torn communities everywhere. Practical and creative measures to realize the human rights of women - civil and political rights, economic, social and cultural rights and the right to development should be a priority of the country and it should act with organizations, academic institutions, individuals and the

NGO community, but most specially with women throughout the country to promote and protect women's rights and to translate these rights into a better quality of life. The principle of the equal rights of women and men was recognized in the Charter of the United Nations, and is contained in the Universal Declaration of Human Rights and all subsequent major international human rights instruments. Confirmation of the principle of equality in these instruments was an important step in the recognition of the rights of women. Yet traditional exclusion of women from the public domain has persisted in our country - relegating women to the private domain. The need for women's participation in all spheres of society - in both the public and the private domains - and the recognition of inequality and discrimination in the private domain, led to the creation of specific standards for the protection of women's rights. In 1979, the United Nations General Assembly adopted the Convention on the Elimination on All Forms of Discrimination against Women (CEDAW). CEDAW establishes women's right to non-discrimination on the basis of sex, and affirms equality in international law. It provides that women and men are entitled to the equal enjoyment and exercise of human rights and fundamental freedoms in civil, cultural, economic, political and social fields. Different global conferences promoted the review of policies and programmes from the perspective of their impact on women and men - in other words, a re-evaluation of policies and programmes from a gender perspective. Aim is to achieve the advancement of women through correcting disparities in different policy sectors and ensuring their enjoyment of civil, cultural, economic, political and social rights. The Human Rights of women and the girl-child are an inalienable, integral and indivisible part of universal human rights. The full and equal participation of women in political, civil, economic, social and cultural life,



at the national, regional and international levels, and the eradication of all forms of discrimination on the grounds of sex are priority objectives of the international community. Recent world conferences, including Vienna (1993), Cairo (1994) and Beijing (1995) have confirmed the strong link between the gendered nature of violations of human rights, and the actual advancement of women's rights. Discrimination against women violates the principles of equality of rights and respect for human dignity. It is also an obstacle to the participation of women on equal terms with men in all spheres of society.

**Unequal Status of Women:** Countries' achievements in human development (that is, whether people are educated, enjoy a decent standard of living and lead long and healthy lives) change noticeably when inequality in achievement between women and men is taken into account. The majority of the world's 1.3 billion people living in poverty are women, a situation caused by a number of factors. Their unequal situation relates to access to land, property, credit and other economic resources, is one aspect. Another is their treatment under social welfare systems and their status and power in the family. Research has shown that, although gender inequality is strongly associated with human poverty, it is not necessarily associated with income poverty. Even when a country is very poor in terms of income poverty, it can still achieve a relative level of gender equality according to basic indicators for human development. Progress in gender equality can be achieved at different income levels and stages of development. And it can be found across a range of cultures and political ideologies. Access to, and control of, productive resources, particularly land, are key factors in addressing women's poverty. In rural areas, lack of access to, and control of, productive resources have particular consequences for women. Although women's right to own land is often legally established, gender asymmetry in access to and control over land is one of the main obstacles to the full participation of women in rural development. Because of continuing exclusion of women from, and discrimination against women in, acquiring land, security of tenure and inheritance rights to land and property, women also face particular constraints in securing and maintaining their right to housing. The continued discrimination women face in all matters relating to land and property has been identified as the single most critical factor in the perpetuation of gender inequality and poverty.

**Education & Women:** Education is also a prerequisite for effective economic participation. Education and training for women and girls yields high social and economic returns, and is a precondition for the empowerment of women. While enrolment ratios for boys and girls at the primary level are approaching equality everywhere, differences persist at the regional level and for different age groups and levels

of schooling, especially at higher levels. Two thirds of the world's illiterate adults are women, with illiteracy highest among older women who never had the opportunity to go to school.

**Discrimination with Women at Workplace:** Women work in different jobs and occupations than men, almost always with lower status and pay. In the enjoyment of rights, women face constraints and vulnerabilities which differ from those that affect men and which are of significant relevance to the enjoyment of these rights. At the same time, these variables mean that women may be affected by violations of rights in ways that are different from men. Women are disproportionately affected by poverty and social marginalization. Women suffer systemic and systematic discrimination, which results in deep patterns of inequality and disadvantage. The overall level of development and of resources available to countries, women's literacy levels and women's access to information and to legal remedies also have an impact on women's enjoyment of their rights. The gender-based division of labour, with women being primarily responsible for reproductive work and work related to the family, and men for productive work, also contributes to the perpetuation of gender-based inequalities. Many women experience multiple barriers in gaining access to rights such as employment, housing, land, food and social security. These barriers include the disproportionate burden of reproductive and care-giving work performed by women; the sexual division of labour and segregated employment practices; discriminatory traditional and cultural laws and practices; unequal representation by women in political and other decision-making structures at all levels; and the widespread violence perpetrated against women. Women's social position, marital status, class, or membership in particularly vulnerable groups, such as refugee or migrant women, rural or urban poor women, are often linked to de facto, and sometimes also to de jure, discrimination.

**Traditional practices affecting the health of women and the girl-child:** The Vienna Declaration and Programme of Action adopted at the World Conference on Human Rights in 1993 expanded the scope of the international programme on human rights, emphasizing that "gender-based violence and all forms of sexual harassment and exploitation, including those resulting from cultural prejudice and international trafficking, are incompatible with the dignity and worth of the human person and must be eliminated". The Conference urged Governments to take steps to combat harmful traditional or customary practices, including female infanticide.

The Beijing World Conference on Women in 1995 deal with harmful traditional practices. It defines violence against women as encompassing dowry-related violence, female



genital mutilation and other traditional practices harmful to women, female infanticide and prenatal sex selection. The reasons why men outnumber women in certain parts of the world include harmful attitudes and practices such as female genital mutilation, son preference (which results in female infanticide and prenatal sex selection), early marriage, including child marriage, honour killings and discrimination against girls in food allocation.

**Problem of Health & Reproduction:** The Beijing Conference states: Good health is essential to leading a productive and fulfilling life, and the right of all women to control all aspects of their health, in particular their own fertility, is basic to their empowerment. The human rights of women include their right to have control over and decide freely and responsibly on matters related to their sexuality, including sexual and reproductive health, free of coercion, discrimination and violence. Bearing in mind that women are particularly vulnerable in times of internal or international armed conflicts, States parties must take special measures to protect women from rape, abduction and other forms of gender-based violence. In the recent past the Committee has devoted increasing attention to the problem of trafficking of women and children and forced prostitution. It also implies that women may not be treated as objects to be given together with the property of the deceased husband to his family". As the publication and dissemination of obscene and pornographic material portraying women as objects of violence is likely to promote such treatment, Nations are called upon to provide information about legal measures to restrict the publication or dissemination of such material. The right to marriage, which is the subject of General Comment No. 19 (1990), entails equality of men and women to enter marriage only with their free and full consent. Moreover, the commission of so-called "honour crimes", which remain unpunished, constitutes a serious violation of the constitution Laws which impose more severe penalties on women than on men for adultery or other offences also violate the requirement of equal treatment. Indian Constitution has been very liberal about rights of women. Women have right of education and of equal pay for equal work. They have legal right of equal share in the property of father. They have right to marry a man of their choice and can complain against domestic violence and issues related with demand of dowry. They can also complain against ill-treatment at work places. Female foeticide is a crime so is pornography, rape and honour killing. Child marriage and Satipratha are also crimes in the eyes of law. Despite having so lofty laws, many women are sacrificed at the altar of dowry, men-women ratio has been disturbed because of female foeticide. A girl child is discriminated in education and nutrition.

Women suffer sexual harassment at workplace. All this happens because women are not sensitized about their rights. Education should play a key role in sensitizing women about their rights and making them independent.

**Rationale of the Study:** Women constitute not only half of the population. Their role is even bigger and more magnanimous as they are creators and have the power to give birth to a new human being. A nation cannot develop until women play an active role in social reform. It is rightly said that the society which does not pay respect to women is sure to perish. In India traditionally a great respect is given to women. *Nari tum kewa shradha ho, Ek nahin do do matrayen, Nar se badh kar nari* these lines of poems describe the high status of women but reality is quite different as India is recognized as the most unsafe country for women. In the patriarchal society of India many evil social customs like sati pratha, *bal vivah*, *parda pratha*, dowry system, female foeticide, crime against women developed. There are crimes like dowry, burning of brides at the altar of dowry, killing of girl child at the womb of mothers, discriminating girl child, molestation of women at workplace, in travel and even at education centres is really very disturbing for emotionally sensitive minds. Recent cases of rape of even minors pose a serious question about mental health of the society. Killing of innocent, harmless girl child at the womb of mother demonstrate the callousness and hard-heartedness of an insensitive society. The researcher tried to make the pre-service teachers aware about these issues so that they can mould the society positively by influencing their students to create a conducive climate for girls.

**Objectives:** To know awareness among pre- service teachers against gender related crimes, To know sensitivity among pre- service teachers against gender related crimes through focused group discussion, To develop a programme to create awareness among pre- service teachers against gender related Crimes, To make the pre-service teachers aware about the reasons of gender related crimes, To make the pre-service teachers aware about the solutions of gender related crimes, To make the pre-service teachers learn about precautionary measures, To make the pre-service teachers learn about the legal provisions against gender related crimes, To evaluate awareness among pre- service teachers against gender related crimes after implementing the programme and To study the feedback of pre-service teachers about the programme.

**Research Questions:** What are main gender related crimes? What are the reasons of gender related crimes? What are the solutions of these crimes? What are the precautionary measures to protect themselves in difficult situations? What are the legal provisions against these crimes?

**Research Design:** This was an experimental research. This was a single group pre-test and post-test design. As gender



sensitivity of pre-service teachers was evaluated before implementing the programme and after its implementation. All Pre-service teachers of Anand District comprised the population of the study. Eighty pre-service teachers of the Waymade College of Education were selected as sample. This was purposive sampling as the Waymade College of Education being the English Medium College, students from all over the country, even outside from Gujarat and from diverse background join the college. The college also has a Women Development Cell which works for women empowerment. The tools used were Pre-test to know awareness of pre-service teachers regarding gender related crimes, Post-test: To know effect of the programme on pre-service teachers regarding gender related crimes, and Feedback Form: The researcher prepared the feedback form to study the awareness of pre-service teachers about the programme.

**Research Procedure:** The researcher took the pre-test and post-test as well as thirteen sessions of one hour each. In all fifteen sessions of one hour each were conducted by the researcher. On Day 1: Pre-test on: To know the awareness of Pre-service teachers about gender related crimes, a pre-test was taken so that there awareness about the same can be known. On Day 2: There was focussed group discussion about gender related crimes in which the pre-service teachers shared their experiences. They told about various crimes which happen every day in India and people need to be aware of these stark realities. On day 3: Talk by the resource person MS. Sapna Rathi an army major, she talked about the picture of gender related crimes all over the world. She talked about the horrible crime of acid attack as well as Domestic Violence Act 2005, Rape Law 2013. On day 4: Visit of Karate Team A Karate team visited to train the girls in self-defence. The purpose of this demonstration was to demonstrate that by learning these tricks they can easily overpower the assailants and not become victims of such crimes. On day 5: Pre-service teachers were asked to think of reasons for the different gender-related crimes. On day 6: Pre-service teachers listed the reasons of various crimes and wrote them on strips. On day 7: After discussion about reasons of such type of crimes, Pre-service teachers came out with a list of severe crimes and prepared the scrap books having different themes. On day 8: Pre-service teachers were asked to think of solutions of the gender related crimes. Discuss about the solutions of these type of crimes and write and paste the same on scrap books took place. On day 9: Pre-service teachers navigated the INTERNET to find the legal provisions against these gender related crimes. On day 10: Demonstration by 108 to use it in case of emergency on January 25, 2014. The purpose of this demonstration was to show how this can be used when any woman suffers due to violence or sexual assault. As this service enables a person to get first aid and medical treatment,

this helps the woman in danger get advantage of medical facilities. Many times this timely service can save the lives of innocent victims. On day 11: Discussion about the legal provisions for different types of crimes. Pre-service teachers were informed about legal provisions against domestic violence, dowry death, female foeticide, forced prostitution and honour killing. The main purpose for this was to make the girls aware of their rights. How can they avail of government and police help in case of harassment. On day 12: Pre-service teachers were asked to read important portions of the book 'A Thousand Splendid Suns' by Khaled Housenni as this book vividly describes gender related crimes. On day 13: Review of the book 'A Thousand Splendid Suns' by Khaled Housenni. Purpose of this review was to critically evaluate the conditions of women under Taliban. On day 14: Focus group discussion about various gender related crimes and need to face them courageously. On day 15: Post test and feedback on. A post test was given to Pre-service teachers to know the effect of the programme on their understanding various gender related crimes and how they can face such situations bravely and also seek government help.

**Findings:** Analysis of feedback and analysis of pre-test and post-test yielded the following results: Most of the pre-service teachers agreed that the programme developed their insights about crimes against women. Most of them stated that the programme provided them information about gender related crimes. They came to know about the use of 108 in case of emergency, Most of them stated that they came to know about the reasons and solutions of gender related crimes. They came to know about the self-defence skills as watched the demonstration of the Karate team. Thus most of the pre-service teachers stated that the programme made them more aware about gender related crimes.

#### References

- Sharma, U. (2003). *Women Empowerment through Information Technology* New Delhi: Authors Press, Publishers of Scholarly Books
- Bhujimali, A & Poddar, S. (2005). *Development of Rural Women through Education & Empowerment* Delhi: Abhijeet Publications,
- Sen, K.M & Kumar, A. K.S. (2001) *Women in India: How free? How Equal ?* New Delhi, United Nations Resident Coordinate
- [www.Women'sCollective.net](http://www.Women'sCollective.net)
- [www.witness.org](http://www.witness.org)
- [www.madre.org](http://www.madre.org)
- [www.undp.org/women](http://www.undp.org/women)
- [www.thp.org](http://www.thp.org)



CONTINUOUS PROFESSIONAL DEVELOPMENT THROUGH FEEDBACK MECHANISM

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Abstract

Quality in Higher Education is one of the burning challenges of sustainable National Development. Now a day each one of us discusses on Quality in Higher Education and also implementing variety of ways to improve the quality in education. However, the quality in education remains a talk on tea party which consequently fails in developing latent and professional competencies. Quality is linked with the teaching learning processes going on in the institutions and for that the quality teachers are required in both the aspects knowledge as well as skills. There are various mechanisms for enhancing skills among teachers but in this paper the researchers have focused on one of the mechanisms that is Feedback mechanism. Feedback mechanism includes collecting feedbacks from students, colleagues and other stake holders to enhance proficiency in teaching skills which leads the professional development of teachers. In this paper researchers have conducted an action research on how feedback from students and colleagues help in continuous professional development of teachers.

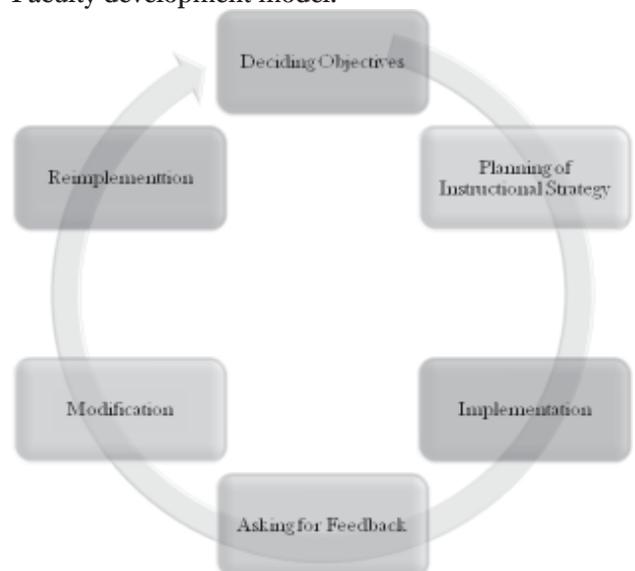
Key Words: Quality, Feedback Mechanism, Continuous Professional Development

Now-a-days it is very frequently observed that students sign up for higher studies with less interest or take is casually. Moreover, there are very few institutions in India who are giving quality inputs so as to inculcate the learning skills amongst students. Higher Education System in India compare to developing/developed countries needs substantial improvement. The percentage of students taking higher education is hardly about 13 % whereas the same is varying between 28 to 90 %, across the world. The lowest % being 28 % and the same is as high as 90 % in developed countries. Over the years higher education system has become an enterprise having much of business orientation with all its exposure to fierce competition at different levels of stakeholders. Indian education system considered as one of the largest of its kind in the world also faces/encounters enormous challenges in the new millennium. These challenges are diversified and manifold stretching from contemporary curriculum development, quality assurance and accreditation and ethical value propositions to policy planning and governance. As stated by Dash (2011), in a technology driven society knowledge rewrites the fate of a nation and so does higher education. One of the major reasons for India's performance for being not that encouraging was due to suboptimal investment on higher education in the recent past.

Continuous Professional Development and Higher Education: Professional development in undergraduate teaching and learning should include a wide variety of general education courses but not limited to English/Language Arts, Mathematics, Science, Social Studies, and Cross-Disciplinary subjects. As per Mundy, Kupczynski, Ellis and Salgado, in order to share and promote the tenets of "best practices" and to keep new and experienced faculty members informed and knowledgeable in the best ways to promote student learning, it is necessary to be proactive and provide continual professional development(CPD) in an asynchronous and synchronous environment that encourages lifetime learning.CPD refers to the process of tracking and documenting the skills, knowledge and experience that you gain both formally and informally as you work, beyond any initial training. It's a record of what you experience, learn and then apply. The term is generally used to mean a physical folder or portfolio documenting your development as a

professional. The key features of the CPD process areBe self-directed: driven by you, not your employer, Focus on learning from experience, reflective learning and review, Help you set development goals and objectives, Include both formal and informal learning and Quality and competency enhancement of faculty members.Educators must understand the concepts in processing professional development and what it means to education. The National Staff Development Council (2007) created a set of nine standards that all professional development should follow. They include content knowledge and quality teaching, research-basis, collaboration, diverse learning needs, student learning environments, family involvement, evaluation, data-driven design, and teacher learning.Continuing professional development (CPD) in higher education is an area of growing interest, debate and research, not only for individual lecturers, but also educational developers, professional bodies and institutions worldwide (Wood, 2008). In its standards framework, the Higher Education Academy refers to a range of professional values, one of which is 'Commitment to continuing professional development and evaluation of practice'.

Faculty development model:





*Deciding Objectives:* The first stage focuses on deciding the objectives of teaching learning process. In this stage teacher has to decide the objectives that he/she wants to achieve after the teaching learning process gets over. This is the most crucial stage as the followed stages are based on this stage. Teacher should planned general as well as specific objectives which to be attain at the end of the year as well as at the end of the session respectively. *Planning of Instructional Strategy:* Planning is the most essential component of any works that to be done effectively. So in the second stage, teacher has to plan for the instructional strategy for effective completion of the task. This stage includes the complete planning of how teacher is going to deliver his/her content in the class. It includes planning of approach, methods, techniques and teaching learning material to be used by the teacher in making teaching learning process effective. It also covers the planning of task or activities that teacher is going to conduct in the class. *Implementation of the instructional strategy:* In this phase teacher has to implement the planned activities. This phase is the actual practice stage where teacher needs to practice over the planned strategy. It is not necessary that whatever is planned by the teacher should be followed whether it goes right or not, but the researcher can modify the planning as per the response he/she gets from the students because sometime the planning may not work in the field so teacher has to be ready with some alternative of it. Planning of the alternative is also considered as one of the part of planning stage. During implementation teacher has to be clear with his role which is to be performed in the class whether it can be a motivator, guide, friend, mentor, Classroom controller, leader and so on. *Asking for Feedback:* Feedback is a reflection over the strength and weaknesses of an individual with critical judgement on his/hers performance. It provides scope of improvement to an individual. In this stage the teacher asks for the feedback to know the performance level in the class. It is very important to know whether students have understood the content or not and what are the lacuna in the performance of teacher. So teacher can ask feedback from students and also from their colleagues which make them realise the loopholes in effective teaching. Here the attitude of teacher plays important role as sometime they are not ready to accept the feedback. So teacher has to accept whatever feedback they got and work over it. Feedback is also given in the form of appreciation if teacher does well in the class which motivates the teacher for the next attempt in the class. *Modification of Instructional strategy:* After receiving feedback from colleagues and students, teacher has to analyse the feedback critically and also discuss with students and peers if not able to understand. After the analysis teacher has to implement the suggestions given by the peers and students. Teacher can again go through the objectives and the methodology part and modified it as per the feedback received. *Re-implementation:* The name itself suggest that after modification teacher has to re implement the planning in the class with incorporation of all suggestions and

appreciations. This cycle goes on and on, which finally results into improvement and enhancement of teaching competency of faculty members.

### Objectives

In the present study the researchers have tried to find out the impact of feedback mechanism on continuous professional development of teacher educators of Waymade College of Education. It is a kind of action research where different methodology were implemented for teaching learning process and overall feedback were taken from pre service teachers studying at Waymade College of Education, academic year 2014-15. The major objectives of present study were To enhance and quipped professional skills among teacher educators, To reflect over the practices followed in teaching learning process for improvement and To strengthen teaching competency with respect to knowledge and skills among teacher educators. With the above objectives the researchers have implemented an action research. In this research, pre service teachers of Waymade College of Education were given exposure of various methodology of teaching learning by teacher educators and were asked to write feedback for all teacher educators. Even colleagues were also asked to give feedback to each teacher educator by following the practice called Mutual Auditing. Mutual Auditing is one of the practices used to improve quality of teaching learning. In this practice, the performance of each teacher educators were evaluated for regular time interval based on the criteria such as Presentation of content, Language Accuracy, Classroom Interaction, practicality of the content, Knowledge and skills, and the use of technology in the classroom. Each teacher educator was asked to evaluate five consecutive sessions and ask to judge the performance of his/her colleagues' and give feedback or suggestions for the further improvement. This practice helped in developing professional skills of teacher educators. This practice also helps to learn new strategies, ideas and skills from the presenter for which the observer can appreciate the efforts presenter to motivate him. Students understanding plays important role in acquiring knowledge. It is truly said the "If students cannot learn the way we teach then we should teach the way they learn", so it is very important for a teacher to understand the way of learning of students. This can only be possible through inviting suggestions of students in teaching learning process. With the above view the informal feedback of students were taken in written form to understand improvement in teaching learning process. Informal discussion also helped researchers to collect information regarding improvement needed in academic pursuit. In this paradigm, each teacher educator was asked to use innovative ideas and techno pedagogies to teach the concepts of syllabus. They were asked to use various methods and aid to make their teaching learning interactive. For each method used to teach, pre service teachers were asked to give feedback in context of Content Mastery, Relevance of Teaching with BBW, Rapport building and discussion in the

classroom, Practicability of taught concept and Classroom Management. After the collection of feedback it was analysed by the respective teacher educator and suggestions given in the feedback were incorporated for the next session. This practice was followed for 6 months. The feedback collected from pre service teachers and peers were analysed through content analysis method.

### Findings

In the present research the data were qualitative in nature which were analysed by Content Analysis method. Researchers have revealed general interpretation for the present research. The suggestions and appreciation given by the pre service teachers in the form of feedback were incorporated and accepted by teacher educators. The nature of feedback given by pre service teachers and peers were different so it was presented differently as under. *Feedback given by Student Teachers:* On basis of observation pre service teachers had given following feedback. The most common suggestion given by most of pre-service teachers was to make class more activity based and interactive. The nature of feedback was reflecting appreciation as well as limitations of faculty members. As the classroom is of hundred student teachers, there was vast diversity found in learner's learning style and understanding level. Few of the student teachers (pre-service teachers) found that speed of explanation was fast, so that they find difficulty to grasp things and noting down the major points while classroom teaching. So, speed of explanation needs to reduce to some extent. Few of the student teachers insisted to give more real life examples for better understanding of the concept and to facilitate their learning explanation along with pictorial presentation was insisted by student teachers. Student teachers have also suggested being more assertive while dealing with certain students and providing reading material at regular time after completion of the concept. They have also appreciated the efforts made by teachers in making their teaching learning process interesting and interactive. *Feedback given by Other Faculty Members:* The reflections given by faculty members' after observation provide different view point and direction to improve over teaching learning process. Each faculty members' classroom session was observed by co-faculty member and necessary feedback was given through the practice of mutual auditing. Faculty members' comment also reveals both positive and negative areas of teaching. The general feedback was emphasis on the use of participatory approach in teaching learning process. They were also insisted to use constructivist approach to teach some concepts of psychology. It was also suggested that if lecture method was used to teach content than, it was insisted to write major points of content on black board in organised manner, which help students in exams. Apart from this, certain points like using voice modulation instead of monotonous voice and appropriate gesture and posture need to be taken care of. Teaching should be interdisciplinary with establishing linkage with real life examples. *Modifications made in teaching on basis of feedback:* After feedback, concern

faculty member had analysed all the suggestion, reflections, opinion, responses from student teachers and other faculty members. They made required changes in their teaching pedagogy and approaches. They planned for various activities, using power point presentation and video for various topics. After showing video or presentation discussion was raised based on that which again followed by explanation points which are not understood by student teachers. Class was made interactive with some activities, task and also with the incorporation of group discussion technique in between. Informal talk was done by faculty members for build-up rapport with students. Other areas were also improved which includes voice modulation pattern; use of appropriate body language and the speed of explanation were also reduced. *Feedback by students and colleagues on modifies teaching strategy:* After incorporating all the suggestions again the feedback was taken from the student teachers and from the faculty members which included Less difficulty faced by students to understand topic as compare to earlier classes, Good rapport build up with students, Use of presentations and activity makes class interactive and interesting and Classroom instruction was more activity based and interesting.

### Reference

- Crawford, K. (2009). Continuing Professional Development in Higher Education: Voices from Below (EdD thesis). University of Lincoln, England. Retrieved from: <http://eprints.lincoln.ac.uk/2146/1/Crawford-Ed%28D%29Thesis-CPDinHE-FINAL%28Sept09%29.pdf>
- Dash, M. (2011). *Changing Scenario in Higher Education in India*. The Indian Economy Review, Vol.3. Retrieved from: <http://www.theindiaeconomyreview.org/browse/PdfFiles/15th%20Feb-15th%20May2011.pdf>
- Donnelly, R. (2007). Perceived Impact of Peer Observation of Teaching in Higher Education. *International Journal of Teaching and Learning in Higher Education*. Vol. 19(2). Retrieved from: <http://files.eric.ed.gov/fulltext/EJ901290.pdf>
- Nandi, R. (2014). India's Position in the Global Community: With Respect to Higher Education Scenario. *International Journal of Educational Planning & Administration*. Vol. 4(1). Retrieved from: [http://www.ripublication.com/ijepa/ijepav4n1\\_05.pdf](http://www.ripublication.com/ijepa/ijepav4n1_05.pdf)
- Mundy, M., Kupczynski, L., Ellis, J. D. and Salgado, R. L. (N. A.). Setting the standard for faculty professional development in higher education. *Journal of Academic and Business Ethics*. Retrieved from: <http://www.aabri.com/manuscripts/111041.pdf>
- Wood, P. (2008). Continuing Professional Development in Higher Education: A Qualitative Study of Engagement in the Field of Nursing and Midwifery. *Journal for the Enhancement of Learning and Teaching*. Vol.4(1). Retrieved from: <http://uhra.herts.ac.uk/bitstream/handle/2299/6145/902913.pdf?sequence=1>



## THE PROBLEM OF NAXALISM WITH SPECIAL REFERENCE TO THEIR RIGHTS

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### Abstract

*In last six decades, India has achieved significant milestones in the areas of economic growth, cultural assimilation and global political interests. However, the 8% tribal population of the country has been left to protect themselves against the guile of rich and powerful eyeing the natural resources and minerals of their indigenous land. Only geographical distance and remoteness of their habitat offered them some protection. But their isolation has also exposed them to the ruthless might of Naxal cadres, supposedly struggling to throw out the rulers of the country through the barrel of gun. None, except Mao would be happy in his grave to find faithful followers in a remote land that he never visited. This paper concentrates on the problems of naxalites with special reference to their rights.*

**Keywords:** *problem, naxalism, rights, naxalites*

After the paved roads have ended and the dirt roads have crumbled into winding footpaths, after the last power line has vanished into the forest behind you, a tall, red monument suddenly appears at the edge of a clearing. It's 25 feet high and topped by a hammer and sickle, honoring a fallen warrior. White letters scroll across the base: "From the blood of a martyr, new generations will bloom like flowers." The monument is a memorial but also a signpost, a warning that you are entering a "Liberated Zone"- a place where Mao is alive and Marx is revered, where an army of leftist guerrillas known as the Naxalites control a shadow state amid the dense forests, isolated villages and shattering poverty of central India. *Here, the Indian government is just a distant, hated idea.* The sovereign Republic of India stands for socialism, egalitarianism, trans-religious secularism and national unity based on the principles of fraternity. Our independence was meant to "wipe every tear from every eye". *Jawahar Lal Nehru* declared in his tryst with destiny address. There was a pledge in the Preamble to the Constitution that justice, social, economic and political would be ensured for every Indian. But three score and three years later, we as a nation have much to answer for and account to generations of the past and the future. The expectations at Independence darkened into deprivation and depravation into dread, hunger homelessness, have-not status and finally despair. This gradual, slow process economic destitution and social estrangement led to the people losing their faith in the instrumentalities of the Constitution, namely the executive, the legislature, and the judiciary. Inevitably, when the State failed the confidence of the people they took to the streets, to the jungles, and to lawlessness. Terrorism was the next step; this is the genesis of Naxalism. Maoism and other forms of extremism. Today issues of tribal rights, mineral resources and naxal are of vital importance violence converge. Tribal communities make up 802% or approximately 8 in 100 Indians- an economically and culturally vulnerable and distinctive group. In last six decades, India has achieved significant milestones in the areas of economic growth, cultural assimilation and global political interests. However, the 8% tribal population of the country has been left to protect themselves against the guile of rich and powerful

eying the natural resources and minerals of their indigenous land. Only geographical distance and remoteness of their habitat offered them some protection. *But their isolation has also exposed them to the ruthless might of Naxal cadres, supposedly struggling to throw out the rulers of the country through the barrel of gun.* None, except Mao would be happy in his grave to find faithful followers in a remote land that he never visited.

A peep into the past: Tribal are the indigenous population of India with the Dravidian and Aryan influx coming later. Today with 573 recognized communities, Adivasis account for almost 8 percent India's population. Central India is the home to the largest tribal population. They have been provided with special provisions in the Indian Constitution with the 5<sup>th</sup> and 6<sup>th</sup> Schedules, comprising such accommodations for tribals in Central and North-east India. However, the situation of the tribals has been bad and continues to deteriorate due to neglect. For instance, the national figure for poverty among adivasis is 45.86% and in States like Orissa, the figure is 72%. Adivasis had been troubled before the advent of Naxalism, and there has been growing unrest for a long time. The reasons include struggle for identity against creeping de-culturization. Another aspect o the problem is the dispossession and marginalization of the people, caused by collusion between local politicians, bureaucrats, business community and in many cases chosen leaders of the tribals themselves.

Concerns and Challenges in India: 'Naxals', the leftwing extremists, have carved out a large area along the eastern coast of India, spreading from Nepal border to Tamil Nadu. Though started 40 years ago, the movement ceased to die out and instead had grown ominously. This region largely includes dense forests and tribal areas and consists of 92,000 sq.km. *Red Corridor* is the label people have given to this area, which the government machinery never dared to reach. Naxals are the uninvited and self declared rulers in the Red Corridor. In late 2009, the Indian government launched 'Operation Green Hunt' to root out the Naxals. In reality, however, the tribals find themselves sandwiched between the Maoists on one side who can't give up their armed struggle and the government on the other, that cannot put



the interests of a vulnerable minority- the adivasis-ahead of those with more money and political power, that cannot put the interests of a vulnerable minority-the adivasis-ahead of those with more money and political power. Realizing that the lack of development and the absence of governance are primarily responsible for growth of the leftwing extremists, the government has drawn development plans to win over the tribal people. Apart from this, there is the issue of implementing the *PESA (Panchayats Extension to Scheduled Areas) Act* in its true spirit.

The PESA Act- Panchayat (Extension to Scheduled Areas) Act, 1996: In 1996, the Parliament passed the Panchayats (Extension to their right) to self-governance. The law, according to Dileep Singh Bhuria, the Chairman of the committee that worked on it could 'mark the beginning of a new era in the history of tribal people...' Village level democracy became a real prospect for India in 1992 with the 73<sup>rd</sup> amendment to the Constitution, which mandated that resources, responsibility and decision making be passed on from central government to the lowest unit of the governance, the Gram Sabha or the Village Assembly. A three tier structure of local self government was envisaged under this amendment. Since the laws do not automatically cover the scheduled areas, the PESA Act was in-acted in 1996 to enable Tribal Self Rule in these areas. The Act extended the provisions of Panchayats to the tribal areas of nine states that have Fifth Schedule Areas. The PESA Act gives radical governance powers to the tribal community and recognizes its traditional community rights over local natural resources. It not only accepts the validity of 'customary law, social and religious practices, and traditional management practices of community resources', but also directs the state governments not to make any law which is inconsistent with these. Accepting a clear-cut for the community, it gives wide-ranging powers to Gram Sabhas, which had hitherto been denied to them by the lawmakers of the country. Thus PESA is a unique legislation, often described as Constitution within the Constitution, which attempts to bring together in a single frame two totally different worlds-the simple system of tribal communities governed by their respective customs and traditions, and the formal system of the State governed exclusively by laws. The full-fledged implementation of PESA will give Rs. 50,000 crore to tribal communities to develop themselves. *Nothing would deal a bigger blow to the Maoists than participative development by, for and of the tribal communities. Of the 76 districts highly infected by the Maoists, 32 are PESA districts. Hence, honest implementation of the PESA Act would empower the marginalized tribals so that they can take care of their development needs. This would deprive the Naxals of their ground support coming from the misguided and helpless tribals.*

Why then the PESA Act is largely ignored by the State governments? The main hurdle in the proper implementation of PESA comes from the *nexus of bureaucrats and politicians* who would lose authority in tribal areas. They have always subordinated the welfare of poor tribals in favour of the rich or the powerful. Giving real autonomy to Gram Sabhas, as envisioned in the Act, would leave them without much influence. Forest department officials have

long viewed the resource rich tribal regions as source of revenue. They often collude with timber mafias for petty gains. They fail to realize that forests are the only source of sustenance for tribals. In the vast tribal areas of Andhra, MP and Orissa, the tribals are primarily dependent on the collection and selling of the non-timber forest produce (NTFP). In Uttarakhand there have been reports of forest depots Development Corporation and the Tribal Development Corporation had exclusive rights for a number of NTFPs. But under liberalization wave since 1990, individual companies (for example, Utkal Forest Products) have been given collection rights for 29 NTFPs for 10 years. Various paper industries have been engaged, under the guise of 'labour contactors', for working bamboo areas. They have cornered bamboo collection rights in several forest divisions. Economic liberalization has brought the corporate giants into the region hunting for minerals for their mega size industrial exploits. Industry is wrecking havoc with the living conditions of the tribals under the liberalization regime. Their acts force the helpless tribals to leave the land they have known to be their own since ages. Compensation and rehabilitation plans are hardly ever implemented with honesty and dignity. This is a major cause of poverty and displacement as commonly seen in states like Orissa and Andhra Pradesh. These attempts to rob the tribals of their resources are criminal, especially when it occurs in places like Kalahandi and Koraput districts where starvation deaths among tribals are legendary.

How to force state governments to implement the PESA Act? Looking at the performance of State Government in implementation of PESA and their tendency to by-pass it, the Central government should issue a notification that all other laws will be subordinate to PESA in the fifth schedule (or PESA) areas. Land litigations are another headache of tribals who have been rendered landless by the rich or powerful. In order to restore speedy justice, follow the *recommendation of the B.D. Sharma Committee*. It suggested issuing notification of a date, when all pending cases in any Court of Law in which the land of a tribal is alleged to have been illegally transferred or occupied by any person or body, shall stand transferred to the Gram Sabha in whose jurisdiction the land is situated. *Only PESA has the real potential to give a fatal blow to the leftwing extremists thriving on the backwardness, ignorance, and isolation of tribal people. The "Original Indian People" of India deserve a life free of exploitation, poverty, and fear.*

Poor recognition of Forest Rights: *The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA)* was a result of the polity responding to protracted struggles by tribal communities and movements to assert rights over the forestlands they were traditionally dependent on. The Act turned colonial forest policy on its head, which had established the rights of the community. Further, by recognizing the validity of the gram sabha to give effect to these rights, this Act has great synergy with PESA's provisions.

