* M.K. Gondaliya

Science [Physics]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 1 - 2
ISSN 2319 - 8168

HABIT AND MORPHOLOGY OF GEL GROWN NICKEL DOPED POTASSIUM HYDROGEN TARTRATE SINGLE CRYSTALS

The habit and morphological study of gel grown nickel doped potassium hydrogen tartrate (NPHT) has been successfully carried out. The morphology of grown crystal is affected by mainly twos parameters: like concentration of feed solution and the pH of the system. The most common cause of habit changes is the presence of impurity in the crystallizing solution. Three types of morphologies of nickel doped potassium hydrogen tartrate are observed. The results of these observations have been described and discussed.
[Keywords: NPHT, morphology, habit, orthorhombic, bi-prismatic, rhombohedral]

INTRODUCTION

Crystal habit is mostly described in qualitative term and it is defined as its overall external shape. The shape results from different rates of growth of its faces. During the crystallization process, one set of faces may be induced to grow faster than others of growth of another set may be retarded. Crystals of same substance grown by different methods may be completely dissimilar in appearance even though they belong to same crystal system. Crystal habits and habit modifications of a variety of crystals are described by Buckly, Muller, Elwell and Scheel, Burton et al, Chernov, Hartman, Kern and many others. Despite remarkable advances in this field, the study of crystal morphology and habit is not outdated because habit plays a vital role in the growth of large quality crystals. Now days crystal growers are more interested in finding explanations for habit modifications. This paper deals with the habit modification and the influence of gel parameters on morphology of NPHT crystals.

EXPERIMENTAL DETAILS

The slowest growing faces determine the habit of crystal. At equilibrium, these faces have the lowest surface energy but it is apparent that crystal habit is governed by kinetic rather than equilibrium considerations. Various factors such as degrees of super solution, type of the solvent, pH of the gel media, presence of impurities etc. affects the habit of a crystal. Kern showed that in a number of experiments many ionic crystals change their habit when super saturation exceeds a certain critical value. Wells observed that a change in solvent results in a change of the crystal habit. Many times pH gel has considerable influence on growth rate of crystals, which ultimately changes the crystal habit. Habit modifications are also observed that the increase in temperature fastens the growth rate. The most common cause of habit changes is the presence of impurities in crystallizing solution. Habit modification by impurities is a surface phenomenon. Impurity

Figure 1

2. Hexagonal first order prism with rhombohedral edges crystals.

The nucleation of this type of crystal is usually initiated just below the gel solution interface and also at the extreme bottom of the glass test tube. The morphology of Some of the typical crystals are shown in Figure 2. Such types of crystals are almost transparent.

* Physics Department, Kamani Science College, Amreli.

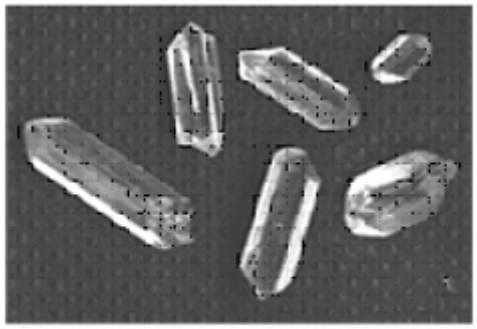


Figure 2

3. Bi-prismatic needle crystals.

These type of crystals are nucleated well inside the gel and extended up to bottom, depending on the feed solution concentration. They start growing with a single nucleus with the diffusion of feed solution into the gel. Initially the growth rate is increases and than becomes constant after laps of time. The growth of needle is due to the presence of diffusion field around the tips of the needle and the crystal grows into the supersaturated solution whereas the sides of the crystals are in contact with a largely exhausted solution. Bi-prismatic needle crystal is illustrated in Figure 3. The crystals are quite transparent.

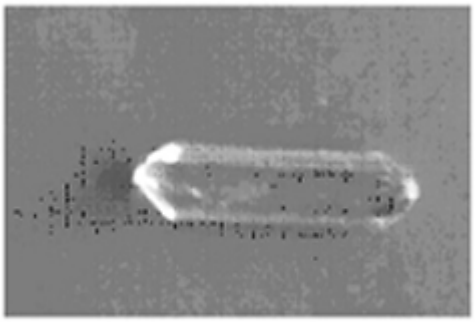


Figure 3

DISCUSSION

1. Influence of Gel pH.

The effect of gel pH on the morphology of the grown crystals is studied by keeping all other gel parameters constant. Its observed that pH is nearly 3 then the hexagonal prisms with rhombohedral edges crystals are grown. If pH is about 4, rods like orthorhombic disphenoidal crystals are grown and at 5 pH, bi-prismatic needle crystals are formed.

2. Influence of concentration of feed solution.

By varying the concentration of feed solution ($NiCl_2 6H_2O$ + KCl) and keeping all other parameters constant the morphology and size of the grown crystals is studied. It is observed that increasing the concentration of feed solution increases linear growth along growth axis for bi-prismatic needle and orthorhombic disphenoidal crystals. Both the crystals are transparent and geometrically well defined. Hexagonal crystals increase in size with the increase of concentration of feed solution. They become semi-transparent with increase of concentration of feed solution.

Crystal habit is governed by the interaction between surface and the diffusion field. Once the habit is established, the diffusion field around it will orient itself to confirm the crystal symmetry and tend to maintain it. The parameters such as concentration of feed solution, pH of gel, impurities in the solvent, gel ageing, temperature, etc. have considerable influences the crystal morphology. In steady state of concentration gradients, diffusion rate also becomes steady which favor the growth of well-defined crystals. However, slower growth rate along one direction results in the growth of rod like disphenoidal crystals. Faster growth rate along growth direction results in the growth of bi-prismatic needle crystals.

CONCLUSION

Rods like orthorhombic and bi-prismatic crystals are obtained under different growth conditions. Transparent hexagonal crystals are obtained. The growth rate along the growth axis for bi-prismatic needle and orthorhombic disphenoidal crystals increases with increasing concentration of feed solution. Generally crystals are transparent but due to gel inclusion semi-transparent are resulted.

REFERENCES

- Mullin J.W.,Crystallization, Butterw orths, London, U.K. (1961).
- Elwell D. and Scheel H.J., Crystal growth from high temperature solutions, Academic press,
- London, U.K., (1975).
  Burton W.K., Cabrera N. and Erank F.C., Phil.Trans.Roy.Soc., A 243 (1951) 299.
- Chernov A.A., Sov. Phys., 4 (1961) 116.

* G.D. Vyas

Science [Mathematics]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 3 - 5
ISSN 2319 - 8168

CONCEPTUAL FRAMEWORK OF VEDIC MATHEMATICS IN RECENT EDUCATION SYSTEM, IN INDIA

As the title suggest, my main focus is on "Vedic Mathematics "used in ancient times. The exposition of such topic is usually brief and the principle result that is summarized becomes pre – requisite for the reminder. Vedic Mathematics is much more than magical method of fast calculation. While mastery of its simple sutras – and a little practice – undoubtly enables one to perform mental computations with lightning speed, what is really fascinating about the subject is hat it springs from what a namely considered religious treatise! But ours is mechanic universe governed by immutable mathematical laws, where everything functions according to definite principles.Be that as it may, Vedic mathematics based on hidden rhythms and pattern bequeathed to us from hoary antiquity will prove to be an valuable aid for every modern human who has to cope with numbers, weather a school kid, a student preparing for major competitive examination, an engineer, a beleaguered house wife, or a counter sales man….a magic want to ease the pressure of 21st century living.This paper outline a proposed education system to develop the kings of Mathematics.

Introduction to Vedic Mathematics:

Vedic math was rediscovered from the ancient Indian scriptures between 1911 and 1918 by Sri Bharati Krishna Tirthaji (1884-1960), a scholar of Sanskrit, Mathematics, History and Philosophy. He studied these ancient texts for years, and after careful investigation was able to reconstruct a series of mathematical formulae called sutras.

Bharati Krishna Tirthaji, who was also the former Shankaracharya (major religious leader) of Puri, India, delved into the ancient Vedic texts and established the techniques of this system in his pioneering work - Vedic Mathematics (1965), which is considered the starting point for all work on Vedic math. It is said that after Bharati Krishna's original 16 volumes of work expounding the Vedic system were lost, in his final years he wrote this single volume, which was published five years after his death

VEDIC MATHEMATICS SUTRAS

Entire mechanics of Vedic mathematics is based on 16 sutras – formulas Sutras:

1. Ekadhikena Purvena
2. Nikhilam Navatascharamam Dashatah
3. Urdhva-tiryagbhyam
4. Paravartya Yojayet
5. Shunyam Samyasamucchaye
6. Anurupye Sunyamanyat
7. Sankalana vyavakalanabhyam
8. Puranaprranabhyam
9. Calana – Kalanabhyam
10. Yavadunam
11. Vyastisamashtih
12. Sheshanynkena Charmena
13. Sopantyadvayamantyam
14. Ekanyunena Purvena
15. Ginitasamucchayah
16. Gunaksamucchayah

Development of Vedic Math

Vedic math was immediately hailed as a new alternative system of mathematics, when a copy of the book reached London in the late 1960s. Some British mathematicians, including Kenneth Williams, Andrew Nicholas and Jeremy Pickles took interest in this new system. They extended the introductory

* Lecturer, Swami Sahjanand College of Commerce & Management, Bhavnagar

material of Bharati Krishna's book, and delivered lectures on it in London. In 1981, this was collated into a book entitled Introductory Lectures on Vedic Mathematics. A few successive trips to India by Andrew Nicholas between 1981 and 1987, renewed the interest on Vedic math, and scholars and teachers in India started taking it seriously.

The Growing Popularity of Vedic Math

Interest in Vedic maths is growing in the field of education where maths teachers are looking for a new and better approach to the subject. Even students at the Indian Institute of Technology (IIT) are said to be using this ancient technique for quick calculations. No wonder, a recent Convocation speech addressed to the students of IIT, Delhi, by Dr. Murli Manohar Joshi, Indian Minister for Science & Technology, stressed the significance of Vedic maths, while pointing out the important contributions ofancient Indian mathematicians, such as Aryabhatta, who laid the foundations of algebra, Baudhayan, the great geometer, and Medhatithi and Madhyatithi, the saint duo, who formulated the basic framework for numerals.

Vedic Maths in Schools

Quite a few years ago, St James' School, London, and other schools began to teach the Vedic system, with notable success. Today this remarkable system is taught in many schools and institutes in India and abroad, and even to MBA and economics students. When in 1988, Maharishi Mahesh Yogi brought to light the marvels of Vedic maths, Maharishi Schools around the world incorporated it in their syllabi. At the school in Skelmersdale, Lancashire, UK, a full course called "The Cosmic Computer" was written and tested on 11 to 14 year old pupils, and later published in 1998. According to Mahesh Yogi, "The sutras of Vedic Mathematics are the software for the cosmic computer that runs this universe."Since 1999, a Delhi-based forum called International Research Foundation for Vedic Mathematics and Indian Heritage, which promotes value-based education, has been organizing lectures on Vedic maths in various schools in Delhi, including Cambridge School, Amity International, DAV Public School, and Tagore International School.

Vedic Math Research

Researches are being undertaken in many areas, including the effects of learning Vedic maths on children. A great deal of research is also being done on how to develop more powerful and easy applications of the Vedic sutras in geometry, calculus, and computing. The Vedic Mathematics Research Group published three new books in 1984, the year of the centenary of the birth of Sri Bharati Krishna Tirthaji.

Plus Points

There are obviously many advantages of using a flexible, refined and efficient mental system like Vedic math. Pupils can come out of the confinement of the 'only one correct' way, and make their own methods under the Vedic system. Thus, it can induce creativity in intelligent pupils, while helping slow-learners grasp the basic concepts of mathematics. A wider use of Vedic math can undoubtedly generate interest in a subject that is generally dreaded by children.

Implications for the students:

* Students should devote more time in practicing Vedic Mathematics.
* Students must relate the questions in Vedic Mathematics in their lives.
* Students should initiate themselves to develop certain questions which they can solve mentally.
* Students should playvarious games among themselves related to Vedic Mathematics so as to increase their speed and accuracy of mental calculations.
* Students should regularly practice the short cuts taught in Vedic Mathematics or Mental Mathematics so as to get well versed with the sutras and enhance their quality of Mathematical computation in terms of speed and accuracy.
* Students should be encouraged to learn more and more short cuts of Vedic Mathematics so that they did not have to join extra classes to crack various competitive exams like NTSE, etc.

Implications for teachers:

* Teacher should teach various tricks to deal with Vedic Mathematics/ Mental Mathematics questions in order to break the monotony of the discipline. Teacher should motivate and encourage the students to

do simplecalculations mentally.

* Teacher should learn various tricks through Vedic Mathematics and othersupport books.

* Teacher should give daily life examples in the class so that students canrelate the questions with the actual life situation.

* Teacher should use simple language while teaching Vedic Mathematics.

* Conducive environment should be organised by the teacher so that effectiveteaching learning can take place.

* Teacher should motivate the student to participate in Vedic Mathematicsquizzes.

* Teacher should use various techniques like computers etc. to teach Vedic Mathematic to attract the attention of the learners.

Implications for curriculum developers:

*** Separate periods should be there to teach Vedic Mathematics.**

***Various inservice programmes like seminars, work shops etc.should beorganized with respect to Vedic Mathematics.**

***Handbooks and manuals should be provided to the teachers for VedicMathematics so that they can consult them as and when required.**

*** Practice sessions should be organized to develop the skill of calculating mentally among the students.**

Conclusion:

This study suggested giving the rise of future mathematician of the country.It also helps to the educationist and curriculum developer so far.

References:

Books:

- ⇨ Andrew Nicholas (2001)"India's System of Vedic Mathematics
- ⇨ Andrew Stewart-Brown (2000)"Recurring Decimals - Vedic Style", Mathematics Teaching No. 170, pages 28,9.Declan O'Reilly (1991)
- ⇨ "I've got Rhythm: Algorithm",Mathematics in School.
- ⇨ Hans Liebeck (2001)"A Short Cut in Long Division",
- ⇨ The Mathematical Gazette,Vol 85, P 463-6. J.N. Kapur (2000)
- ⇨ THE TRUTH ABOUT SWAMIJI'S VEDIC MATHEMATICS
- ⇨ Publishedby Mathematical Sciences Trust Society.138 pages.

* R.L. Thadesar

Science [Mathematics]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 6 - 8
ISSN 2319 - 8168

MATHEMATICAS AND ART

INTRODUCTION :

Mathematics and art have a long historical relationship. The ancient Egyptians and ancient Greeks knew about the golden ratio, regarded as an aesthetically pleasing ratio. They incorporated it and other mathematical relationships, such as the 3:4:5 triangle, into the design of monuments including the Great Pyramid, the Parthenon, the Colosseum.

Artists who have been inspired by mathematics and studied mathematics as a means of complementing their works include the Greek sculptor Polykleitos, who prescribed a series of mathematical proportions for carving the ideal male nude. Renaissance painters including Piero della Francesca and Leonardo da Vinci made use of mathematics in their work. In modern times, artists like M. C. Escher use mathematical forms intensively, while new branches including Penrose tiles and fractal art have been developed

Overview :

Galileo Galilei in his Saggiatore wrote that "[The universe] is written in the language of mathematics, and its characters are triangles, circles, and other geometric figures." Artists who strive and seek to study nature must therefore first fully understand mathematics. On the other hand, mathematicians have sought to interpret and analyse art through the lens of geometry and rationality.

Ancient times :

The Golden Ratio

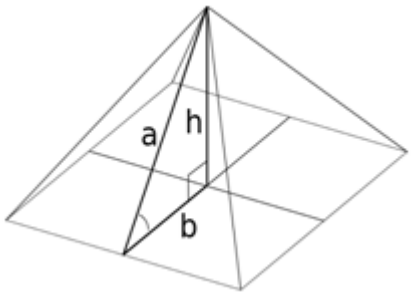
The Golden Ratio, roughly equal to 1.618, was first formally introduced in text by Greek mathematician Pythagoras and later by Euclid in the 5th century BC. In the fourth century BC, Aristotle noted its aesthetic properties. Aside from interesting mathematical properties, geometric shapes derived from the golden ratio, such as the golden rectangle, the golden triangle, and Kepler's triangle, were believed to be aesthetically pleasing. As such, many works of ancient art exhibit and incorporate the golden ratio in their design. Various authors can discern the presence of the golden ratio in Egyptian, Summerian and Greek vases, Chinese pottery, Olmec sculptures, and Cretan and Mycenaean products from as early as the late Bronze Age. The prevalence of this special number in art and architecture even before its formal discovery by Pythagoras is perhaps evidence of an instinctive and primal human cognitive preference for the golden ratio.