However continuing bureaucratic control, resistant attitudes of the forest department officials to give ownership to communities, and inadequate efforts at awareness have led

to the slow implementation of the Act. The law lays down a clear three-stage process for recognition of people's rights. It also defines what constitutes admissible evidence. The Forest Department has a role at the district and sub-divisional levels, but only as one of the parties involved. But the department has made every effort to give itself illegal veto powers to deny rights. In most states the department is refusing to be present at the time of verification by the Forest Rights Committee, and then demanding that the claim be rejected at the screening stage as they did not attend. The Forest Rights Act requires that all rights be recognized through a transparent, public process, where the gram sabha or village assembly is central. Instead of following that process, government officers are imposing their own *diktats*. Gram Sabhas are being deliberately called at the panchayat level or even larger units in Andhra Pradesh, Chhattisgarh and elsewhere- where they are too large for adivasis and forest dwellers to have their voices heard. This is in direct violation of the Act, especially in Schedule Five areas. Even where gram sabhas have functioned and recommended claims, in Madhya Pradesh, Gujarat, Andhra Pradesh and other States, the area over which rights are being recognized is being arbitrarily reduced. People cultivating an acre of land file claims for it, have their claims duly verified, and find that the actual title is given for a tenth of the area. It is not just the process of implementation but the quality of the same that is important here, and thus the states need to make this process of implementation meaningful for the communities dwelling in the forests.

According to the Ministry of Health and Family Welfare deficit roots in the left-wing extremism-affected districts are:

i). More than 3/4<sup>th</sup> of the people living in these districts have a low standard of living index. ii). Female literacy for most districts is below the national average. iii).

Less than 1/4<sup>th</sup> of the population lives in pucca houses. iv). Less than 1/3<sup>rd</sup> have an electricity connection. But while party proclamations and the evidence of poor development and governance support this hypothesis-of economic liberalization fueling socio-economic disparities, resulting in political extremism- it is necessary to note that the Maoist party, like all political outfits, seeks political power. As one functionary said, *we do not want to add windows to the existing house (India's parliamentary democracy) to improve it. We want to bring down the house, and build a new one.* The party thus has its own sharply defined goals, culminating in the overthrow of the Indian State. So for example, while denouncing 'the loot of adivasi resources', as and when necessary to further its political and military aims, the party takes money from the mining industry to fund its party operations.

**Suggestions:** To tackle the menace of Naxalism the following suggestions are proposed: *Attack the very causes of Naxalism:* The first and the most efficient remedy to tackle the menace of Naxalism is that the State must *attack the very causes of rise, and spread of Naxalism*, which can be done by adopting the measures as such Establishment of efficient political, judicial and administrative framework to provide quick and adequate redressal to the grievances of the people especially people in the rural and tribal areas, by establishment of fast track courts, mobile courts etc. If the

grievance redressal mechanism is dysfunctional and works are not being implemented, the resultant public anger and frustration, in all likelihood, would be tapped by Naxal groups. Fill the political vacuum in such areas, where the administration has failed to deal with the problems of the people, which can be done by adopting the following measures: *Proper implementation of the PESA* in its true spirit will be serious blow to Naxalism, when tribals themselves will be empowered. This Act provides for autonomous self governance by the poor tribals at the Gram Sabha level. Proper implementation will be a serious blow to Naxals when tribals are empowered. *Proper implementation of the Forest Rights Act, 2006* to ensure that the traditional rights of tribal communities over the forests are preserved. There is a general feeling of alienation among the tribals, who feel divested of their traditional rights by the middlemen and the industrialists. The Naxalites tap this grievance to mobilize tribals under their fold. *Amendment of the Land acquisition Act, 1894* to bring it in line with the provisions of the PESA. At the moment this colonial-era law is being widely misused on the ground to forcibly acquire individual and community land for private industries. In several cases, the practice of the State Government is to sign high profile MOUs with corporate houses (Govt. of Jharkhand and IANS), and then proceed to deploy the Acquisition Act to ostensibly acquire the land for the State Industrial Corporation. This body then simply leases the land to the private corporations- *a complete travesty of the term 'acquisition for a public purpose'*, as sanctioned by the Act. *Wean away the following of the Naxalites:* The State cannot change the thinking of the hardcore naxalites, as these men and women are Communists with absolute belief and commitment to the Maoist ideology. The Naxalite-Maoists, as they call themselves, are the 'so-called' liberators, redeemers and saviors representing the down trodden workers and landless/poor farmers who have been entangled into vicious circle of poverty, misery and wretchedness. Being the spokesmen of poor farmers and neglected tribes, the Naxalites enjoy the popular support of the masses they represent. The command the hearts and souls of the people and have started a legitimate freedom movement against Indian rule. Thus to win the war against Naxalism it is essential to gain the trust of the rural and tribal people, which is possible only with proper and planned development in these areas. Unless something radical is done in terms of a *structural revolution* in rural and tribal areas, there would be a continuous expansion of the Naxal insurrection. Further, the Government must make the people realize that the Naxalites like all political outfits are fighting to seek political power and not for the welfare of the poor or of the tribals. They have their own sharply defined goals, culminating in the overthrow of the Indian State. In other words *they do not want add windows to the existing house (Parliamentary democracy) to improve it, but rather want to bring down the house, and build a new one.* Finally, the Naxalite problem calls for a three-pronged solution: social and economic development and governance; multi-lateral dialogue; and military action.

a). Socio-economic development and Governance: As the Naxalites are fuelled by discontent from the marginalized

and the poor, a larger percentage of the national budget must be allocated to addressing the needs of these regions. More of the national expenditure needs to be focused on developing these poorer regions through initiatives regarding health, education, social welfare and rural and urban development. Government service delivery should be improved in these tribal areas. Both state and government must ensure that things such as statutory minimum wages, access to land and water sources initiatives are implemented. In coming up with strategies for national economic growth, the government must always bear in mind the possible effects of fast growth for all socio-economic groups in a country as large and diverse as India. If the social needs of these marginalized people are addressed, there will be no discontent to fuel the Naxalite's movements. *Governance: The growing Naxalite insurgency also reflects a flow in the federal structure.* Because law and order is seen as a state responsibility, the central government is unable to be implement a coherent national strategy to address the threat. The government has the overall responsibility of mobilizing development, but it cannot do so without the support of the states. The Central Government and the States need to cooperate together to solve the internal security threats and coordinate the implementation of this multi-dimensional approach. Both the Governments must complement and support each other's initiatives and strategies.

b). Dialogue: Second, the government should initiate sincere dialogue with these marginalized groups, the Naxalites. The popularity of Naxalites with the adivasis is a reflection of the fact that the government has been unaware or "unapologetically indifferent to their plight". By communicating and starting a dialogue between these stakeholders, these groups will feel that they being heard. By opening dialogue, the government can give opportunity for the rebels to join the mainstream by showing them that solutions can be created together with the government, by being part of the political system in a legitimate way. They no longer need to resort to violence to get the state's attention. For example, the former director-general of AP concluded that as a result of the ceasefire and dialogue with Maoists in 2004, the violence in the state decreased by 80-90 percent in the region. As David Pilling noted, the challenge for India's leaders will be to allow the necessary development in these poverty-stricken areas while acknowledging the rights of a neglected indigenous group.

c) Police Action : Currently, the main instrument employed by the government to address the Naxalite threat is the increasing use of the State and Central police forces. It is accepted that force is needed to combat the Maoist guerrillas; it should not be the only solution. By addressing the issue only by brute force, government risks alienating civilians who are caught in the middle. Coercion of the state will only encourage people to rally against it.

Counter Measures to be taken by the State and its intelligence agencies to tackle Naxalism: Specifically, the State Intelligence agencies, in order to tackle and keep vigil on Naxalism need to : *In Rural Areas* : Monitor caste conflicts and keep an eye on conflicting groups. Marginalized groups are usually targeted

by CPI (Maoist) for recruitment. Monitor rural land disputes between the poor/landless farmers and landlords. The former are mobilized by the naxalites through peasant through peasant fronts such as Krantikari Kisan Committee to target landlords. They resolve the dispute through force and win over the loyalty of the individual/group. Monitor the efficacy of grievance redressal mechanism of local bodies in rural bodies in rural areas as well as the efficiency of government departments engaged in developmental works. Keep a watch on organizations and individuals engaged in mobilizing tribals to identify the outfit's to identify presence and role. *In Urban Areas* : Identify LWE front organizations and individuals engaged in mobilizing tribals, and keep a watch on their activities. Identify left-leaning intellectuals and other influential sections, such as lawyers, civil society, HR (Human Rights) groups, university professors, journalists, school teachers, journalists, school teachers etc. for any association with the LWE. Check on academicians/ research scholars who may have researched on tribal/rural areas and who are retaining links with their contacts in those areas. Watch should be maintained on subscribers of LWE journals like 'People's March' of the CPI (Maoist) in libraries and universities. Watch should be maintained on businessmen/contractors involved in developmental works such as construction of roads, bridges etc. in the Naxal affected interior areas.

#### Conclusion

Thus Naxalism is not merely a law and order problem, it is a problem that reflects underlying issues in the Indian social, economic and political institutions. While the naxalite movement is mainly an internal threat with globalization, external and internal security threats are inextricably interlinked. India is hemorrhaging badly under the Naxalite menace and may be soon in Coma, until and unless certain long term measures are implemented in true sense.

#### References

- Agarwal P.K. (2010). *Naxalism : Causes and Cure*, Publisher : Manas Publications
- Sudeep Chakravarti *Red Sun : Travels in Naxalite Country* Penguin Books India.
- Ajay Dandekar & Chitragada Chowdhary, PESA, Left Wing Extremism & Governance – Concerns & Challenges; commissioned by Ministry of Panchayati Raj, Government of India, New Delhi.
- Naxalite Movement in India : A Profile Rajat Kujur; Institute of Peace & Conflict Studies (IPCS), New Delhi.
- Frontline, Issue 21, Volume 21 – 'The Naxalite Challenge'.
- Pratiyogita Darpan, April 2011 Issue – 'Naxalism'
- Governance Now, February 16-18, 2011, Issue 02
- [www.naxalitemaoistwordpress.com](http://www.naxalitemaoistwordpress.com)
- [www.economist.com](http://www.economist.com)
- [www.naxaliterevolution.com](http://www.naxaliterevolution.com)
- [www.pib.nic.com](http://www.pib.nic.com)
- [www.hindustantimes.com](http://www.hindustantimes.com)
- [www.asianage.com](http://www.asianage.com)
- [www.wikipaedia.com](http://www.wikipaedia.com)



## HUMAN BEING AND ENVIRONMENT – PSYCHOLOGICAL POINT OF VIEW

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## Abstract

*The relationship between man and his environment is basically two-way in that man is affected by the environment and yet he also the capacity to modify the environment. Man's capacity to modify the environment is clearly a dynamic one, varying in both time and space. It is our duty to create a good and healthy environment for human being and also save our environment as far as possible. Not only this, one has to keep in mind that changes will happen in each and every moment.*

**Keywords:** nature, environment, human, human being, psychology

Since the twilight zone of his infancy a man learns to enjoy the presence of others and to achieve his goals with others' help and cooperation. These goals may be physical comforts, protection, survival etc. In fact, the drive to belong or associate oneself with others is fundamental in man and it motivates him to live together. Thus, "man alone always seeks to increase his contacts" (Doxiadis, 1970). Learning may take place through the process of operant conditioning or by imitation. The beauty of human life is that he plans and designs his environments not only for self but also for the welfare of his descendants. Man can claim a special credit to help nature for the erection of a prop to hold human civilization, since bygone days until now. Along with the changes in the social ambience or socialized ecological setting, new and new social problems arise and of them a few continue as the constant companion of civilized life. The relationship between human being and his environment is very complex. Each shapes and is shaped by others. Not only this, environment is not static. It is dynamic and changes occur even if there is no interference. Environment often changes after sometime and therefore many organisms have ability to adapt to these changes. The environment of any living species is multidimensional and extremely complex. Natural environment refers to places and geographical features, such as mountains, valleys etc.; environmental conditions such as temperature and rainfall etc; on the other hand, built environment refers to the results of people alterations of environments, e.g. houses and buildings, cities, communities etc. Environments are not merely the existence of natural and/or built up settings but also signify the relationships between people and people, people and things and things and things. The characteristic feature of human life is his effort to make a wholesome community life where reciprocation and sharing is the key concept. A person can be characterized on the basis of specific kind of response to a given class of environmental settings. The quality of the environment is particularly critical to human's health, wealth and happiness. The quality of the environment is also

influenced by the activities which take place within the settlement, while the efficiency with which the activities are performed, which in turn, is influenced by the environment also. Environmental psychology sees that man not as a passive product of his environment, but as a goal-directed being who acts upon his environment and who in turn is influenced by it. In changing his world, man changes himself. This is the dynamic interchange between man and his milieu. Environmental psychology is also concerned with social problems. It adopts a humanistic orientation in recognition of fact that in dealing with his environment, man is crucially affecting not only the earth on which he lives, but others who share it with him. At the one extreme, we explore the behavioral implications of urban living, with its relation to housing patterns, crowding, stress factors and social identity. At another extreme, the natural environment is studied as both a problem area, with respect to environmental degradation and as a setting for certain recreational and psychological needs. A growing trend in environmental psychology is directed towards the immediate living environment of the individual. The idea of environmental man is integral to an understanding of the process of change – man not as a passive receiver of stimuli, nor as psychologically autonomous, but man in dialectical tension with his milieu, interacting with it, shaping it and being shaped by it. The boundaries of such a concept are broad, with implications for urban planning, the design of office and living space, the conservation of natural resources and the building of institutions, such as schools and hospitals where environmental form is intimately related to the educational and treatment purpose. Man has made his life bio-socially programmed for a healthy social symbiosis – interdependency in social and community life – to share, to serve, to think and to feel for others around him. Man enriches his environment through efforts and hard work. Thus, it can be said that life and environment are correlates. Their relationships are extremely intimate and reciprocal. Man is found to change his social behavior through ages in

satisfying his never satisfied wants in relation to his physical world and social world because he is most adapted biologically to his unsophisticated natural or physical environment than the modernized and industrialized sophisticated living environments. Thus, a person's environment consists of the sum total of the stimulation which he or she receives from his conception until his death. Environment comprises various types of forces such as physical, intellectual, economic, political, cultural, social, moral and emotional. Environment is the sum total of all the external forces, influences and conditions, which affect the life, nature, behaviour, growth, development and maturation of living organisms. Environment includes the surroundings conditions that affect an organism (Gifford, 2007). People tend to seek out places where they feel competent and confident, places where they can make sense of the environment while also being engaged with it. Preserving, restoring and creating a preferred environment are thought to increase sense of well-being and behavioural effectiveness in humans. Besides, some common environmental stressors, viz., noise, climate, etc. may create problem especially due to failure of preferences, prolonged uncertainty, lack of predictability and stimulus overload. There are numerous behavioural and cognitive outcomes which include physical illness, diminished altruism, helplessness and fatigue. Coping with stress involves a number of options. Humans can change their physical or social settings to create more supportive environments (e.g. smaller scaled settings, territories) where they can manage the flow of information or stress inducing stimuli. People can also endure the stressful period, incurring mental costs that they deal with later in restorative settings (e.g. natural areas, privacy and solitude). They can also seek to interpret or make sense of a situation as a way to defuse its stressful effects, often sharing these interpretations as a part of their culture.

Place is an important concept of environmental psychology. Sense of place can be described as a collection of symbolic meaning, attachment and satisfaction with the spatial setting. A place is a centre of meaning or field of care, based on human experience, social relationship, emotions and thoughts. Place includes the physical settings, human activities and human socio-psychological processes (Brandenberg & Carroll, 1995). Place-identity is a sub-structure of self-identity of the person consisting of broadly conceived cognitions about the physical world in which the individual lives. These cognitions represent memories, ideas, feelings, attitudes, values, preferences, meanings and conceptions of behavior and experience which relate to the variety and complexity of physical settings that define day-to-day existence of every

human being. At the core of such physical environment related cognition is the 'environmental past' of the person, a past consisting of places, spaces and their properties which have served instrumentally in the satisfaction of the person's biological, psychological and cultural needs (Proshansky, 1978; Proshansky, Nelson-Shulman & Kaminoff, 1979; Proshansky & Kaminoff, 1982). Place-identity may be assumed as a cluster of positively and negatively valence cognitions of physical settings. Place-identity is the source of meaning for a given setting by virtue of relevant cognitive clusters that indicate what should happen in it, what the setting is supposed to be like and how the individual and the others are supposed to behave in it. In this context it can be said that place-attachment rests on symbolic meanings. All settings are in varying degrees with multiple meanings. Greder and Garkovich (1994) emphasized common meanings based on shared or similar experience. Bonding and the emotions associated with it are central to the concept of attachment. Fried (2000) explained that attachment to a community can be understood in terms of the deeper meaning of experiencing close local relationships with people and by extension to places of relational interaction. Gustafson (2000) suggested that place-identity is a cognitive structure which contributes to global self-categorization and social-identity processes. Hence place-identity develops from acts of locating oneself within environmental contexts throughout daily routines as well as during exceptional circumstances. Place is an extensive concept with physical, geographical, architectural, historical, religious, social and psychological connotations (Canter, 1997). The three components – place-attachment, place-identity and sense of place are important for psychological well-being for each and every individual considering their living environment. Housing is meant to address basic human needs for shelter and security by providing protection against climatic conditions (excessive heat and cold) and unwanted intrusions from insects, rodents and environmental nuisances (such as noise) that may be harmful for healthy living and well-being of human being. The housing environment can also be considered in terms of a wide range of architectural, economic, social and cultural factors. Billing and Churchmen (2003) found that physical boundaries affect the attitudes and behavior of residents. A residential area is a type of land use where the predominant use is housing. The individual living in residential environment is affected both physically and psychologically by the way they perceived the changes in their living surrounding. Health, well-being and satisfaction are highly influenced in the way the inhabitants' perception about residential environment. Housing actually contributes to the accumulation of the health capital of individuals and



communities (Easterlow & Munro, 2003). Quality of life, environment and community in which one lives are the yardstick used to determine human happiness. Neighbours adjust and adapt to the social and physical components of their community in order to optimize outcomes. Sense of community is associated with the social environmental characteristics of a place although resident's perception is important factor regarding the physical features of the built environment. The built environment has direct and indirect effects on mental health. Poor quality housing appears to increase psychological distress. The environmental and social conditions in specific residential environment create impact on human relations, induce stress and can have positive and negative impact on physical and mental health of individuals. We can consider about the concept of quality of urban life. It emerged during the late 1960's and early 1970's when the environmental crisis became a major national issue around the world. Since then the environmental psychologists are interested in the patterning of relationship between the human behaviour and the experience in relation to physical settings. The very nature of urban life, its people, social groups, institutions, activities, objectives and goals, requires that the concept of quality be a multidimensional one which subsumes a host of specific definitions varying in meaning and the extent of their application to the city and the inhabitants.

Environment being a life-support system, its management would consist of plans and projects aimed at defining environmental standards, control of environmental conditions and assessment of the impact of human activities on the environment. Environment in a layman's understanding implies everything around him, which affects the living of human beings. Environment has everything to do with the quality of life. It is difficult to make an exhaustive list of the elements which constitute the environment. It depends on what basic unit is taken to evaluate its environment. The environment of a human settlement as the unit may involve much macro considerations than the environment of a locality. If human being is considered as nodal point, then the environment may consists of : his shelter and living space, his neighbourhood, the city, the surrounding habitation areas etc. The relationship between man and his environment is basically two-way in that man is affected by the environment and yet he also the capacity to modify the environment. Man's capacity to modify the environment is clearly a dynamic one, varying in both time and space. It is our duty to create a good and healthy environment for human being and also save our environment as far as possible. Not only this, one has to

keep in mind that changes will happen in each and every moment. Concerted approach may help to maintain congenial man-environmental relationship in the near future. One generation may face perceptible environmental stress but the succeeding generation may be found to overcome that to a great extent. Nature has made some provisions in the physiological and psychological systems of man to absorb or to cope with environmental stress, if that is required for survival.

### References

- Billing, M. & Churchman, A. (2003). Building walls of brick and breaching walls of separation. *Environment and Behaviour*, 35 (2), 227 – 249.
- Brandenberg, A.M. & Carroll, M.S. (1995). Your place or mine? The effect of place creation on environmental values and landscape meaning. *Society and Natural Resources*, 8, 381 – 398.
- Canter, D. (1997). The facets of place. In G.T. Moore and R.W. Marams (Eds.), *Advances in Environment, Behaviour and Design*, 109 – 147, Plenum Press : New York.
- Doxiadis, C.A. (1970). Ekistics : The Sciences of Human Settlements, *Science*, 170, 393 – 404.
- Easterlow, D. & Munro, M. (2003). Housing as health capital : How health trajectories and housing paths are linked. *The Journal of Social Issues*, 59 (3), 501 – 506.
- Fried, M. (2000). Continuities and discontinuities of place. *Journal of Environmental Psychology*, 20, 193 – 205.
- Gifford, R. (2007). *Environmental Psychology : Principles and Practices* (4<sup>th</sup> ed). Clville, WA : Optimal Books.
- Greder, T. & Garkovich, L. (1994). Landscape : The sonstruction of nature and the environment, *Rural Sociology*, 59 (1), 1 – 24.
- Gustafson, P. (2000). Meaning of place : everyday experience and theoretical conceptualizations. *Journal of Environmental Psychology*, 21, 5 – 16.
- Proshansky, H.M. (1978). The city and self-identity. *Environment and Behaviour*, 10, 147 – 169.
- Proshansky, H.M., Nelson-Shulman, Y. & Kaminoff, R.D. (1979). *The role of physical settings in life crisis experiences*. In I. Sharon and C. Spielberger (Eds.), *Stress and Anxiety*, VI, Washington, D.C. : Hemisphere Publishing Corporation.
- Proshansky, H.M. & Kaminoff, R.D. (1982). The built environment of the young. In S. Messick (Ed.) *Development in Young Adulthood : Characteristics and Competencies*, Francisco, Work and Social Life, San Francisco, Jossey-Bass.



## ATTITUDE OF PARENTS TOWARDS PRIVATE TUITION: A CASE STUDY

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**Abstract**

*The present study attempts to explore the attitude of parents towards private tuition and its causes, effectiveness of private tuition and the problems on the lives of parents. From the result of the research the causes of increasing trend of private tuition are – overcrowded classroom and lack of individual attention in the school, heavy stress on academic performance, frequent bandhs, general strikes or blockade and other social issues, ineffective classroom teaching and rigid curriculum, examination oriented school culture, influence of family members, relatives and friends, an alternative means to help weak children, insufficiency of academic guidance for the future in the family, to keep children gainfully occupied in their studies and means for minding children and keeping them attach with their books. While studying the problems of private tuition in the lives of the parents, the problem are – large amount of money spend on children's private tuition, socially accepted culture to improve the learning and academic performance, wealthy households are capable of spending more money than poor households and has created a serious socio-economic division in the society, put parents in the society into financial burden and exhaustion, parents to pay less attention to their professions as they are confined in attending their children in private tuition centres on daily basis, resulted a negative backwash in the society by robbing the thinking power, creativity and problem solving skills of the children, parents are compelled to send their children to private tuition under the pressure and influence of their family, friends and relatives, parents as a whole are not proportionately benefitted in terms of the results of their children academic performance as to the money they have spent on private tuition and spending most of the time in attending children private tuitions affects physical and mental health. The findings may help to improve the present education system and to enable eradication of private tuition in our society.*

**Keywords:** Parents' attitude, private tuition, factors of private tuition, problems of private tuition, Imphal, Manipur.

Private tuition has now become a global phenomenon and has been establishing globally a trend parallel to the formal school education. Most parents think that tuitions keep children busy and provides flexible time for the weak students to clear their doubts, improve students' academic performance, help the students to prepare themselves for examinations and entrance for professional courses and also for higher studies. In some cases, parents are not happy about sending their children to private tuition, but they know that, without that stimulus, their children will be losers in race. Nowadays, parents considered and also convinced that private tuition is a good investment. They feel that without private tuition, their children would be left behind, and the parents strongly believed that levels of education are closely linked to level of future learning. Parents tolerated private tuitions because of the benefits of high scores in examinations. And in some families where parents are uneducated and children are the first generation learners they viewed private tuition as a means to fill the gap to educate their children as they thought school learning is not enough for their children. Not all parents are in favour of private tutoring. Those who are poor find it expensive, others think that the child becomes tired or has little time for extra-curricular activities. Some parents also have the view of complete ban on private tuition. Over the years, the spirits of competition among the students have increased intensely. The spirit of completion has been exacerbated by the mismatch between the number of aspirant and the limited seats available at the higher levels of academic ladder and job opportunities, thus necessitating private tuition. Consequently, students of all types – weak, average and bright have taken recourse to private tuition for different reasons. However, the specific reasons for private tuition are varied and encompass educational, social, cultural, economical and psychological aspects. Private tuition has also successfully found its ground in Manipur as an extension of the growing global phenomenon. The tutoring industry has becomes

an expanding source of employment as well as a way for many mainstream school teachers to earn supplementary incomes. At the same time, private tutoring has been a welcome opportunity to increase the income of the formal private school teachers, whose salaries have been seriously eroded. In the case of government teachers in the state irregularities of salary have affected the moral of the teachers in our state. Private tuition is now much less about pupils who are in real need of help that they cannot find in the school, but has become much more about maintaining competition advantages of the already successful and privileged. It also represents a significant financial investment by families to their children's education in the state, with the majority of students having tutoring at some point during their careers. There are many reasons for the rising demands for private tuition to complement the public and private schooling system. The demand factors include demand for places in prestigious schools, ineffective teaching-learning process in the mainstream schools, large school class sizes, general strikes bandhs, blockades or class boycotts by student bodies or cease work strikes by teachers and lack of individual attention and pressure. The supply factor includes low salary and morale of teachers, teacher regulation and peer pressure. Private tutoring is not always effective in raising academic achievement and in some school students commonly skip classes or sleep through lessons just because they are either tired excessive external study or students take the regular classroom teaching for granted. This means that the shadow education can make regular schooling less efficient. Teacher who spends more time focusing on private tuition than regular classes can cause greater inefficiencies in the mainstream school system. Situation in which teachers provide extra private tutoring for pupils for whom they are already responsible in the public system can lead to corruption, particularly when teacher deliberately teach less in their classes in order to promote the market for private tuition. The culture of spoon feeding is robbing away the

thinking power of our young students. This slowly cultivates a mindset of dependency among young students which they cannot think of solving any problem without teacher's assistance. The National Curriculum Framework of 2005 had adopted a constructivist perspective. In the teaching which aims at developing learners who construct their knowledge themselves, for the learners it is learning for construction of knowledge, and for the teachers it is teaching for construction of knowledge. So, the present education system need to change in the constructivist view of learning. Private tutoring is defined as fee-based tutoring that provides supplementary instruction to children in academic subjects that they study in the mainstream education system. The study primarily focuses on tutoring lessons for children or adolescent paid for by their households or parents, so private tutoring can clearly be considered to be a form of private education. The present study aims at exploring a little more the phenomenon of private tutoring, the causes for taking private tuition, the effectiveness of private tuition and the problems of private tuition on the lives of the parents.

### Objectives of Study

To find out the opinion of the parents for the causes of increasing private tuition in Manipur. To find out the opinion of the parents on the effectiveness of the private tuitions in improving the academic performance. And To find out the problems on the lives of the parents caused by the increasing trend of private tuition in Manipur.

### Method of Study

The present study was conducted through survey method of research on the simple random sampling of 100 parents who came to guard their children from selected 10 (ten) tutorial centres of Imphal – East and West districts of Manipur. The sample comprised of 10 parents from Gurukul tutorial centre, KeishampatHodamLeirak, 10 COMET tutorial centre, Keishampat, 10 MECI tutorial centre, KeishampatThokchomLeikai, 10 Lamjingba tutorial centre, Lamphel, 10 KIMES tutorial centre, Singjamei, 10 Panacea tutorial centre, Checkon, 10 Shine tutorial centre, Wangkhei, 10 Social Science tutorial centre, SoibamLeikai, 10 ESPM tutorial centre, WangkheiAyangpalli, 10 Spice tutorial centre, Checkon, Imphal. The tools for the study were used questionnaire which was developed by investigator himself keeping into account the various aspects of private tuition. The data are interpreted in term of percentage.

### Result and Discussion

#### 1. Causes for Increasing Trend of Private Tuition

Table – 1

Sl. No	Causes	Number	Percentage
1.	Overcrowded classroom and lack of individual attention in the school	91	91 %
2.	Heavy stress on academic performance	63	63 %
3.	Frequent bandhs, general strikes or blockade and other social issues	75	75 %
4.	Ineffective classroom teaching and rigid curriculum	79	79 %
5.	Examination oriented school culture	61	61 %
6.	Influence of family members, relatives and friends	58	58 %
7.	An alternative means to help weak children	57	57 %
8.	Insufficiency of academic guidance, for the future in the family	68	68 %
9.	A way to keep the children gainfully occupied in their studies	55	55 %
10.	Means for minding children and keeping them attach with their books	71	71 %

(N = 100), While studying the causes of increasing trend of private tuition in Manipur, it was found that 91 i.e. 91 % of parents agreed that overcrowded classroom and lack of individual attention in the school is also cause for rising the demand for private tuition. 63 i.e. 63 % agreed that the heavy stress on academic achievement of their children is the cause for the trend of private tuition. 75 i.e. 75 % of the parents agreed to the statement that frequent bandhs, general strikes or blockade and other social issues are the cause of increasing trend of private tuition. 79 i.e. 79 % of the parent agreed that ineffective classroom teaching and rigid curriculum are the cause for the trend of private tuition. 61 i.e. 61 % of the respondents agreed to the statement that examination oriented school culture is the reason to seek for private tuition. 58 i.e. 58 % of the parents agreed that their family members, relatives and friends influence them to sent their children for private tuition. 57 i.e. 57 % of the parents responded yes to the statement that private tuition can be an alternative means to help the weak students. 68 i.e. 68 % of the parents agreed that insufficiency of academic guidance for the future career is the cause for seeking private tuition. 55 i.e. 55 % agreed that they sent their children to private tuition to keep them gainfully occupied in the studies. 71 i.e. 71 % of the parents agreed that it serves as means for minding children and keeping them attach with their books.

#### 2. Effectiveness of Private Tuition

Table – 2

Sl. No	Effectiveness	Number	Percentage
1.	Improve academic performance	88	88 %
2.	Help to revise and understand lessons and deepen knowledge	82	82 %
3.	Provide flexible time and individual attention to improve weak subjects	62	62 %
4.	Help academically sound and successful children to maintain their competitive advantage over others	76	76 %
5.	Help prepare Well for the competitive exams, entrance exams (Medical, Engineering and other professional courses) and for higher studies	83	83 %
6.	Kind of educational investment to gain benefits in the future	66	66 %
7.	An alternative means to supplement learning beside school classroom teaching	72	72 %

(N = 100) In the aspects of the effectiveness of private tuition, it was found that 88 i.e. 88 % of the parents agreed that private tuition help their children to improve the academic performance. 82 i.e. 82 % of the respondents gave their positive response that private tuition help them to revise and understand their lessons and deepen their knowledge. 62 i.e. 62 % of the parents agreed that private tuition provide children a flexible time and individual attention to improve the weak subjects. 76 i.e. 76 % of respondents agreed that private tuition helps academically sound and successful children to maintain their competitive advantage over others. 83 i.e. 83 % of the parents agreed that private tuition help the children in preparing well for the competitive exams, entrance exams (Medical, Engineering and other professional courses) and for higher studies. 66 i.e. 66 % of respondent agreed that private tuition is a kind of educational investment to gain benefit in the future. 72 i.e. 72 % of the parents agreed that private tuition is an alternative means to supplement learning beside school classroom teaching.



3. Problems of Private Tutorials on the Lives of the parents

Table - 3

Sl. No.	Problems	Number	Percentage
1.	Large amount of money spent on children's private tuition	89	89 %
2.	Socially accepted culture to improve the learning and academic performance	90	90 %
3.	Wealthy households are capable of spending more money than poor households and has created a serious socio-economic division in the society	92	92 %
4.	Put parents in the society into financial burden and exhaustion	91	91 %
5.	Parent of pay less attention to their professions as they are confined in attending their children in private tuition centres on daily basis	90	90 %
6.	Resulted a negative backwash in the society by robbing the thinking power creativity and problem solving skills of the children	89	89 %
7.	Parents are compelled to send their children to private tuition under the pressure and influence of their family, friends and relatives	76	76 %
8.	Parents as a whole are not proportionately benefitted in terms of the results of their children academic performance as to the money they have spent on private tuition	68	68 %
9.	Spending most of the time in attending children private tuitions affects physical and mental health	73	73 %

(N= 200) While studying problems in the lives of the parents through the private tuition, it was found that 89 i.e. 89 % of the parents agreed that large amount of money is spent on children private tuition. 90 i.e. 90 % of the parents agreed that private tuition has become a socially accepted culture to improve the learning and academic performance. 92 i.e. 92 % of the parents agreed to the statement that wealthy households are capable of spending more money than poor households and it had created a serious socio-economic division in the society. 91 i.e. 91 % of respondents agreed that private tuition has put parents in the society into financial burden and exhaustion. 90 i.e. 90 % agreed that they pay less attention to their professions as they are confined on a daily basis to attend their children in private tuition centres. 89 i.e. 89 % of the parents agreed that private tuition resulted in a negative backwash in the society is robbing the thinking power, creativity and problem solving skills of the children. 76 i.e. 76 % of respondents agreed that they faced heavy pressure from their family, friends, and relatives and are compelled to send their children to private tuition. 68 i.e. 68 % of the parents agreed that as a whole are not proportionately benefitted in terms of the result of their children academic performance as to the money they have spent on private tuition. 73 i.e. 73 % of the parents agreed that spending most of the time in attending children private tuitions affects physical and mental health.

4. Educational Level of the Parents

Table - 4

Educational Level	Number of Parents	Percentage
Undergraduate	23	23 %
Graduate	34	34 %
Post-graduate and above	43	43 %
Total	100	

(N= 100) From the above table 4, it shows that 23 i.e. 23 % of the parents of the students are under- graduate. 34 i.e. 34 % of the parents of the students are graduate. 43 i.e.

43 % of the parent are post –graduates and above. It can be therefore interpreted that most of the highly educated parents send their children for private tuition.

5. Professional Level of the Parents

Table - 5

Professional Level	Number of Parents	Percentage
Government Employee	53	53 %
Private Sector Employee	22	22 %
Business	25	25 %
Total	100	

(N= 100) From the above table 5, it is found that 53 i.e. 53 % of the parents of the students are government employees. 22 i.e. 22 % of the parents of the students are private sector employees. 25 i.e. 25 % of the parents are doing business. It is therefore interpreted that maximum number of government employee parents send their children for private tuition than private sectors and business parents.

6. Economic Status of the Parents

Table - 6

Income Level of the Parents in a year	Number of Parents	Percentage
1 Lakh – 2 Lakh	13	13 %
2 Lakh – 3 Lakh	16	16 %
3 Lakh – 5 Lakh	17	17 %
5 Lakh and above	54	54 %
Total	100	

(N= 100) From the above analysis of the economic status of the parents who send their children in private tuition, it is found that 13 i.e. 13 % of the parents' income level is 1 Lakh – 2 Lakh rupees in a year. 16 i.e. 16 % of the parents' income level in 2 Lakh – 3 Lakh rupees in a year. 17 i.e. 17 % of the parents' income level is 3 Lakh – 5 Lakh rupees in a year. 54 i.e. 54 % of the parents' income level is 5 Lakh and above rupees on a year. It can be therefore interpreted that parents earning annually an income of 5 Lakh and above send their children for the private tuition more than the parents earning less income.

Conclusion and Suggestions

While studying the causes for increasing trend of private tuition, the highest number of parent consider that overcrowded classroom and lack of individual attention in the school is the cause for increasing trend of private tuition in Manipur. Ineffective classroom teaching and rigid curriculum is the second rank for cause of the parents seeking private tuition. The teachers are focusing more on private tuition rather than classroom teaching. And the present curriculum does not provide knowledge useful to children's future career. In the third rank is the frequent bandhs, general strikes or blockade which is used as a means for any demand of the social issues to the government which become the cause of increasing trend of private tuition in Manipur. Private tuition serves as means for minding children and keeping them attach with their books is cause for trend of private tuition. Insufficiency of academic guidance for the future career of the children is the cause for seeking private tuition. Many of the parents consider that heavy stress on the academic performance of the children is a cause of private tuition. Examination oriented school culture is also cause of the increasing trend of private tuition. Influence of family members, relatives, friends and the society are the cause for sending the children to join private tuition. An alternative means to help the weak students which in



turns increases the demand for private tuition. They send their children to private tuition to keep them gainfully occupied in the studies. While studying the problems of private tuition on the lives of the parents, it was found that the parents faced problem due to investment of large amount of money on children's private tuition. Private tuition has become a problem as it has become socially accepted culture to improve the learning and academic performance of the children. And it also implies that it will largely affect the functioning of the mainstream school system and it will also affect the learning process of the students. Majority number of parents agreed that problems in the lives of the parents is due to the reason that wealthy households are capable of spending more money than poor households and has created a serious socio-economic division in the society. It means that this will bring about an educational inequality and social inequality issues. Private tuition put parents in the society into financial burden and exhaustion. Private tuition which has led parents to pay less attention to their professions as they are confined in attending their children in private tuition centres on daily basis. It has resulted a negative backwash in the society by robbing the thinking power, creativity and problem solving skills of the children. Parents as a whole are not proportionately benefitted in terms of the results of their children academic performance as to the money they have spent on private tuition. Spending most of the time in attending children private tuition affects physical and mental health of the parents.