Pyramids :

Evidence of mathematical influences in art is present in the Great Pyramids, built by Egyptian Pharaoh Khufu and completed in 2560BC.Pyramidologists since the nineteenth century have noted the presence of the golden ratio in the design of the ancient monuments. They note that the length of the base edges range from 755–756 feet while the height of the structure is 481.4 feet. Working out the math, the perpendicular bisector of the side of the pyramid comes out to 612 feet. If we divide the slant height of the pyramid by half its base length, we get a ratio of 1.619, less than 1% from the golden ratio. This would also indicate that half the cross-section of the Khufu's pyramid is in fact a Kepler's triangle. Debate has broken out between prominent pyramidologists, including Temple Bell, Michael Rice, and John Taylor, over whether the presence of the golden ratio in the pyramids is due to design or chance. Of note, Rice contends that experts of Egyptian architecture have argued that

* Teachin Ass., Dept. of Mathematics, Sir P.P. Institute of Science, Bhavnagar

ancient Egyptian architects have long known about the existence of the golden ratio. In addition, three other pyramidologists Martin Gardner Herbert Turnbull



Herodotus related in one passage that the Egyptian priests told him that the dimensions of the Great Pyramid were so chosen that the area of a square whose side was the height of the great pyramid equaled the area of the triangle. This passage, if true, would undeniably prove the intentional presence of the golden ratio in the pyramids. However, the validity of this assertion is found to be questionable. Critics of this golden ratio theory note that it is far more likely that the original Egyptian architects modeled the pyramid after the3-4-5 triangle, rather than the Kepler's triangle. According to the Rhind Mathematical Papyrus, an ancient papyrus that is the best example of Egyptianmath dating back to the Second Intermediate Period of Egypt, the Egyptians certainly knew about and used the 3-4-5 triangle extensively in mathematics and architecture. While Kepler's triangle has a face angle of 51°49', the 3-4-5 triangle has a face angle of 53°8', very close to the Kepler's triangle. Another triangle that is close is one whose perimeter is 2ð the height such that the base to hypotenuse ratio is 1:4/ð. With a face angle of 51°50', it is also very similar to Kepler's triangle. While the exact triangle the Egyptians chose to design their pyramids after remains unclear, the fact that the dimensions of pyramids correspond so strongly to a special right triangle suggest a strong mathematical influence in the last standing ancient wonder.

Parthenon :

The Parthenon is a temple dedicated the Greek goddess Athena, built in the 5th century BC on the Athenian Acropolis. It is contended that Phidias, the main Greek sculptor in charge of decorating the Parthenon, also knew about the golden ratio and its aesthetic properties. In fact, the Greek symbol for the Golden Ratio is named Phi (ö) because of Phidias. The golden rectangle, a rectangle whose length to width ratio is the golden ratio and considered the most pleasing to the eye, is almost omnipresent in the façade and floor plans of the Parthenon. The entire façade may be enclosed within a golden rectangle.The ratio of the length of a metope and triglyph to the height of the frieze, as well as the height of the columns and stylobate to the entire height of the temple is also the golden ratio. Phidias himself constructed many Parthenon statues that meticulously embody the golden ratio. Phidias is also notable for his contributions to the Athena Parthenos and the Statue of Zeus. As with the Pyramids however, more recent historians challenge the purposeful inclusion of the golden ratio in Greek temples, such as the Parthenon, contending that earlier studies have purposefully fitted in measurements of the temple until it conformed to a golden rectangle.

Great Mosque of Kairouan:

The oldest mosque in North Africa is the Great Mosque of Kairouan (Tunisia), built by Uqba ibn Nafi in 670 A.D. Boussora and Mazouz's study of the mosque dimensions reveals a very consistent application of the golden ratio in its design. Boussora and Mazouz contend: The geometric technique of construction of the golden section seems to have determined the major decisions of the spatial organisation. The golden section appears repeatedly in some part of the building measurements. It is found in the overall proportion of the plan and in the dimensioning of the prayer space, the court and the minaret. The existence of the golden section in some parts of Kairouan mosque indicates that the elements designed and generated with this principle may have been realised at the same period. Because of urban constraints, the mosque floor plan is not a perfect rectangle. Even so, for example, the division of the courtyard and prayer hall is almost a perfect golden ratio.

Polykleitos :

Polykleitos the elder was a Greek sculptor from the school of Argos, and a contemporary of Phidias. His works and statues consisted mainly of bronze and were of athletes. According to the mathematician Xenocrates, Polykleitos is ranked as one of the most important sculptors of Classical antiquity for his work on theDoryphorus and the statue of Hera in the Hera ion of Argos. While his sculptures may not be as famous as those of Phidias, he is better known for his approach towards sculpture. In the Canon of Polykleitos, a treatise he wrote designed to document the "perfect" anatomical proportions of the male nude, Polycleitus gives us a mathematical approach towards sculpturing the human body. The influence of the Canon of Polycleitus is immense both in Classical Greek, Roman, and Renaissance sculpture, with many sculptors after him following Polykleitos' prescription. While none of Polycleitus original works survive, Roman copies of his works demonstrate and embody his ideal of physical perfection and mathematical precision.

Reference

- Courant, Richard and H. Robbins, What Is Mathematics? : An Elementary Approach to Ideas and Methods, Oxford University Press, USA; 2 edition
- Eves, Howard, An Introduction to the History of Mathematics, Sixth Edition, Saunders.
- Kline, Morris, Mathematical Thought from Ancient to Modern Times, Oxford University Press, USA.

* R.P. Madhu ** S.M. Thathagar

Science [COMPUTER]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 9 - 10
ISSN 2319 - 8168

IS 'E LEARNING AND M LEARNING' ARE THE EFFECTIVE EDUCATION SYSTEM FOR UP-COMING EDUCATION SYSTEM

This research paper focuses on E learning and M Learning technology. This technology is appropriate for implementing contemporary education system and it will be useful forthcoming education system. It also illustrates introduction of basic terminology. It emphasis on how to change current education system and establish quality and utility based education system available in current era. Many IT and Mobile education systems are innovative systems that may be useful compare to current education system. I think this is the only way to improve & update education system.

Keyword: E Learning, M Learning, contemporary education system, prospect education system, effectiveness of any education system.

Introduction:

As we are marching towards 22nd century many new education systems are introduced and we have mentioned some drawbacks of vacant education system. Each educationalist always tries to finding out new education system that may be replaced instead of vacant education system. This research do not consider any level of education, it emphasizes on all the fields of educational systems that includes our Indian primary, secondary, higher education or various education system of vast field of education.

What is E Learning?

E-learning is going to become famous and alive with vast technique in the field of education. Its use becomes very popular now days. It provides education through the internet and many computers, laptop and other hardware. The benefit of e education provides education at very long distance, in other words its length is very high. Any one learns using E Education is called e learning. For E-learning many web portals are designed and using username and pass we can start learning.

E-Education was established in 2004 with the aim to provide reliable and value-added educational consultancy services to potential students, who want to pursue further education in foreign institutes. The idea of establishing educational consultancy firm was initially generated by the fact that educational consultancy services provided by various consultants in the country are inadequate and misleading genuine students who pursue higher education abroad.

What is M Learning?

As the keyword suggests M learning means, learning through Mobile phones. M learning uses various mobile phones such as NOKIA, Samsung, Blackberry, HTC etc. In M learning mobile operating system also plays important role such as Windows OS or Android OS. In M learning E education is also important or in other words we cannot get 'M Learning' if 'E learning' will not be available.

*** Lecturer, Nandkuvarba Mahila bca college, Bhavnagar**
**** Lecturer, Swami Sahjanand College of Comm. & Mgt., Bhavnagar**

M-learning technology includes handheld computers, MP3 players, notebooks, mobile phones and tablets. M-learning focuses on the mobility of the learner, interacting with portable technologies, and learning that reflects a focus on how society and its institutions can accommodate and support an increasingly mobile population. There is also a new direction in m-learning that gives the instructor more mobility and includes creation of on the spot and in the field learning material that predominately uses Smartphone using various software. Presently we find various Mobile Applications, using which we can get real education.

Contemporary education system:

In INDIA current education system is based on Exam that may be yearly or semester. In annual system, exam has been conducted at the end of the year. The assessment of students' knowledge so quickly competed that within a one or two days it comes to an end. While during online within 1 or more hours it finishes. It may be variant as per a variety of fields but existing system is based on current exam system. Contemporary education system also exercises 'E-learning' concept in limited areas. For teaching faculties, in current education system, many modern education techniques are used while for student we use limited technology in existing teaching system and because of those learners or students does like contemporary education system more and it also does not contain any interesting technique.

Comparing 'E-learning and M-Learning' education system v/s contemporary education:

As each education technique has some or more drawbacks, current education is disliked by many educationalists of current age. 'E learning' is going to become famous for new education system but with parallel Mobile phones has started new revolution in all education aspects. Mobile phone also provides learning and it called 'M-Learning'. Currently all the learners have mobiles or most of students uses mobile phones and using mobile phones we can access Internet which is called E-Learning and many Smartphone allows to install various mobile application such as MCQ based education and many other application for education purpose.

For implementing 'E Learning and M Learning' as a education system, a class 30 students is selected, 15 students have to taught one month and remaining are taught using internet and all students have assigned some homework. At the end exam Is taken not only on paper but their General knowledge IQ is also tested and we have get the result that students who are taught using Internet and Mobile Application, their IQ was high.

Conclusion:

In this research paper contemporary education system is compared with 'E-Learning and M-Learning' and at the conclusion, researcher puts firm emphasis on to use E-Learning and M-Learning as education system for current era.