Based on the Above Situations, it is Suggested to Eradicate Private Tutorials in our Society: The present education system need to change in the constructivist view of learning. In the teaching which aims at developing learners who construct their knowledge themselves, for the learners it is learning for construction of knowledge, and for the teachers it is teaching for construction of knowledge. Teacher must realize that knowledge / concepts learned today should change to modify tomorrow. Therefore, they do not stress on memorising the facts by students but help teachers to nurture students as independent thinkers and constructors of knowledge. The role of teacher change from 'transmitter' of knowledge to facilitator' of knowledge construction. They must employ a range of strategies to support individual student's understanding by problem – based activities. Teachers must not be grafted on traditional methods of teaching; these need a change in the culture – a set norms, attitudes, beliefs and practices that constitute constructivist culture. Learning is not a passive receptive process but is instead an active meaning making process required to solve meaningful problems. So, students should take the responsibility of their own learning. They must construct knowledge and should not receive knowledge as passive learners. It is to suggest to the parents and the students that private tuition is not the only means to guarantee the academic improvement and higher performance. Because private tuition cultivate a mindset of dependency and culture of rote learning. So, parents and students should aware of disadvantages of private tuition. Teachers must not be commercialized instead they should be dedicated to their teaching profession, in their mainstream school education. It is also suggest that students, parents and the government should promote the learning in the school rather than those in the private tuition

centres. They should aware that the learning which the private tuition provide is incomplete. It undermines the all round education as provide in the schools. This serious issue of growing demand of private tuitions has to be emphasized by the policy makers intervening on curriculum, teachers salary structure, pedagogical development, evaluation system etc., and to think what can be executed for the slow learners. In the present education system curriculum should be based on constructivist. In the constructivist curriculum emphasis is given on the individual learner as an important role in determining what will be learned. Government should framed a policy like remedial classes for the students in the schools. It should be made compulsory implementation and monitored the working of its policy for the welfare of the students, parents and the society as a whole.

### References

- Best, J.W and Kahn, J.V. (1999). Research in Education. Pentic Hall of India, Pvt. Ltd., New Delhi.
- Hai – Anh Dong and Halsey Rogers, F. (2008). How to Interpret the Growing phenomenon of Private Tutoring?: Human Capital Deepening Inequality Increasing or Wash of Resources? The World Bank Development Research Group Human Development and Pabic Service team.
- Judith Ireson and Katie Rushforth, (2004). The Nature and Extent of Private Tutoring at Transition Points in Education, School of Psychology and Human Development Institute of Education, University of Landon.
- Kwok Lai – Yin and Percy, (2004). Emergence of Demand for Private Supplementary Tutoring in Hong Kong: Argument, Indicators and Implication. Hong Kong teacher's Centre Journal Vo. 3.
- Mark Bray and Percy Kwok, (2003). Demand for Private Supplementary Tutoring: Conceptual, Considerations, and Socio- Economic Patterns in Hong Kong. Journal, Economic of Educational Review.
- Mark Bray, (2007). The Shadow Education System: Private Tutoring and its Implication for Planners (2<sup>nd</sup> Edition): UNESCO: International Institute for Educational Planning, Paris.
- Mark Bray, (2009) Confronting the Shadow Education System - What Government Policies for What Private Tutoring? UNESCO: International Institute for Education Planning, Paris.
- Mark Bray, (2011). The Challenge of Shadow Education – Private Tutoring and its Implication for Policy Makers in EU – An Independent Report Prepared by the European Commission from January, 2007 to February, 2011 by the NESSE.
- NCERT (2005). National Curriculum Framework 2005. New Delhi: National Council for Educational Research and Training.
- Noushad Husain, (2013). Intelligent Tutoring System: Changing Role of ICT in Education, New Delhi: Shirpa Publications.
- Raffick Foondun, A. (2002). The Issue of Private Tuition: An Analysis of the Practice in Mauritius and Selected South – East Asian Countries. International Review of Education, Vol. 48 November.
- Santosh Sharma, (2006). Constructivist Approaches to Teaching and Learning: Handbook for Teachers of Secondary Stages. New Delhi: National Council for Education Research and Training.



## EFFECT OF FAMILY RELATED VARIABLES ON TEACHER MORALE

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**Abstract**

*Teacher morale can have a positive effect on pupil's attitude and learning. It makes teaching more pleasant for teachers and creates an environment that is more conducive to learning. There are several factors that may affect teachers' morale such as changes imposed by the govt., working conditions, lack of power to enforce discipline and perception created by media and society. Teacher morale can be shaken and raised by giving treatment to some variables that effect teacher morale. There had been several studies pertaining to the teacher's morale and school related variables, but there are various other variables that may affect teacher morale. One of the variables that may affect their morale is their family factor i.e.*

**Keywords:** teacher, teachers morale, family

There has been rapid changes of vast magnitude in all spheres in the past decades-technological changes; conceptual changes, industrial changes, geographical changes, man power changes population changes and revolution of rising expectation among the masses with all these social changes it is apparent that the educational system must keep pace with them. Education is a powerful instrument for change in society. The progress of the country can be measured with the quantity and quality of the schools. In India attention has been directed towards quantitative aspect of educational planning and the expansion of educational facilities at all stages. According to Miller (1981) teacher morale can have a positive effect on pupil attitudes and learning. Raising teacher morale level is not only making teaching more pleasant for teachers, but also learning more pleasant for the students. This creates an environment that is more conducive to learning. We can see this more clearly if we ask questions such as, "Would you really feel better about your job if you were paid a lot more? Would you enjoy the work more? Would you work harder, and willingly take on more than you are taking on at present?" The answers are probably no for most people. Some people work hard and do their best wherever they are and whatever they are paid. Often they feel good about the job – their morale is high. Other people do not. Many people have a high level of morale when starting a new job, but this may decline when they have become accustomed to the new post. Where it does decline it does so irrespective of the money – something else is changing which is reducing the individual's morale. Morale and achievement are also related. It is found that where morale was high, schools showed an increase in student achievement. Perception here is the key – it is not a case of how much teachers are actually paid, or how much the government interferes with the classroom, it is the perception of their role by teachers that affects how high or low their morale is. Looked at in this light we can identify a range of demoralizers that affect teachers:

**Changes imposed by the government:** On a day when a teacher is feeling under the weather he or she cannot pull away from the high level demands of the classroom and do some

less demanding paperwork instead, as others in different jobs might be able to do. The classes are still there demanding the teacher's attention. So the teacher is in a job where he or she has to work hard to maintain control, and when this is achieved the teacher feels good and morale will probably rise. But then suddenly the government comes along and changes everything without asking the teacher her or his opinion. And that is highly demoralizing.

**Condition of service:** The person doing the job invariably feels that he or she has some knowledge of how things work – and this is perfectly natural. Changes made from on high will invariably lead to a lowering of morale among the work force where those on high are not respected. If those on high are perceived as faceless bureaucrats it very hard to see how such respect can be gained.

**Lack of power to enforce discipline:** A teacher who perceives him to be unable to deal with a child in what he or she considers to be the correct way will usually feel powerless and demoralized. Where the teacher feels that a child can make a complaint to higher authority about the teacher's behavior, and that the teacher will then be suspended pending an enquiry, then that teacher is obviously going to feel extremely lacking in morale. Recent cases in which the word of one child have resulted in a teacher being branded a potential child-beater can be nothing but demoralizing.

**Poor working conditions:** Again perception is the key. If people perceive the world of work as one where conditions are poor, this will demoralize them. The change to a new and much better working environment can raise morale, but this does not always last for long. As with money, people become accustomed to what they have and quickly want more. Good working conditions alone are not enough to keep morale at a high level.

**Public and media perception:** Many would agree that the public and media perception of teachers is often not positive, and this too can have a demoralizing effect. Certainly at a recent conference in Glasgow the majority of those in the room stated that if the opportunity came up in a social

gathering to declare what their job was, they would try to avoid saying teacher. Some admitted they would actually lie. Because of their relative isolation from other adults, teachers have little opportunity to share their successes with colleagues and administrators. This results in greater reliance on student responsiveness for teachers' professional satisfaction (Goodwin 1987). Stress also affects morale. It can "result in emotional and physical fatigue and a reduction in work motivation, involvement, and satisfaction" (Stenlund). Feeling overly stressed can result in erosion of one's idealism, sense of purpose, and enthusiasm.

**Objectives:** The objectives comprised to identify and study the morale of teachers of secondary schools; to study the effect of family related variables on teacher morale of secondary schools and to study the interaction effect of various variables on teacher morale of secondary school

**Hypothesis:** There will be no significant mean difference in the morale of secondary school teachers with respect to various family related variables. And There will be no significant mean difference in the interaction of various family related variables on the morale of secondary school teachers

**Delimitation:** The study is delimited to the secondary school teachers of Ahmedabad district. The study is delimited to the Gujarati and English medium school teachers. The study is delimited to the family related variables. The study has been carried out on the basis of the responses of the teachers of secondary schools.

**Importance of the Study:** It is expected that this study would result in recommendation to education authorities in India and policy makers to boost teacher morale. The study would indirectly address ways to attract or retain well qualified people to teaching profession. The study would illustrate and spell out the effect of different variables and their mutual effect on teacher morale

**Research Design:** The research is based on the survey method. The data has been collected from 497 teachers of Ahmadabad district. The distribution of teachers according to different variables is given below.

Table 1 - Family related variables-

Related variables	Variables	Number of teachers
Type of family	Joint	336
	Nuclear	161
Caste	Reserved	163
	Unreserved	334
Marital status	Married	437
	Single	60
Brought up place	Rural	242
	Urban	255

The tool 'Teacher Morale Questionnaire' standardized by Dr. Anjali Mehta. The tool consists 77 statements classified into different components of teacher morale. The negative statements (number 22, 34, 55, 71, 72, 76, 77) were scored

from 1 to 4. It means if respondent selects '1' for any of the negative statements he obtains 1, likewise 2 for 2, 3 for 3, and 4 for 4. Further all statements of the tool were grouped according to the components of the teacher morale. The individual score where calculated. Finally a composite score of teachers morale where arrived at after adding the scores of all the segregated components of teachers morale.

Sr. no.	Components	Statement number	Total
1.	Teacher welfare	12, 14, 17, 27, 55, 59, 60, 73, 74	9
2.	Teacher security	3, 16, 18, 31, 46, 58, 62	7
3.	Working conditions	4, 6, 8, 11, 13, 22, 23, 36, 39, 40, 41, 45, 47, 48, 69, 76, 77	17
4.	Interpersonal relation	2, 5, 7, 20, 33, 37, 44	7
5.	Professional satisfaction	24, 25, 53, 56, 61, 63, 64, 75	8
6.	Professional management	9, 10, 15, 32, 35, 42, 49, 50, 65, 67, 68, 71, 72	13
7.	Teacher's need	28, 29, 30, 38, 43, 51, 52, 54, 57, 66, 70	11
8.	Affection	1, 19, 21, 26, 34	05
	<b>Total</b>		<b>77</b>

The score of secondary school teachers morale were listed the frequency of the score were grouped into class intervals. The frequency distribution table was prepared of 497 secondary school teachers. Mean, SD, skewness and kurtosis value of the score of teacher's morale was calculated.

### Analysis and Interpretation

Table 2 - The effect of family related variables on teacher morale

SOURCE	S.S.	DF.	MS	F.CAL.
Type of family (A)	25.003	1	25.003	0.033
Caste (B)	9.905	1	9.905	0.073
Marital Status (C)	1092.078	1	1092.078	1.442
Area (D)	8.453	1	8.453	0.011
A*B	1.272	1	1.272	0.002
A*C	268.198	1	268.198	0.354
A*D	2.306	1	2.306	0.003
B*C	907.914	1	907.914	1.199
B*D	6.026	1	6.026	0.008
C*D	3123.920	1	3123.920	4.126
A*B*C	318.135	1	318.135	0.420
A*B*D	0.443	1	0.443	0.01
A*C*D	3617.268	1	3617.268	4.778
B*C*D	1284.007	1	1284.007	1.696
A*B*C*D	1170.843	1	1170.843	1.546
Error	364171.529	481	757.113	

### There is no significant effect of family related variables on secondary school teacher morale.

It is evident from the table 2 that the calculated 'F' value of the effect of types of schools, Caste, marital status and brought up place on teacher morale is 0.033, 0.073, 1.442 and 0.011 respectively, which is much lower than the table value at 0.5 and 0.1 levels. Hence the rule hypothesis is accepted. It means that there is no overall significant effect of types of family, caste, marital status and area on teacher morale on secondary school teachers. .

**The Interaction effect at the first level:** There is no significant effect of the interaction of various family related variables on secondary school teacher morale at the first level of interaction

It is evident from the table 2 that the ‘f’ value of interaction of type of family and caste is 0.002 which is quite less than the tabulated value at 0.05 or 0.01 level. Thus, it is clear from the result that there is no significant effect of interaction of type of family and caste on the secondary school teacher morale. From the table 2, it is also clear that the interaction of type of family and marital status, the ‘f’ value obtained is 0.354 which is again less than the tabulated value at 0.05 and 0.01 level. This means there is no significant effect of the interaction of type of family and marital status on teacher morale. The similar kind of result can be seen at the interaction of type of family and brought up place. The ‘f’ value of interaction of type of family and brought of place is 0.003 which is quite less than the tabulated value. It means that there is no significant effect of the interaction of type of family and brought up place on teachers morale. Similarly, the ‘f’ calculated value of interaction of caste and marital status is 1.199 which is less than the tabulated value at both (at 0.05 and 0.01 level) levels of significance. Thus it is clear from the result that there is no significant effect of interaction of caste and marital status on the secondary school teacher morale. Interestingly, the ‘f’ calculated value of interaction of marital status and brought up place is 4.126 which is higher than tabulated value. It means there is a significant effect of interaction of marital status and brought up place on secondary school teachers morale. We will also see the effect of married and single teacher morale that are brought up either in rural area or urban area in later section of analysis and interpretation. The ‘f’ calculated value of interaction of caste and brought up place is 0.008, which is quite less than the tabulated value at any of the level (at 0.05 or 0.01) of significance. Thus, we can say that there is no significant effect of interaction of caste and brought up place on the secondary school teachers morale.

**The Interaction effect at Secondary level:** There is no significant effect of the interaction of various family related variables on secondary school teacher morale at the secondary level of interaction

At the secondary level of interaction, it is evident from the table 2 that the ‘f’ value of interaction of variables like type of family, caste and marital status is 0.420 and the ‘f’ value of interaction of type of family, caste and area is 0.001 which are quite less than the tabulated value at 0.05 and 0.01 level of significance. The ‘f’ value of interaction of caste, marital status and area is 1.696 which is less than the tabulated value at 0.05 and 0.01 level of significance. Thus we can say that the interaction effect of type of family , caste , marital status on

teachers morale , type of family , caste and area on teachers morale and caste , marital status and area on teachers morale have no significant effect on teachers morale as their calculated ‘f’ value is less than the tabulated value. But interestingly the interaction of type of family, marital status and area at secondary level shows different result. The calculated ‘f’ value of this interaction is 4.778 which are higher than the tabulated value. The table value of ‘f’ ratio at 0.05 level is 1.96 and 0.01 level is 2.58, which are lesser then the calculated value. This means there is a significant interaction effect of type of family, marital status and area on secondary school teachers’ morale. It is just to recollect that the interaction effect at first level there appears significant effect of the interaction of marital status and brought up place. We can infer that the interaction of marital status brought up place and type of family effect significantly on teacher morale. We have yet to find out which variable either single or married of the marital status and rural or urban of brought up place and joint or nuclear family of type of family

**The Interaction effect at final level:** There is no significant effect of the interaction of various family related variables on secondary school teacher morale at the final level of interaction

It is evident from the table 2 that the ‘f’ value of the final interactional effect of all four independent family related variable i.e. type of family, caste, marital status and area is 1.546 which is less than the tabulated value at both 0.05 and 0.01 level. Thus we can say that there is no interactional effect of family related variables i.e. type of family, caste, material status and area on secondary school teacher morale at its final interaction level. From the table 2, two significant values are obtained. One, at the interaction level of marital status and area and the other one at the interaction of type of family, marital status and area the values are found significant. To understand, the composition of which sub variable of a class variable has worked and resulting as significant? The ‘t’ value of the interaction of significant values have been obtained. This is presented below here.

**Table 3 - Statistical details of teacher’s morale with family related variables**

Variables	Mean	SD	t’ Value
Joint family	259.49	23.06	0.309
Nuclear family	260.44	35.55	
Unreserved	258.92	22.96	0.87
Reserved	261.59	35.49	
Single	266.42	17.32	2.62
Married	258.89	28.72	
Urban	258.51	23.11	1.01
Rural	261.01	31.43	

There is no significant effect of joint family or nuclear family on teacher morale of Secondary School

Table 3 reveals that the mean and SD of joint family is 259.49 and 23.06, when the mean value and SD of nuclear family is



260.44 and 35.55 respectively. In the statistical point of view there is no significant effect of those teachers living in the joint family or nuclear family, as the 't' value is 0.309 which is NS or not significant at 0.01 and 0.05 level. So we can say that there is no significant effect of teachers living in a joint family and teachers living in nuclear family on teacher morale.

There is no significant effect of reserved or unreserved category on teacher morale of Secondary School

With reference to caste, all castes are put in to two categories one is 'reserved' and the other is 'unreserved'. All OBCs, SCs, STs, are included into reserved category. The mean and SD of unreserved and reserved category are 258.92 and 22.99 and 261.92 and 35.49 respectively. The 't' value of reserved and unreserved category is 0.87, which is NS or not significant at either of 0.05 or 0.01 level of significance. It suggests that there is no significant effect of teacher morale of those who belong to reserved or unreserved category.

There is no significant effect of reserved or unreserved category on teacher morale of Secondary School

In terms of marital status teachers two categories have been decided. All married men and women put into 'married' category and widow, widower, divorced or unmarried persons are listed in the category of 'Single'. Mean and SD of Single and married persons are 266.42 and 17.32 and 258.89 and 23.11 respectively. The calculated 't' value for married and single is 2.62, which is significant at 0.05 level. It means there is a significant effect of single and married teachers on their morale. The noticeable thing is that at the first level of interaction marital status with brought up place was found to be significant. At secondary level of interaction with type of family and brought up place the effect was found significant. Interestingly the mean value of married is lesser than the single whereas SD is higher of married group than the single. Their 't' value is significant. It means that there is a significant effect of married people on teacher morale.

There is no significant effect of rural or urban as their brought up place on teacher morale of Secondary School

Referring back to table 3, it is indicated that teacher's brought up place as rural area or urban area have any effect on teacher morale, 't' value is calculated. The mean and SD of teachers brought up urban area and rural area are 258.51 and 23.11 and 261.01 and 31.43 respectively. Their 't' value is 1.01 which is not significant at either 0.05 or 0.01 level of significance. It means there is no significant effect of teachers brought up in rural or urban area on teacher morale.

**Conclusion:** It can be inferred from the analysis and interpretation of data that there is no significant effect of family related variable. The marital status shows significant effect when it interacts with brought up place at the first level and at the second level of interaction it shows significant effect on teacher morale. When the effect of married and single was calculated the result appears significant. It means that marital status variable effect the teacher morale significantly. The mean score of single teacher is higher than married teachers but the standard deviation of married teachers is much higher than single teachers. One can interpret that single teachers have stronger morale than married teachers. The research strongly recommends Quota for single individuals particularly women in the appointments of teaching profession. This will not only give them social security but boost to quality in education.

### References

- Anderson, C. (2000), The importance of Instructional leadership behaviours as perceived by middle school teachers, middle school principals and educational leadership professors, unpublished doctoral dissertation, University of Georgia
- Buzek, E. (2004) The relationship between instructional leadership behavior of middle school principals in Texas and student achievement, Unpublished Doctoral Dissertation, University of Houston, Houston, TX.
- Darji, D.R. (1975), A study of Leadership behavior and its correlates in the Secondary Schools of Panchmahal's District, Ph.D. Thesis, MSU, Baroda
- Franklin, J. and Wilson, S.M. (200), Principals' efforts to empower Teachers: Effects on Teacher Motivation and Job Satisfaction and Stress, the Clearing House, 73 (6) , 349 Heldfef Publication .
- Kincaid, D. (2006) Selected factors affecting instructional leadership skills of Public, Privated, and charter elementary school principals in Texas, Ph. D. Thesis, Texas A& M University, Commerce TX.
- Redeffer, Frederick L. (1957), Teacher Morale and Quality of Education, Nation's Schools 59, Pp. 53-55
- Yang, Chen – Sheng, (1996). Instructional Leadership behaviors of elementary school principals in Taiwan, Republic of China, Ph.D. Thesis, University of Northern Colorado Greeley, Co.



## BEST PRACTICES FOR WOMEN - A REVIEW OF EMPLOYMENT RELATIONS APPLICATION IN INDIAN IT INDUSTRY

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### Abstract

*Due to liberalization and globalization, competition has become so intense, that managers have less time to respond to changing market situation. In order to remain competitive they have to cut cost, enhance efficiency in operations and increase profitability. Rapid developments in information and communication technology have provided enormous data to the managers to arrive at decision, comparable to market standards. This leads to complex process. How to make decisions in this complex and competitive environment? How to manage the employee retention? In the today era no one can deny the importance and credibility of roles and responsibilities of Human Resource Management in an organization with reference to women participation as it ensures the achievement of maximum growth for the organization. Now the employers also having strong opinion that, their "Human Capitals" are one of the important key drivers in their growth. Women today are present in every field of work. Research has consistently indicated strong correlation between diverse senior management and financial performance of organizations, highlighting business benefits from having considerable number of women employees as part of the workforce. The scarcity of global talent has led to many organizations pro-actively doing their best to recognize, retain, and develop women. In India, keeping women employees on the job has proven difficult in a traditional patriarchal society. With the changing work force demography, and the talent war among the companies to attract and retain the best-in-class candidates, Indian companies continue to work on improving existing policies and facilities for women which projects that now the ability to manage effectively the employee talent within the organization is necessary and becoming more critical everyday due to switchovers in this competitive environment. Employee relationship management (ERM) is a process that companies uses to effectively manage all interactions with employees, ultimately to achieve the goals of the organization. Happy employees are productive employees. Successful businesses know how to manage relationships to build lasting employee satisfaction. The most important part of any business is its people. No business can run effectively without them. But people don't work in a vacuum; they need to communicate and work with others to get their jobs done. To be successful, employers need to manage relationships in the workplace to keep the business functioning smoothly, avoid problems and make sure individual employees are performing at their best. The purpose of this paper is to investigate the new approach of ERM with special reference to women who are working in software industry and suggest possible ways to communicate the concept more effectively so that this concept could be implemented more successfully in Indian Industry. The objective of this study is to understand Employee Relation Management Role in enhancement of employee performance and it is essential to understand the effectiveness of Employee Relations activities and practices which are contributing positively towards women Employee Performance. This study will be undertaken basically on theoretical Ground and by examining the Annual Reports of Indian Industry and interaction and the collected information will be arranged and analyzed systematically. ERM with especial reference to women includes both quantitative and qualitative factors of Performances. The Employee Management tool is a strategic business tool that can help Indian Software Industry to take more focused approach to developing operating strategies and measure the women workforce retention outcomes. This paper will lead to the awareness of the importance of Employee Relationship Management for women workforce retention in software industry. The organization can introduce assigning appropriate importance to the activities – as they deem fit for women retention.*

**Keywords:** *Employee Relations, work-life balance, safe working conditions, attrition, etc.*

Globalization pressures escalate competitiveness and, in response, global companies tend to adopt a handful of Western management practices. One of these is the Employee Relationship Management. However, empirical evidence assessing the transferability and effectiveness of Western best practices into Asian countries is scarce. To compete successfully companies require focus, innovation and ability to enable quick change. The Employee Relations involves the body of work concerned with maintaining employer-employee relationships that contribute to satisfactory productivity, motivation, and morale. Essentially, Employee Relations is concerned with preventing and resolving problems involving individuals which arise out of or affect work situations. Companies provide best quality services enjoy high level of customer retention and

comparatively good rate of employee retention. Customers Retention leads to good business and ultimately increases employee retention level. Retention of employees refers to satisfied employees that results loyal customers. Employees are considered as internal customer as they require the same level of satisfaction against their services rendered for the company as the customer of corporate services or corporate products requires. Employee Relations deal its employees as its customer because ER Managers run their day today business with the help of its employees and for these employees. Satisfied customers exhibit revenue growth and firm level of performance. Progressive Employee Relations practices are found behind success of leading organizations. ERM practices are commonly known by the traditional titles but it is up to the management that chooses the best fit



practices to fulfill the requirements matching to the culture of the organization. Organizations implement Employee Relation Practices to polish skills of its employees which ultimately lead to better organizational performance. ER practices impart a significant role to enhance performance of organizations indirectly. Performance of employee depends upon job satisfaction, compensation and benefits structure, reward plans, promotions, motivation, environment, training and succession planning. Along with this, modern tools, techniques and sophisticated technology used by organizations for Employee Relations create competitive advantage over competitors. Issue of employee retention affects the performance of the entire company. Organizations are realizing that their people are, by far, their most important asset. Motivation creates passion leading to performance. The most effective are Appreciating Letters, paid Time off from work, Self-respect, Flexible timing and lunch hours and performance review meetings. Organizations motivate employees by investing in them financially and emotionally and in return they result positively.

*What Does 'Employee Relations' Mean? The term 'employee relations' refers to a company's efforts to manage relationships between employers and employees. An organization with a good employee relations program provides fair and consistent treatment to all employees so they will be committed to their jobs and loyal to the company. Such programs also aim to prevent and resolve problems arising from situations at work. Employee relations programs are typically part of a human resource strategy designed to ensure the most effective use of people to accomplish the organization's mission. Human resource strategies are deliberate plans companies use to help them gain and maintain a competitive edge in the marketplace. Employee relations programs focus on issues affecting employees, such as pay and benefits, supporting work-life balance, and safe working conditions. One of the most effective ways for a company to ensure good employee relations is to adopt a human resource strategy that places a high value on employees as stakeholders in the business. Stakeholders are people who are committed, financially or otherwise, to a company and are affected by its success or failure. When employees are treated as more than just paid laborers, but as actual stakeholders with the power to affect outcomes, they feel more valued for the job they do.*

**Literature Review:** The great corporate challenge of the age is harnessing the creativity and the productive power of people. As Poole (1986) points out, employment relations are best described as a discipline concerned with the systematic study of all aspects of the employment relationship. This relationship is one in which the employee sells his or her capacity to work in exchange for a wage and other benefits, and the employer hires employees in order that they produce goods or services that can be sold at a profit. Werbler & Harris (2009) researched that employees are ready to make an extra effort if they are satisfied with strategic decisions of their organizations. Employees give importance to employers

for their communication procedures that affect their efficiency and motivation level. Ubeku (1983) stated that Employee Relations are about collective bargaining which concerns Matters for negotiation including Overtime rates, Hours of work Annual leave, Leave allowances, Sick benefits, Out-of-station allowances, Redundancy benefits, Acting allowances, Transfer/disturbances allowances, allowances etc. and Matter for discussion at enterprise level including Method of production, Increased efficiency, Safety, Welfare, Training of workers, Disciplinary procedures, Christmas bonus, Scholarship awards, Long-service awards, Compassionate/casual leaves, Medical facilities, Death benefits etc.

*Elements of a Good Employee Relations Plan: The employment relationship is one of the great innovations behind the rise of the modern business enterprise. It revolutionized the organization of work, providing managers and workers with a very flexible method of coordination and a basis for investing in skills. An effective employee relations program starts with clearly written policies. Employee relations policies describe the company's philosophy, rules, and procedures for addressing employee-related matters and resolving problems in the workplace. Many companies have one or more employee relations representatives, people who work in the human resources department to ensure that company policies are followed fairly and consistently. Employee relations representatives work with employees and supervisors to resolve problems and address concerns. An employee relations program is not a one-size-fits-all solution. Strategies for good employee relations can take many forms and vary by a number of factors, including industry, location, company size, and even individual leadership philosophies.*

*Some of the major objectives of employer-employee relations are to develop and maintain harmonious relations between management and labor so essential for higher productivity of labor and industrial progress in the country; to safeguard the interests of labor as well as management by securing the highest level of mutual understanding and goodwill between all sections in industry; to establish and maintain industrial democracy based on the participation of labor in the management and gains of industry, so that the personality of every individual is fully recognized and developed; to avoid all forms of industrial conflict so as to ensure industrial peace by providing better working and living standards to workers; to raise productivity in an era of full employment by reducing the tendency of higher labor turnover and absenteeism; to bring about Government control over such industrial units which are running at losses for protecting employment or where production needs to be regulated in public interest and to ensure a healthy and balanced social order through recognition of human rights in industry and adaptation of complex social relationships to the advancements of technology.*

*The individual factors those affect the performance or productivity are (a) Working conditions (b) Working hours (c) Nature of job. (d) Employees competencies. (e) Job security. (f) Welfare*



and social security. (g) Training of employees. (h) Salary packages. (i) Liberty at work to perform. (j) Quality of leadership. (k) Motivation of employees. (l) Career development opportunities. (m) Rewards, recognition and incentives (n) Organizational culture. (o) Behavior of employees. (p) Location of work. (q) Management approach. (r) HR policies. (s) Technology at work. (t) Business environment. Thus, the maintenance of good human relationships is the main aim of employer-employee relations because in the absence of such relationships “the whole edifice of industry may collapse.

**Need of Employee Relationship Management:** IT companies are having high degree of attrition. The challenges for these companies are to keep this attrition rate as low as possible. Various companies adopt different techniques to retain their employees like high pay packets, ESOP, other benefits. They try to keep this attrition rate as low as possible to retain super achievers. The need of organizations for people and people for organizations will be more difficult to satisfy in the today’s competitive business environment. Organization’s competitive advantage could be generated from human resources (HR) and organization performance is influenced by a set of effective HRM practices. Software is a wealth and job creating industry, which has in just a few years, grown to US \$ 1 trillion, employing millions of professionals worldwide. The Indian software industry has burgeoned, showing a nearly 50% Compounded annual growth rate over the recent years. Being a knowledge-based industry, a high intellectual capital lends competitive advantage to a firm. With a global explosion in market-opportunities in the IT sector, the shortage of manpower both in numbers and skills is a prime challenge for HR professionals. The related issues are varied indeed: recruitment of world-class workforce and their retention, compensation and career planning, technological obsolescence and employee turnover. With the advent of a work situation where more and more companies are having to concede that their valued employees are leaving them, a new concept of career and human resource Management is bound to emerge. The focus of this new paradigm should not only be to attract, motivate and retain key ‘knowledge workers’, but also on how to reinvent careers when the loyalty of the employees is to their ‘brain ware’ rather than to the organization. With lifetime employment in one company not on the agenda of most employees, jobs will become short term. Today’s high-tech employees desire a continuous up-gradation of skills, and want work to be exciting and entertaining a trend that requires designing work systems that fulfill such expectations. As employees gain greater expertise and control over their careers, they would reinvest their gain back into their work. HR practitioners must also play a proactive role in software industry. As business partners, they need to be aware of business strategies, and the opportunities and threats facing

the organization. As strategists, HR professionals require to achieve integration and fit to an organization’s business strategy. As interventionists, they need to adopt an all embracing approach to understanding organizational issues, and their effect on people. Finally, as innovators, they should introduce new processes and procedures, which they believe will increase organizational effectiveness.

### **ERM Strategies and Policies for Software Professionals**

(a) *Motivation & Retention of Employees:* Retention and motivation of personnel are major HR concerns today. People a Gartner group company specializing in management of human capital in IT organizations has observed that the average tenure for an IT professional is less than three years. Further, the use of new technologies, the support of learning and training, and a challenging environment ranked higher than competitive pay structures as effective retention practices. Recent survey of 1028 software professionals from 14 Indian software companies, showed that while the professional gave importance to personal and cultural job-fit, HR managers believed that the key to retention was salary and career satisfaction. Money was a prime motivator for ‘starters’, but for those into their third or fourth jobs, their value-addition to the organization was more important. Monetarily, offering ‘the best salaries in industry’ is the minimum every company is doing, apart from performance based bonuses, long-service awards, and stock options. Many organizations frequently conduct employee satisfaction and organization climate surveys, and are setting up Manpower Allocation Cells (MAC) to assign ‘the right project to the right person’. In fact, some are even helping employees with their personal and domestic responsibilities to satisfy & motivate their workforce!

(b) *Best Talent Attraction:* In a tight job market, many organizations often experience precipitous and simultaneous demands for the same kinds of professionals. In their quest for manpower, they are cajole talent around the world. In such a seller’s market, software companies are striving to understand which organizational, job, and reward factors contribute to attracting the best talent one having the right blend of technical and person-bound skills. This would mean a knowledge of ‘the tools of the trade’ combined with conceptualization and communication skills, capacity for analytical and logical thinking, leadership and team building, creativity and innovation. The Indian software industry suffers from a shortage of experienced people such as systems analysts and project managers, and attracting them is a key HR challenge.

(c) *Compensation and Reward:* Increasing demands of technology coupled with a short supply of professionals has increased the costs of delivering the technology. This makes incentive compensation a significant feature, with the result that software companies have moved from conventional pay-for-time methods to a combination of pay-for-knowledge



and pay-for performance plans. With the determinants of pay being profit, performance and value-addition, emphasis is now on profit sharing or performance-based pay, keeping in view the long-term organizational objectives rather than short-term production-based bonuses. Skills, competencies, and commitment supersede loyalty, hard work and length of service. This pressurizes HR teams to devise optimized compensation packages, although compensation is not the motivator in this industry.

(d) *Increasing loyalty and commitment:* As with any other professional, what really matters to software professionals is selecting 'the best place to work with', which is what every company is striving to be. The global nature of this industry and the 'project-environment' has added new cultural dimensions to these firms. In a value-driven culture, values are determined and shared throughout the organization. Typically, areas in which values are expressed are: performance, competence, competitiveness, innovation, teamwork, quality, customer service, and care and consideration for people. Flat structure, open and informal culture, authority based on expertise and ability rather than position, and flexi-timings are some of the norms software firms follow. The idea is to make the work place a 'fun place' with the hope of increasing loyalty and commitment.

(f) *The Demand Supply Gap:* Shortage of IT professionals is global in nature and not peculiar to the Indian software industry alone. W. Strigel, founder of Software Productivity Centre Inc. (1999) has projected the shortage of software professionals to be one million by 2060. Infact, a survey reports that 75 per cent of US companies planned to reengineer their applications using newer technologies, but found that 72 per cent of their existing staff lacked the skills needed in these technologies, and 14 per cent were not even retainable.

(g) *Integrating HR strategy with Business Strategy:* The strategic HR role focuses on aligning HR practices with business strategy. The HR professional is expected to be a strategic partner contributing to the success of business plans, which to a great extent depend on HR policies pertaining to recruitment, retention, motivation, and reward. The other major areas of concern for HR personnel in this context are, management of change, matching resources to future business requirements, organizational effectiveness, and employee development.

(h) *Encouraging Quality and Customer focus:* Today's corporate culture needs to actively support quality and customer orientation. With globalization and rapid technological change, quality is of utmost importance for the Indian companies, which earn most of their revenues through exports. Hence, the HR professional as a strategic partner needs to encourage a culture of superior quality to ensure customer satisfaction, the only real measure of quality of a product or service. To be competitive today, an organization

needs to be customer responsive. Responsiveness includes innovation, quick decision-making, leading an industry in price or value, and effectively linking with suppliers and vendors to build a value chain for customers. Employee attitudes correlate highly with customer attitude.

(j) *Value Addition training for up-gradation of Skills:* Rapid and unpredictable technological changes, and the increased emphasis on quality of services are compelling software businesses to recruit adaptable and competent employees. Software professionals themselves expect their employers provide them with all the training they may need in order to perform not only in their current projects, but also in related ones that they may subsequently hold within the organization. This is because a creative engineer or scientist who has learned how to accomplish something has little interest in doing it again. Once they have satisfied their curiosity, they may abruptly lose interest and seek an immediate change". And when the rate of technological change is high may be higher than the time required acquiring competence in one area professionals could undergo psychological turbulence owing to the need to work in a new technology throughout their career. They want to gain new knowledge, which will be utilized by their organization. On the basis of the new learning they want to work in higher segments of software value chain.

#### **Overview of Indian IT Industry and Participation of Women Employee:**

India is the world's largest sourcing destination for the information technology (IT) industry employs about 10 million Indians and continues to contribute significantly to the social and economic transformation in the country. The IT industry has not only transformed India's image on the global platform, but has also fuelled economic growth by energizing the higher education sector especially in engineering and computer science. India's cost competitiveness in providing IT services, which is approximately 3-4 times cheaper than the US. The Indian IT sector is still in the growing stage, and as the need for talent grows across all levels, woman-power, if leveraged, can bring significant benefits to all stakeholders. The Indian IT revolution heralded a new era in the organized labour market of the country. In the last two decades, with the proliferation of jobs in the field of IT/ITES, more and more women have entered the workforce at entry level positions. NASSCOM estimates that approximately 30 percent of the employees of IT/ITES organizations are composed of women. Various studies have found that the leakage of female talent takes place in the early stages of their career where women have to juggle various familial roles and responsibilities and professional demands. Globally, organizations are strategizing about gender inclusivity and building a pipeline of female talent in the middle and senior management levels. In this context, it is interesting to examine the software services sector and the



factors that affect women's persistence in IT careers. The characteristics of the software services industry in India and the nature of its work pose some unique challenges for professionals in the industry, especially for women. The organizations in the software industry in India are project based and as the industry has matured, more complex and strategic projects have been outsourced to India<sup>2</sup>. This requires a strong operational and delivery focus in a 24/7 environment.

This creates pressure on software professionals to work longer hours. This pressure is an outcome of two factors. Firstly, the time differences with the US and Europe which is the dominant trade partners in the industry, which necessitate employees to work evenings in India and maintain the concept of a 24-hour knowledge factory. Secondly, the project orientation of the industry, with rapid technology changes that make skills quickly obsolete, requires software professionals to frequently re-skill. Consequently, software professionals need to put in extra training and educational hours to keep up with these changes. Those women who aspire to play a bigger role in technology need to maintain a consistently high learning curve. The time required for professional development will have to come out of personal time of the employees. Long working hours, unpredictable workloads and the constant pressure of updating skills have a negative impact on work-family balance. The nature of the industry and the fact that most women software professionals are in 'the crucial phase in women's lives' i.e. 23-38 years, where women are drawn into marriage and motherhood, put increasing pressure on maintaining a work-life balance. In a transitioning society like India, where traditionally a woman's role is redefined in relation to herself, her family and society, the new and expanded role of women with a strong occupational identity is putting pressure on their persistence with their careers. To successfully tap into this huge talent pool, professional service providers and other industries alike have to pay special attention to women as a source of educated and employable talent. Back in 2003, the number of women employees in Infosys was only 19% making women a minority in the organization. This impacted not only the organizational culture, but also the policies and support systems setup for employees, key decisions on process improvements and risk assessment. Given this context, if organizations need to strengthen their talent pipeline of women within the organization, there is a need to ensure that more women to remain in the workforce. Only if significant number of women persisted in the workforce through the early career stages, would the talent pool of senior women leaders in organizations get strengthened.

**Data Discussion-A Case Study of Infosys Women Inclusivity Initiative (IWIN's):** IWIN's (Infosys Women Inclusivity Initiative) efforts and results in creating a gender

inclusive work environment as well groom more women leaders at Infosys. An Indian IT giant. Infosys is the first Indian IT company to set up a dedicated office for diversity and inclusion. Methodology included focus group discussions with employees, benchmarking practices among the global companies, and consultation with academicians to understand and relate better to research conducted on gender inclusivity.

*Birth of IWIN:* The Company formed Infosys Women Inclusive Network (IWIN) to addresses specific needs towards the development, engagement, growth, and retention of women by promoting an inclusive workplace where the potential of women is leveraged and every woman feels valued, heard, and fully involved with the company. Infosys like many Indian IT organizations is located in the outskirts of Indian cities it operates in and this presented in itself a safety threat for women who applied. That combined with the fact that the infrastructure and public transport at these cities were still in its infancy. Infosys, being an equal opportunity employer believed in hiring from colleges which was not for a particular gender. With women's only engineering colleges coming up, this again was restricting the pool of talent available for hiring. Infosys has always believed in giving equal opportunities and hence other issues such as equal pay for women, discrimination in performance ratings etc., were not our battles to fight. These are considered general hygiene factors that has helped Infosys emerge as a globally respected organization for gender inclusion. Therefore the key challenges that presented were - Create a safe and harmonious work place for women - Identify and engage with talent from multiple sources - Ensure equal opportunities for both men and women - Create inclusion and retention policies catering to this group The key initiatives and programs of IWIN are all mapped to attract, increase, and retain (AIR) women employees with the intent to expand the bottom of the pyramid and to chart out a strategy to retain women as they move up in their career life cycle. Infosys attracts talent by pioneering exclusive programs like Campus Connect, SPARK, industry electives, and internship programs. Campus Connect - It is an Infosys program to help increase India's competitiveness in the knowledge economy. Campus Connect aims at evolving a model through which Infosys and engineering institutions can partner for competitiveness, enhance the pool of highly capable talent for growth requirements in the IT space. It is aimed at creating an effective means of backward integration into the supply chain by going into the college campuses from where the IT industry gets its people for its growth. Spark - As part of this initiative a group of students along with members of faculty visit the nearest Infosys DC and spend the day observing the IT services delivery environment. The event is designed and conducted by Infosys volunteers. The agenda is customized for the target



audience which also includes special batches for women, rural institutes and Government-run institutes. Initiatives like SPARK, a program that aims at raising the aspiration levels of students, have made young Indians think of bigger opportunities and challenges that awaited them once they completed their education.

While the above listed are a few initiatives that Infosys pioneered to attract talent, there has been an endless list of initiatives conducted to create a positive environment at work. ASHI - Infosys places a lot of importance on safety of women in and out of the campus. Anti sexual harassment initiative is a very strong program within Infosys. All employees have to undergo ASHI training and multiple avenues are provided for employees to raise a concern. All complaints / concerns are looked into and addressed by trained individuals. Safety - Self-defense classes are held in the campus to train women to be more prepared when faced with an unsafe situation. The organization provides special taxis to women with a security guard to make sure that women reach home safely on days when they end up working late to meet client deadlines. This is primarily done as a measure to ensure safety of employees. An automated message is sent in the evening, to remind employees about the importance of travelling back home on time and to use safe means of transport. Others - Simple but extremely effective changes like including women in all recruitment panels, talking about importance of safety and harassment free work environment, influencing the public transport system to increase the frequency of buses to the office locations and hiring from women-only technical colleges has shown us significant results in attracting and retaining women employees. Today, Infosys has 91% of women returning from maternity leave. It is interesting to note that every day 7 women avail the option of maternity leave. Though the effectiveness of these initiatives is measured not by numerical targets, numbers do help us understand whether the needle is moving in the positive direction. At Infosys we not only measure the increase in percentage of women joining the organization but also the increase in number of women across levels in the organization. Apart from launching inclusive policies, we also track the usage of policies for effectiveness and ensure that the usage is moving up. It is interesting to note that equal percentage of men and women make use of the flexible workplace policies. For women at mid to senior management, an exclusive program called IWIL (Infosys Women In Leadership) was designed in partnership with a premier business school in India (Indian Institute of Management). Aimed at empowering women to take up leadership roles and nurture talent to take up leadership roles in future. IWIL has helped women discover latent strengths, re-evaluate their potential and renew their aspirations. With subsequent batches, empowering more women employees, the impact will be felt on overall

workforce demography. The road ahead looks extremely bright with hope of developing best-in-class women leaders. The pool of women will be further developed through 'tier-leadership' program which is open for both men and women. This program also presents scope for building sponsorship programs for women, networking opportunities, thereby making women build their own circles of influence. These programs coupled with goals to increase women representation in unrepresented areas, levels or with low representation will be the key to sustain and grow gender inclusivity program at Infosys. Other inclusion programs: At Infosys gender inclusion continues to be a major focus area; however, the focus of diversity & inclusion is much larger one. Though our stance as an equal opportunity continues, a diverse talent pool comes with its own set of challenges. For example an employee with disability, though treated on par with any other employee, may require certain reasonable accommodations at workplace to perform and deliver at his/her optimum potential. Hence, an employee resource group for minority/micro-inequity groups has been encouraged. • Family matters - At Infosys, 50,000 parents are continuing to grow. The Family Matters network is essentially a support group that helps employees cope with the ever growing challenges of managing family and work. Family matters also offer parenting workshops, relationship as well as newsletters every quarter. • Creating Common Ground - CCG is a differentiated focus of Infosys, This has led to creating a unique forum, that is, Ineffability.

*Focus on Women's Security by Initiatives of NASSCOM:* Women comprise about 65% of IT-BPM workforce in India. In the coming years this percentage is only likely to increase and therefore one of the key aspects for the industry is ensuring safety of its employees and in particular women employees. The industry is cognizant of the fact and stands poised for the safety and security of its women and is committed towards providing an appropriate environment by adhering to robust security practices, managing and upgrading comprehensive employee security program across regions. As a routine feature the IT-BPM industry invests a lot in the area of security, gender diversity and inclusivity. The industry believes that working at any hours of the day is a fundamental right of every woman and all stakeholders must work together in partnership to create a conducive and secure environment for women. Overall organization leadership and management teams are dedicated towards undertaking measures which ensure security both at office premises and while commuting to or back from work. The enclosed document has been prepared as a compendium of recommended best practices in several IT & BPM companies in India and can be even be adopted by other industries for enhancing security of their women employees.

The Indian IT-BPM sector is one of the largest employers in India and with over 800,000 women employed across



levels and has been driving the agenda of gender diversity across large and small companies.”The contribution of women to the growth of our industry has been immense and it is constant endeavor to provide a safe and secure working environment for all employees. The courage and commitment of women employees that despite the heightened security concerns, there is no any decline in attendance, productivity and applicants to jobs in this industry. The industry follows robust practices and has further enhanced its awareness programs for employees to make them aware of these practices.

NASSCOM has been conducting several sessions for member organizations and other stakeholders, regarding the sharing of best practices on women’s safety. The aim has been to help organizations re-enforce a secure work environment conducive for women employees. The month of February, 2013 was identified as the Women’s Safety month and workshops on ‘Women Safety’ were held across locations. NASSCOM had entered into a Memorandum of Understanding with the Oriental Insurance Co. Ltd. to introduce a common health insurance programme called the ‘Technology/Knowledge Worker Health Plan’, for its members. The key objective of the programme is to provide a comprehensive, flexible and affordable health insurance cover for employees of the IT sector. The plan is aimed in particular at small and medium companies, bringing technology into the domain of health insurance management. More than 120 companies have signed up for this plan covering more than 40,000 employees. This has helped NASSCOM members achieve up to 30 percent savings in premium.

**Security arrangements at Office Premises:** Office premises are electronically & personally guarded by security guards which prohibit entry to unauthorized personnel • Premises are under surveillance using CCTV camera. With due permissions companies are willing to share the footage with the police if required

**Only authorized vehicles with valid stickers are allowed** inside the premises after due inspection by the security guards. Inspection includes engine, dicky and chassis • Adequate lighting is provided within and outside the main building areas that include premise entrances, parking lots and perimeter area Safe Commuting – Travelling to Work from Home & Back • Home pick and drops are provided for women employees for night shifts as stipulated by Shops and Establishment Act. •

**Cabs ferrying women workforce are monitored** using global positioning systems (GPS). The transport team monitors cab speed through GPS and appropriate instructions are given when found to be over speeding or diverting the usual route. Some companies have even installed panic button in the cabs in select regions. • Most routes are worked out in such a manner that as far as

possible woman employee is not the first one to be picked up or last one to be dropped. In case such a route is unavoidable, a guard is always provided to escort the women employee. • In case if a women employee is a second pick up and suddenly the first male employee doesn’t show up then respective companies inform the women employee that they will be picked up once guard is sent or a third male employee is requested to pick up the women employee • In cases where there is a bi lane and the movement of cab is restricted, guards / male employee pick up / drop the women employees at the doorstep and remain halted until it is confirmed that the employee has entered safely at her residence. • Boarding and de boarding is done in secure and well lit areas • Some companies have a feedback form with each guard which the woman employee is required to sign after every drop / pick up. • Effective checks and controls on the vehicle movement in order to check any unwarranted activities of cab drivers, such as picking up strangers and staying away from the designated routes. • Breath analyzers are used to carry out random checks on drivers to prevent drunk drivers from driving. Disciplinary action and penalties are imposed on the vendor if found guilty •

**SMS Alerts:** Women employees get a SMS and are expected to press yes or no when they reach. In case the response is no or deferred, the team at company starts to investigate. • Maintaining daily track sheet of the women employees who are commuting late in the evening with all the details such as name, complete address, mobile no, emergency mobile no, reporting manager Mobile no., accompanying person name and mobile no. (Any male employee or office boy or security guard), Car details, Driver no. & name, Out time, Approx. travel time to reach to their respective destinations. These details are available only to the transport department at the office and not the drivers.

**Emergency Response Systems:** 24x7 Emergency helpline number and other important numbers are displayed in the cabs. Employees are regularly sensitized about availability of these numbers which can be used to report emergency, life safety and security threatening situations • some companies have patrolling vehicles for night. These are equipped with mobile phones and emergency numbers and pick up random route for checking and for quick responding in any emergency situation. Measures for safe hiring • Guards and Drivers are hired from licensed agencies who maintain diligent records of these employees such as recent photograph/ Name/ Father Name / Mobile no. / License number for drivers / Permanent Address / Present Address/ Appointment letter/ Police notification. This ensures that nobody enters the premises without a valid identity proof. Creating Awareness • Self Defense training for the women employees by professional trainers to help them get trained in handling emergency situations • Transport Security team carries out regular briefing sessions for escort guards & drivers



sensitizing them about their roles and responsibilities while escorting women employees • Floor huddles and employee discussions to educate and reiterate employees regarding safety and security guidelines. • Companies running their own Safety Campaigns which are a set of composite events including activities like screening of videos, messages from senior leaderships, rewards for drivers & vendors, felicitating role models etc. • Making available to employees key government contact list specially local police authorities.

**Feedback Mechanism:** Well defined process for seeking feedback from employees through an easy to use web interface. Secrecy of individual identity is assured and maintained when providing such feedback. Employee surveys are undertaken at regular intervals soliciting a broad based participation to identify opportunities for improvement in security systems. • Security Workforce / Personnel Training: Security personnel especially male Guards are sensitized towards showing respect and care when engaging / dealing with Women Security Colleagues and Women Employees of the organization. • Train the Driver: Regular training & counseling sessions for drivers to sensitize them on following

- o Need for safe driving
- o Sharing of Emergency Contact Numbers of Security, Transport and Key Management Personnel in Security and Transport departments
- o Safety and security of employees especially women employees
- o Showing respect when engaging with women employees
- o Not moving out on duty if security escort is not available especially when lone women employee is commuting
- o How to contact and report a emergency situation which could impact safety of employee especially women employees

**Addressing Medical Emergencies:** Companies also support women employees in the event of a medical emergency. Medical aid room with round the clock availability for essential first aid as well as comprehensive medical care program through the empanelled hospitals. Advisories for women employees • Women employees are advised to ensure their mobile phones are charged before they leave for or from work • If the identity of a co-commuter is suspected, request him to display the I-Card. If the I-card is not available, report the matter to the authorities immediately. • Do not permit any outsider to board the vehicle under any circumstances. In case of help required by someone in cases like a road accident, call 100 or the office transport helpdesk. • Women are advised not to display valuables/currency to the driver, avoid conversations giving sharing personal details and be attentive in case of change in route. • Follow the allocated roster and stop only at the designated place as per the schedule • Call the helpline and report in cases such as non availability of security escort for a women employee (if she is the first to board or last to disembark) , inappropriate behavior by drivers or if under the influence of alcohol, over-speeding by cabs, unscheduled breaks for refueling / picking up friends, Vehicle breakdown, driver communicating

on the mobile while driving, use of unacceptable language and absence of I-card .

**Prevention of Sexual Harassment at Work places:** Committee's as prescribed by Vishaka guidelines have been setup in organizations to deal and prevent Sexual harassment. This committee is responsible for independently handling any complaints on sexual harassment at the workplace. • Awareness sessions on what constitutes sexual harassment with all employees. The focus of these sessions is to promote gender sensitivity including understanding of and how to deal with harassment cases at workplace. The conduct of these sessions is arranged in such a manner that it shall: aim to create awareness around workplace / sexual harassment issues by defining key concepts o Highlight the prevalent laws / guidelines covering this topic / cases o Provide a brief overview of the organization policy on subject matter, its' ambit and scope o Enable attendees to identify harassment cases and understand sensitivities involved while handling such cases o Share instances and actions taken to build employee confidence in the process.

**Conclusion:** In conclusion, the themes that emerged from the qualitative analysis highlighted the pervasive factors that impact the Employee Relationship Management. The societal role expectations, women's career ambitions, and the nature of the IT industry challenges the way they manage their professional and personal lives. While their self-identities primarily lie in their work, they are strongly influenced to perform the roles of homemaker and dependent care provider given the societal expectations; this does require negotiation both at home and at work in terms of how and when work can be done. Furthermore, women who had taken a slow track in their career growth, mentioned that this was a conscious choice as they felt their families needed them more at that point in time. An implication is that organizations may not be effectively utilizing their talent; however implementing ERM policies and practices would facilitate women in pursuing their career goals and dependent care responsibilities. With an increasing number of women entering the workforce and the Indian IT industry facing a talent shortage, it appears that understanding the role of work and family in the lives of women professionals will become an important HR concern. Indian women IT professionals can achieve the work family balance by setting priorities in their work and personal lives and by having support systems both at work, formally through HR policies and programmes, and informally through supervisor and co-worker support and at home. The data raised issues that need to be addressed both from an academic and practice point of view. The identified dimensions could serve as a platform for further research on women IT professionals and the work life balance which will serve as a guide for organizations to address issues of working women by designing and implementing sound ERM policies and

practices for facilitating the work family balance. This, in turn, would go a long way in enabling women to perform better at work, be more committed to the organization, and ultimately contribute to the growth of the economy and positively impact society as whole.

### References

- Adya, M. (2008). Women at work: Differences in IT career experiences and perceptions between South Asian and American women. *Human Resource Management*, 47(3), pp. 601-635
- Agarwal, R. and Ferratt, T.W. (2000). Retention and the career motives of IT professionals, Proceedings of the 2000 ACM Special Interest Group on Computer Personnel Research Conference (SIG CPR), Chicago, IL, pp. 158-16
- Agarwal, R. and Ferratt, T.W. (2001). Crafting an HR strategy to meet the need for IT workers, *Communications of the ACM*, 44(7), 58-64.
- Agarwal, R., and Ferratt, T.W. (1999). Coping with labor scarcity in information technology. Practice Driven Research in IT Management series. Cincinnati, OH: Pinnafix, 1999.
- Ahuja, M. (2002). Women in information technology profession: a literature review, synthesis, and research agenda. *European Journal of Information Systems*, 11, 20-34
- Aziz, M. (2004). Role stress among women in the Indian information technology sector. *Women in Management Review*, 19(7/8)
- Baroudi, J.J. and Igbaria, M. (1995). An examination of gender effects on career success of information systems employees. *Journal of Management Information Systems*, 11(3), 181-201.
- Bhal, K.T., and Gulati, N. (2006). Predicting turnover intentions: incorporating the role of organization and work group level variables. *Global Journal of Flexible Systems Management*, 7, 3-4, 41-50
- Bhal, K.T., and Gulati, N. (2007). Pay satisfaction of software professionals in India. *Vikalpa*, 32(3), 9-21
- Bhatnagar, J. (2007). Talent management strategy of employee engagement in Indian ITES employees: key to retention. *Employee Relations*, 29(6), 640-663
- Bhattacharya, S. and Basu, J. (2007). Distress, wellness and organizational role stress among IT professionals: Role of life events and coping resources. *Journal of the Indian Academy of Applied Psychology*, 33(2), 139-162
- Carsten, J., and Spector, P. (1987). Unemployment, job satisfaction, and employee turnover: A metaanalytic test of the Munchinsky Model. *Journal of Applied Psychology*, 73(3), 374-381.
- Chakraborty, C. and Dutta, D. (2004). Indian software industry: growth patterns, constraints and government initiatives edited by Raghavendra Jha, Working Paper. Palgrave-Macmillan, India
- Dhar, R.L. and Dhar, M. (2010). Job stress, coping process, and intentions to leave: A study of information technology professionals working in India. *The Social Science Journal*, 47, pp. 560- 577
- Dignan, L. (2010). Infosys wrestles with India IT worker turnover. *Zdnet.com*. [http://www.zdnet.com/blog/btl/infosys-wrestles-with-india-it-workerturnover/36652?tag=mantle\\_skin;content](http://www.zdnet.com/blog/btl/infosys-wrestles-with-india-it-workerturnover/36652?tag=mantle_skin;content)
- Noe, R.A., Hollenbeck, J.R., Gerhart, B. and Patrick, P.M. (2007) "Human Resource Management: Gaining a Competitive Advantage", Tata McGraw-Hill, New Delhi.
- Prasad, K. (2005) "Strategic Human Resource Management: Text and Cases", Macmillan India Ltd., New Delhi.
- Kandula, Srinivas R. (2003) "Human Resource Management in practice with 300 models :Techniques and Tools", Sage, Delhi
- Rao T.V., Rao Raju, and Yadav Tara. (2001). "A Study of HRD concepts, structure of HRD Proceedings of the 5th National Conference; INDIACOM-2011 Copy Right © INDIACOM-2011 ISSN 0973-7529 ISBN 978-93-80544-00-7 departments, and HRD practices in India",
- Siekel Tom. (2002). "After CRM, it's ERM: Employee Relationship Management Indian Management", Vol. 41, Issue 9, July p. 38
- Storey J. (ed.) (1989). "New Perspectives in Human Resource Management", Routledge, London, p. 114.
- Truss Catherine. (2001). "Shifting the paradigm in Human Resource Management: From the resource based view to complex adaptive system". Published in a Research Paper on Human Resource Management by Kingston Business School, Kingston University.
- Thite, M. (2004) "Managing People in the New Economy: Targeted HR Practices that Persuade People to Unlock their Knowledge Power", Response Books, New Delhi.
- Truss, C. (2001) "Complexities and Controversies in Linking HRM with Organizational Outcomes" *Journal of Management Studies*, Vol.38, No.8.
- Walker, J.W. and Stopper, W.G. (2000) "Developing Human Resource Leaders" *Human Resource Planning*, Vol.23, No.1, p.38-44.
- Webb, J. (2004) "Putting Management Back into Performance: A Handbook for Managers and Supervisors", Allen & Unwin, Australia.
- Joynt, P. and Morton, B. (2005) "The Global HR Manager: Creating the Seamless Organization", Jaico Publishing House, Mumbai.

## SOCIO-ECONOMIC CONDITION OF THE FISHERMEN COMMUNITY OF PUMLEN LAKE: A CASE STUDY IN TOKPACHING VILLAGE OF THOUBAL DISTRICT, MANIPUR

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### Abstract

The paper is an attempt by the authors to highlight the socio-economic condition of the fishermen community of Tokpaching Village of Thoubal District of Manipur who fishes for their livelihood on the Pumlen Lake, the second largest fresh water wetland in the state of Manipur. The fisherman community belongs to low income community. The total of 50 families of the village was surveyed during the study. The findings reveal that total number of population of the village was 469 among them 63.53% (Literate) and 36.46% (Illiterate). Among the literate population 52.38% has primary level education, 30.95% has upper primary school level, 11.31% has high school level and only 3.57% of the fisherman possessed higher degrees. The peoples were employed in different sectors such as agriculture (26.29%), fishing (29.74%), business (17.67%), in-service (14.22%) and any other works (12.06%). 82.94% of the total population of the village lived in the katcha houses and remaining (17.05 %) in pukka houses. Income level was lowest (Rs. 500-1000 per month) among the age group of 10 – 20 and highest (2000- 8000 per month) among the age group of 40-50. The overall fish production of the Lake was 1652 kg per annum. Out of these, miscellaneous fish caught was the maximum i.e. 727 kg per annum (44.12%) while those of cat fishes were minimum i.e. 248 kg per annum (15.02%). Production of carp fish variety was the lowest while production of small fishes was the highest. The findings also reveal that the villagers were engaged in other occupational sector other than fishing due to reduction in fish production in the beels resulted by overexploitation, siltation, human activities etc.

**Keywords:** Socio-economic condition, fisherman community, Wetland, Livelihood, Tokpaching village, Pumlen Lake, Thoubal District of Manipur.

Study of socio-economic status is an important factor for sustainable management of wetlands and enhancement fish production as well as upliftment of rural economy (R. Bordoloi., *et al.* 2012). Fish is the main food item of the majority of the people in the State, particularly Meiteis who are mainly concentrated in the valley. The State has no marine fisheries. It has vast potential of fisheries resources comprising ponds tanks, natural lakes, marshy areas, swampy areas, rivers, reservoirs, submerged cropped land, low lying paddy fields etc. The largest source of fish is the Loktak Lake. And the second comes the Pumlen Lake (the study area). The total water areas in Manipur State have shrunk from around 100000 ha in 1990 to around 56461.5 ha in 2009-10. About 18000 ha of water areas have been brought under fish culture operation ([databank.nedfi.com/content/fishery-Manipur](http://databank.nedfi.com/content/fishery-Manipur)). Fisheries occupy a very important place in the socio-economic development of the state of Manipur. It has been recognized as a powerful income and employment generator as it stimulates growth of a number of subsidiary industries and is a source of cheap and nutritious food besides being a foreign exchange earner. At the same time, it is an instrument of livelihood for a large section of economically backward population of the state. Fisheries acquired the status of one of the fastest growing sector for increasing food production as well as solving unemployment problems owing to introduction of scientific fish farming and artificial propagation for enhancement of fish production. The state is endowed with fisheries resources of about 56,461.15 ha

water areas in the form of lakes, seasonal and perennial swampy beels, rivers, tanks, ponds, reservoir, low lying paddy field etc. which can be developed on scientific lines of fish culture for production of more fish. According to state government report, so far 18,600 ha of water areas have been brought under fish culture operation by the end of 2010-11.

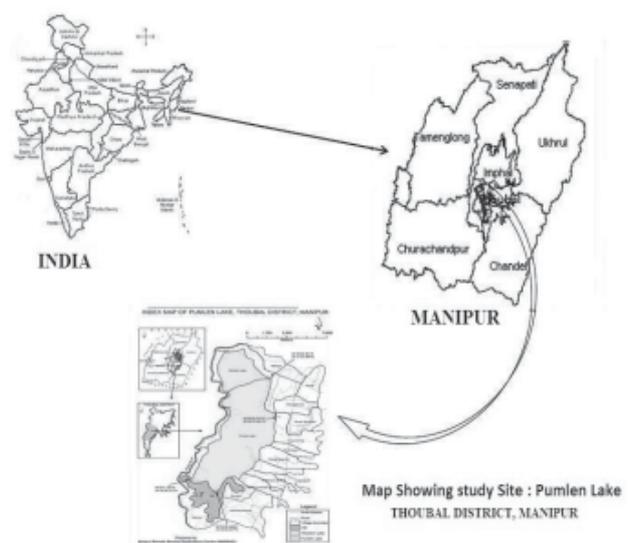


Figure 1: Location of Pumlen Lake (Pat = Lake in Manipuri)



Pumlen Lake locally known as Pumlen Pat (Pat – a Lake in Manipur) is the second largest freshwater wetland located in the southern part of the Manipur valley. The Lake is situated in Thoubal District of Manipur at a distance of about 50 km from Imphal, the capital of the state towards the Southern Lowlands of the central valley i.e. on the left side of the Imphal river at the geographical ordinates between 93°50'E to 94°0'E and 24°20'N to 24°35'N and at elevation of 767 meters above mean sea level (A.S.L.). Fishing is a very important part of the economic activities in the surrounding area and is a vital source of protein for the local diet. It is a shallow weed-infested lake with two-third of its water surface covered with heterogeneous vegetation locally known as *Phoom* or *Phumdi*. A drastic change in the ecosystem of Pumlen Lake from its earlier state is said to have occurred since the commissioning of Loktak Hydel Project which uses the Lake Pumlen as a secondary reservoir (Figure 1). Despite high potential for production of fish in the state, the region is deficient in fish production and hence fish is imported from other states like Andhra Pradesh and West Bengal. There is vast scope of increasing fishery production by efficient and rational management of the existing water resources. Earlier major bulk of the fish catch was contributed by the indigenous carps. However, during the past three decades the catch is dominated by the Indian major carps and other exotic carps. The major cause of ecological problems in Manipur is due to improper planning and lack of integrated approach. Concerted efforts should be made to increase fish production and ensure nutritional security of people of Manipur (Ajit Kumar Ng, 2007). There are several constraints to development of fishery sector in the state. Some of the major constraints are Inflow of organic chlorine pesticides and chemical fertilizers used in the agriculture practice in and around the lakes, rivers, ponds, beels, etc. has resulted in the decline of natural stocks of several species of fish; No observable efforts are being made by the government agencies to reclaim the water bodies or to attempt fresh stocking of seed in rivers and other water bodies; Over exploitation and indiscriminate fishing are also the causes for poor fish production; Fast growth of aquatic weeds like water hyacinth and other weeds in most of the water bodies and heavy siltation year after year have destroyed the ecology and affected fish production to a great extent; and Poisoning and poaching, a common problem faced by the farmers (Ajit Kumar Ng, 2007 *op. cit.*). Socio-economic status of wetland dependent people was studied by few workers in Manipur such as Singh, R. *et al.* (1999), Singh, R.K. *et al.* (1999), Singh, Th. Nabakumar (2010), Trisal, C.L. *et al.* (2002) and Laishram, J. *et al.* (2013). Before introduction of an aquaculture technology in the rural area, survey of the

beels dependent people should be given first preference for sustainable development of wetland as well as Lake dependent community. Bijaya Lakshmi Nongmaithem Devi *et al.* (2012) made a detail study on the fishers' socio-economic and cultural profile around the Loktak Lake of Manipur, India. With this aim, socio- economic status of the Lake dependent people was studied in Tokpaching Village of Pumlen Lake, Thoubal district, Manipur. Notwithstanding the above detailed pioneering studies on the fisher folk of North East India in general and Assam in particular have been done by Kar (1990, 2003, 2007, 2013); and Dey and Kar (1989).

**Significance of the study:** Fish is the most important item and easily digestible protein food of the Manipuri. It is the only source of animal protein acceptable to all the people of the state. To make self sufficiency in stable fish production in the state, the fishery department implements various plan schemes/programmes including Centrally Sponsored Schemes for improvement of fisheries infrastructural facilities, development of inland fisheries and aquaculture for augmenting production of fish from the natural resources as well as from private fish farms. According to Fisheries Department, Government of Manipur (Annual Administrative Report, 2010-2011), the present level of annual fish production of the state is to the tune of 19,200 tonnes as against the total requirement of about 27,500 tonnes (based on the National Nutritional Standard of 11 kgs. per capita consumption) of fish for about 25,000 lakh projected population of the state showing a shortfall of about 8,300 tonnes. At present, the shortage is partly met by importing fish from other states like Assam, West Bengal, Andhra Pradesh etc. On the basis of the National Level of production, Manipur has got a production potential of about 38,000 tonnes of fish per annum if harnessed the un-tapped fisheries resources through judicious exploitation and application of modern scientific fish culture techniques. In order to increase fish production in the state, proper and judicious utilization of all the aquatic resources deserves proper attention. This will help in enhancing fish production and to uplift the socio-economic conditions of the poor fishermen by generating self employment opportunities and fight malnutrition problem in the State at large. In this context, the present study is pertinent and significant.

**Operational definitions of the key terms:** *Socio-economic condition* – it is the total combined measure of the economic and sociological status of an individual's or family's economic and social position in relation to others, based on income, education, and occupation etc. *The fishermen community*



of *Pumlen Lake* – the fishing communities residing near the periphery of the *Pumlen Lake* especially the villagers of the Tokpaching Village of Thoubal District of Manipur. *Thoubal District* – it is one of the nine districts of the state of Manipur. *Pumlen Lake* – a Lake situated in Thoubal District of Manipur at a distance of about 55 km from Imphal, the capital of the state towards the Southern Lowlands of the central valley. *Manipur* – it is a state in northeastern India, with the city of Imphal as its capital. It is bordered by Nagaland to the north, Mizoram to the south, and Assam to the west; Burma lies to its east. The state has an area of 22,327 square kilometers.

**Objective of the Study:** The objective of the study is to survey and highlight the socio-economic status of fisherman community of the Tokpaching village, situated near *Pumlen Lake* (wetland) of Thoubal District of Manipur.

**Research Design:** The study is qualitative in nature and case study under normative survey method is employed. Primary data of the present study has been collected from the field using a self constructed interview schedule and a format (questionnaire) of National Bureau of Fish Genetic Resources (with some modification). Secondary data has been collected from books, journals, websites etc. The study was conducted during 2012 to 2013. The total of 50 families of the village was surveyed during the study. Data were collected by visiting the target village and from personal

interview. The fish catch data were collected from fisherman, man holder etc. The pertinent data, thus, collected was subjected to descriptive statistical analysis such as the calculation of the percentages, Pie chart, bar diagrams etc.

**Data Analysis, Findings and Discussion:** The livelihood and production of fish in the present study were summarized in the Table 1 & 2. Total number of population of the village was 469, among these 57.99% were male and 42% were female. The results of the survey indicated that the literacy rate among the fishermen in the village was poor. It has been found that the population of the village was 469; 63.53% (Literate) and 36.46% (Illiterate). Among the literate population, 52.38% have upto primary, 30.95% up to upper primary school, 11.31% up to high school and only 3.57% of the fisherman was found to be higher degree. The peoples were in different services such as agriculture (26.29%), fishing (29.74%), business (17.67%), In-service (14.22%) and any other works (12.06%). Again, 82.94% people were lived in the katcha house and remaining (17.05%) in pukka house while, per month income was found to be lowest (Rs. 500-1000) in the age of 10-20 and highest (2000- 8000) in the age of 40-50 group. The overall fish production of the Lake was 1652 kg/yr. Out of these productions, miscellaneous was found to be maximum (727 kg/yr) with 44.12% while Indian major carp was minimum (248 kg/yr) with 15.02%.

Table 1: Socio-economic condition of Tokpaching village in Pumlen Lake, Manipur (2012-2013)

SL. No.	Parameters	Sample size	Percentage (%)
1.	Population of Tokpaching	469	57.99 (Male) 42.00 (Female)
2.	Type of house %		
	a) Katcha	389	82.94
	b) Pukka	80	17.05
3.	Educational status		
	(a) Illiterate	171	36.46
	(b) Literate	298	63.53
	(i) Primary School	88	52.38
	(ii) Upper Primary	52	30.95
	(iii) High School	19	11.31
	(iv) Higher degree	9	3.57
4.	Main occupation of the family		
	(a) Fishing	69	29.74
	(b) Agriculture	61	26.29
	(c) Business	41	17.67
	(d) In-service	33	14.22
	(e) Any works	28	12.06
5.	Monthly income of the family with age wise distribution	Minimum (Rupees)	Maximum (Rs.)
	(a) 0-10 years	0.00	0.00
	(b) 10-20 years	100.00	1000.00
	(c) 20-30 years	500.00	3000.00
	(d) 30-40 years	2000.00	7200.00
	(e) 40-50 years	2000.00	8000.00
	(f) 50-60 years	2000.00	7500.00
	(g) 60-70 years	2000.00	7000.00

Table 2: Fish production (kg/month) in Pumlen Lake during 2012-2013

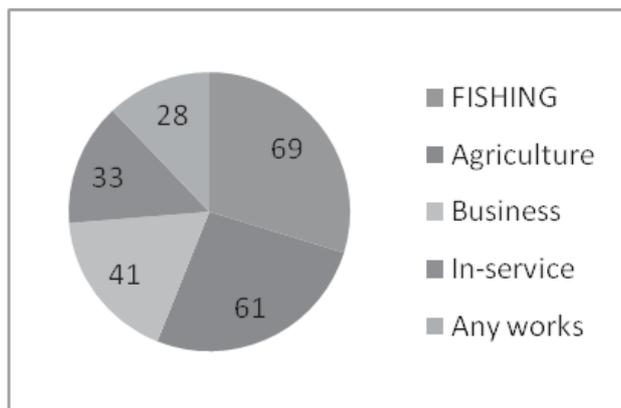
Production Of Fish	JAN.	FEB.	MAR.	APL.	MAY	JNE.	JULY	AUG.	SEP.	OCT.	NOV.	DCR.	TOTAL kg/year %
Carp	6	4	6	11	21	31	31	31	51	51	51	42	336 (20.33%)
Cat fish	6	7	5	6	7	5	21	11	34	41	56	49	248 (15.02%)
Murrels	8	11	6	7	32	35	25	26	50	61	41	39	341 (20.62%)
Misc.	30	51	51	52	55	50	53	100	105	70	60	50	727 (44.12%)
Total	50	73	68	76	115	121	130	168	240	223	208	180	1652 kg/year

\*Misc=Miscellaneous includes small indigenous fish

FIGURE 1: Fish Production Per Month



FIGURE 2: Over All Main Occupation Of The Family



Laishram, Jogeshet *al* (2013) mentioned that wetlands are one of the most productive and resource rich area which provides basic needs of households and contributes to food security, income and welfare. Sheikh and Goswami (2013) describe that in these days of global economic changes, the fishers are found not having the basic necessities to elevate their living conditions. Instead they are facing a lot in their struggle for existence. Furthermore, they are still in the primitive stage with limited or no scientific and technical guidance to use the wetland more economically and sustainably. The economic status of the people was fairly poor as they were not fully engaged in particular work specially in the business of fish, because of declining fish production in the Lake due to anthropogenic pressure, floods and siltation. Most of the peoples were not aware of modern aquaculture technique. They used traditional fishing methods.