REFERENCE

- **Innovative Mobile Learning: Techniques and Technologies** By, Hokyoung Ryu, David Parsons
- **Combining E-learning and M-learning: New Applications of Blended Educational Resources** By, David Parsons
- **Architectures for Distributed and Complex M-learning Systems: Applying Intelligent Technologies** By, Santi Caballe
- http://www.m-learning.in/home.php
- http://www.24x7learning.com/
- http://www.classteacher.com/
- http://en.wikipedia.org/wiki/M-learning

* Dr. G.S. Patel ** Dr. P. Shah

Homeopathy
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 11 - 14
ISSN 2319 - 8168

AN EXPERIMENTAL ANALYSIS OF HOMOEOPATHIC MEDICINE (ARSENIC ALBUM) IN THE GROWTH, DEVELOPMENT AND DISEASE CAPABILITY IN PLANT (CALENDULA OFFICINALIS)

Introduction

There is a saying that marching ahead is life and stagnation is death. Homoeopathy as a system of treatment has progressed remarkably during the last few decades. Homoeopathic system of medicine is a system of par excellence. since birth it had lived up to the challenges and had never succumbed to other systems of medicines.

The reason behind being the universal acceptance of the law of similar law that can be implied to anything which can be termed the living. For centuries the system and its medicines have been serving as a boon to the ailing sick. In recent years this pragmatic system of medicine had been tried in other areas of life apart from man like in the plants as well lower animals and had so far given desirable results. Understanding the significance and need for the hour I would like to take up this venture of experimenting the role of homeopathic medicine in the life span of plants.

Homoeopathic treatment has been found very effective in domestic and other animals; we shall not forget the fact that plants sustain life on the earth. All plants including food crops and cash crop bring welfare to and therefore the healthy existence of plants are inevitable crops and also for maintaining an ecological balance. Though agriculture is our basic necessity, the abuse of artificial manures and pesticides has brought about many health hazards to men and animal. The fertility of the soil is badly affected so the ecological balance is also affected. In this context it is highly relevant to probe into an alternative system of manuring and treatment of plant. It is believed that homoeopathic medicine can be a better substitute to pesticides. For healthy growth of plants and to improve agricultural producing and also to be more eco friendly, very little studies have been conducted in this regarded. So far in the present study a humble attempt is made to test the extend of usefulness of homoeopathic medicine in this direction To serve the purpose the research we shall conducted experiment of homoeopathic medicine arsenic album to be administered to the marigold plant (calendula officinalis).

AIMS & OBJECTIVES

AIM – An experimental analysis of homoeopathic medicine in the growth, development and disease capability in plant (calendula officinalis).

OBJECTIVES – To check whether there is any significant difference in germination, growth and development of calendula officinalis with different potencies of the same drug (Ars .Alb).

* To know the effect of homoeopathic medicine (Ars. Alb) on with standing diseases capability of calendula officinalis

MATERIAL AND METHODS

Study was carried out at SKH Medical College, Beed, Maharastra from October 2008 to January 2009

General Principals followed in the study are :

* All plants were exposed to clear sunlight and well maintained with the optimum temperature.
* Displacement not allowed after the container has kept in position to avoid root damage.
* Fair sun and airy position were selected for keeping the containers.
* Containers kept in position in such a way it should

* Director, Swami Vivekanand Homeopathy & Medical College, Bhavnagar
** Lecturer, Swami Vivekanand Homeopathy & Medical College, Bhavnagar

not be affected by natural elements or lower animals
· Optimum soil moisture was maintained at the time of seeding and germination.
· Watering was done once in a day.
· No flammable or toxic materials were kept next or aside of the plant.
· Chemicals, inorganic fertilizers are not used to stimulate the plant growth.
· Containers were placed away from toilet or bath room
· Watering was done with good water (ph 5.8 to 6.2)
· Photographs and Measurement was done on every 08 days

MATERIALS -

* Seeds of African marigold were taken from government agriculture unit.
* Selection of drug Ars.Alb in various potencies was taken from famous government approved pharmaceutical company.
* Study was done by dividing plants in four groups, each group contain 10 seed. Following groups were made:
* Control Group
* Arsenic alb 1 M
* Arsenic alb 200
* Arsenic Alb 30

Selection of seeds

Calendula officinalis plant has been selected for my experiment titled "An experimental analysis of homoeopathic medicine in the growth, development and disease capability in plant (calendula officinalis)." and the seeds for the above said experiment was purchased from KIRTI agriculture shop, beed.

Selection of Homoeopathic medicine

Arsenic Album drugs with different potency were purchased from SBL Homoeopathy pharmaceuticals. Potencies 30,200,1M was experimented.

Selection of soil

The soil for growing Calendula officinalis was fertile, well-drained but moisture-retentive, with a pH in the range 5.8-6.2.

The soil selected for this experiment was examined by Government Horticulture officer with the pH map of district and certified as 6.2 pH value.

Equipments required

· Digital camera for showing images of plants on different time intervals
· Measuring tape 10 feet size & transparent scale for measuring the growth
· 4 numbers of small plastic cup with 20 ml capacity
· 4 numbers of plastic containers of 10 liters capacity
· Sign boards with different markings
· Arsenic Album drug solution 30,200,1M
· Plastic spray for spraying drugs
· Water as per requirement

Method

I st day

* 20 ml capacity four plastic cup were selected and viable seeds 10 numbers were soaked in 10 ml of water
* One drop of Arsenic Album 30 was added to First plastic cup.
* One drop of Arsenic Album 200 was added to second plastic cup.
* One drop of Arsenic Album 1M was added to third plastic cup.
* Fourth plastic cup was selected as control group and no medicine was added to it.

II nd day

All these four species were taken to four plastic containers of 10 liters capacity to have clear conception of homeopathic medicine, which were filled with three fourth of garden soil.200 ml of water has been added to each container on the first day and 100 ml up to the level of germination.

IIIth day onwards

Water was given to all four group daily as per requirement to prevent dryness.

For all treated group 10 drops of drug was added with 500 ml of water and sprayed over each plant every 10 days till the end of life span.

DISCUSSION

My experiment was stared initially by putting seeds of calendula officinalis in the soil after digging 1 cm deep but due to rail fall I was unable to proceed further. So, decision was taken to use plastic container of 10 liter capacity to start the experiment. Experiment was done at S.K.H. Medical College, Beed.

After following general rule of experiment and putting seeds in the plastic container germination was started on second day in 30 and 1M and on third day in 200 potency group while control group germination was started on 4th day. Normal period of germination of calendula is 3 to 19 days. This suggests that use of drug arsenic alb has beneficial effect on germination speed.

After 10th days of cropping seeds 2 seeds were germinated in 30 while 3 seeds where germinated in 200 and control group, highest seeds (5) were germinated in 1M potency group as shown in Graph 1. This also suggests that 1M potency of arsenic alb is favoring germination of seeds.

The average height of the treated group at the end of the study was (110th day) 79.2 cm. Among the treated group, the group with Arsenic Album 200 had maximum growth (98.5 cm), while the control group had only 36.0 cm growth and 1M potency group was heaving a height of 38.0 cm, this finding may be because of species of seed which were there in 200 and not due to drug effect.

Group with 30 potency was destroyed between 32 to 40 day because of root damage due to rain fall, which was evident on examination of root of plant.

The very first bearing of flower was on the 20th day by arsenic album 30 potency treated group of container. Bearing of flowering by arsenic album 200,1M, treated groups and control group of container was between 30 to 40 days. No of flowers were highest in 1M group (>23). Weight of flowers was 5-8 gram in 1M potency which was highest among all groups. In control group it was only 1-2 gm. So drugs also help in the nourishment and development of flowers also.

Average number of leaves was highest in 1M potency (>120) which further document effect of drug on plant. Surprisingly diameter of 200 potency plant was reduced on 110 days which may be due to disease in the plant.

All four groups were affected with the different type of diseases. Botrytis blight was affecting flowers and leaves of all 4 group but least present in 1M group.

Leaves were affected - only 6% in case on 1M while 26% in 200 and 30% in control group. Leaves were affected with bacterial spot and atmospheric lower of the leaves are cover yellows in colors.

Red spider mite was developed in 30 potency group and furthermore it was destroyed between 30 - 40 days due to root damage. Mineral disease was observed in 1M potency in remarkable manner which may suggest property of drug to help plant to conserve and absorb more minerals from the soil and due to excessive presence of mineral it has adverse effect on the plant.