Therefore, urgent needs of awareness programme regarding modern scientific fish farming technique among the villagers. The overall fish production of the Lake was about 1652 kg/yr. Out of these productions, miscellaneous had the maximum while Cat fishes recorded the minimum. Again, miscellaneous was followed by Murrels, Carps and Catfish. Minimum production for carps was recorded in February while maximum in October and November; for cat fish, minimum was observed in March and maximum in November; for miscellaneous the minimum production was found in January and maximum in August to October. The production of various fish species was highest during monsoon and post-monsoon and lowest during winter season. The fishermen used traditional fishing methods as most of them were not aware of modern aqua-cultural techniques.

In the light of the above discussion, there is an urgent need to work on the development and provide good facilities and financial aids to the villagers for the betterment of their socio-economic condition; Bringabout a proper management of the Lake Ecosystem for the development of fishery in a sustainable manner; Organise awareness programmes in connection with the modern fish farming techniques and training of fishermen; Save ecology and environment of the lake through reduction of felling of trees in the catchment area of the lake and use of pesticides in capture fishery; To conclude, the major hindrance in the fishermen’s socio-economic condition is the change in water regime and its resultant effects on fishing techniques etc which demand an urgent remedial measure. In fact, the major cause of the lake ecological problem is due to improper planning and lack of integrated approach. Concerted efforts should, therefore, be made to increase fish production, ensure betterment of socio-economic status of fishermen community and nutritional security of people of the state.

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#### References

- Dutta, S. K and Kundu, R (2007): Socio-Economic Appraisal of Culture Based Fishermen: Case Study in West Bengal. *J. Soc. Sci.*, 15(3): 255-262.
- Handbook on Fisheries Statistics (2000): Ministry of Agriculture, Government of India (GOI), New Delhi.
- Singh, N.R., Das, B.K., Shomorendra, M. and Kar, D. (2013). Fish diversity of Pumlun Lake in Manipur with a note on traditional fish catching devices, *Indian Journal of applied research* Vol. 3, No. 10, 46-48pp
- Devi, N.B.L., Ngangbam, A.K., Dr. Sheela Immanuel, and Ananthan P. S. (2012). *IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS)* ISSN: 2319-2380, ISBN: 2319-2372. Volume 1, Issue 5, 48-56pp.
- Mallick Nirakar and Das Suranjan. (2012). Community in Flux: Study of Patni in Cachar District of Assam. *International Research Journal of Social Sciences*. Vol. 1(3), 41-44. ISSN 2319-3565.
- R. Bordoloi, S. K. S. Abujam, G. Paswan, U. C. Goswami and S. P. Biswas. (2012). Socio-Economic Status of the Fisher Folk of Upper Brahmaputra River: A Case Study in Jankhana Village of Jorhat District. *International J. of applied biology and pharmaceutical technology*. Vol. 03, Issue-4, 338-342pp.
- R. C. Bhattacharyya and A. Dutta (2012): Fishery status of undivided Goalpara, Assam, with reference to socio-economic conditions of fishers, [www.ijabpt.com](http://www.ijabpt.com), Volume-3: July-Sept-2012 ISSN: 0976-4550.
- Samual Sheikh and Dr. M.M. Goswami.(2013). Socio-Economic Condition of Fisheries of Chandrakholo wetland, Dhubri, Assam, India. *Bulletin of Environment, Pharmacology and Life Sciences Bull. Env.Pharmacol.Life Sci.*, Vol 3 (1) December 2013: 257-261pp. Academy for Environment and Life Sciences, India Online ISSN 2277-1808.
- Sarat Baruah. (2012). Beel Fisheries of Assam and its Impact on the Socio-Economic Life of the people of Lakhimpur District. *International Indexed & Referred Research Journal*. ISSN- 0974-2832, RNI-RAJBIL 2009/29954; Vol. IV \* ISSUE-39.
- Singh, Abha L. and Moirangleima, Kh. (2009). Shrinking Water area in the wetlands of the central valley of Manipur. *The Open Renewable Energy Journal* 2: 1-5pp.
- Singh, H. Tombi and Singh, R.K. Shyamananda. (1994). Loktak Lake, Manipur. *Worldwide Fund for Nature*, India, New Delhi. 69pp.
- Singh, R.K. (1999). What are wetlands? Pages 1-7, In: Singh, R.K. and Sharma, H.P. (Editors) *Wetlands of Manipur (Vol-1)*. Manipur Association for Science & Society (MASS), Imphal.
- Singh, R.N.; Singh, N.S.; Garg, J.K. and Murthy, T.V.R. (1999). Loktak Notified Wetland Ecosystem and its Catchment. Pages 43-52, In: Singh, R.K. and Sharma, H.P. (Editors) *Wetlands of Manipur (Vol-1)*. Manipur Association for Science & Society (MASS), Imphal.
- Singh, Th. Nabakumar. (2010). Loktak and its Environment in Manipur. *Rajesh Publications*, New Delhi. 194 pages.
- Trisal, C.L. and Manihar, Th. (2002). Management of Phumdis in the Loktak Lake. Pages 1-6, In: Trisal, C.L. and Manihar, Th. (Editors) *Proceedings of the workshop on Management of Phumdi in Loktak Lake, January 22-24, (2002)*, Wetlands International-South Asia, New Delhi and Loktak Development Authority, Imphal.
- Trisal, C.L. and Manihar, Th. (2004). The Atlas of Loktak Lake. *Wetlands International-South Asia*, New Delhi and Loktak Development Authority, Imphal. 93pp.
- Ajit Kumar Ng (2007), *Status of Aquaculture and Fisheries in Manipur- Part 3* – (Retrieved from [e-pao.net > education > Scientific Papers on 14/03/2015 at 16:10 pm](http://e-pao.net/education/Scientific%20Papers%20on%2014/03/2015%20at%2016:10%20pm)) [databank.nedfi.com/content/fishery-manipur](http://databank.nedfi.com/content/fishery-manipur) (retrieved on 14-03-2015 at 14:38 pm)



## IMMEDIATE EFFECT OF MIND SOUND RESONANCE TECHNIQUE (MSRT- A YOGIC RELAXATION TECHNIQUE) ON COGNITIVE FUNCTIONS IN TYPE 2 DIABETES

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### Abstract

Diabetes is one of the chronic medical conditions with high prevalence rates. Long standing diabetes is associated with impaired cognitive functioning. Yoga is known to improve the cognitive functions in normal and many health conditions. Mind Sound Resonance Technique (MSRT) is one of the mindfulness based yogic relaxation technique, known to enhance cognitive functions. The objective comprised to study the immediate effect of MSRT practice on cognitive functions in patient with type 2 diabetes. Forty three (18 male) type 2 diabetes patients with an age range between 30 to 65 (mean age  $\pm$  SD = 56.83  $\pm$  12.54) with minimum history of diabetes since last 5 years, were enrolled in this study. All the subjects underwent training of 15 sessions of MSRT practice in 6 days. DLST test was used to assess psychomotor speed, which involves visual scanning, mental flexibility, sustained attention, psychomotor speed and speed of information processing. On 7<sup>th</sup> day subjects were administered DLST before and immediately after the 30 minutes of MSRT intervention. Data was found normally distributed by Shapiro-Wilcox test. The paired sample t test was used to see the pre-post changes. There was significant improvement in total score ( $p = 0.001$ ; +24.99%) and net score ( $p = 0.001$ ; +25.47%) along with a nonsignificant decrease in wrong attempts ( $p = 0.855$ ) of DLST. Present pilot study indicates that MSRT may have a potential role in enhancing psychomotor performance in patients suffering from diabetes, immediately after the practice. These findings need confirmation from studies with a larger sample size and randomized controlled design, which will be implicated in the future.

**Keywords:** Mind sound resonance technique; psychomotor performance; diabetes, mindfulness, cognitive function.

Diabetes is a metabolic disorder characterized by chronic elevated blood sugar levels. In the long run it leads to multi-organ dysfunction like, heart, brain, kidneys, eyes, blood vessels, etc<sup>1</sup>. Many studies have demonstrated that diabetes poor cognitive functioning in terms of reduced, memory concentration, processing speed etc<sup>2</sup>. Diabetic patients are. Yoga is one of the ancient sciences. It was discovered and practiced by ancient Indian sages for the higher purposes of life like, self realization and achievement of super-natural powers called siddhi's. Recent scientific studies on yoga revealed its healing secret in various health conditions such as diabetes<sup>3</sup>, hypertension<sup>4</sup>, cardiovascular disease<sup>5</sup>, parkinson's disease<sup>6</sup> etc. Yoga is also known to have a positive influence on psychological conditions like anxiety<sup>7</sup>, depression<sup>8</sup>, schizophrenia<sup>9</sup> etc.

**MSRT:** Mind sound resonance technique is one of the mindfulness based relaxation techniques, in which resonance is generated by chanting the mantras. It leads to deep relaxation of the mind and body. Practice of MSRT enhances the relaxation, wellbeing, will power etc<sup>10</sup>. It is known to reduce state anxiety, pain, tenderness and disability in patient with chronic low back pain<sup>11</sup>. In another study MSRT reduced state anxiety and improved cognitive performance immediately after the practice in patient suffering from generalized anxiety disorder.<sup>12</sup> This study was aimed to see the immediate effect of MSRT on cognitive functions in patients of type 2 diabetes.

**Method:** Fortythree subjects (18 male) with an age range between 30 to 65 (mean  $\pm$  SD = 56.83  $\pm$  12.54), suffering from diabetes type 2, since last minimum 5 years, were enrolled in this study [see table 1].

Table 1: Demographic detail of the patients

Sr no	Gender	Number	Age (years)
1	Male	18	56.76
2	Female	25	57.00
3	Total	43	56.83

All the subjects were on anti-diabetic medication. Subjects had no previous expose to MSRT practice and were given one week of orientation to MSRT practice before the study. On 7<sup>th</sup> day subjects were administered DLST before and immediately after the MSRT intervention.

**Measures:** The digit letter substitution task (DLST): This test was developed from the Digit Symbol Substitution Test (DSST) as one of the subsets of the Wechsler intelligence scale. Substitution tests are essentially speed-dependent tasks that require the subject to match particular signs and symbols, digits or letters to other signs within a specified time period (90 s).<sup>13</sup> Substitution tasks involve visual scanning, mental flexibility, sustained attention, psychomotor speed and speed of information processing. DLST is a valid tool for assessing neuro-psychiatric illnesses and has been standardized for the Indian population<sup>14</sup>. **Assessment:** All assessments were performed on an empty stomach between 6:30 pm and 7:00 pm. MSRT session was given in the supine position for 30 min in a dark, quiet room. A pre-recorded audio-tape was used to give the MSRT instructions.

**Intervention:** MSRT is one of the advanced yoga-based mindful relaxation techniques that involves experiencing with closed eyes the internal vibrations and resonance developed while counting the syllables A, U, M, Om and Mahamrityunjayamantra sounds. The details of MSRT practice, including the steps involved are described elsewhere.

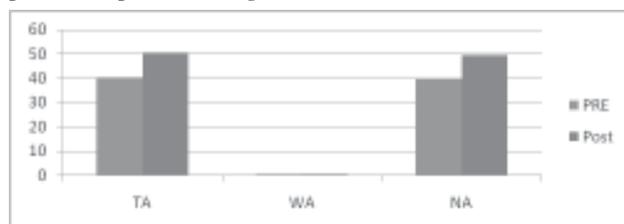
**Data analysis:** All statistical analysis was performed using the Statistical Package for Social Sciences (SPSS version 10.0). data was found normally distributed by the Shapiro-Wilcox test. The Paired sample t test was applied to find the pre-post changes.

**Result:** There was significant improvement in total score ( $p = 0.001$ ; +24.99%) and net score ( $p = 0.001$ ; +25.47%) of DLST [see table 2].

Table 2: Details of Pre and Post test Scores

Sr No	PreMean SD	±	PostMean SD	±	% change	P*- Value
TA	40.41 ± 15.27		50.51 ± 15.57		+ 24.99	<0.001**
WA	0.60 ± 1.8		0.67 ± 1.8		+ 11.67	0.88
NA	39.53 ± 15.66		49.60 ± 15.90		+ 25.47	<0.001**

TA=Total attempt, NA=Net attempt, WA=Wrong attempt, <sup>a</sup> paired sample t test, \*\* significance level at 0.001



Graph 1: Graph showing changes mean score of DLST, before and immediately after the practice of MSRT

**Discussion:** This study was aimed to see the immediate effect of MSRT on cognitive functions in patients with type 2 diabetes, at the end of the study, we observed the significant improvement in total and net score of DLST. In one of the recent study on immediate effect of MSRT on state anxiety and psychomotor performance in patient with generalized anxiety disorder has shown to enhance psychomotor performance as compared to supine rest<sup>15</sup>. In another randomized controlled study, MSRT intervention, given daily for 10 days, was found useful in reducing the state anxiety in patients suffering from chronic neck pain.. In this study<sup>16</sup>.

The results of this study are also in support of findings of previous studies. Possible mechanism behind these findings, after the practice of MSRT may be because, Yoga known to improve autonomic functions via triggering neurohormonal mechanisms that suppress sympathetic activity through down-regulation of the hypothalamic-pituitary-adrenal axis<sup>17</sup> and mindfulness-based practices are predicted to enhance cognitive flexibility<sup>18</sup>. The strengths of the study are: (a) This multidisciplinary study encompasses the fields of yogic science, psychology and diabetology; (b) due to the short duration of yoga intervention, acceptability and adherence to therapy was good; and (c) as MSRT was delivered through a standard protocol, it could be reproduced in the exact way for all cases. Small sample size and lack of control group are the most important limitations of the study. This study was a pilot project to assess the response to MSRT in a small patient population to plan for a better study with a much higher sample size and better design in the future. There is a lack of objective variables to understand the mechanism of action of MSRT at the electro-physiological, neurological and biochemical levels. Future studies should include randomized controlled design with a larger sample size along with objective variables of autonomic functions such as heart rate variability nerve conduction velocity, biomarkers such as blood sugar level.

**Conclusion:** The Present pilot study indicates that MSRT may have a potential role in enhancing cognitive functionings in patients suffering from type 2 diabetes, immediately after the practice. These findings need confirmation from studies with a larger sample size and randomized controlled design, which will be implicated in the future.

#### References

<sup>1</sup>Diagnosis and Classification of Diabetes Mellitus. American Diabetes Association. Diabetes Care January 2008 vol. 31 no. Supplement 1 S55-S60

<sup>2</sup>Journal of Clinical and Experimental Neuropsychology. The Relationship between Impaired Glucose Tolerance, Type 2 Diabetes, and Cognitive Function. Volume 26, Issue 8, 2004. Nesrine Awad<sup>a</sup>, Michèle Gagnon<sup>b</sup> & Claude Messier. pages 1044-1080

<sup>3</sup>Sharma R, Amin H, Prajapati PK. Yoga: As an adjunct therapy to trim down the Ayurvedic drug requirement in non insulin-dependent diabetes mellitus. Anc Sci Life. 2014 Apr-Jun;33(4):229-35

<sup>4</sup>Tolbaños Roche L, Mas Hesse B Application of an integrative yoga therapy programme in cases of essential arterial hypertension in public healthcare. Complement Ther Clin Pract. 2014 Nov;20(4):285-90.

<sup>5</sup>Yadav A, Singh S, Singh K, Pai P. Effect of yoga regimen on lung functions including diffusion capacity in coronary artery disease patients: A randomized controlled study. Int J Yoga. 2015 Jan;8(1):62-7.

<sup>6</sup>Sharma NK, Robbins K, Wagner K, Colgrove YM. A randomized controlled pilot study of the therapeutic effects of yoga in people with Parkinson's disease. Int J Yoga. 2015 Jan;8(1):74-9.

<sup>7</sup>Dhansoia V, Bhargav H, Metri K. Immediate effect of mind sound resonance technique on state anxiety and cognitive functions in patients suffering from generalized anxiety disorder: A self-controlled pilot study. Int J Yoga. 2015 Jan;8(1):70-3

<sup>8</sup>Klainin-Yobas P<sup>1</sup>, Oo WN, Suzanne Yew PY, Lau Y. Effects of relaxation interventions on depression and anxiety among older adults: a systematic review. Aging Ment Health. 2015;9:1-13

<sup>9</sup>Ikai S, Suzuki T, Uchida H, Saruta J, Tsukinoki K, Fujii Y, Mimura M. Effects of weekly one-hour Hatha yoga therapy on resilience and stress levels in patients with schizophrenia-spectrum disorders: an eight-week randomized controlled trial. J Altern Complement Med. 2014 Nov;20(11):823-30.

<sup>10</sup>Nagendra HR. Mind Sound Resonance Technique. Bangalore: Swami Vivekananda Yoga Prakashana; 2001. p. 51

<sup>11</sup>Yogitha B, Nagarathna R, John E, Nagendra H. Complimentary effect of yogic sound resonance relaxation technique in patients with common neck pain. Int J Yoga 2010;3:18-25

<sup>12</sup>Dhansoia, V., Bhargav, H., & Metri, K. (2015). Immediate effect of mind sound resonance technique on state anxiety and cognitive functions in patients suffering from generalized anxiety disorder: A self-controlled pilot study. International journal of yoga, 8(1), 70.

<sup>13</sup>Sheridan LK, Fitzgerald HE, Adams KM, Nigg JT, Martel MM, Puttler LI, et al. Normative symbol digit modalities test performance in a community-based sample. Arch Clin Neuropsychol 2006;21:23-8

<sup>14</sup>Pradhan B, Nagendra H. Normative data for the digit-letter substitution task in school children. Int J Yoga 2009;2:69-72.

<sup>15</sup>Dhansoia, V., Bhargav, H., & Metri, K. (2015). Immediate effect of mind sound resonance technique on state anxiety and cognitive functions in patients suffering from generalized anxiety disorder: A self-controlled pilot study. International journal of yoga, 8(1), 70.

<sup>16</sup>Pradhan B, Nagendra H. Normative data for the digit-letter substitution task in school children. Int J Yoga 2009;2:69-72

<sup>17</sup>Vempati RP, Telles S. Yoga-based guided relaxation reduces sympathetic activity judged from baseline levels. Psychol Rep 2002;90:487-94.

<sup>18</sup>Lee JK, Orsillo SM. Investigating cognitive flexibility as a potential mechanism of mindfulness in generalized anxiety disorder. J Behav Ther Exp Psychiatry 2014;45:208-16



## EFFECT OF CYCLIC MEDITATION ON JOB RELATED STRESS IN IT PROFESSIONALS

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### Abstract

*Information Technology industry in India resulted in increase of job stress and its management by professionals would impact their employability as well as personal lives. Yoga is an ancient science which can give comfort to body/mind complex of human being in any context of life with a disciplined practice. Present study was design to assess the effect of yoga technique- cyclic meditation on job stress on Indian information technology professionals. A qualitative research method was used to collect data and results are worth pursuing.*

**Keywords:** Yoga, Meditation, Job stress, Cyclic meditation, Stress management & IT professionals

Global Competitive markets demand IT professionals to be innovative, cost effective as well as deliver “customer liked” products on time, all the time. It all boils down to “do more with less every time on time”. This creates lot of stressful situations for IT Professionals like ever changing customer expectations, squeezed project schedules, availability of skilled professionals, availability of talented leadership pool etc. As Robbins (2001) mentioned, an individual goes through stressful condition when he/she needs to deliver on any opportunity. Research has also shown Indian IT professionals are more prone to Job stress related complication due to the nature of the job they have to perform. Job stress is mainly governed by work-overload, role conflict and role ambiguity any professional’s ability to withstand job related stress also depends on physical well-being, psychological wellbeing and personal life well-being. An individual who can withstand job related stress can also turn areas of problems in the organization/industry into areas of opportunity for success. Yoga based practices are gaining popularity in India and abroad among IT professionals. The present study investigates the effects of cyclic meditation on Indian IT professionals using Qualitative method.

**Intervention-Cyclic Meditation:** C.M is inspired by a verse from Mandukya Upanishad (Sanjib Patra, Shirley Tells.2009). C.M. is a set of stimulation and relaxation poses. There are two principles of this practice- depth of perception and expansion of awareness. The complete cycle of this practice consists of 35 minutes. Cyclic meditation was developed by SVYASA (Swami Vivekananda Yoga Anusandhana Samstahana), Bangalore, India. Cyclic Meditation could be shortly referred as C.M here after.

**Material and Methods:** In this study qualitative methodology was used. Qualitative methodologies could be considered to be used in cases where large range of unknown variables effects an area (Creswell, 1998). Key advantage with qualitative case study is that it helps to get deeper insight

into participant experiences without any prior hypothesis (Patton, 1990). **Subjects-**Participants were selected from Bengaluru, India office from one of the leading Multinational European Company (MNC). Sixty days intervention was administered to 45 employees of the selected company participated in the study. All the participants were not having any serious illness or were not under medical treatment during the intervention period. The age range of employees varied from 24 years to 42 years. Participants were requested to provide their experience in a written format honestly without any bias or apprehension. The written format provided, has guiding questions like “describe the impact of cyclic meditation at physical level.

**Data Analysis:** As Denzin and Lincoln (1994) explain, data analysis begins after collecting the data from the participants in qualitative research. Written data provided by volunteered participants, was grouped into four major categories of information. First one was effect of Cyclic Meditation (C.M.) on physical well-being, second one was effect of C.M. on psychological well-being, and third one was effect of C.M. on personal life and the last one being effect of C.M. on work place. As part of last category of effect on workplace, responses from participants were also carefully examined to see the effect of C.M on job stress for IT professionals.

**On physical well-being:** Regular use of mouse and key board with the computer, IT professionals are more prone to wrist pains, shoulder joint pain, obesity issues as well body laziness issues. As IT professionals work under cool air conditions constantly, IT professionals might also get exposed to breathing issue, sleep issues as there is a possibility of imbalance in effort done between body and mind in a day.

**On psychological well-being:** Challenging projects and ambitious targets also add to impact the psychological well-being. Psychological well-being can be felt by self-awareness, self-confidence and listening capabilities. Below are experiences



as expressed by some of the participants.

**On personal life:** I.T professionals are spending much more time at workplace than at home. As quality time spent at home for professionals is decreasing day by day, any disturbance at home/family would disturb the work efficiency of professionals and make those professional more prone to job stress situation. Below are experiences as expressed by some of the participants.

**At workplace:**I.T professionals may have challenging times in handling work related discussions/risk management/schedules which can potentially impact work efficiency, resulting in job related stress. Support from sub-ordinates/peers as well as supervisors, is also crucial for performing assigned tasks efficiently. Responses from Participant experience sharing document were also examined to assess the impact of Cyclic Meditation at the workplace. Below are experiences as expressed by some of the participants.

**On Job related stress management:** Participants' responses were also carefully examined to assess the effect of C.M. in handling job related stressful situations. Ability to work with cool mindedness is key in stressful job situations. It is also important to respond appropriately for work place discussions else it would have negative spiral effect on Job stress. Ability to complete tasks even under stressful situations is key for professional's success. Below are experiences as expressed by some of the participants. Below are experiences as expressed by some of the participants.

"I am able to focus on work with greater intensity and am able to manage work schedules more effectively."

"I feel effectiveness in my way of approach in handling discussions which helped to increase my productivity."

"It helped to reduce tensions at work place and I feel relaxed in taking decisions compared to before."

"Usually, I do not get proper sleep in the night. Also if I sleep longer hours by chance, I use to feel tired and sleepy all the time following wakeup. C.M. sessions helped me to get proper and continuous sleep for 6 hours, which is good enough for the body to relax."

"I use to have back pain on daily basis. When I use to get up in the morning, I use to feel the pain a lot. After I practice cyclic meditation, I have no more back pain and feeling relaxed."

"I have become aware of my thoughts and body movements post Cyclic Meditation practice."

"I am able to take decisions well after analysing all the pre & post actions of decisions post Cyclic Meditation practice"

"Cyclic Meditation practice has obviously increased the patience and it helped to handle the situations and relations effectively with family and friends."

"Also I must say, I am able to spend quality time with my family every evening."

"Earlier due to more stress, sometimes I tend to react to situations hastily. With a relaxed body and mind, I am able to appropriately respond to situations at work place."

"Last few months, my workplace environment had turned from bad to worst. I had to cope with schedule challenges, not so supportive management during this time. This affected me both physically and emotionally. Because of these changes, I used to get angry with my kids/wife even for a small mistake and also couldn't get sleep well in the night. After started practicing cyclic meditation, I am more relaxed both physically and mentally. It definitely helped me to let out my stress. This in turn helped me in finding a new career opportunity as well."

### Results&Discussion

Participants experienced positive effects at physical well-being as well as psychological well-being after practicing Cyclic Meditation. Participants reported more of self-awareness, self-confidence, decision making capability as well as on listening capability as expressed by few participants. Participants also experienced ability to respond appropriately in work related situations, positive effect in personal lives in terms of handling situations and relations effectively. Most of the participants experienced positive effect at work place in terms handling discussions, risk forecasting and in adopting systematic problem solving. In addition to a quality time spent in personal time helps to tackle work related issues as well as job stress effectively.

**Limitations:** Adding more I.T, M.N.C companies would give more promising outcomes which might support existing findings more robustly or modify some of the findings. To enrich this study, future research can also consider women specific job stress as well as, study on IT enabling sector like B.P.O industry

### Conclusions

Cyclic Meditation practice helped IT professionals for enhancing their physical and psychological well-being including ability to manage work related tasks effectively. Organization and environment plays significant role in impacting job stress for Indian IT professionals. Cyclic Meditation practice would help to reduce job stress and it also enables the IT professional to perform efficiently at work place despite of stressful work conditions.

### References

- Anthony D LaMontagne, Tessa Keegel, Amber M Louie & Aleck Ostry (2010). ' Job stress as a preventable upstream determinant of common mental disorders: A review for practitioners and policy-makers.' *Advances in Mental Health: Promotion, Prevention and Early Intervention* Volume9, issue1, 2010.



- Anthony D LaMontagne., Tessa Keegel., Amber M Louie., Aleck Ostry & Paul A. Landsbergis. (2007). 'A Systematic Review of Job-stress Intervention Evaluation Literature, 1990-2005'. *INT J OCCUP ENVIRON HEALTH* 2007: 13:268-280
- Belkic, K., P. Landsbergis et al. (2004). 'Is job strain a major source of cardiovascular disease risk?' *Scand J Work Environ Health* 30(2):85-128.
- Cano, C. R., Sams, D., & Schwartz, J. (2009). The job stress—Job performance relationship in the social service encounter. *International Journal of Nonprofit & Voluntary Sector Marketing*, 14(1), 83–93.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). *Handbook of qualitative research*. London: Sage Publications.
- Folman, S., & Lazarus, R. S. (1988). 'Coping as a mediator of emotion'. *Journal of Personality and Social Psychology*, 54(3), 466-475.
- Ivancevich, J., Napier, H., & Wetherbe, J. (1983). Occupational stress, attitudes and health problems in the information systems professional. *Communications of the ACM*, October.
- Karasek, R., & Teorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books.
- LaMontagne, A. D. and T. G. Keegel (2009). 'Work environments as a determinant of health, In: Understanding health : A determinant approach, 2<sup>nd</sup> edn H. Kelecher and C. MacDougall eds. Oxford, Oxford university Press 201:217
- Marmot, M. G., H. Bosma, et al. (1997). 'Contribution of Job control and other risk factors to social variations in coronary heart disease incidence.' *The Lancet* 360:235-239.
- Maxwell, J. A. (1996). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: Sage Publications.
- Moddie, R. and I. Verins (2002). 'To whom does mental health belong?' *Australian e-journal for the Advancement of Mental Health* 1(2): 68-73.
- Nagendra HR, Nagarathna R. Bangalore, India: Swami Vivekananda Yoga Publications; 2007. New perspectives in stress management.
- Patton, M. Q. (2002). *Qualitative research and evaluations methods* (3rd ed.). London: Sage Publications.
- Perrewe, P. L., & Zellars, K. L. (1999). An examination of attributions and emotions in the transactional approach to the organizational stress process. *Journal of Organizational Behavior*, 20(5), 739–752.
- Rajib Lochan Dhar and Mahua Dhar (2010). 'Job stress, coping process and intentions to leave: A study of information technology professionals working in India'. *The Social Science Journal* 47 (2010) 560–577
- Ramesh Manocha., Deborah Balck. And Lei Wilson (2012). 'Quality of Life and Functional Health Status of Long-Term Meditators'. *Evidence-Based Complementary and Alternative Medicine* Volume 2012 (2012), Article ID 350674, 9 pages
- Sanjib Patra., Shirley Telles (2009). 'Positive impact of Cyclic Meditation on subsequent sleep'. *Med Sci Monit*; 15(7) :CR375-381
- Sleep Matters: The Impact of Sleep On health and Wellbeing (2011). Mental Health foundation. ISBN: 978-1-906162-65-8
- Somerfield, M. P., & McGrae, R. R. (Eds.) (2000). Stress and coping research: Methodological challenges, theoretical advances, and clinical applications. In *Psychology in the Public Forum. American Psychologist*, 55(6), 620–673.
- Stansfeld, S. A. and B. Candy. (2006). 'Psychological work environment and mental health – a meta-analytic review.' *Scand J Work Environ Health* 32(6): 443-462.



## EFFECT OF INTEGRATED YOGA ON AGREEABLENESS AND PERFORMANCE OF EMPLOYEES

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### Abstract

*The personality of employees determine the performance of employee. Agreeableness is one of the Big Five Personality traits which affects the performance of employee. An empirical study is made to assess the effect of practicing Integrated Yoga on personality traits, including agreeableness of employee. 51 employees are given Yoga Intervention for four months and another 51 employees are not given any intervention. Using Big Five Personality Inventory, data is collected before, in the middle, and at the end of the study. The analysis of data using SPSS showed that agreeableness among employees in Integrated Yoga Intervention group improved significantly ( $p < .01$ )*

**Key words:** Personality, Performance of Employee, Agreeableness, Integrated Yoga

In the present knowledge based society, human resources are the most important resource for the progress. Personalities of employees shape the behaviours in the workplace and thus their performance. Development of the personalities to suit the changing requirements of the organization has become an important duty of the management.

**What is personality:** According to Murray R. Barrick and Michael K. Mount "Personality is an individual's relatively stable and enduring pattern of thoughts, feelings and actions"<sup>1</sup>. The term personality trait refers to enduring personal characteristics that are revealed in a particular pattern of behaviour in a variety of situations. Many efforts are made to identify the primary traits that govern behaviour and these efforts resulted in long lists. Out of these Big Five Personality Model is most widely used in identifying and classifying traits. The Big Five Personality Model, supported by an impressive amount of research suggests that the five basis of dimensions underlie all others and encompasses most of the significant variation in human personality<sup>2</sup>. The Big Five Personality traits are Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism. Among these, Agreeableness, its importance in job performance and impact of practice of Integrated Yoga on agreeableness are studied in the present research. The facets of agreeableness are Trust (forgiving), Straight forwardness (not demanding), Altruism (warm), Compliance (not stubborn), Modesty (not show off), tender mindedness (sympathetic).

### **Importance of agreeableness in job performance:**

Agreeableness is relevant because they are better liked and they are more compliant and confirming. In jobs requiring significant teamwork or frequent interpersonal interactions, higher performance and lower levels of deviant behaviors

very important<sup>3</sup>. Conscientiousness, extraversion, and agreeableness are positively correlated with job satisfaction (Judge, Heller, & Mount, 2002)<sup>4</sup>. Workplace deviance was more likely to be endorsed with respect to an individual when both the perception of the workplace was negative and emotional stability, conscientiousness, or agreeableness was low<sup>5</sup>. Witt et al. (2002) argued that the interaction between conscientiousness and agreeableness is most relevant for 'jobs requiring substantial cooperative interaction'<sup>6</sup>. Employees with high levels of conscientiousness and agreeableness are more likely to possess the resources required to excel in bank teller jobs requiring speed, accuracy, and customer service. It is critical for positions with frequent interpersonal interactions to be filled by employees who have high levels of both conscientiousness and agreeableness<sup>7</sup>. Elisa Ilardaet found that the strongest correlations with team work are found to be with extraversion, total emotional intelligence, agreeableness<sup>8</sup>. Cooper (1997), Vakola, Tsaousis, and Nikolaou (2003) found that the relationship between extraversion, openness, agreeableness, conscientiousness and attitude were all found to be linked to being adoptable to change in an organization<sup>9</sup>. Agreeableness was significantly related to interpersonal teamwork behavior, collective efficacy also was found to moderate the relationship between agreeableness and interpersonal teamwork behavior. Agreeableness and interpersonal teamwork behavior relationship is stronger for those in high collective efficacy groups<sup>10</sup>. Agreeableness, and Emotional Stability are positively related to different aspects of contextual performance<sup>11</sup>. Agreeable individuals are better able to resolve conflict or facilitate its resolution when it arises (Frederick p. Morgeson, Matthew h. Reider, Michael a. Campion, 2005)<sup>12</sup>



**Is personality changeable?** Whether personality is changeable is an issue of long debate. According to Allport, one of the pioneers in research on personality, personalities are stable dispositions of an individual<sup>13</sup>. This is well known as the theory of Personality Trait Consistency. Mischel (1968) introduced what has been called Situationalism. It suggests that human behaviour is largely dependent on situations. He made two empirical arguments 1) that personality traits only have a correlation of about 0.30 with personal behaviour in any given situation and 2) the cross sectional behaviour is also only around 0.20-0.30.<sup>14</sup> The study of both personality trait theory and situationalism is called Interactionism. Rather than saying that situations determine behaviour (which ignores differences in individual reactions) or that personality determines behavior (which is misleading because of low cross situational consistency of behavior) Interactionism expresses it differently.<sup>15</sup> In some studies empirical data show that personality traits change throughout the life time. Mean level changes in personality traits have been demonstrated in young adulthood (Helson & Moane, 1987)<sup>16</sup>, midlife (Dudek & Hall 1991)<sup>17</sup> and old age (Field & Millsap 1991)<sup>18</sup>. Interactionist approach allows us to assume that the person is free because his personality is not genetically determined and that some of his personality traits may vary because of his own decisions (Jose Hernandez and Ricardo Mateo 2012)<sup>19</sup> From the above discussion it is clear that personality can be changed by environment and environment can act as the facilitator for personality development.

**Personality Development- Integrated Yoga as the facilitator:** Yoga is becoming popular in all parts of the world and recognising the importance of it the United Nations declared June 21<sup>st</sup> as World Yoga Day. However only a little research has been done on yoga and most of it is related to application of yoga to improve health of people. Very little research has been done on the application of yoga to human resource management or to improve organizational performance. To fill this gap, an effort has been made in the present study. An analysis of the term Yoga, as given by different scriptures and gurus in different contexts is as follows. Patanjali, an ancient *Yoga* sage, defines *Yoga* as *Yogab Citta vritti Nirodhab* – Yoga is a technique used to still the fluctuations of the mind to reach the central reality of the true self (Iyengar, 1966)<sup>20</sup>. Patanjali's *Yoga Sutras* outline a skillful way of conducting life that fosters moderation and harmony (Becker, 2000)<sup>21</sup> According to Yoga Vashishta (3.9.32) *Manah Prasamanopayab Yoga ityabhidhiyate* – Yoga is a skillful and subtle process to calm down the mind. Mahadevan (2008) made important conceptual analysis of application of Bhagavadgita to organizational management and how it envisages the importance of one being agreeable and cooperative for team work<sup>22</sup>. Bhagavadgita is an important scripture on Yoga. It

discusses about importance of being agreeable and cooperative for the progress of society and self. The spirit of sharing and unconditional giving (the virtue of *Yajna*) is the basis on which everything in the world sustains. The Gods bless the living beings with this virtue and in turn the living beings give back to the Gods using this principle. The concept of mutual dependence is the corner stone behind ancient Indian living *Yajna* way of living about sharing, giving back to the system and not organizing life in a pure “selfish” or “what is in it for me to enjoy” mode. These three together play the central role of ensuring sustainability in the long run. If we take such an approach to work we will indeed be free of several layers of bondage that we ourselves have inflicted on us. Such an approach to work will take us to the pinnacle of what we need to achieve in life. It essentially means that the peace of mind and happiness for which we are struggling hard will indeed be ours. According to Swamy Vivekananda, every one can become divine by psychic control (Raja Yoga), devotion (Bhakti Yoga), Knowledge of self (Jnana Yoga), Selfless action (Karma Yoga). According to him it is possible to bring perfection in a person. He suggests four ways for it viz., by Work (Karma Yoga), by Worship (Bhakti Yoga), by Philosophy (Jnana Yoga), by Psychic control (Raja Yoga). Yoga practice which aim at the integral development of the personality by a fine combination of the above four methods of yoga viz., Karma Yoga, Bhakti Yoga, Jnana Yoga and Raja Yoga is called as Integrated Yoga. Based on the above principles Swamy Vivekananda Yoga Anusandhana Samsthan (S-VYASA) University, Bengaluru, developed a Holistic and Integrated Yoga Module. It encompasses the philosophy of Raja yoga (Asanas, pranayama, dhyana etc), Karma Yoga (path of detached actions), Jnana Yoga (knowledge of self), Bhakti Yoga (trust in the supreme order). Practicing this knowledge may bring out complete transformation of one's personality on physical, mental, emotional and spiritual levels which, among other things, strengthen his performance levels. In modern times, some research has been done on application of Yoga for personality development which as such the concept of Karma Yoga emphasizes on being agreeable to results of the work, while performing one's duties with excellence. It emphasizes the importance of being agreeable to performing one's duties, Svadharma, even such a duty is menial or not rewarding (Pandey and Naidu)<sup>23</sup>. According to Srinivas (1994), a series of techniques collectively known under the general label, ‘*Yoga*,’ way of management of human resources is better than western methods. He further states that *Yoga* is a well formulated approach to planned change.<sup>24</sup> Aditi Kejriwal and Venkat R. Krishnan (2004) made a study on what the organizations can do for enhancing transformational leadership by using the Guna ( Sanskrit word for ‘personality’) framework and by reinforcing the Vedic worldview and made recommendations for: Designing



training programmes to develop Sattva and reduce Tamas, Building team-orientation and self-sacrifice for directing energies towards super ordinate goals, Base organizational policies on a competency framework built around Sattva and a Vedic orientation<sup>25</sup>. In a study by Sony Kumari (2008) it is proved that practice of yoga improves Emotional Intelligence and Emotional Competence<sup>26</sup>. Sudhir Deshpande (2009) in a randomised control trail of the effect of yoga on personalities of 226 people stated that practice of yoga develops Sattva Guna(balanced personality)<sup>27</sup>. According to Tikhshyam Ganpath et al(2012) practice of Yoga can improve Emotional Quotient in employees and can enable them to excel in execution<sup>28</sup>. Agreeableness dimension of personality was significantly positively correlated with all the five dimensions of Organisational Citizenship Behaviour.<sup>29</sup> Hasmukh Adhia(2009) conducted an important study relating to Improving Organisational Citizenship Behaviour by practice of Integrated Yoga by employees<sup>30</sup>. It is established in the study that by practice of Integrated Yoga that Emotional Intelligence can be enhanced and Job Burnout or Stress can be reduced and improve Organisational Citizenship Behaviour.

**Empirical study details:** The salient features of the method of this study are The aim of the study is to see if Agreeableness is improved by practice of Integrated Yoga; The subjects for the study were 102 employees (after considering drop outs from the study), 51 of them practicing Integrated Yoga (Intervention Group) and the remaining 51 of them not practicing Integrated Yoga(Control group); Employees-men and women, with normal health as declared by the subjects are included in the study; Those who have any previous experience of any Yoga program or presently following any type of Yoga program or taking any medication for psycho somatic problems or self occupied people or retired people are excluded from the study; The subjects for intervention group are taken from people who come voluntarily to learn and practice Integrated Yoga in Andhra Pradesh Yogadhyana Parishad a state government organization in Hyderabad. Subjects for control group were taken from employees in different organizations in Hyderabad, who volunteered to participate in the study; The period of study is four months i.e from 1<sup>st</sup> October 2014 to 31<sup>st</sup> January 2015; The subjects in the intervention group practiced Integrated Yoga for 4 months( 100 days, after deducting holidays, absents etc) for 1.5 hours a day; The daily program of intervention contains Surya Namaskaras (Sun salutations), Asanas (Body postures), Pranayama (Breath regulation exercises), Self Awareness Meditation and 10 minutes lecture on application of traditional Indian knowledge to modern work and personal lives; Every month a lecture viz., Jnana yoga class for 1 hour on application of traditional Indian knowledge is conducted

by the first author on the following topics, either thru oral lectures or audio visual presentations. 1) Yogah Karmasu Koushalam 2) Six Dimensions of Karma Yoga 3) Axioms of meaningful work 4) Lord Krishna as modern manager; The subjects in the control group were not given any intervention; In order to prove or disprove the hypothesis, data was collected for both the groups before the study i.e, on October 1<sup>st</sup> 2014, in the middle of the study i.e on December 1<sup>st</sup> 2014, at the end of the study i.e., on 31<sup>st</sup> January 2015; and The Big Five Inventory developed by Oliver P.John and Sanjaya Srivastava was used<sup>61</sup>. It contains 44 questions and 9 of them are related to agreeableness. It is a five point Likert scale and has a Cronbach Alpha reliability of .82 and validity of .92<sup>30</sup>

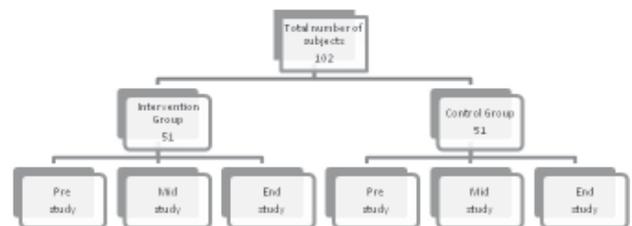


Figure 1: A schematic representation of the study plan

Table 1: Age and job experience of Intervention group and Control subjects

	Age of I. G.	Experience of I. G.	Age of C. G.	Experience of C. G.
Mean	34.784	10.627	32.21	7.2157
std dev	6.6677	6.1722	4.7744	4.265

Table 2: Sector wise distribution of subjects

Sectors	Intervention group	Control group
IT and related	21	20
Finance and related	14	13
Others	16	18

Table 1 represents age and experience of subjects. The average age of subjects in intervention group is 34.7 years with standard deviation of 6.6 where as the average age of subjects in control group is 32.21 with standard deviation of 4.77. The average experience of subjects in intervention group is 10.6 years with standard deviation of 6.17 where as the average experience of subjects in control group is 7.21 years with standard deviation of 4.2 years. The average experience of subjects of intervention group is about 3.4 years more than that of control group. Average age of subjects in intervention group is more by only 2.5 years than that of control group. Table 1 shows that the background of subjects in terms of age and experience in control group and intervention group is similar.

Table 2 represents the industries in which the subjects are employed. For the sake of study, the industries are divided as 1) Information Technology and related services like BPO, electronics 2) Finance and related services include banking, insurance, mutual funds, accounting services 3) those who



do not fall under the above two are categorized as ‘others’. The table shows the similarity in distribution of the subjects in both control group and intervention group.

**Table 3: Agreeableness in Intervention and Control group during the study**

	Intervention Group			Control Group		
	Pre	Post1	Post2	Pre	Post1	Post2
Mean	28.22	29.7	31.1	28.51	28.2	28.47
SD	4.51	4.86	5.50	4.21	5.23	5.42
Change		4.44	11.1		0.74	0.01

Table 3 represents the average changes in the agreeableness among the subjects in intervention group and control group. Since the total number of items in agreeableness are nine and scales are five, the maximum score is 45. The pre study i.e., base line data shows that score of agreeableness is 28.22 with standard deviation of 4.51 in subjects of intervention group whereas the same for control group is 28.51 and 4.21 respectively which show that the subjects have similar traits before the study. The post 1 study i.e., data in the middle of the study shows that there is 4.4% increase in agreeableness in intervention group ,but only 0.74% increase in agreeableness in control group. Similarly post 2 study i.e., data at the end of the study compared to beginning of study shows there is 11.1% increase in agreeableness in intervention group where as it is only 0.01% in control group.

Since the design of the study requires repetitive studies of the same subjects, Repetitive Measures ANOVA i.e. RMANOVA test was used to analyse the data which are collected before the study(pre study), in the middle of the study(post1 study) and at the end of the study(post2 study) both for intervention group and control group. The results are shown in the table 4.

**Table 4: Agreeableness between groups**

Time factor	Group	Significance (p value)
Pre	Y1 vs c1	.315
Post 1	Y2 vs c2	.012**
Post 2	Y3 vs c3	.001**

Table 4 shows that the difference in agreeableness among subjects in intervention group and control group before the study i.e, baseline data is not significant (p>.05). It shows that the score of agreeableness is relatively same in the subjects of both groups before study. Post 1 data i.e data in the middle of the study show that there is significant increase in the agreeableness in intervention group compared to control group (p < .001).Post 2 study i.e, data at the end of the study shows that there is significant increase in the agreeableness in intervention group compared to control group (p < .001).

**Table 5: Agreeableness with in groups**

Group	Time factor	Significance (p value)
Yoga	Pre vs post 1	.000**
	Pre vs post 2	.000**
	Post 1 vs post 2	.000**
Control	Pre vs post 1	1.000
	Pre vs post 2	1.000
	Post 1 vs post 2	1.000

Table 5 shows changes in agreeableness with in Intervention group and control group during the study. It shows a continuous increase in agreeableness from beginning to middle(p<.001), middle to end(p<.001) and beginning to end (p<.001) in subjects of intervention group . There is no significant increase in agreeableness from beginning to middle(p>0.05), middle to end(p>.05) and beginning to end (p>.05) in subjects of control group

**Notes:\*\*** indicates that the values are significant; Pre,post1,post2 means the Study before intervention (baseline data), study in the middle of intervention, study at the end of intervention respectively; Y1,Y2,Y3 means yoga group(intervention group) at the time of before study, middle of study, after study; and C1,C2,C3 means control group at the time of before study, middle of study, after study

**Limitations of the study and recommendations:**The subjects are from different organizations and sectors. The changes in environment of their respective organizations and sectors during the study period may affect their responses. For further research, It is recommended to have subjects from the same organization.The control group is not given any intervention, which may affect their interest to give response to the questionnaires and affect it’s accuracy. Considering the ethical issues it is difficult for an outsider to insist on interest of subjects of control group while giving responses. For further research, it is recommended to give some non yoga intervention to control group.It is recommended for further research that if the intervention for both groups is given with in the organization, the same physical and office environment for all subjects in both groups can ensure better accuracy, unbiased responses.

**Conclusions**

The following conclusions can be drawn from the study - Personality traits of employee especially agreeableness has an impact on the performance of employee; Personality is changeable by suitable environment and training; Practice of Integrated Yoga brings a positive transformation in the personality traits especially Agreeableness and the implication of the above points is that practice of Integrated Yoga can improve the performance of employee.

**References**

M.R.Barrick, The Big Five Personality Dimensions and Job Performance:Ameta analysis,” Personnel Psychology, Spring 1991, pp 1-26  
 Stephen P.Robbins, Timothy A.Judge, Neharika Vohra, Organisational Behavior, Pearson Education: Prentice hall, 2011), p.128



- Stephen P. Robbins, Timothy A. Judge, Neharika Vohra, Organisational Behavior, Pearson Education: Prentice Hall, 2011), p.131
- Timothy A. Judge, Daniel Heller and Michael K. Mount, Five-Factor Model of Personality and Job Satisfaction: A Meta-Analysis Journal of Applied Psychology 2002, Vol. 87, No. 3,
- Colbert, Mount, Harter, Witt, & Barrick, Interactive Effects of Personality and Perceptions of the Work Situation on Workplace Deviance Journal of Applied Psychology, Vol. 89, No. 4
- L.A. Witt, Lisa A. Burke, Murray R. Barrick, Michael K. Mount, Interactive Effects of conscientiousness and Agreeableness on Job performance, Journal of Applied Psychology, 2002, Vol 87, No 1
- Russell P. Guay, In-Sue Oh, Daejeong Choi, Marie S. Mitchell, Michael K. Mount and Kanghyun Shin, The Interactive Effect of Conscientiousness and Agreeableness on Job Performance Dimensions in South Korea, International Journal of Selection and Assessment Volume 21 Number 2 June 2013
- Irarda, Frindley, Emotional Intelligence and Propensity to be a team player, E-Journal of Applied Psychology :Emotional Intelligence, 2 (2), 19 -29 (2006)
- Cooper R.K (1997), Applying Emotional Intelligence in Workplace, Training and Development, 51, 31-38
- Kevin Tasa, Sears and H. Schat, Personality and teamwork behavior in context: The cross-level moderating role of collective efficacy, Journal of Organizational Behavior 32, 65–85 (2011), Published online 2 February 2010 in Wiley Online Library, DOI: 10.1002/job.680
- Hogan, J. & Holland, B. 2003, "Using theory to evaluate personality and job performance relations: A socio-analytic perspective", Journal of Applied Psychology, vol. 88, pp.100-112.
- Frederick, Matthew, Michael, selecting individuals in team settings: the importance of social skills, personality characteristics, and teamwork knowledge, Personnel psychology 2005, 58, 583–611
- G.W. Allport, Personality: A psychological Interpretation (New York: Holt, Rinehart & Winston, 1937)
- Mischel, W. 1968. Personality and assessment. New York: Wiley
- Cloninger, S.C. 1996. Theories of Personality: Understanding Persons. Eaglewood Cliffs, NJ: Prentice Hall
- Helsen, R. and Moane, G. 1987. 'Personality change in women from college to midlife'. Journal of Personality and Social Psychology, 53:176-186
- Dudek, S.Z and Hall, W.B 1991. 'Personality consistency: eminent architects 25 years later'. Creativity Research Journal, 4:3, 213-231
- Field, D. and Millsap, R.E. 1991. 'Personality in Advanced Old Age: Continuity or Change?' Journals of Gerontology, 46:6, 299-308
- Jose Hernandez and Ricardo Mateo 'Indications of virtues in Conscientiousness and its practice through continuous improvement', Business Ethics: A European review, Vol 21, number 2, April 2012
- Iyengar B.K. Light on yoga. New York: Schocken Books; 1966.
- Becker T.E. Foci and bases of commitment: Are they distinctions worth making! Acad Manage J 1992;35:232-44.
- Mahadevan, B. (2008). "Management Lessons from the Bhagavad Gita", *Vedanta Kesari*, December 2008, pp 558-561.
- Pande N, Naidu R.K. Anasakti and health: A study of non-attachment. Psychol Dev Soc J 1992;4:89-104.
- Srinivas K.M. Organization development: Maya moksha. In: Kanunga R.N, Manuel M, editors. Work Motivation Models for Developing Country. New Delhi: Sage Publications; 1994.
- Aditi Kejriwal and Venkat R Krishnan, Impact of *Vedic* Worldview and *Gunas* on Transformational Leadership, *Vikalpa*, Volume 29, No 1, January - March 2004
- Sony Kumari, Alex Hankey, H.R. Nagendra, Effect Of Smet On Emotional Dynamics Of Managers, *Voice Of Research*, vol. 2 issue 1, June 2013, issn no. 2277-7733
- Sudheer Deshpande et al., A Randomized Control Trial Of The Effect Of Yoga On *Gunas* (Personality) And Health In Normal Healthy Volunteers, *International Journal of Yoga*, January 06, 2009
- Tikhe Sham Ganpat et al., Yoga Therapy for developing Emotional Intelligence in mid-life managers, *Journal of Midlife Health*, Vol 2, issue 1, Jan-Jun 2011, issn 0976-7800
- Akhilendra K. et al., Does Personality Predict Organisational Citizenship Behaviour among Managerial Personnel, *Journal of the Indian Academy of Applied Psychology* July 2009, Vol. 35, No. 2, 291-298.
- Hasmukh Adhia, H.R. Nagendra, B. Mahadevan, Impact Of Yoga Way Of Life On Organizational Performance, *International Journal of Yoga*, DOI: 10.4103/0973-6131.72631
- John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (Vol. 2, pp. 102–138). New York: Guilford Press.



## WILD LIFE AS THE GROWING TOURISM SECTOR IN THE COUNTRY – A COMPARATIVE STUDY ON THE YOUTHS OF TWO DIFFERENT GEOGRAPHICAL AREAS

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### Abstract

*Tourism Industry in India is one of the most lucrative industries in the country and contributes substantially to foreign exchange earned. In the past couple of decades with good supported promotion this industry has developed as an important means of employment generation. In fact during 2010, seven million tourists visited India and spent US \$ 13.9 billion, thus making India one of the major global tourist destinations. Augmented tourism in India has created jobs in a variety of associated sectors, both directly and indirectly. Tourism is one of the success stories of the 20th century and is concerned more with the satisfaction of individual rather than with the scientific and technological achievements. Almost 20 million people are now working in India's Tourism Industry. India's tourism is thriving, owing to a huge flow in both business and leisure travel by foreign and domestic tourists and is expected to generate approximately US\$ 275.5 billion by 2018. There has been an increase in environmental awareness and pressure of urbanization. Now, urban masses look for new get away locations, where they can get involved in active outdoor recreation. Thus, national parks and sanctuaries have emerged as the favourite destinations. The visitors to these national parks are usually the youth in 18 to 30 years of age group. They are driven by the motivation to do something "adventurous". This study was conducted in two cities with different set of respondents; since they are in the close proximity of the National Parks and Wild Life Sanctuaries. The prime objective of study has been to understand the reason of preference of Wild Life Tourism and the expectations of the tourists about various aspects during their course of travel and stay. The basic procedure adapted was tourist interviews through convenient sampling. The total respondents were about 326 between the age group of 20 years to 45 years. This included males and females SEC A1, A2, B1 and B2. It is assumed that the people of these SEC have the buying capacity as an influence of and reaction to word of mouth and advertisements. Both quantitative and qualitative data was collected for analysis.*

**Keywords:** *Tourism, Wild Life Tourism, Tourists*

From time immemorable India has been the most exciting adventurous and most sorted after place of tourism. India's Wild Life Tourism, Aadhayatmic (Spiritual) Tourism, Medical Tourism, age long Ayurvedic Tourism, Historical Tourism or Religious tourism all have been reasons of anxiety and belief for people from across the globe. India has always been known as the land of Tigers and Snakes and Snake charmers. The wild life of the country has been a reason of happiness and delight for the people of all classes and ages. There are varied reasons why tourists prefer the Indian Parks and sanctuaries. The famous Kipling's "Moughli" was a reality of the park of Pench. The Great Bengal Tiger brings a big smile on the faces of the tourists and the White Tigers are still a very exciting experience. Further whether it is the Great Lion at Gir or Rhinosouraus of Kaziranga all are a major reason of attraction for the tourists from across the globe. Tourism is been promoted through various programmes "Hindustan ka Dil" for Madhya Pradesh; "Kuch din to Gujariye Gujrat mein" for Gujrat; North east Tourism and so on by the department of tourism. Since India is blessed with the most suitable weather conditions round the year and most beautiful and exotic flora and fauna, it attracts tourists for its wild life tourism. Apart from this there are a few other things also which the tourists enjoy. This includes the exotic traditional Indian food being served in the vicinity of the wild life parks and sanctuaries; the traditional ayurvedic treatment for relaxation and rejuvenation of the tourists; and the huge range of handicraft and other jungle related products. These have grown as a big industry in and around the parks and sanctuaries generating a huge employment. The growth in the wild life tourism can be

supported by the fact that the footfall of the tourists have grown substantially over the last decade especially in the states of Madhya Pradesh, Gujrat, Rajasthan, Himachal Pradesh etc. along with the other states. Although tourists visit is regular but there are some special times during the year when the visits higher and this varies as per the geographical locations. Wild Life tourism is a sector which is majorly availed by people of a particular class and thus this is a fast growing industry also contributing to generating substantial amount of foreign exchange. Moreover statistics have stated that the year on year on the last decade the number of tourists both Indian and foreign have gone up by more than 200%. The money spent on tourism has also gone up by almost 300%, resulting in receipt of good amount of foreign exchange. Even the Indian tourists are spending a lot which is directly or indirectly helping the associated industries flourish. An important point to be noted is that off late a very big number of young adults are indulging into wild life tourism. This is mainly because of getting a job at an early age thanks to the BPOs and other MNC's. Youth today have substantial disposable income. In this current hectic and mechanized working life even the people of young age wish to get a relaxing holiday. But since they don't get long leaves, they prefer destinations which are near, comfortable, different, relaxing, rejuvenating and most importantly natural. They wish to breathe in a place which is pollution free and healthy and nothing can be better than a wild life park or sanctuary which fulfill all the needs and is different from the routine holidays. It is also noticed that even the foreign tourist ensure spending a substantial time in Indian wild life parks. Reason stated



have been the same as earlier discussed along with one more thing that they get to see the rare wild life which is not otherwise possible.

Reading material from the earlier works done on the relevant subject supported the study. This included the works done by the references mentioned; research study done by Dr.Barvekar S.G. (2009) and Dr.Mishra Y.K.(2008) for their doctorate on this subject and other study material from the University of Jabalpur, University of Amarkantak and University of Delhi. Yadav M.L. and Tiwari S.K. (2009): "A study on developing tourism amongst the working youths", mentions about the changes seen in the decision of the youths about their tourist destination. It also analyses about the choices and preferences of the respondents from the different socio economic classes. Giri A.K. and Nambiar Ravindran (2008): "A study on Wild Life Tourism with special reference to generating employment and business opportunities". The paper discusses about the potential jobs related to the tourism in India and the increase in the per capita income of the lower masses. Jain R.K. (2010): "A critical study on safe tourism in India – focusing on female tourists". The research paper categorically talks about the growth and changes in the jobs availability and other aspects in the various parts of the country specifically with reference to tourism industry. They also discuss about the security hazards and the problems created due to lack of awareness and the indifferent attitude people have about being cautious while travel. Ahmed Shakeel and Verma N.K. (2010): The authors detail about the reasons and characteristics leading to the growth of this sector. They also focus on the consistent growth the sector has been showing over the decade and the growing need of improving the artisans skills related to handicrafts. Pratabhan S.S. and Gupta J.K. (2009): The authors have worked majorly on the security aspects related to tourists. They have supported with lots of examples and data the fact that the foreign tourists safety and security in the country is of prime importance. They also discuss about the pattern and trend of their visit time, duration of stay, places of interest and purchase pattern. Development and Growth of Indian Tourism within the Country and Incoming Foreign Tourist (2013-14) – Report of Indian Tourism Development Corporation (ITDC)

**Objectives of Study:** Although tourism in India is one of the fastest growing industries, precisely Wild Life Tourism is one part of it which is still comparatively expensive and is enjoyed only by a specific lot of people. The basic purpose of study has been to understand the reason why youth prefer Wild Life Tourism; to study the expectations of the tourists from Parks and Sanctuaries during their visits and to study the expectations of the tourists on aspects like travel and hospitality during their visits to these places.

**Research Design:** The study was conducted on the youth in two cities with different set of respondents. This included Jabalpur, M.P., because the city is in the close proximity of

the country's first National Park Kanha, Bandhavgarh and Pench; and Gurgaon, Haryana, which has Jim Corbett at a weekend traveling distance. The basic procedure consisted of tourist interviews through convenient sampling. Simple percentage method has been used for analysis of the received data. The total respondents were about 326 between the age group of 20 years to 45 years. This included males and females SEC A1, A2, B1 and B2. Respondents in the form of households have been considered as one unit. It is assumed that the people of these SEC have the buying capacity and good disposable income as an influence of and reaction to word of mouth and advertisements. Both quantitative and qualitative data was collected for analysis.

**Understanding the Study:** In tourism, the product from a destination view point is a combination of various elements or components, some of which are tangible and some are intangible. The only open path for the organization in this case would be to let somebody know itself about the consumer needs, expectations, and attitudes of mind, likes and dislikes in order to put together and constantly build up the tourism products.

**General Profile of the Respondents**

Gender	Male	Female			
	54%	46%			
Age group	20-25	26 – 30	31 - 35	36 – 40	41 - 45
	15%	22%	34%	20%	9%
Occupation	Govt. Service	Private Orgns.	Public	Business	Students
	13%	42%	11%	26%	8%
Group / Family size	Single	2	3	4	5
	36%	37%	12%	8%	7%
House hold income	< 5 lacs	5 - 8 lacs	8 - 10 lacs	10 - 15 lacs	> 15 lacs
	83	77	107	46	13
Tourism Frequency	Monthly	Quarterly	Half Yearly	Yearly	
	22%	27%	19%	32%	

There has been an increase in environmental awareness and pressure of urbanization. Now, urban masses look for new get away locations, where they can get involved in active outdoor recreation. Thus, national parks and sanctuaries have emerged as the favourite destinations. The Government of India initiated the 'new ecotourism and wild life tourism policy'. In order to generate more revenue, the new policy deviates from its previous principle of 'for conservation only'. The policy, now, aims at increasing tourism by creating more services and facilities for the visitors to the protected areas. Thus, there has been a constant increase in the number of visitors during the 'season' particularly to the parks like Kanha, Bandhavgarh, Corbett, Ranthambore, Nagarhole, Kaziranga, etc., which have close proximity to metropolitan and / or big towns. The visitors to these national parks are usually the youth in 23 to 35 years of age group. They are driven by the motivation to do something "adventurous". During the course of study, the primary objective was understanding reasons for youth's preference to wild life tourism. The data gathered through discussions pointed towards a few very different and unexpected facts.

The first and the most highlighted has been that the youth today apart from being aware about fast changing permutation of the natural surroundings is moving back towards a peaceful and slow paced life. This is for the time they get out of their hectic working schedules. The adapted westernized culture is being replaced by the original Indian culture. Due to the speedy and exhaustive MNC's work culture the youth look forward to a peaceful break whenever they can afford time out. In the past decade due to better commuting options and also much improved hospitality it has become convenient and comfortable to visit places. The plastic and concrete life has changed the view point of the youth, who now prefer places like wild life parks and sanctuaries, meditation centers or natural resorts, for their weekends and holidays. They call these places detoxifying centers. The respondents of this research preferred wild life tourism for a few basic reasons as such Wild life parks and sanctuaries now-a-days have developed in such a way that, they do not just provide a peaceful place to the visitors but also give them information and experiences of various ancient skills and culture; Wild life is very fast getting extinct and if they do not see it now they would probably will never be able to see it ever; Youth at a weekend travelling distance travel to these places with a motive to spend their personal small time in the natural surroundings, which is out of question in their small apartments and flats; they also look forward to these holidays as time spent on getting to see and know something they never knew. For eg: in most of the wild life park resorts they provide with authentic regional food, regional cultural programmes, information on the place specific flora and fauna; and the respondents also mentioned about wild life areas where they could see and feel the wild life. The summary of the feedback mentions that, the youth preferred the wild life tourism for the basic reason that it takes them back to nature and also provides an opportunity to rejuvenate and experience life which is full of mental peace and physical relaxation. On categorizing the respondents it is seen that, of the total respondents 34% where people – both males and females, in the age group of 31 yrs to 35 yrs are people who are fairly stable in their jobs with very high working hours and thus need a natural relaxing break to rejuvenate. The respondents of this age mentioned a few noticeable points. Firstly they are people with substantial disposable income. Another important point is that they do not yet have kids or have kids who are small and thus educational responsibility is less leading to comfortable mobility.

The further information reveals that, the respondents on having visited these places are impressed by what they receive. When they plan to visit such place they have some images regarding the place. They wish to see a place neat, clean, serene, natural and most importantly GREEN AND FULL OF FLORA, FAUNA AND WILD LIFE. There are parks and sanctuaries where these expectations are fulfilled very well since the management supports with tourist visits either through vehicles or on elephants or some other way for eg:

in Bandhavgarh the wish to see the great Indian Tiger is fulfilled most of the times since the population of the animal is sufficient and the visits are planned in such a way that they can be seen from a distance of two feet without harming or irritating them. There are parks and sanctuaries where good quality plants, natural products, herbal products and local handicrafts are available at very reasonable and appealing prices. The places of natural surrounding are perceived to be full of insects and reptiles like snakes, scorpion etc. People prefer visiting parks and sanctuaries which are comfortable and convenient to travel and have hotels, rest houses and resorts which are safe and comfortable for their stay. Kanha and Bandhavgarh in Madhya Pradesh and Jim Corbett in Rajasthan are both places where there are hotels and resorts of all price ranges. Tourists also enjoy tree houses and bamboo houses which are also available in the close vicinity of various parks and sanctuaries. There are also good places to enjoy local food. These two parks have ensured good internal visit plans and thus the tourist get a very good opportunity to see and feel the natural and fresh flora and fauna. In and around these parks and sanctuaries there is a fair market of natural products like Honey, Scrubber, Latex, Quality Seeds, herbal plants and herbal products etc. Market even caters with the locally manufactured goods like wood and bamboo products, potteries, pickles, masalas etc. Even the local transport in these areas is in abundance which helps the tourists to commute safely and at very reasonable prices. Tourists as per their interests chose from any of the options of traveling for eg: jeeps, buses, tongas, carts, cabs etc.

**Limitations:** The biggest limitation of the study has been that, only two places could be covered which was purely due to travelling constraint. But the author proposes to continue the study in the other parks and sanctuaries also.

**Findings:** The youth prefer WLT primarily because of the thrill and adventure related to the fact of being close to an atmosphere which is not present in the ambience of their existence. They take WLT as stress buster, because of the natural and different setup, which is natural and soft toned as against the hustle of their routine life. Major tourism in the country including WLT happens in the month of November and December followed by August and September. This is probably because of the working seasons applicable in the major organizations. March, April and May are the low season probably because of the weather, exams, and year ending for all the working lot. The facilities in and around the parks have developed to the level of tourist convenience and requirements. A great travel and stay convenience has been built up in and around these places by the government and the private businesses. Not just tourism money is being earned through this, but a lot of money is being diverted to travel and hospitality industry. Small scale industries and artisans are also gaining a better livelihood. Tourism in the country is helping increase the economy of the common man related directly or indirectly to this sector.



**Conclusion:** This study has led to an insight in to the preference reasons, travelling patterns, aspirations and wishes of the people regarding their tourism requirements and plans. The study has been in the vicinity of just two national parks and thus the details found have been focused majorly on the respondents specifically from a particular life style and geographical area; whereas the study might lead to different and / or added findings and details if conducted in other park areas. This is because the life style and work culture both differ with the change in the class of town and the SEC residing there. The author of this paper has conducted the entire study and for any further data or details, the readers can revert to the author. It is expected that the study would be of utility to many more researchers.

**References**

Ahmed Shakeel and Verma N.K. (2010) *Growth of Indian tourism and its effect on the Indian handicraft industry—Management Peer.*  
 Bhatia A K (2007) *Tourism Development Principles and practices,* New Delhi: Sterling Publishers Private Limited  
 Batra G S, (2010) *Tourism in the Twenty First Century,* New Delhi: Anmol Publications Private Limited  
 Burkart A.J. and Medlik, S. (2009) *An Outline of Tourism,* London: Heinemann Limited.  
 Development and Growth of Indian Tourism within the Country and Incoming Foreign Tourist (2009-10) –

*Report of Indian Tourism Development Corporation (ITDC)*  
 Giri A.K. and Nambiar Ravindran (2008): “Growing tourism industry in India with special reference to the increase in job opportunities”, *The Management Review*, 39-356-189.  
 Jain R.K. (2010) – “An analytical study of increasing tourism in the different parts of the country”– *Pratigya Journal of Economics and Social Sciences.*  
 Pratabhan S.R.L. and Gupta J.K. (2009) – “A study on the increase in foreign tourists in India and the Trends, Patterns and Security Coverage – *Economic Review Journal.*  
 Pran Nath Seth (2007) *Successful Tourism Management, Vol II, Tourism Practices,* New Delhi: Sterling Publishers Private Limited  
 Sunil Gupta & Bansal S P. (2009). *Tourism towards Twenty First Century* New Delhi: Deep & Deep Publications Private Limited  
 Yadav M.L. and Tiwari S.K. (2009):”Changing trends of tourism in India and its impact of youths tourism decisions”, *Apeeksha - Journal of Management and Economics* 43,2.  
[www.articlesnatch.com/Article/Travel—Tourism-In-India/1616472](http://www.articlesnatch.com/Article/Travel—Tourism-In-India/1616472)  
[www.jmi.nic.in/Research/ab2003\\_commerce\\_sisht.htm](http://www.jmi.nic.in/Research/ab2003_commerce_sisht.htm)  
<http://www.indiatourism.org/>  
<http://www.tourinitiative.org/>  
<http://www.elsevier.com/>

**Table 1: Footfall in the Wild Life Parks and Sanctuaries - State wise**

	2007	2008	2009	2010	2011	2012	2013	2014
Kerala	1.71	1.61	1.43	1.29	1.16	1.04	1.27	2.83
Goa	0.61	0.53	0.48	0.44	0.40	0.36	0.32	0.29
Delhi	0.54	0.56	0.51	0.47	0.44	0.40	0.37	0.34
Rajasthan	4.66	5.09	5.35	5.70	6.06	6.42	6.76	9.18
Tamil Nadu	12.28	11.71	13.30	13.14	12.95	12.71	12.43	14.78
Andhra Pradesh	15.97	15.35	17.46	16.04	16.55	15.98	13.29	13.56
Gujarat	2.25	2.56	2.72	2.95	3.18	3.42	3.67	3.91
Himachal Pradesh	1.84	1.88	1.75	1.65	1.56	1.46	1.37	4.89
J & K	2.00	1.96	1.74	1.59	1.44	1.30	1.18	1.05
Uttar Pradesh	15.66	15.87	14.05	15.75	15.44	16.13	16.83	17.53
Uttarakhand	3.40	3.85	3.80	3.82	3.83	3.82	3.80	3.77
Orissa	1.20	1.26	1.19	1.16	1.12	1.08	1.04	1.00
Karnataka	7.90	8.26	8.25	8.37	8.46	8.52	8.55	8.54
West Bengal	3.60	3.68	3.60	3.59	3.57	3.54	3.49	3.42
Madhya Pradesh	16.50	17.92	17.52	18.16	18.96	19.93	20.12	27.57
Maharashtra	3.89	3.88	3.85	3.87	3.88	3.87	3.85	3.82

Figs in percentages, Source: Annual reports on Wild Life Survey, Pench Wild Life Park.

**Table 2: Tourism in the Wild Life Parks and Sanctuaries - Month wise**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	6.05	5.44	4.81	4.18	3.57	3.00	2.49	2.04	2.08	2.12	2.13
February	7.72	6.56	5.48	4.50	3.63	2.89	2.26	1.75	1.32	1.10	0.99
March	7.44	6.42	5.46	4.56	3.74	3.02	2.41	1.89	1.42	1.07	0.79
April	6.08	5.43	4.76	4.10	3.48	2.90	2.39	1.94	1.51	1.17	0.89
May	7.48	6.73	5.95	5.17	4.42	3.72	3.08	2.52	2.05	1.41	1.39
June	8.03	7.73	7.32	6.81	6.23	5.62	4.99	4.37	4.36	4.33	4.25
July	6.91	6.95	6.87	6.68	6.38	6.00	5.56	5.09	5.26	5.42	5.53
August	8.45	9.15	9.75	10.21	10.51	10.65	10.64	10.48	10.84	11.17	11.38
September	9.85	10.67	11.37	11.90	12.26	12.42	12.41	12.22	11.74	11.24	10.64
October	10.26	8.87	7.53	6.29	5.16	4.17	3.32	2.61	2.70	2.78	2.83
November	11.50	13.60	15.81	18.07	20.31	22.47	24.49	26.34	26.27	26.10	25.66
December	10.22	12.44	14.90	17.54	20.30	23.13	25.97	28.76	30.45	32.11	33.50

Figs in percentages, Source: Annual reports on Wild Life Survey, Pench Wild Life Park.