Observations and Results

1. Rate of Germination & Percentage of Germination

Table 1.1

Germination percentage for treated group and control

(Average 10 days)

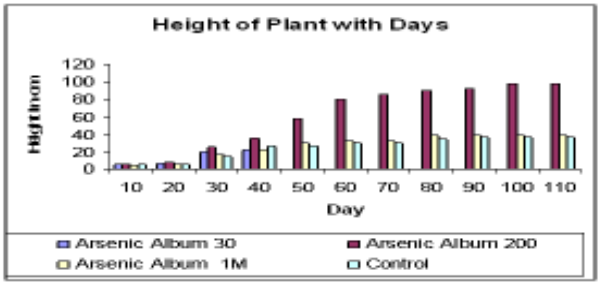
Sr. No.	Container index	Total No of seeds	No of seeds germinated	%of germination
1	Arsenic Album 30	10	2	20
2	Arsenic Album 200	10	3	30
3	Arsenic Album 1M	10	5	50
4	Control	10	3	30

2. Total Height of plant on different time intervals :-

Average Growth pattern (Height in cm)

The average height of the treated group at the end of the study was (110th day) 79.2 cm. Among the treated group, the group with Arsenic Album 200 had maximum growth (98.5 cm), while the control group had only 36.0 cm growth.

Height comparison of treated group and control on different interval



3. Period of flowering on different time intervals:-

Average number of flowers beard The very first bearing of flower was on the 20th day by arsenic album 30 potency treated group of container

30th Day – 40th day : Bearing of flowering by arsenic album 200,1M, treated groups and control group of container.

All plants in all four containers started flowering at 40th day

4. Capability of Disease withstand:-

Disease withstanding capability :- (In average)

Control Study

Leaves : - 30% of leaves were affected with bacterial spot and atmospheric lower of the leaves are cover yellows in colors.

Flowers: - are affected because of the betraysis fungal infection.

Treated Groups

In 30 C

Leaves : - whole plant was destroyed after 40 days due to rain fall and root damage due to excessive water.

Flower : - only spider mite affected.

In 200 C

Leaves : - Only 26% of leaves were affected with bacterial spots and fungal infection and spider mite also seen in this potency

Flowers: - affected because of environment problem.

1M potency

Leaves :- 6% of leaves were affected mostly and zn, Mg. affected.

Flowers : - no any diseases

In leaves (Disease affected)

Plant groups	Percentage
Arsenic Album 30*	--
Arsenic Album 200	26%
Arsenic Album 1M	6%
Control	30%

SUMMARY AND CONCLUSION

Arsenic album 30 C, 200 C, 1 M, has significant effect on the germination and growth , flowering and disease resistance of calendula officinalis plants when compared to control. It can be summarized as follow:

First Germination	**Arsenic Album 30 And 1M**
Maximum Germination	**Arsenic Album 1M**
Well Spread ,Healthy And Length Of Leaf	**Arsenic Album1m**
First Flowered Group	**Arsenic Album 30**
Maximum Number Of Flowers	**Arsenic Album 200,1M**

From the above study we can come to a conclusion that, Arsenic Alb 30, 200, 1M, drugs have stimulating effect on the germination, growth of the plant, flowers bearing and disease resistance effect on the calendula officinalis plant than the control group.

REFERENCE

- The Plant Disease Diagnostic Clinic at Cornell University is located at 334 Plant Science Building, Ithaca, NY, 14853.
- Ken Fern, Notes from observations, tasting etc at Plants For A Future and on field trips.
- Chiej. R. Encyclopaedia of Medicinal Plants. MacDonald 1984 ISBN 0-356-10541-5.
- Launert. E. Edible and Medicinal Plants. Hamlyn 1981 ISBN 0-600-37216-2.
- Bruce. M. E. Commonsense Compost Making. Faber 1977 ISBN 0-571-09990-4
- International Bee Research Association. Garden Plants Valuable to Bees. International Bee Research Association. 1981

* A.K. Katariya

Ayurveda
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 15 - 17
ISSN 2319 - 8168

KSHARSUTRA IN FISTULA IN ANO (BHAGANDARA)

Introduction: In present era most of person have disturbed elementary canal due to modern life style. Which leads to disturbed bowel habits. Constipation, Frequency of defecation, Piles, Fissures , Fistula in ano and other anorectal disorders are result of disturbed elementary canal. Other reasons of anorectal disorders are bad habits like continuous standing or sitting posture, spicy diet, mental stress and irregular dietary and sleeping habits.

Fistula in ano: Fistula is a tract lined by unhealthy granulation tissue which opens externally on the skin around anus and internally in the anus , rectum, vagina or other organs.

* Fistula – Latin word – *Reed,Pipe & Flute*
* Fistula is an abnormal communication between any two epithelial lined organs.
* It results from an anorectal abscess
* Difficult and Recurrent surgical disease.

BHAGANDARA Bhaga - Bhaj
Daran - Dri

* Bhaga - Structures around the guda including Yoni & Basti.
* Darana - Tear of surface associated with pain.

"ASTAMAHAGADA" - very difficult to cure.

Defination of Bhagandara: Te tu bhaga guda basti radesh daranachch Bhagandara ituchyate, apakva Pidika, Pakva Bhagandara Su.Ni.4/3

• A lesion which causes in continuity of the skin of the vaginal, rectal & perineal regions and associated with tearing pain.
• It is a result of bursting of Bhagandara pidika.

Nidana of Bhagandara :

A. Aharajanya: Ati Tikta,Katu & Kshaya ras pradhan, Ati Rksha Guru And vata-pita prakopaka And Apathya Ahara sevana etc.

B. Viharajanya: Kathina and Utkatasana, Pravahana, Ativyavaya, elephant,hourse vehicle etc.riding, Bastinetrasangharsh etc.

C. Agantuja: Truna and Asthishalya, Krumi,

D. Anya: Arshonidana, Sthaulya(obesity) Etc.

Aetiology of Fistula in Ano: Crypto Glandular infection, Previous Pyogenic Abscess,Legancy of Anorectal Abscess, Sequel of Anorectal Abscess, Tuberculosis, Anal fissure, Ulcerative colitis,Crohn's disease,Leukemia,Colloid Carcinoma,Foreign body intrusion,Pelvic inflammation,Trauma,Radiation, Lymphogranuloma venerum ,Immunocompromised state,Infectious dermatitides ,Pelvic inflammation, Other rectal, obstetrical or gynecological operations etc.

Symtomatology:

• Sero purulent discharge
• External opening occluded – Pain & Swelling
• Pruritus ani
• No Bleeding per rectum
• O/E - Single/Multiple external openings
• Local Inflammation & Induration
• Fistulous tract felt between Index finger in rectum & thumb outside perianal skin
• Internal opening felt as a nodule on anorectal wall

Prognosis: According to Ayurveda Ano-Rectal area is consider as a vital part.Diseases of this area is

*** Lecturer, Dept of Shalyatantr Govt. Ayurved College, Junagadh.**

very painful condition and discomfort to daily routine life.According to Acharya Sushruta Bhagandar-Fistula in ano is one of the disorder described in Ashta Mahagada and difficult to cure. Medications is one of the treatment for Bhagandara but it has limitations like less successful, not a permanent solution Etc.Other option is only operative-surgical treatment.

Management:

A Preventive: - Nidan parivarjan -Supuration of Pidika –General and local

B. Curative: 1. Medical: Local and Systematic

2.Surgical: Purva,Pradhana(fistulotomy,Fistulectomy etc.) and Paschat karma

3. parasurgical: Raktamokshana, Agnikarma, Ksharavarti, Ksharakarma, and Ksharasutra

In Ayurveda specially in SUSHRUTA SAMHITA Shastra and anushastra chikitsa is described for Kashtasadhya Vyadhi.If Shastra chikitsa is not possible, Anushastra – parasurgical treatment is one of the best for ano-rectal disorders.Acording to Sushruta KSHARA is one of the Anushstra.

What is KSHARA: Medicine in alkaline nature prepared by Ayurvedic drugs like Arka, Apamarga, Kadali, Palash, Nimb etc.It has excision, incision, curetting, tridoshaghnatva and special processing action. Kshara plays an important role in surgical and para surgical process specially in ano-rectal disorders.

What is KSHARASUTRA:

• Ksharasutra is a thread coated by Kshara.

• History : Not quite a new invention – in 460 B C Hippocrates had advocated one such method under the nomenclature of apolinose which had been developed later by Celsus.

• In 1969 – Roschkehad used Parlon (synthetic) thread and got 50% result

• P.J.DESHPANDE in B.H.U had used Ksharasutra for the treatment of Fistula in ano.

Standerdization of Ksharasutra:

• THREAD : Silk pleated, Silk twisted, Synthetic, cotton or Surgical linen.

• Surgical linen-20 is the best.

• Tensile strength – 5 kg measured by tensiometer.

• PH- Less then 9.6 measured by PH paper.

• Chromatographically study.

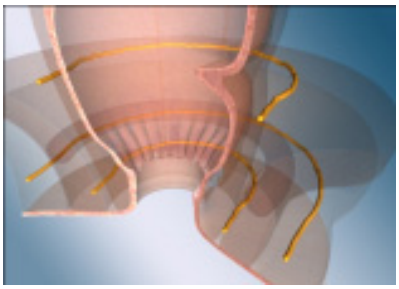
• Study of dispersition.