## CORPORATE SOCIAL RESPONSIBILITY: A CASE STUDY OF GUJARAT MINERAL DEVELOPMENT CORPORATION (G.M.D.C)

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### Abstract

*As per The Companies Act 2013, compulsory spending on socially responsible activities is now a matter of debate and discussion among the industrialists, social activists, Government, managers, researchers and various institutions. In today's scenario social responsibility is not merely a concept of charity or donation but organizations are trying to go beyond this concept and executing the whole CSR project as a need based phenomena. Awareness of this term of CSR is actually very less among the common people. Good number of government organizations and private organizations are serving to the society under this head. Involvement of all stake holders is essential part in every CSR activity. More or less every stake holder in every organization is associated with responsible activities. It is a humble duty of the owner of the company to nurture its organization and employees on the basis of values and to create a culture where employees engage themselves with the organization positively and have respect for the same. Top level management of the company should channelize CSR activities in co ordination with the employees of the department and try to make them work in socially responsible way.*

**Keywords:** Corporate Social Responsibility, stake holders, social development, society, industry and organizations

**Abbreviations:** CSR- Corporate Social Responsibility, GMDC-Gujarat Mineral Development Corporation, ONGC-Oil and Natural Gas Corporation, NTPC- National Thermal Power Corporation, PGCIL- Power Grid Corporation of India, IOC- Indian Oil Corporation, Bharat Heavy Electrical Limited, GIDC- Gujarat Industrial Development Corporation, GNFC- Gujarat Narmada Valley Fertilizer Corporation, GPCB- Gujarat Pollution Control Board, MNC- Multi National Companies ,CSO- Civil Society Organization ,ISO- International Organization for Standardization ,GVT- Gram Vikas Trust.

The relationship of society and business is interdependent in nature. Business /Industry provides its goods to the society but at the same time they are polluting the environment due to hazardous waste and processes. Between the great good and terrible harm that business does, today's organizations are strongly concerned about the proper role of the organization in the development of the society. Industries influenced by social, political and environmental factors. Business gradually develops a sense of responsibility. In early 1950s Industrialists observed what society needed and started to operate accordingly. A key tenet of Corporate Social Responsibility (CSR) is the unspoken contract between Business and society within which it operates. Some kind of destructive effects always exist wherever production process is taking place. It may damage the environment, health of the employees working inside, land where the company actually perform its operations, water (river, pond), air etc. so it seems to be an ethical responsibility of the industry to give back a positive way of living life happily to the Society and what it takes away in the form of a positive way of life. Early sixties was the era of change in the every front of the society. Industrialists realized their role in the society. The first sincere effort towards responsibility of business started during this period.

**Concept and Meaning of CSR:** The "social Responsibility" among businesses is not a new concept. Ancient Chinese, Egyptian and Sumerian writings often delineated rules for

commerce to facilitate trade and ensure that the wider public's interests were considered. Ever since, public concern about the interaction between business and society has grown in proportion to the growth of corporate activity. According to the World Bank, (2004) "CSR is the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at a large to improve their quality of life in ways that are both good for business and good for international development." "Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large" (Mallen Baker, 2004) There are many different terms for Corporate Social Responsibility -CSR practices in the world. They include: *Corporate citizenship, Corporate conscience, Social performance, Business responsibility, Community Relations, Corporate stewardship, Strategic responsibility, Corporate community engagement, Sustainable responsible business* etc. Terms for CSR may be vary from country to country, sector to sector, industry to industry but the purpose behind it is always remains the same. India is the first country to introduce CSR as a legal compliance in the world. Some Industrialists are not in favor of making CSR mandatory and some are happy to stream line their activities which they are already doing since many years. Though the term "Corporate" seems to be very polished and sophisticated but the person behind this corporate term, the owner of the company has always been an idol for the all stake holders of that organization for nurturing the culture of the organization. It is very much important for every organization to have value based working environment. No industry can survive without keeping the whole mankind in the centre of a business. Nowadays organizations are focusing on need based activities for the development of society .Government is also very much careful and conscious for maintaining harmony with beneficiaries and industries.



**Legislation and CSR:** Under “The Companies Act 1956” there was no provision regarding corporate social responsibility. The movement for CSR was started in August 3, 2009. After a month it was referred to parliamentary standing committee on finance. The committee submitted its report to the Government. Loksabha passed the Bill on 18<sup>th</sup> December 2012. At last all efforts transformed in to reality and The Act was passed in 28<sup>th</sup> August 2013. Under the clause no 135 chapter IX of The Companies Act 2013, every company having net worth of rupees five hundred cores or more or turnover of rupees one thousand cores or more or net profit of five cores or more during any financial year shall constitute a Corporate Social Responsibility Committee of the Board. Consisting of three or more Directors out of which at least one Director shall be an independent Director. If company fails to spend such amount the Board shall in its report made under clause (O) of sub section (3) of Section 134 specify the reason for not spending specific amount for CSR activities.

The Companies Bill proposes that profit making companies that meet certain conditions will be required to set aside at list 2% (two percentages) of the net profit on CSR activities.

**About Gujarat Mineral Development Corporation:** Gujarat Mineral Development Corporation is a Government undertaking organization and having reputed position in mining industry. Now a days two views regarding compulsory contribution for CSR activities have been observed, one is putting CSR as a provision under the law is not logical because many industries which are performing such activities since a long time in their respective fields without any compulsion. It should be done heartily and not force fully. And another view is compulsory contribution of 2% under the head of CSR section 135 in The Companies Act 2013, was really a good decision because those who are spending since their existence in the market is good but what about those industries which are not exercising on their social obligations now they are bound to perform activities for the betterment of the society. Gujarat Mineral Development Corporation is one of the organization those who are providing their best services to the organization since its existence. GMDC was incorporated in the year 1963 to develop major mineral resources in the state and commenced with a small silica sand quarrying plant near Thanghadh to crush and screen the silica required for glass manufacturing. And within next few years it grew more and more with various plants in the various places of Gujarat. Bauxite plant in Kutch in the year 1964 than in 1971 fluorspar ore and calcium fluoride, in 1976 Lignite mine plant at Panendhro and so on many other plants were established Gujarat Mineral Development Corporation has been associated with CSR activities since a very long time. Huge amount of money has been spent by GMDC every year for CSR projects like Health, Education, Water conservation, irrigation, Drinking water and Agriculture.

**Main objectives under CSR policy in GMDC include to improve the physical quality of life significantly;**

to create opportunities for livelihood; to improve the quality and facility of education; to create health awareness, health facilities and to improve sanitation facilities; and to develop a communication plan to make all interested and potentially interested parties aware of the strategic plan for Corporate Social Responsibility, so as to contribute to its implementation.

**GMDC and Social welfare:** As a matter of responsibility, this company has been providing facilities such as education, health, water supply, sanitation, rural infrastructure, livelihood for the betterment and upliftment of rural people in some of the remotest regions of the state. Such initiatives have created a favorable image of this company in the areas where it operates and have also served as harbinger of development. Inclusive development has been a corporate philosophy and now a necessity for this organization. From the beginning, GMDC has the concept of cultivating a culture of building good relations with the community where it operates mining operations. The Corporate Social Responsibilities (CSR) initiated by GMDC is marked by its existence with formulation and in building with the objectives of the Company. For this noble purpose, a public charitable trust namely GMDC Gramya Vikas Trust (GVT) was formed by GMDC as early as in 1990 with the aim of promoting integrated and holistic developmental activities in and around the project areas. GVT is managed by Board of Trustees consisting of GMDC officials’ viz. Managing Director (IAS), Chief General Manager, Company Secretary, General Manager-CSR, and General Manager-HR. The Expense of GVT is funded by GMDC. GVT has employed a team of MSW qualified social mobilizer to implement its objectives. Apart from GVT initiatives, GMDC contributes towards cause of state for developmental activities like Roads, Environment and Contributions for the purpose of Health Care, Social Welfare and Chief Minister’s relief fund in case of disasters like earthquake, cyclone, Flood etc. with men and machineries too. Corporate office of the GMDC has introduced “RAVISHALA” project which works for children of slum dwelling areas around GMDC premises. Employees of the GMDC took this initiative in the year 2011 and successfully perusing it till date. they have provide them education with fun loving activities like games and also trips to the fun fair and Hotel Patang to had a happiest moments of their life ever. Children also enjoyed Diwali celebration with crackers and sweets at GMDC.

**CSR practices by GMDC:** GMDC acknowledges the contribution of all its stakeholders-those residing near project sites, investors, consumers, industry etc. Providing rural infrastructure in the field of water, sanitation, education, health, employment and livelihood, micro irrigation and continuous fuel supply to small and medium scale enterprises and generous dividend payout policy has been well received and made significant impact on people’s lives. GMDC is conscious towards need to have an inclusive approach for development. GMDC operates its projects in some of the remotest and arid regions of the State. In order to bring



these rural regions into mainstream of development concentrated efforts are made to assess the developmental needs at the grass root level and then provide the much needed rural infrastructure. The sectors catered are :

**Health:** GMDC facilitates well equipped medical vans with qualified doctors for the villagers in rural areas of Gujarat, including 49 villages surrounding panandhro lignite mines, 27 villages in ghadhsisa bauxite mines, 7 villages in bhavnagar lignite mines, 3 villages in rajparadi lignite mines. Providing hospital facilities at colony complexes to both employees and rural population in Panandhro lignite project, ATPS Thermal power plant, Rajparddi lignite project and Kadipani fluorspar project.

**Education:** GMDC is providing primary, high school and higher secondary schooling facilities at Panandhro, ATPS and Kadipani projects. Financially sponsoring girl students belonging to weaker sections of the society in Lakhpat region for education. Special financial assistance for girl students of core area villages of GMDC. They also have made schools with qualified teachers in project areas which are open for all children nearby areas. They also organizes sport events for the students and distribute school bags and other required accessories to the students.

**Water conservation and Environment:** Water is one of the most basic requirements for a life. GMDC has since inception, focused on harvesting natural water resources. GMDC has made water storage tanks, check dams and deepening of ponds in different areas of Saurashtra and Kutch districts. They also have initiated reuse of sewage water and rain water harvesting. GMDC has covered approx 850 hectares area in last ten years more than 13 lakhs trees have been planted.

#### Micro irrigation

Under a special Micro Irrigation System implemented in collaboration with State model agency. In Kutch 2 talukas, 65 villages and more than 4500 acres of land have been benefitted by micro irrigation. around 4 crores have been spent under this project in Kutch region 46% of beneficiaries are marginal farmers in Kutch region. Similarly in Bhavnagar 5 talukas, more than 3000 beneficiaries more than 5500 hectares and 5.5 crore have been spent over this project by December 2014. This drip irrigation has increased the crop yield and enhanced standard of living of these rural people. GMDC organizes trips for farmers to explore their knowledge of agriculture.

**Employability enhancement:** GMDC organizes vocational training programmes for the people in rural and scattered area of Kutch and Saurashtra districts. They also organize skill up gradation programmes in the areas like handicrafts and handlooms. Distribution of activity kit. Conducting training programmes to make leaf bowls, a plate, incense sticks.

**Statement of the expense incurred by GMDC Lignite project, Rajparddi under GVT(GRAM VIKAS TRUST-GMDC) in the month of January 2013-2014 year for CSR activities.**

Sr no	Subject	Project village	Beneficiaries	Amount spent
1.	Drinking water facilities: Bore well	Amod,Damalai, Bhuri	Villagers	1,44,721/
2.	Education: (Study tours for school children and other programmes)	Amod, Damalai, Dubhari, New and Old Amod	151 Students (tour)	3,55,662/
3.	Mobile medical facility	Amod, Damalai, Dubhari, New and Old Amod, Bhuri	781 Patients	17,897/
4.	Other CSR work: Purchase of sports items, cheque issued to Nasa Foundation, Water tankers, mikes	Amod, Damalai, Dubhari, New and Old Amod, Bhuri,Tarsali,Pi pran.	Truck drivers, students, villagers, youth mandal etc.	1,38,044/
			Total	6,56,324/

(Source: www.gmdcltd.com)

#### Conclusion

Industrialization is very much important for the development of any state, but not at the cost of Environment and health in which whole society has to suffer forever. In Indian culture Responsibility for family, caste, community is deep rooted from its origin. We from our birth taught to behave in ethical manners and family values, rituals translated to the next generations. *"Wealth comes and goes, life and youth goes from the living, in this world of coming and going, dharma alone is firm"* (CHANKYA) Ethic and Value based business often consider as a good company for the Society and people of the country. Ratan Tata, K R Narayan Murthy they are having inherent values and Ethics and same thing they feed to their managers, employees, distributors, share holders. Tata group is having its own trust named Sir Ratan Tata Trust, for social cause. Similarly Infosys Foundation of Narayan Murthy his wife is dealing with all social causes. Numbers of Industries are polluting our Environment through many ways and to compensate that damage to the Society and Environment they began Socially Responsible activities. Nowadays to perform CSR practice is a very usual thing for many organizations in India. Some organizations are very sincerely performing their role in Social Responsible cause. Organizations are doing need based projects which is based on community's expectation from the Industry. Though there are some criticisms of CSR found and having misconception regarding CSR like, it is time and money wasters, public relation activity, only large scale Industry can perform, but it is beyond legislation ,rules and policy. In 2009 Ministry of Corporate Affaire has introduced guidelines to perform CSR activities in the Industries, which talk about principles like care for stake holders, respect for women, respect for environment, activities for social cause and inclusive development. It is really good that at every front CSR is being noticed by each and every sector.

#### References

- V.J.prasad,C.V.Baxi (2005). Corporate Social Responsibility Concepts & Cases excel books
- V.Balchandran, V Chandrasekaran (2009).Corporate Governance and Social Responsibility PHI Learning Pvt Ltd..
- Sophia Dilima (2014). Corporate Social Responsibility in GMDC project under taken in MLW department, Gujarat University
- William B Werther and Jr. David Chandler (2012).Strategic Corporate Social Responsibility (second edition) New Delhi: Sage Publication.
- www.mca.gov.in
- www.iso.org
- www.alcumusgroup.com
- www.indiacsr.org
- www.gmdcltd.com



## CUSTOMER SATISFACTION IN TERMS OF COMPANY IMAGE, CONSULTANCY & CUSTOMER SERVICE: A CASE OF JINDAL INDUSTRIES

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### Abstract

*Customer satisfaction is key to business success. There is a great deal of information being published today and discussed on the topic customer service and customer satisfaction. Proponents of these topics or approaches to conducting business tend to emphasize the importance of conforming to specifications, keeping processes in control, meeting requirements, giving customers what they want and handling complaints effectively. It is a simple truth. Satisfied customers do more business with you more often. They purchase more each time around, and they purchase more often. They also refer their family and friends to you. The link between sales, service, satisfaction and profits is direct. The more a customer is satisfied, the more he or she spends. The more customers spend, the more you sell. And usually, when you sell more, your profits are greater. The paper highlights the customer satisfaction in terms of company image, technical consultancy provided and customer services in Jindal Industries.*

**Keywords:** *Customer Satisfaction, Company Image, Consultancy, Customer Services.*

Everyone is aware of the importance of satisfying customers. We can't get away from the fact the reporters, authors, consultants, and everyone else is telling us that we must satisfy our customers in order to be competitive. Yet, while these same people tell us what to do and some tell us how to do it few if any tell us how to determine how well we are doing it. We only know how well we are satisfying our customers if we measure their satisfaction levels. There is a great deal of information being published today and discussed on the topic customer service and customer satisfaction. Proponents of these topics or approaches to conducting business tend to emphasize the importance of conforming to specifications, keeping processes in control, meeting requirements, giving customers what they want and handling complaints effectively. Despite the proliferation of books, articles, videos, seminars and conferences on these subjects and approaches, none of them is central to a successful business. It is a simple truth. Satisfied customers do more business with you more often. They purchase more each time around, and they purchase more often. They also refer their family and friends to you. The link between sales, service, satisfaction and profits is direct. The more a customer is satisfied, the more he or she spends. The more customers spend, the more you sell. And usually, when you sell more, your profits are greater. Whenever we measure something, it gets performed, completed, and usually, improved upon. That is why measurement techniques are so important to customer satisfaction. When we have a quantifiable number, or measure, to put on a behavior, people can see exactly what effect that behavior is having on their own and the company's performance. Asking customers to rate us on our levels of service, and their level of satisfaction, virtually guarantees that we will work to improve our efforts in these areas. The paper highlights the customer satisfaction in terms of company image, technical consultancy provided and customer services.

**Literature Review:** Customer satisfaction is a key and valued outcome of good marketing practice. According to Drucker (1954), the principle purpose of a business is to create

satisfied customers. Increasing customer satisfaction has been found to lead to higher future profitability (Anderson, Fornell, and Lehmann 1994), lower costs related to defective goods and services (Anderson, Fornell, and Rust 1997), increased buyer willingness to pay price premiums, provide referrals, and use more of the product (Reichheld 1996; Anderson and Mittal 2000), and higher levels of customer retention and loyalty (Fornell 1992; Anderson and Sullivan 1993; Bolton 1998). Increasing loyalty, in turn, has been found to lead to increases in future revenue (Fornell 1992; Anderson, Fornell, and Lehmann 1994) and reductions in the cost of future transactions (Reichheld 1996; Srivastava, Shervani, and Fahey 1998). All of this empirical evidence suggests that customer satisfaction is valuable from both a customer goodwill perspective and an organization's financial perspective. While it seems clear that increasing customer satisfaction is beneficial to a marketing manager, how to measure it is less clear. Customer satisfaction has been studied from the perspective of the individual customer and what drives their satisfaction (Oliver and Swan 1989; Oliver 1993; Fournier and Mick 1999) as well as from an industry-wide perspective to compare customer satisfaction scores across firms and industries (Fornell 1992; Anderson, Fornell, and Lehmann 1994; Fornell et al. 1996; Mittal and Kamakura 2001), while other research has examined customer satisfaction in a single organization (Schlesinger and Zornitsky 1991; Hallowell 1996; Loveman 1998) or across several organizations (DeWulf, Odekerken-Schröder, and Iacobucci 2001). In addition, specific tools for measuring customer satisfaction have been developed in the past, including SERVQUAL (Parasuraman, Berry, and Zeithaml 1988, 1991). Thus, there exists an ample literature on which to draw when attempting to measure customer satisfaction. There are two principal interpretations of satisfaction within the literature of satisfaction as a process and satisfaction as an outcome (Parker and Mathews, 2001). Early concepts of satisfaction research have typically defined satisfaction as a post choice evaluative judgment concerning a specific purchase decision (Oliver, 1980; Churchill and



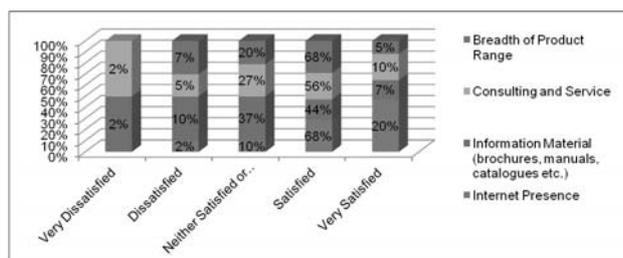
Suprenant, 1992; Bearden and Teel, 1983; Oliver and DeSarbo, 1988). More recently, renewed attention has been focused on the nature of satisfaction ± emotion, fulfillment and state (Parker and Mathews, 2001). Consequently, recent literature adds to this perspective in two ways. First, although traditional models implicitly assume that customer satisfaction is essentially the result of cognitive processes, new conceptual developments suggest that affective processes may also contribute substantially to the explanation and prediction of consumer satisfaction (Fornell and Wernerfelt, 1987; Westbrook, 1987; Westbrook and Oliver, 1991). Second, satisfaction should be viewed as a judgment based on the cumulative experience made with a certain product or service rather than a transaction-specific phenomenon (Wilton and Nicosia, 1986). Searching for information is a key stage of a consumer's decision-making process and may include a search for both internal and external information. As the perceived risk of a purchase decision increases, consumers search for more information in order to cope with uncertainties about the potential positive or negative consequences (Jihye Park, 2005).

**Research Methodology:** In this study all channel partner of the Jindal Industry is our population as well as sample and target customers. There are approximate 250 channel partners in Jindal industry. We tried to reach with the every channel partner and finally reached around 230 channel partner. A questionnaire was circulated to the target channel partner and requested to fill it. Response rate was very low but still we got 70 responses, an out of 70 responses, 41 responses was completely filled. Sample size was low but this was enough to make the conclusion for the customer satisfaction in Jindal Industry because the sample was randomly and almost form the across the entire country.

**Data Analysis**

**1. Company Image**

Company Image				
Response	Internet Presence	Information Material (brochures, manuals, catalogues etc.)	Consulting and Service	Breadth of Product Range
Very Dissatisfied		2%	2%	
Dissatisfied	2%	10%	5%	7%
Neither Satisfied or Nor Dissatisfied	10%	37%	27%	20%
Satisfied	68%	44%	56%	68%
Very Satisfied	20%	7%	10%	5%



To examine the customer satisfaction toward the company image, First of all, bar chart and frequency distribution are used to analysis the customer satisfaction toward the

company image. For the internet presence in the market 20% customer are very satisfied. 68% percent customers are satisfied. 88% customers are satisfied out of 44 customers. So overall, customers are satisfied from the internet presence of the Jindal industry in the market. 7% customer are very satisfied for “Information Material (brochures, manuals, catalogues etc.)” and only 44% customer are satisfied, where 10% customer are dissatisfied and 2% customer are very dissatisfied. 37% customers are neutral. They are neither satisfied nor dissatisfied. Out of 44 customers only 51% customer are satisfied. Information material information seems to be problematic area, where company need to pay attention. From consulting and services 10% customer are very satisfied and 56% customer are satisfied. Only 2% customer are very dissatisfied and 5% customer are dissatisfied. Overall customers are satisfied from the consulting and services provide from Jindal industries. 37% customers are neither satisfies or dissatisfied. Although major chunk or customers are satisfied but still company need to be improve more their consulting and services. Response rate from customers for “Breadth of Product Range” is quite good. 68% customers are satisfied and 5% customers are very satisfied. Overall 73% customers are satisfied from company breadth of product range. For more information what channel partner thinks about the company image, kindly refer above frequency table and charts.

**Company Image: Chi Square Test**

Internet Presence			
	Observed N	Expected N	Residual
Dissatisfied	5	20.5	-15.5
Satisfied	36	20.5	15.5
Total	41		

Information Material			
	Observed N	Expected N	Residual
Dissatisfied	20	20.5	-.5
Satisfied	21	20.5	.5
Total	41		

Breadth of Product Range			
	Observed N	Expected N	Residual
Dissatisfied	11	20.5	-9.5
Satisfied	30	20.5	9.5
Total	41		

Consulting and Service			
	Observed N	Expected N	Residual
Dissatisfied	14	20.5	-6.5
Satisfied	27	20.5	6.5
Total	41		

Test Statistics				
	Internet Presence	Information Material (brochures, manuals, catalogues etc.)	Consulting and Service	Breadth of Product Range
Chi-Square	23.439 <sup>a</sup>	.024 <sup>a</sup>	4.122 <sup>a</sup>	8.805 <sup>a</sup>
df	1	1	1	1
Asymp. Sig.	.000	.876	.042	.003

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 20.5.

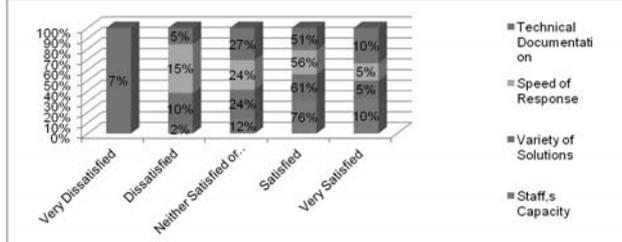
To examine the customer satisfaction toward the company image, Chi-Square test is applied. Overall satisfaction toward company image is significant at 95% confidence interval. Our study showing that channel partner is satisfied with the



company image. Chi-square test was significant (23.439),  $p < 0.00$  "Internet Presence" with one degree of freedom. Information Material is insignificant (0.024),  $p > 0.05$  with one degree of freedom. Channel partner is not satisfied with the information provided for brochures, manuals, catalogues etc. Chi-Square test was significant (4.122),  $p < 0.05$  for consulting and service with one degree of freedom. Chi-Square test for breadth of product range is also significant (8.805),  $p < 0.05$ . As per customer response Jindal industry has good image presence in market.

**2. Technical Consulting Service**

Technical Consulting Service				
Response	Staff's Capacity	Variety of Solutions	Speed of Response	Technical Documentation
Very Dissatisfied				7%
Dissatisfied	2%	10%	15%	5%
Neither Satisfied or Nor Dissatisfied	12%	24%	24%	27%
Satisfied	76%	61%	56%	51%
Very Satisfied	10%	5%	5%	10%



To examine the customer satisfaction toward the technical consulting services, bar chart and frequency distribution are used to analysis the customer satisfaction. Staff's capacity for technical consulting is good with Jindal industry. 10% customers are very satisfied and 76% customers are satisfied with staff's capacity. Overall 86% customers are satisfied with staff's capacity for technical consulting. None of customers are very dissatisfied. Only 2% customers are dissatisfied. Jindal industry is also good in providing variety of solutions for technical consulting services. 5% customers are very satisfied and 61% customers are satisfied. Overall 66% customers are satisfied. Speed of response for technical services in Jindal industry is good. 5% customers are very satisfied and 56% customers are satisfied with the speed of response for technical services in Jindal. None of customers are very dissatisfied and only 15% customers are saying that they are disagree with the speed of response. 24% customers are neutral. They are not dissatisfied and nor they are satisfied. They are not able to make conclusions about speed of response in Jindal. Response rate for technical documentation for technical services is good. 10% customers are very satisfied and 51% customers are satisfied. Only 7% customer are very dissatisfied and 5% customer are dissatisfied with the technical documentation in Jindal industry. 27% customers are neutral.

**Technical Consulting Service: Chi Square Test**

Staff's Capacity			
	Observed N	Expected N	Residual
Dissatisfied	6	20.5	-14.5
Satisfied	35	20.5	14.5
Total	41		

Variety of Solutions			
	Observed N	Expected N	Residual
Dissatisfied	14	20.5	-6.5
Satisfied	27	20.5	6.5
Total	41		

Speed of Response			
	Observed N	Expected N	Residual
Dissatisfied	16	20.5	-4.5
Satisfied	25	20.5	4.5
Total	41		

Technical Documentation			
	Observed N	Expected N	Residual
Dissatisfied	16	20.5	-4.5
Satisfied	25	20.5	4.5
Total	41		

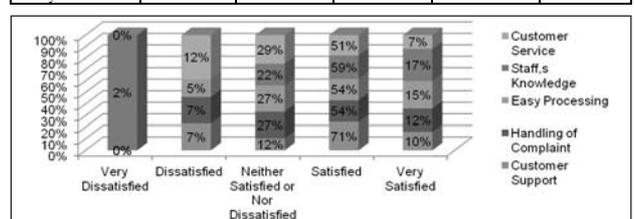
Test Statistics				
	staff's Capacity	Variety of Solutions	Speed of Response	Technical Documentation
Chi-Square	20.512 <sup>a</sup>	4.122 <sup>a</sup>	1.976 <sup>a</sup>	1.976 <sup>a</sup>
df	1	1	1	1
Asymp. Sig.	.000	.042	.160	.160

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 20.5.

To examine the customer satisfaction toward the technical consulting services, Chi-Square test is applied. Overall satisfaction toward technical consulting services is significant. Our study showing that channel partner is highly satisfied with staff's capacity and with variety of solutions. Chi-square test is significant (120.512),  $p < 0.05$  for "Staff's Capacity" and (4.122),  $p < 0.05$  for "Variety of solutions" "with one degree of freedom. But with the "Speed of response" and "Technical documentation" channel partner is not that much happy. Chi-square test for "Speed of response" and "Technical documentation" is (1.976),  $p > 0.05$  and (1.976),  $p > 0.05$  accordingly.

**3. Customer Service**

Customer Service					
Response	Customer Support	Handling of Complaint	Easy Processing	staff's Knowledge	Customer Service
Very Dissatisfied	0%	0%	0%	2%	0%
Dissatisfied	7%	7%	5%	#N/A	12%
Neither Satisfied or Nor Dissatisfied	12%	27%	27%	22%	29%
Satisfied	71%	54%	54%	59%	51%
Very Satisfied	10%	12%	15%	17%	7%



To examine the customer satisfaction toward customer services, bar chart and frequency distribution are used to analysis the customer satisfaction. 10% customers are very satisfied and 71% customers are satisfied for customers support. Overall 81% customers are satisfied services provided by Jindal industry for customers support. None of customers are very dissatisfied with provided customers supports, only



7% customers are dissatisfied with provided customers support. 12% are neither satisfied or nor dissatisfied with provide customers support. For handling of complained 12% customers are very satisfied and 54% customers are satisfied. Overall 66% customers are satisfied for customers services for handling of complained. None of customers are very dissatisfied. Only 7% customers are dissatisfied. 27% customers are neither satisfied or nor dissatisfied. 15% customers are saying that they are very satisfied with easy processing and 54% customers are satisfied with easy processing. None of customers are very dissatisfied, only 7% customers are saying they are dissatisfied with easy process argument. Approximate 27% customers are neither satisfied or nor dissatisfied with easy process statement. At customer services, 17% customers are very satisfied and 59% customers are satisfied with staff's knowledge. Only 2% customers are very dissatisfied with the staff's knowledge and none of customers are dissatisfied with staff's knowledge. 22% customers are neither satisfied or nor dissatisfied with staff's knowledge. Overall customers are satisfied with the customer services. 7% customers are very satisfied and 51% customers are satisfied with customer services provided in Jindal industries. None of customers are very dissatisfied with customer services. Only 12% customers are dissatisfied with customers' services. 29% customers are neither satisfied or nor dissatisfied with the customers services in Jindal industry.

**Customer Service: Chi Square Test**

Customer Support					
	Observed N	Expected N	Residual		
Dissatisfied	8	20.5	-12.5		
Satisfied	33	20.5	12.5		
Total	41				
Handling of Complaint					
	Observed N	Expected N	Residual		
Dissatisfied	14	20.5	-6.5		
Satisfied	27	20.5	6.5		
Total	41				
Easy Processing					
	Observed N	Expected N	Residual		
Dissatisfied	13	20.5	-7.5		
Satisfied	28	20.5	7.5		
Total	41				
staff's Knowledge					
	Observed N	Expected N	Residual		
Dissatisfied	10	20.5	-10.5		
Satisfied	31	20.5	10.5		
Total	41				
Customer Service					
	Observed N	Expected N	Residual		
Dissatisfied	17	20.5	-3.5		
Satisfied	24	20.5	3.5		
Total	41				
Test Statistics					
	Customer Support	Handling of Complaint	Easy Processing	staff's Knowledge	Customer Service
Chi-Square	15.244 <sup>a</sup>	4.122 <sup>a</sup>	5.488 <sup>a</sup>	10.756 <sup>a</sup>	1.195 <sup>a</sup>
df	1	1	1	1	1
Asymp. Sig.	.000	.042	.019	.001	.274

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 20.5.

To examine the customer satisfaction toward customer services, a Chi-Square test is applied. Overall satisfaction

toward customer services is significant at 95% confidence interval. Our study showing that channel partner is satisfied with customer services. Chi-square test for customer support, handling of complaint, easy processing and staff's technical knowledge is significant with (15.244),  $p < 0.00$ , (4.122),  $p < 0.04$ , (5.488),  $p < 0.05$  and (10.756),  $p < 0.05$  accordingly. Question response for customer services is insignificant with (1.195),  $p > 0.05$ . But overall the channel partner is satisfied with provided customer services.

**Conclusion**

The purpose of the current study was to evaluate the customer satisfaction in terms of company image, consultancy and customer service in Jindal industry. Customers are satisfied with the overall company image. As per customer response Jindal industry has good image in market. Channel partner is not satisfied with the information provided for brochures, manuals, catalogues etc. They are highly satisfied with staff's capacity and with variety of solutions in terms of consultancy. But with the "Speed of response" and "Technical documentation" channel partner is not that much happy. They are satisfied with provided customer services in terms of customer support, handling of complaint, easy processing and staff's technical knowledge.

**References**

Anderson Eugene W., Fornell Claes, & Mazvancheryl Sanal K., October 2004; 'Customer Satisfaction and Shareholder Value', Journal of Marketing; Vol. 68  
 Cooper Donald R. and Schindler Pamela S.; 2003, Business Research Methods; Eighth edition; ISBN: 0- 07-249870-6; McGraw-Hill higher Education; Cox J. and Dale, 2001, 'Service quality and e-commerce: an exploratory analysis; Managing Service Quality; Vol.11. No. 2  
 Kotler Philip, 2003, Marketing Management, Pearson Education, Inc. Fifth edition.  
 Lee Haksik, Lee Yongki and Dongkeun, 2000; the determinants of perceived service quality and its relationship with satisfaction; Journal of services marketing; vol. 14 No. 3, pp. 217-231.  
 Lin Chia Chi, 2003, 'A critical appraisal of customer satisfaction and e-commerce', Managerial Auditing Journal, Vol. 18/3 pages 202-212.  
 Moreno Muffatto and Roberto; 1995, A process-based view for customer satisfaction; International Journal of Quality & Reliability Management; Vol. 12 No. 9, pp. 154-169.  
 Parasuraman, A. Zeithaml, Valarie A. Malhotra, Arvind, Feb2005; E-SQUAL: A Multiple-Item Scale for Assessing Electronic Service Quality; Journal of Service Research, Vol. 7 Issue 3, p213-233.  
 Parmita Saha, Yanni Zhao, 2005; Relationship between online service quality and customer satisfaction,, Master's thesis; Lulea University of Technology.  
 Pipe Industries Reports 2010-2011.  
 Rampersad Hubert; 2001, 75 painful questions about your customer satisfaction; The TQM Magazine; Vol. 13, No 5, pp. 341-347.  
 Saunders Mark N. K., Thornhill Adrian, 2003, Organizational justice, trust and the management of change An exploration, Personnel Review Vol. 32 No. 3, pp. 360-375.  
 Söderlund Magnus, 1998; Customer satisfaction and its consequences on customer behavior revisited The impact of different levels of satisfaction on word of- mouth, feedback to the supplier and loyalty; International Journal of Service Industry Management, Vol. 9 No. 2, pp. 169-188.  
 Stauss Bernd, 2002; 'the dimensions of complaint satisfaction: process and outcome complaint satisfaction versus cold fact and warm act complaint satisfaction',



## 'X'TRAPRENEURSHIP- A HOLISTIC APPROACH TO BRING CLARITY IN ENTREPRENEURIAL RESEARCH

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### Abstract

*Research into entrepreneurship and associated terminologies is subject to a lack of clarity and consensus in definition or distinct research approach. Many researchers use different terms to denote or illustrate similar phenomena. Some emphasize the commonalities and defend the use of interchangeable terms, others strongly argue over their distinguishing features. This conceptual paper will discuss these inconsistencies and introduce a new approach called the 'X'trapreneurship approach to classify distinct domains of entrepreneurship: independent process, bottom-up process and top-down process. This three domain approach will help in resolving the plague of inconsistencies surrounding entrepreneurial research areas giving researchers a distinct framework to identify the position of different entrepreneurial terminologies. Using this approach, a revised hierarchy of entrepreneurship terminologies is proposed in this paper which will bring some form of simplification and clarity thereby serving as a guideline for future research and adding a unique contribution to the entrepreneurial research field.*

**Keywords:** 'x'trapreneurship approach; entrepreneurship; intrapreneurship; corporate entrepreneurship; corporate venturing

Entrepreneurship research has made a highly influential global impact in terms of how we perceive, conduct or study innovation dynamics related to any organization. Over the years there has been a phenomenal growing interest in this research area leading to the development of several sub-areas such as corporate entrepreneurship, intrapreneurship and corporate venturing to address specific issues associated with this research field. Organizational complexities are part of the 21<sup>st</sup> century significantly influencing the corporate culture (Baruah and Ward, 2014) and companies which are more adaptable, aggressive, and innovative according to Kuratko, Covin, and Garrett (2009) can immune themselves with a better position to adjust to this dynamic, threatening and complex external environment. Different organizations are adopting certain management strategies to attain competitive advantage to secure this immunity through an enhanced innovation culture within their organizational framework. The conceptual research spectrum of entrepreneurship and its related sub-topics which covers different aspects of organizational innovation has faced certain inconsistencies in terms of their definition or order of hierarchical representation with many researchers using different terms to denote or illustrate similar or the same phenomenon. Some have emphasized the commonalities among these terms thereby defending the use of interchangeable terms whereas others have strongly argued over their distinguishing features. This has led to a plague of confusion on reaching a consensus over their definitions and justified representation of some of these sub-groups of entrepreneurship. In this paper we propose a new approach called the 'X'trapreneurship approach to identify the distinct domains within entrepreneurship research. Through this approach, we will classify different terminologies used in entrepreneurial research such as independent entrepreneurship,

corporate entrepreneurship, intrapreneurship and corporate venturing under these identified domains. The inconsistencies usually faced by researchers in the conceptual frameworks of entrepreneurship will be significantly addressed by our new approach thereby providing some form of simplification and clarity for future works.