Preparation of Ksharasutra:

COATINGS : 10 coats of latex of Snuhi
7 coats of Kshara
4 coats of Haridra

Collection of Snuhi Kshira Coatting

Ksharasutra in Fistula in ano (bhagandara): A probe with a Kshrasutra insert in fistulous tract & ligate both ends of Ksharasutra. Change the Ksharasutra every week. Continuous the treatment till whole tract cut through properly.



Mechanism of Action:

Snuhi Ksheera – Protiolytic action

Apamarga Kshara – Caustic action

Haridra churna – Antiseptic action

• Continuous drainage of fistulous tract

• Curate the unhealthy granulation tissue

• Stimulate the healthy granulation tissue
• Effective necrolysis of old fibrous tissue
• Separation of debris & Cleansing the wound
Cutting through tissues & laying the track open
• **Unit cutting time:** The time taken by Kshara sutra to cut one centimeter of fistulous tract in days.
Total no. of days taken for cut through
U.C.T.= days/cm
Initial length of tract in cm.

Demerits of Surgical treatment:

• Long chain treatment.
• Wound created unusually large scar.
• Proper healing of such a wide wound. Especially in the ano-rectal region, is not of dangers.
• Contraction of the scar makes the patient very uncomfortable whenever he/she has to sit for longer times at a stretch.
• Loss of sphincter control leads to incontinency of stool.
• Recurrence rate high.
• Repeated operative procedure reducing considerably the chances of good healing.
• Lengthy hospitalization.
• Economically costly.

Benefits of Ksharasutra Therapy:

• Low recurrence rate
• Not produce extensive tissue damage and mutilation of the part
• Less pain and discomfort
• Routine work possible easily
• Long standing hospitalization not required
• Negligible trauma and sphincter
• Less chances of stool incontinency in future
• Less expendable

* R.M. Parmar

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 18 - 20
ISSN 2319 - 8168

RURAL ENTREPRENEURS: PROBLEMS & REMEDIES TO SOLVE

More than 75 % person lives in rural area in India. The economic development of our country largely depends on the development of rural areas and the standard of living of its rural mass. Rural entrepreneur is one of the most important inputs in the economic development of a country and of regions within the country. Rural entrepreneur uses the scarce resources in the most efficient manner thereby increasing profits and decreasing costs. Due to lack of education, majority of rural people are unaware of technological development, marketing etc. Shortage of finance and raw materials are main problems face by rural entrepreneurs
This paper focuses on the identification of various problems associated with rural entrepreneurship. Suitable cures have also been discussed to overcome these problems.

Key words: Economic development, Lack of training, Purchasing power, Rural entrepreneur, Rural mass.

I. INTRODUCTION

Entrepreneurship can play an important role in rural development. “Entrepreneur means one who creates a product on his own account, whoever undertakes on his own an industrial/trading enterprise in which work men are employed”. If entrepreneurships really encouraged in rural area it would, of course, be instrumental in changing the face of rural areas by solving the problems of unemployment, poverty, economic disparity, poor utilization of rural capacity, low level of standard of living .

II. RURAL ENTREPRENEURSHIP AND DEVELOPMENT OF VILLAGES

Rural entrepreneurship implies entrepreneurship emerging in rural areas. This means rural entrepreneurship is synonymous with rural industrialization. Many examples of successful rural entrepreneurship can already be found in literature. Diversification into non-agricultural uses of available resources such as catering for tourists, blacksmithing, carpentry, spinning, etc. as well as diversification into activities other than those solely related to agricultural usage, for example, the use of resources other than land such as water, woodlands, buildings, available skills and local features, all fit into rural entrepreneurship.

Indian agriculture is characterized by low productivity, exposure for vagaries of nature like drought, flood, other natural disasters and weaknesses like mismatch between agricultural and cash crops, inadequate infrastructure to provide for value addition, wide disparity in public-private partnership in agricultural development

Rural people, in search of jobs, often migrate to urban centre’s creating unwanted slums and live in unhygienic conditions of living. A turnaround is possible in the above trend if employment opportunities are made available in rural areas along with basis amenities of life.

Rural industrialization through the development of rural entrepreneur seems to be the answer to Poverty, unemployment and back-wardens of Indian economy. Government of India in its successive five year plans has been assigning increasing importance and support for the promotion and development of rural entrepreneurship.

III. OBJECTIVE OF STUDY

* . To analyze the problems faced in growth of rural

* Ass. Prof. Shri J.M.Patel Arts and Smt. M.N.Patel Commerce mahila college, Unjha.

entrepreneurs in India.

* To find out the remedies to solve the problems of rural entrepreneurs.

IV. PROBLEMS IN RURAL ENTREPRENEURSHIP:

Entrepreneurs are playing very important role in the development of economy. They face various problems in day to day work. As the thorns are part of roses, similarly every flourishing business has its own kind of problems.Some of the major problems faced by rural entrepreneurs are as under.

1) Financial Problems: Most of the rural entrepreneurs fail to get external funds due to absence of tangible security and credit in the market. The procedure to avail the loan facility is too time-consuming that its delay often disappoints the rural entrepreneurs. Lack of finance available to rural entrepreneurs is one of the biggest problems which rural entrepreneur is bearing now days especially due to global recession. Major difficulties faced by rural entrepreneurs include low level of purchasing power of rural consumer so sales volume is insufficient, lack of finance to start business, reduced profits due to competition, pricing of goods and services.

2) Lack of infrastructural facilities: The growth of rural entrepreneurs is not very healthy in spite of efforts made by government due to lack of proper and adequate infrastructural facilities.

3) Marketing problems: Rural entrepreneurs face severe completion from large sized organizations and urban entrepreneurs. They incur high cost of production due to high input cost. Major problems faced by marketers are the problem of standardization and competition from large scale units. They face the problem in fixing the standards and sticking to them. Competition from large scale units also creates difficulty for the survival of new ventures. New ventures have limited financial resources and hence cannot afford to spend more on sales promotion. These units are not having any standard brand name under which they can sell their products. New ventures have to come up with new advertisement strategies which the rural people can easily understand. The literacy rate among the rural consumer is very low. Printed media have limited scope in the rural context. The traditionally bounded nature, cultural backwardness and cultural barriers add to the difficulty of communication. People in rural areas mostly communicate in their local dialects and English and Hindi are not understood by many people. It has been seen in recent past that in spite of enough food stocks with government warehouses, people are dying of starvation. This indicates problem with the public distribution system. The producers are not collective in their approach for marketing their products because they are to widely scattered and uneducated.

4) Management problems: Information technology is not very common in rural reas. Entrepreneurs rely on internal linkages that encourage the flow of goods, services, information and ideas. The intensity of family and personal relationships in rural communities can sometime be helpful but they may also present obstacles to effective business relationships. Business deals may receive less than rigorous objectivity and intercommunity rivalries may reduce the scope for regional cooperation. Decision making process and lines of authority are mostly blurred by local politics in rural areas.

5) Procurement of raw materials: Procurement of raw materials is really a tough task for rural entrepreneur. They may end up with poor quality raw materials, may also face the problem of storage and warehousing.

6) Lack of technical knowledge: Rural entrepreneurs suffer a severe problem of lack of technical knowledge. Lack of training facilities and extension services crate a hurdle for the development of rural entrepreneurship.

7) Poor quality of products: Another important problem is growth of rural entrepreneurship is the inferior quality of products produced due to lack of availability of standard tools and equipment and poor quality of raw materials.

8) Human resources problems: Most of the entrepreneurs of rural areas are unable to find workers with high skills. Turnover rates are also high in this case. They have to be provided with on the job training and their training is generally a serious problem for entrepreneur as they are mostly

uneducated and they have to be taught in local language which they understand easily. The industries in rural areas are not only established just to take advantage of cheap labour but also to bring about an integrated rural development. So rural entrepreneurs should not look at rural area as their market, they should also see the challenges existing in urban areas and be prepared for them. Rural entrepreneurs are generally less innovative in their thinking. Youths in rural areas have little options "this is what they are given to believe". This is the reason that many of them either work at farm or migrate to urban land.

TO SOLVE THESE PROBLEMS

Different organization like IFCI, ICICI, SIDBI, NABARD etc. are trying to sort these problems.

Marketing problems are related with distribution channels, pricing, product promotion etc. In order to make the rural entrepreneurs to stat the business venture, the following measures may be adopted:

1) Creation of finance cells: The financial institutions and banks which provide finances to entrepreneurs must create special cells for providing easy finance to rural entrepreneurs.

2) Concessional rates if interest: The rural entrepreneurs should be provided finance at concessional rates of interest and on easy repayment basils. The cumbersome formalities should be avoided in sanctioning the loans to rural entrepreneurs.

3) Proper supply of raw materials: Rural entrepreneurs should be ensured of proper supply of scarce raw materials on priority basis. A subsidy may also be offered to make the products manufactured by rural entrepreneurs cost competitive and reasonable.

4) Offering training facilities: Training is essential for the development of entrepreneurships. It enables the rural entrepreneurs to undertake the venture successfully as it imparts required skills to run the enterprise. Presently the economically weaker entrepreneurs of the society are offered such training facility under

5) Setting up marketing co-operatives: Proper encouragement and assistance should be provided to rural entrepreneurs for setting upmarketing co-operatives. These co-operatives shall help in getting the inputs at reasonable rate and they are helpful in selling their products at remuneration prices. Hence, middlemen can be avoided and rural entrepreneurs derive the benefits of enterprise. Common production-cum-marketing centers should be set up with modern infrastructural facilities. Thus, proper education, comprehensive training, setting up of separate financial institutions, development of marketing co-operatives to a large extent help to flourish the rural entrepreneurs in India. Further, both government and non-government agencies should play an important role.

VI. SUGGESTIONS

* Govt. should provide separate financial fund of rural entrepreneur.
* We should provide special infrastructure facilities whatever they deed.
* Govt. should arrange special training programmes of rural entrepreneurship
* Govt. should felicitate top ranker rural's entrepreneur.
* Rural entrepreneur should more competitive and efficient in the local & international market.
* Use should invite successful rural entrepreneurs from other states of country.

REFERENCES

- ⇨ Power, Thomas Michael Lost Landscapes and Failed Economies: The Search for A Value of Place, Island Press, 1996, 38.
- ⇨ Regional Technology Strategies, Inc Evaluation of the ARC's Entrepreneurship Initiative, February 2001, 1.
- ⇨ Rural Policy Research Institute (RUPRI) Opportunities for Rural Policy Reform: Lessons Learned from Recent Farm Bills, 1995, 2.
- ⇨ www.ediindia.org

* **M.M. Goswami**

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 21 - 25
ISSN 2319 - 8168

RAINWATER HARVESTING IN INDIA

Water is our most precious natural resource and something that most of us take for granted. We are now increasingly becoming aware of the importance of water to our survival and its limited supply. The human beings require water for various purposes. The most part of the earth surface i.e. about 71 % is covered by water. Out of total volume of water available on the surface of the earth 97 % is saline water, 2 % water is in the form of ice and glaciers and only 1 % is fresh and potable water. India is well endowed nations in the world in terms of average annual rainfall. It is unbelievable but it is true that Cherapunji which gets 11000 mm annual rainfall still suffers from serious drinking water shortage. Though India's average annual rainfall is 1170 mm; in the deserts of western India it is as Low as about 100 mm. Hence, it is necessary to opt for rainwater harvesting measures for fulfillment of water requirement.

By 2025, world population will be 8 billion – water will become scarcer. Global farming accounts for 70% of water use, while only 17% of farmland is irrigated and it provides only 40% (estimated) of world's food. Water application losses in irrigation are quite high – almost 40 % of the total irrigation water is lost. Per capita irrigated agricultural land is declining – main reason shortage of water. Water table is falling steadily in intensive farming regions. People and ecosystems are under threat from persistent chemicals like pesticides, fertilizers and heavy metals in waters. There are no serious efforts to gain water by practices like rainwater harvesting, watersheds and mini-ponds, reuse and recycling of waste water. It is said there is enough freshwater in world – however, it is not always available in the right place or right form. The problem is mainly of access, distribution, and optimum utilization. The paper discusses related concerns and outlines what need to be done.

Key words: - Fresh water, Harvesting and Conservation of water, Water reuse, Water Management in agro-ecosystems, Electronics and IT based devices.

INTRODUCTION:-

country like India which is endowed with many large rivers, lakes and wells that need to be conserved, better managed, recharged and channelized for meeting the ever growing requirement of agriculture, industrial and urban growth. Moreover exploitation of ground water has been taken up by millions of individual farmers mostly in regions where surface water is either scarce or absent to meet their dire water needs. Although this has lead to local depletion or decline of ground water levels causing serious concern about rainwater harvesting & the need to recharge ground water. The quantum of ground water so far harnessed is one third of the replenish able ground water of 431 km3 a year. In the comprehensive strategy needed for the conservation and development of water resources, several factors are to be kept in view. These include the availability of water, its quality, location, distribution and variation in its occurrence, climatic conditions, nature of the soil, competing demands & Socio-economic conditions. In dealing with each of these, every effort must be made to make the best use of water for the survival of human life, animal and plant life.

India receives precipitation (including snowfall & rain) of around 4,000 billion cubic meters (BCM), only 1,869 BCM is accessible water, of which India uses barely a third. Nearly 1,179 BCM of water drains in to the

*** Lecturer, M.K. College of Commerce, Bharuch**

sea. Region, whose yearly renewable freshwater availability is below 1,700 m3 / person, is called as the water stress region. And the region whose yearly availability falls below 1,000 m3 / person is termed as water scarcity region. But national figure of annual average per capita water availability is 2,464m3. It shows that the country is not in the water stress range so far. However in some regions per capita availability is as low as 411m3. (Kanyakumari, Pennar, Kutch, Kathiawar, Krishna basin, etc.) The run-off which is about 215 MHM needs to be arrested by making proper planning on micro level as well macro level. Micro level means water conservation schemes of the state governments which are to be implemented in every village. But on macro level, a large chunk of water must be arrested by programmer like National River – linking. Availability and utilization of water in India is shown in table No.1 & Fig. No.1.

No	Item	Quantity (Cu.kms)
1	Annual precipitation volume (including snowfall)	4000
2	Average annual potential flow in rivers	1869
3	Per Capita Water availability (1997)	1967
4	Estimated utilizable water resources. i) Surface water resources. ii) Ground water resources.	1122 690 432

3. WHAT IS RAINWATER HARVESTING? Rainwater harvesting means the activity of direct collection of rain water which can be recharged in to the ground water to prevent fall of ground water level or storing in surface or underground water tank. It is most suited in today's context due to following reasons.

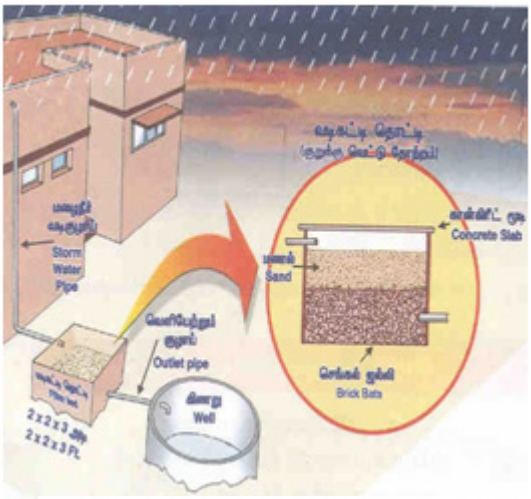
1. It is the most scientific and cost effective way of recharging the ground water and reviving the water table.

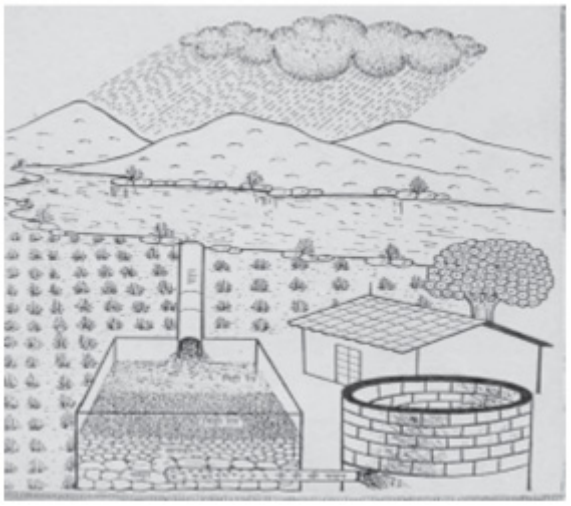
2. It offers advantage in water quality for both irrigation and domestic use.

3. It provides naturally soft water and contains almost no dissolved minerals or salts, arsenic and other heavy metals.

4. It can be done at individual as well as in a community level. This way we can be self sufficient in terms of domestic water requirements and not just dependent on the actions initiated by government or any other local body.

Collecting rainwater as it falls from the sky seems immensely sensible in areas struggling to cope with potable water needs. Rainwater is one of the purest sources of water available as it contains very low impurities. Rain water harvesting systems can be adopted where conventional water supply systems have failed to meet people's needs.





4. Objective of Rain Water Harvesting:-

1) Restore supplies from the aquifers depleted due to over exploitation.

2) Improve supplies from aquifers lacking adequate recharge.

3) Store excess water for use at subsequent times.

4) Improve physical and chemical quality of ground water.