**Inconsistency in the conceptual spectrum of entrepreneurship:** Entrepreneurship research so far has witnessed an incredible history of over 200 years with its earliest citation dating back to the mid 1700s in the prolific writings of Richard Cantillon (Hebert and Link, 1988). Despite this immense interest and an ever-growing popularity in this field, there are still researchers who struggle to establish distinct research clarity within the realms of entrepreneurship and its associated terms. As Bruyat and Julien (2000, 166) summarize "*the problem of defining the word 'entrepreneur' and establishing the boundaries of the field of entrepreneurship has still not been solved*".

Drucker (1985) calls entrepreneurship a distinct feature of either an individual or an institution however he emphasizes that it should not be classified as a personality trait. Wennekers and Thurik (1999) argue that entrepreneurship should not be deemed as an occupation or label entrepreneurs as a well-defined occupational class of persons. Montanye (2006) found that the use of the term entrepreneurship sometimes appears to be synonymous with self-employment and occasionally with self-unemployment. One of the major flaws in entrepreneurship literature is the failure of researchers to differentiate between entrepreneurship and independent entrepreneurship. For instance, authors such as Veronica and Zenovia (2011) have differentiated intrapreneurship from entrepreneurship without specifying whether their reference was aligned towards entrepreneurship or independent entrepreneurship. Sharma and Chrisman (1999) tried to bring

some clarity by illustrating the hierarchy of different terminologies of entrepreneurship and their work emphasized independent entrepreneurship to be a sub-section of entrepreneurship. They noted that research on entrepreneurship within an existing organization have a *'striking lack of consistency in the manner in which these activities have been defined'* (Sharma and Chrisman 1999, 11). One of the prominent features in Sharma and Chrisman's (1999) hierarchical model is the absence of intrapreneurship within the hierarchical frameworks. Although researchers such as Antoncic and Hisrich (2001, 2003), Bosma et al. (2010) have classified intrapreneurship as a sub-section of entrepreneurship; it has not been featured in this hierarchical model. In their review, Sharma and Chrisman (1999) implied that the essence of intrapreneurship is represented by internal corporate venturing as both terms represent the creation of new businesses within an existing corporation. They classified these as part of corporate entrepreneurship and their model thereby focused on different sub-categories of corporate entrepreneurship without prioritizing intrapreneurship. On a similar note, Zahra (1991) suggested the use of terms such as intrapreneurship, internal corporate entrepreneurship, corporate venture or internal corporate venture to represent the overall picture of corporate entrepreneurship. Thornberry (2001) classified corporate venturing, intrapreneuring, organizational transformation and industry rule breaking as the four types of corporate entrepreneurship. A contrasting approach was adopted by Antoncic and Hisrich (2001) who suggested terms like intrapreneuring, corporate entrepreneurship, corporate venturing and internal corporate entrepreneurship to illustrate the aspects of intrapreneurship. Such inconsistency among the conceptual definitions of some of these sub-groups of entrepreneurship has been a major issue resulting in lack of research clarity. Åmo (2010) highlights the importance of establishing a proper consensus on these terms as it will influence some important research issues concerning employee engagement with innovation culture of an organization.

**Interchangeable terminologies?** Overall, there seems to be a consensus that entrepreneurial terms such as corporate entrepreneurship, corporate venturing or intrapreneurship represent the innovation culture within an organization (Ginsberg and Hay (1994), Guth and Ginsberg (1990)). However, there are authors who refer to some of these terms interchangeably. For instance, strategic renewal, innovation and corporate venturing have been classified as key components of corporate entrepreneurship but Toftoy and Chatterjee (2004) studied these components as part of intrapreneurship. These authors consider intrapreneurship and corporate entrepreneurship to be a broad concept representing the generation, development and subsequent implementation of innovative ideas and behaviours within an organization. Therefore, for them these terms can be utilized interchangeably. This interchangeable approach in the use of these terms has also been followed by other authors such as Fitzsimmons et al (2005) and Christensen

(2005). The association of corporate entrepreneurship and intrapreneurship is supported by researchers like Bosma et al (2010) and Åmo (2010) but there is a need to identify the distinguishing features between them so as to derive a proper conceptual framework of entrepreneurship. The absence of a defined entrepreneurship framework has led to a substantial plague of inconsistencies as researchers place their entrepreneurship terminologies in miscellaneous categories. What we desperately need today is an approach to carefully categorize different entrepreneurship terminologies under the right domain and this leads us to proposing a new entrepreneurship terminology classification called 'X'trapreneurship approach.

**The 'X'trapreneurship approach-three domains of entrepreneurship:**

Lazear (2005) viewed entrepreneurship as an efficient process of assembling necessary factors of production and is comprised of human, physical and information resources where entrepreneurs combine people, capital and ideas together to create a new product or produce an existing one with lower or competitive cost. Bull and Willard (1993) defined entrepreneurs as people who carry out new combinations causing discontinuity and for Lazear (2005) they are multifaceted but balanced individuals. Drucker (1985) believes that successful entrepreneurs will aim high as they are not usually content with just improving or modifying existing ideas, they are quite dedicated to creating new and different values and converting a material into a resource or combining existing resources to bring out something more productive. In this paper, we refer entrepreneurship using Hisrich et al. (2010) definition as a process involving creation of something new with value and it requires the necessary devotion of time and effort and accompanies financial, psychic or social risks and uncertainties eventually leading to personal satisfaction and monetary rewards. Bruyat and Julien (2000) found the phenomenon of entrepreneurship to be variable, heterogeneous, dynamic and complex with a certain degree of unpredictability. To understand it better, we propose a new holistic approach called the 'X'trapreneurship approach for classifying different entrepreneurship terminologies. According to this approach, an individual can engage in innovation activities through three distinct routes: the individual can either undertake it independently or in other cases inside a company where they innovate by their own enthusiasm or under the management's influence. The conceptual inconsistencies arising in entrepreneurship research particularly with the placement of the sub-groups can be resolved if they are segmented under the right research domain. Based on our approach, entrepreneurship research as shown in figure 1 can be classified into three key domains namely: Independent process, Bottom-up process, and Top-down process.

This classification can give the sub-groups of entrepreneurship a more distinguished conceptual identity than before thereby facilitating a route for research clarity.

*Independent process:* The independent domain of entrepreneurship as illustrated in figure 1 is a clear



representation of any independent entrepreneurial route via which entrepreneurs approach and establish their innovation. According to Collins and Moore (1970), this independent entrepreneurship represents a process through which an individual or a group of individuals, acting independently of any association within an existing organization, create a new organization. For Gündođdu (2012), independent entrepreneurs and traditional entrepreneurs are synonymous as both terms describe entrepreneurial efforts of any individual whose innovation operations are undertaken outside an existing organization. With its own distinct features, independent entrepreneurship can be clearly differentiated from other entrepreneurship sub-groups such as intrapreneurship or corporate entrepreneurship. For instance, an independent entrepreneur is directly involved with any form of risks associated with the business whereas with the other terminologies, the company takes responsibility for the employees' innovation projects. When it comes to profits, for an independent entrepreneur as pointed out by Morris and Kuratko (2002) the options might be unlimited depending on their scenarios whereas for innovative employees within an intrapreneurial organization, share of profits, rewards or compensations might depend solely on their organizational policies and management criteria. There are also differences in terms of intellectual rights as an independent entrepreneur regardless of success or failure will own any business concept or idea by default but the same may not be applicable for intrapreneurs or innovators within an organization as again the company's intellectual right and policies might override it.

*Bottom-up process:* The second classification of entrepreneurship research, bottom-up process is where innovative strategies arise from an employee's perspective irrespective of the management wishes and therefore belong to the domain of employee behaviour. Intrapreneurship according to Åmo (2010) is a tool for employees to realize their entrepreneurial vision and for Pinchot and Pellman (1999) these intrapreneurs make an essential ingredient in every successful innovation process. Veronica et al (ND) labelled intrapreneurs as domestic entrepreneurs because along with their focus on innovation and creativity, they are constantly pursuing the interest of their company with their persistent vision. They have the potential to become the leaders of specific innovation within their company and ride to the discovery of successful ventures based on the strength of their vision. Therefore, the success of any idea within an organizational culture according to Pinchot and Pellman (1999) will rely largely on the tireless persistence and practical imagination of the intrapreneurs. Intrapreneurs according to Pinchot (1985) are self-determined goal setters and Bosma et al (2010) note that they usually take initiatives to innovate and develop new businesses as per their own will without being asked by a manager or a colleague. As Pinchot and Pellman (1999, pg 63) suggest '*if you need to innovate, you need intrapreneurs*' because they are the ones who effectively roll up their sleeves and get things done. Åmo (2010) emphasizes

that within the arena of intrapreneurship, the innovation initiative originates from the employee and its characteristics are rooted deeply with the employee itself. Intrapreneurship therefore represents an organizational process that sprouts from an employee's perspective gradually moving up in the hierarchy towards the top-management for attaining practical execution and this therefore can be classified as a bottom-up process. This theory has been strongly supported by authors such as Åmo (2010) and Bosma et al (2010). For Åmo (2010) an intrapreneurial employee can be viewed as a proactive actor pursuing innovative ideas inside the borders of the organization. Bosma et al (2010) viewed intrapreneurship from the employee's perspective where employees develop new business activities for their employer and their research focused on employee behaviour inside existing organizations in terms of proactiveness and innovative work behaviour. Although intrapreneurship represents the unasked innovation efforts of employees, their innovation tactics may or may not be in line with what management wants (Åmo, 2010). However, within an intrapreneurial culture, the employees have the skills to control the destiny of their innovation efforts. Being a bottom-up process, successful intrapreneurs will identify the decision makers who will ultimately determine the fate of their innovations (Pinchot and Pellman, 1999). They also highlight that intrapreneurs will test the feasibility of their ideas with their leaders so as to get some form of assurance before going ahead and taking their ideas into practical reality. They have the capability to channel efficient networking across boundaries to obtain help and support and in scenarios where intrapreneurs fail to get help from someone, they will eventually find a route or sponsor who will empower their ideas. Therefore, the key drivers of innovation within an organizational framework are the intrapreneurs, cross-functional teams, and active sponsors. Intrapreneurs in this context are in charge of conceiving business ideas/visions and turning them into business realities and their sponsors facilitate the entire intrapreneurial process. Pinchot and Pellman (1999) believe that intrapreneurs use their courage and creative abilities to find ways to move forward and maintain progress and in that process might even bend some rules where mistakes are affordable. Intrapreneurs are good at setting measurable goals and intermediate targets for themselves and these authors emphasize that once they are approved, these self-determined goals should be placed as a priority and focus of the corporation's control. Åmo (2010) believes that the best conditions for innovation in firms would be to align such independent initiatives with the strategy of the firms. Some researchers illustrated the distinguishing features of intrapreneurship by categorizing it under employee behaviour and studies. Authors like Bosma et al (2010) and Åmo (2010) particularly emphasized on studying intrapreneurship at an individual level to differentiate it effectively from corporate entrepreneurship. Antoncic and Hisrich (2003) based their research of entrepreneurship from an organizational perspective and they recommended the

use of the term corporate entrepreneurship to study entrepreneurship at the organizational level. For them, intrapreneurship should be classified under the domain of emergent behavioural intentions and behaviours. At the individual level, the intentions of starting a new independent business is seen more among intrapreneurs than other employees within the corporation and for Bosma et al (2010) from this individual perspective; the individual characteristics of an entrepreneurial employee (intrapreneur) are clearly evident. Pinchot and Pellman (1999) believe that if the right environment is created, intrapreneurs will naturally arise and employees who may not have exhibited any intrapreneurial characteristics before will eventually become successful intrapreneurs if their passion for turning some idea into commercial reality is effectively aroused. Åmo (2010) distinguished intrapreneurship from corporate entrepreneurship by highlighting the aspects of process ownership where intrapreneurs have to overcome resistance from their organization.

*Top-down process:*The third and final classification of entrepreneurship research is a top-down process which represents a management strategy essentially implemented by the organization in order to enforce, exercise or promote an innovation culture among its employees. As discussed earlier, many authors support the study of intrapreneurship at an individual level and corporate entrepreneurship at an organizational level as this plays a pivotal role in giving these two approaches a distinct pathway for research clarity. Åmo (2010) recommends the use of the term corporate entrepreneurship in situations when employee contribution becomes an answer to an organizational request. He argues that the term intrapreneurship fits best to describe events or situations where an employee contributes to the innovation framework regardless of the wishes or concerns of the organization. Corporate entrepreneurship which illustrates an organization's engagement with innovation through corporate policies and top management's facilitation and involvement can be deemed as a top-down process and is largely supported by authors like Bosma et al (2010, 2011) and Åmo (2010).

Over the years there have been several prominent definitions of corporate entrepreneurship. Miller (1983) for instance defined it as a company's commitment to innovation. Hayton (2005) labeled corporate entrepreneurship as a strategic orientation representing an organization's ability to learn through new knowledge exploration and existing knowledge exploitation. Thornberry (2001) viewed it as a novel approach to new business development and this process is being effectively influenced by organizational learning, collaboration-driven tactics, creativity and individual commitment (Hayton, 2005). For Bosma et al (2011) corporate entrepreneurship illustrates a management strategy which helps in fostering workforce initiatives and efforts to carry innovation leading to the development of new businesses. Zahra and Covin (1995) noted that corporate entrepreneurship represents a company's willingness to engage in new business ventures

or strategies and it therefore requires organizational commitment and sanction for resources to exercise and explore different innovation. Zahra and Covin (1995) suggested that corporate entrepreneurship is reflected in top management's risk taking in respect to corporate investment decisions and strategic actions in times of uncertainty, the frequency and extensiveness of innovation emphasized in the organizational culture and the level of aggressive and proactive competition with rivals. Therefore, the core of corporate entrepreneurship according to Åmo (2010) is based on the fact that organizational change is manageable but it is the management who is in control of the actions of employees and the implementation of any innovative initiative relies on their decisions. Burgelman (1983) termed this to be a result of interlocking entrepreneurial activities involving multiple participants which requires new resource combinations through diversification and this will help in extending the competency of the firm towards unrelated or marginally related areas. Being a top-down process, Åmo (2010) suggests that corporate entrepreneurship is initiated at the top and it is the management levels that invite innovation initiatives from employees and make final decisions on their future. The management will be responsible for any of these innovation initiatives and play a key role in assigning members, allocating tasks and resources, highlighting responsibilities to the people responsible for carrying out the desired innovation. Hornsby et al (2009) studied the corporate entrepreneurial actions from a managerial perspective and found that senior management usually acts mutually with others throughout the firm to identify effective means that could lead to new business creation or reconfiguration of existing ones. According to them, within a specific organizational environment more senior managers display greater structural capability to utilize the conditions for implementing more entrepreneurial ideas than other managers. Their research emphasized a cascading and integrated set of entrepreneurial actions at different management levels for propagating strategies related to corporate entrepreneurship. This view is supported by Hayton (2005) who studied the role played by human resource management particularly in encouraging and promoting corporate entrepreneurship. Åmo (2010) indicates that the management level is the main contributor to corporate entrepreneurship as they are primarily involved in facilitating the entire innovation processes. Zahra and Covin (1995) thereby recommends managers to consider corporate entrepreneurship activities as it is a prominent way to enhance financial performance.

**Corporate Venturing- Where does it fit?**Corporate venturing is another term that is frequently confused with intrapreneurship and corporate entrepreneurship. As evident in Sharma and Chrisman (1999), the classification of corporate entrepreneurship includes three key components: corporate venturing, corporate innovation and strategic renewal. Hippel (1977) defined corporate venturing as an activity residing within a corporation that seeks the generation



of new businesses through the establishment of external or internal ventures. Being a primary component of corporate entrepreneurship, corporate venturing has gathered significant interest among researchers over the years. Guth and Ginsberg (1990) described corporate venturing as the phenomenon of internal innovation leading to the birth of new businesses within existing organizations. Birkinshaw and Hill (2005) defined it as a highly focused approach to innovation involving a parent company to establish a specially designated entity which would then invest in new business opportunities. For them, corporate venturing is a vehicle for attaining strategic success by pursuing a wide range of objectives with a focus mainly towards identifying and developing new businesses for their parent firm. Covin and Miles (2007) stressed the need for effective integration of corporate venturing and organizational strategy for revitalizing firms through the pursuit of innovation-based strategies and introducing and exploiting of new business activities. For Narayanan, Yang and Zahra (2009), corporate venturing represents a set of organizational systems, processes and practices which paves a pivotal route for revitalizing firm operations, building and strengthening new capabilities. Using internal or external means, this also helps in achieving strategic renewal and creating value for shareholders while maintaining a prominent focus on new business creation within existing areas, markets or industries. The top-down element of corporate venturing is supported by Block and MacMillan (1993) who define senior management as the most critical environmental factor deeming them as the greatest promoters of innovation and new ventures. They have a critical role in crafting and enabling a successful venture creation process simultaneously managing a substantial balance in the ongoing businesses of the corporation. Here senior managers need to ensure that the structure of any ventures initiated within the company have features which would maximize the chances of success.

As a component of corporate entrepreneurship, Burgelman (1983) concluded that the success of corporate venturing, just like its parent, is also highly dependent on the availability of autonomous entrepreneurial activities along with the prominent roles played by individuals at operational levels. The capability of middle-level managers to analyze strategic implications of such innovation initiatives and the ability of top management to then turn these initiatives into practical realities was also highlighted. Burgelman (1983) labelled these autonomous strategic initiatives to be one of the most important resources necessary for the maintenance and renewal of corporate capability through internal development. Guth and Ginsberg (1990) noted that corporate venturing can be one of the possible ways to achieve strategic renewal thereby indicating a possible direct connection between these two components of corporate entrepreneurship. Chrisman and Chang (2005) however argued the existence of distinct theoretical differences between strategic renewal and corporate venturing in terms of risk assessments. They observed differences between these two components in terms of

perceptions of risk probabilities between corporate entrepreneurs and non-entrepreneurs and how that might influence the assessment of entrepreneurial initiatives to be considered from different reference points for instance an initiative can be viewed primarily for gain enhancement or for loss avoidance. Narayanan, Yang and Zahra (2009) differentiated corporate venturing from the other two components by highlighting its focus on distinct steps involved in the process of creating new businesses and its subsequent integration into a firm's overall business portfolio.

**A revised hierarchy of entrepreneurial terminologies**

:Based on our classification of entrepreneurship research, a revised hierarchy of entrepreneurship terminologies is proposed in figure 2. As illustrated, our classification approach features entrepreneurship research under three separate domains: independent, bottom-up and top-down. The independent domain is the route leading to any independent entrepreneurial ventures. As discussed earlier, intrapreneurship and corporate entrepreneurship being two distinct phenomena can therefore be placed in their respective domain. Intrapreneurship representing employees' contribution towards the innovation framework of the organization, regardless of management wishes, illustrates a bottom-up entrepreneurial route. Corporate entrepreneurship on the other hand represents an organization's engagement with innovation through a top-down entrepreneurial route.

Gündođdu (2012) proposed a new prototype called innopreneurship to meet the needs and requirements of the new economy by integrating the perspectives of entrepreneurship, intrapreneurship and innovation. This new term has characteristics from both independent entrepreneurship and intrapreneurship thereby having its placement between the domains of independent and bottom-up entrepreneurship. Gündođdu (2012) defined innopreneur as an innovation-oriented entrepreneur who is the new evolutionary model and a cumulative advanced type emerging from this new competitive environment. The author highlighted that the scope of intrapreneurship is constricted within the internal organizational culture whereas innopreneurs are subjected to no such criteria. Innopreneurs thereby are the new types of innovation hunter who demonstrates powerful characteristics of a traditional entrepreneur as well as skills of an intrapreneur.

**Some exceptions:** Authors like Ginsberg and Hay (1994) and Phan et al (2009) argue that corporate entrepreneurship can exhibit both top-down as well as bottom-up characteristics. In our hierarchical classification, although we classified corporate entrepreneurship as a top-down process, there is an exception involving corporate venturing which apart from being a top-down process can also exhibit characteristics of a bottom-up or independent entrepreneurship domain. This is evident if we consider the two sub-components of corporate venturing: internal and external corporate ventures. Internal corporate venturing according to Block and MacMillan (1993) has the unique



challenge of conducting entrepreneurial activities within an existing company and it primarily comprises of a learning intensive project approach which would help in creating new businesses for the purpose of commercializing innovation and technological advances. Researchers such as Burgelman's (1983) and Chrisman and Chang (2005) illustrated a bottom-up route within the frameworks of corporate venturing. Block and MacMillan (1993) and Ginsberg and Hay (1994) emphasized on a top-down process involving senior managers who have a pivotal role in managing and controlling the overall process of corporate entrepreneurship. Senior managers have the responsibility to tailor the scope, scale and degree of aggressiveness of any venturing program according to the firm's capabilities (Block and MacMillan, 1993). However, Ginsberg and Hay (1994) noted that internal corporate venturing should not be considered essentially as a top-down process involving senior managers but the role of venture managers from bottom-up is equally important as well. Block and MacMillan (1993) believe that senior managers should be careful with their involvement in venture management. Without being detached or disinterested, they must primarily provide support and guidance, evaluate performance and check expected outputs. They shouldn't direct day-to-day activities related to the venture management which should be the responsibility of venture managers. This is supported by Ginsberg and Hay (1994) who highlight that venture managers should be involved in managing the direction of new venture projects and so, for successful internal corporate venturing '*venture managers can and should play a major role in making the corporate entrepreneurship process work*' (Ginsberg and Hay 1994, 386). Block and MacMillan (1993) feel that venture managers will experience a great deal of frustration with their involvement in new venture creation if senior managers create an inhospitable climate for entrepreneurial activities. They recommend senior managers to learn how to identify characteristics and skills associated with successful venture managers and create a corporate environment nurturing entrepreneurial actions. Covin and Miles (2007) noted that the label of internal corporate venturing is attached to a phenomenon when within a parent company's domain, a new business or venture is created and the focus here will be on opportunities that are identified within this parent company's environment. This is perhaps the only similarity between the phenomenon of corporate venturing and intrapreneurship. This theoretical similarity is one of the prime reasons why Sharma and Chrisman (1999) didn't isolate intrapreneurship from internal corporate venturing. Ginsberg and Hay (1994) illustrated that both intrapreneurship and internal corporate venturing strategies utilize entrepreneurial resources which are inside the company. With these entrepreneurial resources, these authors pointed out the prime difference that could help differentiate these two concepts. For them, the entrepreneurial resources within an internal corporate venturing are the regular company employees whose creative and innovative aspects are ignited or stimulated in their everyday work. As

discussed, intrapreneurship now stands as a separate entity within entrepreneurship research and thereby should not be confused with any of the sub-categories of corporate entrepreneurship.

External corporate venturing on the other hand relates to the investments facilitating the growth of external opportunities and ventures outside the parent organization and Birkinshaw and Hill (2005) labelled this route as independent start-ups indicating that entrepreneurs with this innovation route will venture into the independent entrepreneurship domain. Phan et al (2009) highlighted how this external corporate venturing will lead corporations into investing in young, early growth-stage businesses through external parties and this can include joint ventures, acquisitions or corporate venture capital. This thereby shows the possibility of some of the sub-categories of corporate venturing to have the potential to migrate into other domains based on innovation routes or circumstances. This is in conjunction with the arguments made by authors such as Ginsberg and Hay (1994) and Phan et al (2009) that sub-groups of corporate entrepreneurship can exhibit both top-down and bottom-up characteristics.

**Conclusion:** The paper highlights some of the inconsistencies arising in the research field of entrepreneurship particularly among its sub-groups: corporate entrepreneurship, corporate venturing, corporate innovation and intrapreneurship resulting in a lack of clarity or consensus among researchers. There are some who support the use of some of these terms interchangeably while others argue over their distinguishing features. We propose a new approach called the 'X'trapreneurship approach for classifying the entrepreneurship terminologies under three distinct domains: independent, bottom-up and top-down process. All these domains have their own distinguishing features thereby making their position vivid in the overall hierarchy providing research clarity and simplification. The independent route is undertaken by a traditional entrepreneur whose primary interest is in creating a new organization independently with sole control over intellectual rights and profits. Intrapreneurship, another sub-group of entrepreneurship represents a bottom-up process illustrating an innovation process sprouting from an employee's perspective and effort. The innovation arising from it may or may not be in line with the organizational practice however, these intrapreneurs do have the characteristics to identify appropriate decision makers to execute their ideas or plans. Corporate entrepreneurship is classified as a top-down entrepreneurship process indicating a management strategy primarily set up to enforce, exercise or promote innovation among its employees and is valid only in situations where employee contribution becomes an answer to an organizational request. Corporate venturing is a component of corporate entrepreneurship which has a tendency to take an independent external route or an internal venturing route depending on the innovation circumstances.



This updated terminology hierarchy will provide future researchers a distinct pathway to approach different research topics within entrepreneurship.

**Further recommendations:** In this paper, we proposed a new classification approach to resolve some of the inconsistencies in the use of different entrepreneurial terminologies. This approach can be used as a guideline by researchers and academics to understand and further analyze the placement of their research terminologies in the bigger picture of entrepreneurship. Our classification approach is only limited to some of the selective terminologies considered in this paper however, using our three domain categorization approach further works should be carried out on other potential terminologies such as strategic entrepreneurship and infopreneurship.

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#### References

Åmo, B. W. (2010). "Corporate entrepreneurship and intrapreneurship related to innovation behaviour among employees". *International Journal of Entrepreneurial Venturing* 2 (2): 144-158.

Antoncic, B. and Hisrich, R.D. (2001). "Intrapreneurship: construct refinement and cross-cultural validation". *Journal of Business Venturing*, no. 16: 495-527.

Antoncic, B. and Hisrich, R.D. (2003). "Clarifying the intrapreneurship concept". *Journal of Small Business and Enterprise Development* 10 (1): 7-24.

Baruah, B. and Ward, A. (2014). "Metamorphosis of intrapreneurship as an effective organizational strategy". *International Entrepreneurship and Management Journal*, 1-12. DOI 10.1007/s11365-014-0318-3.

Birkinshaw, J. and Hill, S. A. (2005). "Corporate venturing units: Vehicles for strategic success in the new Europe". *Organizational Dynamics* 34 (3): 247-257.

Block, Z. and MacMillan, I. C. (1993). *Corporate Venturing - Creating New Businesses within the Firm*. 1<sup>st</sup>edn. Cambridge, MA: Harvard Business School Press.

Bosma, N., Stam, E. and Wennekers, S. (2010). "Intrapreneurship- an international study". *Scientific Analysis of Entrepreneurship and SMEs, Zoetermeer*, no. 12: 1-29.

Bosma, N., Stam, E. and Wennekers, S. (2011). "Intrapreneurship versus independent entrepreneurship: A cross-national analysis of individual entrepreneurial behaviour". [Online]. Available at: [www.uu.nl/SiteCollectionDocuments/REBO/REBO\\_USE/.../11-04.pdf](http://www.uu.nl/SiteCollectionDocuments/REBO/REBO_USE/.../11-04.pdf) [Accessed on 03/11/2014]

Bruyat, C. and Julien.P (2000). "Defining the field of research in entrepreneurship". *Journal of Business Venturing*, no.16: 165-180.

Bull, I. and Willard, G. E. (1993). "Towards a theory of entrepreneurship". *Journal of Business Venturing*, no. 8: 183-195.

Burgelman, R. A. (1983). "A Process Model of Internal Corporate Venturing in the Diversified Major Firm". *Administrative Science Quarterly* 28 (2): 223-244.

Christensen, K. S. (2005). "Enabling intrapreneurship: the case of a knowledge- intensive industrial company". *European Journal of Innovation Management* 8 (3): 305- 322.

Chrisman, J. J. and Chang, E. P. C. (2005). "Corporate venturing and strategic renewal from the perspective of prospect theory". [Online]. Available at: [sbaer.uca.edu/research/sbi/2005/pdf/files/papers/14.pdf](http://sbaer.uca.edu/research/sbi/2005/pdf/files/papers/14.pdf) [Accessed on 03/11/2014]

Collins, O. and Moore, D.G. (1970). *The organization makers: A behavioural study of independent entrepreneurs*. 1<sup>st</sup>edn. New York: Appleton.

Covin, J. G. and Miles, M. P. (2007). "Strategic Use of Corporate Venturing". *Entrepreneurship Theory and Practice*, 183-207.

Drucker, P.F (1985), *Innovation and entrepreneurship*. 1<sup>st</sup>edn. New York: Harper Business.

Fitzsimmons, J. R., Douglas, E. J., Antoncic, B. and Hisrich, R. D. (2005), "Intrapreneurship in Australian firms". *Journal of Australian and New Zealand Academy of Management* 11 (1): 17-27.

Ginsberg, A. and Hay.M. (1994). "Confronting the challenges of corporate entrepreneurship: Guidelines for Venture Managers". *European Management Journal* 12 (4): 382-389.

Guth, W. D. and Ginsberg, A. (1990). "Guest editors' introduction: Corporate entrepreneurship". *Strategic Management Journal*, no. 11: 5-15.

Gündođdu, M. Ç. (2012). "Re-Thinking Entrepreneurship, Intrapreneurship, and Innovation: A Multi-Concept Perspective". *Procedia - Social and Behavioral Sciences*, no. 41: 296-303.

Hayton, J. C. (2005). "Promoting corporate entrepreneurship through human resource management practices: A review of empirical research". *Human Resource Management Review*, no. 15: 21-41.

Hebert, R. and Link, A. (1988). *The Entrepreneur: Mainstream Views and Radical Critiques*. 2<sup>nd</sup>edn. New York: Praeger Publishers.

Hippel, E. (1977). "Successful and Failing Internal Corporate Ventures: An Empirical Analysis". *Industrial Marketing Management*, no. 6: 163-174.

Hisrich, R. D., Peters, M. P. and Shepherd, D.A. (2010), *Entrepreneurship*. 8<sup>th</sup>edn. New York: McGraw-Hill /Irwin.

Hornsby, J. S., Kuratko, D. F., Shepherd, D. A. and Bott, J. P. (2009). "Managers' corporate entrepreneurial actions: Examining perception and position". *Journal of Business Venturing*, no. 24: 236-247.

Kuratko, D. F., Covin, J. G. and Garrett, R. P. (2009). "Corporate Venturing: Insights from actual performance". *Business Horizons*, no. 52: 459-467.

Lazear, E. P. (2005), "Entrepreneurship", *Journal of Labor Economics* 23 (4): 649-680.

Miller, D. (1983). "The correlates of entrepreneurship in three types of firms". *Management Science*, no. 29: 770-791.

Montanye, J. A. (2006). "Entrepreneurship". *The Independent Review* X (4): 549-571.

Morris, M. H. and Kuratko, D. F. (2002). *Corporate Entrepreneurship: Entrepreneurial development within organizations*. Orlando, FL: Harcourt college publishers.

Narayanan, V. K., Yang, Y. and Zahra, S. A. (2009). "Corporate venturing and value creation: A review and proposed framework". *Research Policy*, no 38: 58-76.

Phan. P.H., Wright. M., Ucbasaran. D. and Tan. W. (2009). "Corporate Entrepreneurship: Current research and future directions". *Journal of Business Venturing*, 197-205.

Pinchot III, G. (1985). *Intrapreneuring: You Don't Have to Leave the Corporation to Become an Entrepreneur*. 1<sup>st</sup>edn. New York: Harper and Row.

Pinchot, G. and Pellman, R. (1999). *Intrapreneuring in Action*. 1st edn. San Francisco: Berrett-Koehler Publishers, Inc.

Sharma, P. and Chrisman, J.J. (1999). "Towards a reconciliation of the definitional issues in the field of corporate entrepreneurship". *Entrepreneurship Theory and Practice* 23(3): 11-27.

Thornberry, N. (2001). "Corporate Entrepreneurship: Antidote or Oxymoron?". *European Management Journal* 19 (5): 526-533.

Toftoy, C. and Chatterjee, J. (2004). *The intrapreneurial revolution: now is the time for action*. [Online]. Available at: <http://sbaer.uca.edu/research/icsb/2005../paper192.pdf> [Accessed on 03/11/2014]

Veronica, M. and Zenovia, C. P. (2011). "Entrepreneurship versus Intrapreneurship". *Review of International Comparative Management* 12(5): 971-976.

Veronica, M., Anca, B. and Răzvan, N. (no date). *Intrapreneurship as a platform for internal networks*. [Online]. Available at: [emnet.univie.ac.at/uploads/media/Maier\\_et\\_al..doc](http://emnet.univie.ac.at/uploads/media/Maier_et_al..doc) [Accessed 10/11/ 2014].

Wennekers, S. and Thurik, R. (1999). "Linking Entrepreneurship and Economic Growth". *Small Business Economics*, no. 13: 27-55.

Zahra, S. A. (1991). "Predictors and financial outcomes of corporate entrepreneurship: An exploratory study". *Journal of Business Venturing*, no. 6: 259-285.

Zahra, S. A. and Covin, J. G. (1995). "Contextual influences on the corporate entrepreneurship- Performance relationship: A longitudinal analysis". *Journal of Business Venturing*, no. 10: 43-58.

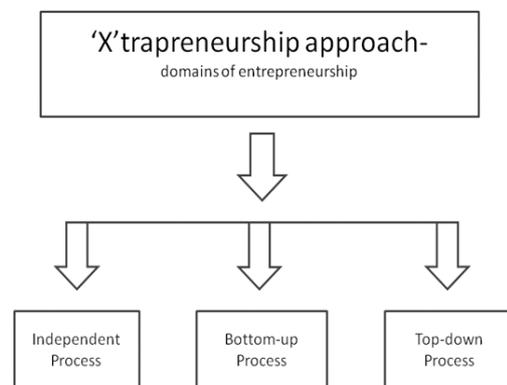


Fig 1 'X'trapreneurship proach- three domains of entrepreneurship

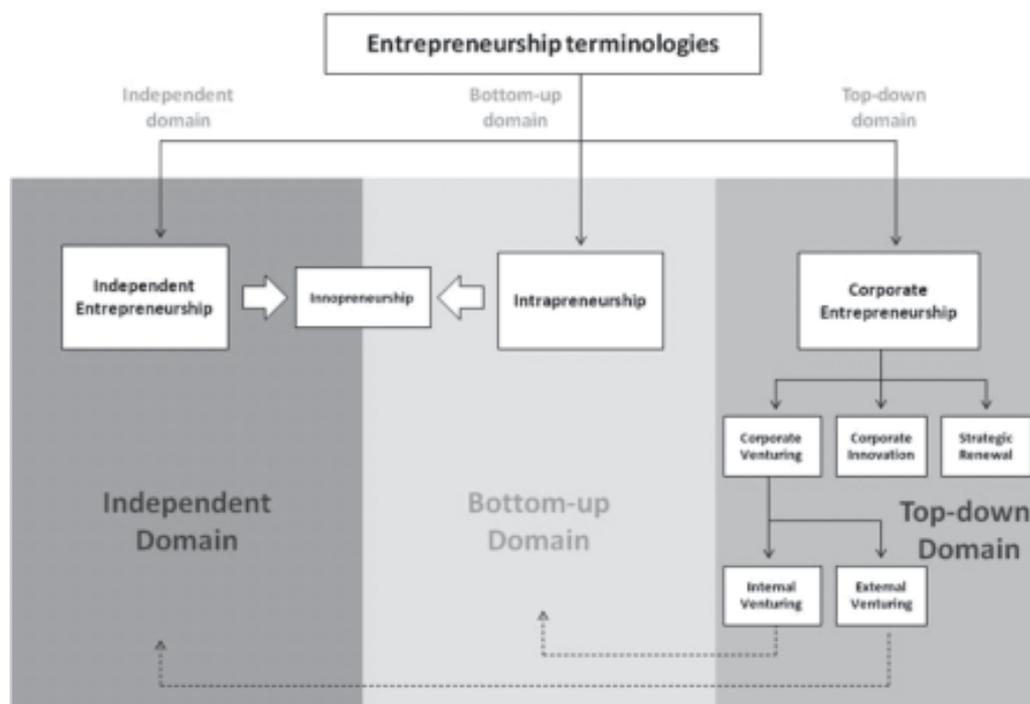


Fig 2 Entrepreneurship terminology classification based on 'X'trapreneurship approach



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