5) Reduced storm water runoff and soil erosion.
6) Prevent salinity ingress in coastal areas.
7) Increase hydrostatic pressure to prevent/ stop land subsidence.
8) Recycle urban and industrial wastewater etc.
9) Rehabilitate the existing traditional water harvesting structure like village ponds, percolation tanks, baolis, tanks, etc
10) With minor scientific modifications and redesigning, convert the traditional water harvesting structure into ground water recharge facilities

2. RAIN WATER HARVESTING TECHNIQUES: There are two main techniques of rain water harvestings.
1) Storage of rainwater on surface for future use.
2) Recharge to ground water.

The storage of rain water on surface is a traditional techniques and structures used were underground tanks, ponds, check dams, weirs etc. Recharge to ground water is a new concept of rain water harvesting and the structures generally used are:-

1) Pits: - Recharge pits are constructed for recharging the shallow aquifer. These are constructed 1 to 2 m, wide and to 3 m. deep which are back filled with boulders, gravels, coarse sand.

2) Trenches:- These are constructed when the permeable strum is available at shallow depth. Trench may be 0.5 to 1 m. wide, 1 to 1.5m. Deep and 10 to 20 m. long depending up availability of water. These are back filled with filter. Materials.

3) Dug wells:- Existing dug wells may be utilized as recharge structure and water should pass through filter media before putting into dug well.

4) Hand pumps:- The existing hand pumps may be used for recharging the shallow/deep aquifers, if the availability of water is limited. Water should pass through filter media before diverting it into hand pumps.

5) Recharge wells:- Recharge wells of 100 to 300 mm. diameter are generally constructed for recharging the deeper aquifers and water is passed through filter media to avoid choking of recharge wells.

6) Recharge Shafts:- For recharging the shallow aquifer which is located below clayey surface, recharge shafts of 0.5 to 3 m. diameter and 10 to 15 m. deep are constructed and back filled with boulders, gravels & coarse sand.

7) Lateral shafts with bore wells:- For recharging the upper as well as deeper aquifers lateral shafts of 1.5 to 2 m. wide & 10 to 30 m. long depending upon availability of water with one or two bore wells is constructed. The lateral shafts are back filled with boulders, gravels & coarse sand.

8) Spreading techniques:- When permeable strata start from top then this technique is used. Spread the water in streams/Nasal by making check dams, nala bunds, cement plugs, gabion structures or a percolation pond may be constructed.

3. Benefits Of Rain Water Harvesting:-

• Rise in ground water levels in water.
• Increased availability of water from wells.
• Prevent decline in water levels.
• Reduction in the use of energy for pumping water and consequently the costs.
• Reduction in flood hazard and soil erosion.
• Benefiting in the water quality.
• Arresting sea water ingress.
• Assuring sustainability of the ground water abstraction sources and consequently the village and town water supply system.
• Mitigating the effect of droughts and achieving drought proofing.
• Reviving the dying traditional water harvesting structures and their rehabilitation as recharge structures.
• Effective use of lack of defunct wells and tub wells as recharge structure.
• Up gradation of social and environmental status etc.

4. Critical issues in rain water harvesting :-One of the most important underlying values in rainwater harvesting is that it is a benign technology and cannot create undesirable consequences. Water harvesting initiatives are driven by firm beliefs and assumptions, some of which are:

1. There is a huge amount of monsoon flow which remains uncultured and eventually ends up in the natural sinks, especially seas and oceans, supported by the national level aggregates of macro hydrology.

2. Local water needs are so small that exogenous water is not needed.

3. Local water harvesting systems are always small and are therefore cost effective.

1. Since the economic, social and environment values of water are very high in regions by water shortage, water harvesting interventions are viable, supported by the assumption that cost effective alternatives that can bring in the same amount of water do not exist.

5. Incremental structures lead to storage and diversion capacities; they do not pose negative consequences for down term users.

5. Limitations imposed by high water demands:- Water harvesting arguments totally miss out on the water demands avaibility perspective at the micro level. RWHS would work if an area which has uncommitted flows to harness has an 'un-met demand' or vice versa. Regions which were heavily into irrigated agriculture in the past, supported by good water endowment, institutional support and favorable policies, might continue to demand large quantities of water for irrigation even when they run out of water. This is because communities take some time to devise coping and adaptive strategies to manage conditions of water deficits.

6. Issues in evaluating costs and economics:- The effective storage, unit costs are worked out on the basis of the design storage capacity of the structure and rule of the thumb guest meets on the number of fillings the Shree Vivekananda research and training institute, mandavi, kachchh, which has done pioneering work on artificial groundwater recharge in Gujarat often the resorts to this strategy to evaluate the cost effectiveness of recharge structures built in kachchh. The recent book by Dr.R.N.athawale on rainwater harvesting in Gujarat, although it covers a range of technical aspects of water.

Scale considerations are extremely important in evaluating the cost and economics of water harvesting/groundwater recharge structure of the hydrological integration of catchments at the level of watershed and river basins. The cost and economics of water harvesting systems cannot be amount is of surplus water available in a basin is limited. This because incremental structures do not result increase in the hydrological benefits from lower systems.

In any basin, the marginal benefit from a new water harvesting structure would be smaller at higher degrees of basin development, while the marginal cost is higher. The reasons for this are:

(1) The higher the degree of basin development, the lower the changes of getting socially and economically viable sites building water impounding structure.

(2) With the higher degree of development, the social and environmental costs of harvesting every unit water increases reducing the net economic value of benefits.

The ability to drive economics benefits from recharge depends on where the recharged water ends up. In regions underlain by hard rock geology, the groundwater flow patterns are quite complex. This is a common problem in the hard rock of Saurastra, kachh where large scale water harvesting or ground water recharge intervention are taken up through check dams, ponds and percolation tank.

7. Lack of integrated approach :- In Saurastra, in spite of the poor potential offered by flow rainfalls, high variability and high in water underground during high rain fall years is poor storage capacity of specific yield of the basalt formation. An estimated 20000 check dams built in a region to capture the rain water and recharge the aquifers are able to store only a small fraction of the surplus run off. In such situation, proper water use programming is required to use the surplus water effectively whereby water from aquifers is pumped out and used during the rainy season itself. Thus creating storage space for incoming flows.

8. Maximizing local benefit v/s optimum benefit for basin communities:- Generally, in any river basin, the upper catchments as rich in terms of their ability to contribute to the basin yield. This is mainly because of the unique physiographical features, and partly because of the climate conditions- such as steep slopes, high rainfall in the mountains and high humidity which provide a favorable environment for runoff generation. The upper catchments also provide a good source of base flows due to forest cover which causes favorable conditions for water storage and infiltration. The sardar sarovar dam harness water

from ample rainfall areas in Narmada valley and takes it to the drought prone areas of north Gujarat and Saurastra which are characterized by low and erratic rainfall.

9. Critical issues for research on rain water harvesting in Gujarat

i) Issues emerging from past research

The different hydrological aspects and artificial recharge system studies were development any decay of the recharge plume recharge rates and radius of the influence of recharge structure the aspects were changes in total dissolved involved actual measurement of some parameters governing the physical impacts of recharge structure. The study found significant reduction in depth to water level in wells from season after the water harvesting intervention. The study argued that the recharge caused by the pal systems continuous even after the rains the post-monsoon recharge component is larger than the during the monsoon.

ii) Issue for future research

The question often asked amongst water resource scientists and practitioners is: are there limits to local water harvesting? The potential impact of local water harvesting on large water systems is central in the ongoing debate on decentralized water harvesting. The two main counter arguments are increasing the number of water harvesting structures would not result benefits and widespread construction of water harvesting structures across watershed basin would result in diluting hydrological and economy benefits. Today, the villages is the basin unit for planning local water harvesting and the scale of intervention is decides by the density and the presence by basin wise planning the basin on robust water exercises to estimate the surplus runoff in typical rainfall years. Economic analyses of water harvesting should based returns at the basin level rather than from individual structure to capture the scale effects.

iii) Major findings

1. Inefficient recharging in hard rock's due to lack of integrations of groundwater and surface water use in this regions planning of recharge should considered of the available excess flows rather than direct recharge this should be used to create underground storage for incoming surface flows to meet the basin human needs however the is not flowed.

2. Many water scare regions in have water demands which far exceed the supplies, with subsequent vulnerability to hydrological stresses, such that they required exogenous water.

3. Economic evaluation of water harvesting groundwater systems pose several due to the difficulty in quantified the inflows, the storage and efficiency. And the economic value of the benefits which social direct ecological or environmental.

12. Conclusion

In many other regions which have medium rainfalls but expenditure 'medium to high' evaporation, the poor groundwater potential hard rock which underlines these regions poses a constraint for recharge. Economic evaluation of water harvesting systems poses several complexities due to the problems in quantifying hydrological impacts and the cannot be worked out for structures on the basis of individual benefits but rather than on the basis of increment benefits. There is a one optimum level of the water harvesting which basin can undergo to help optimize the gross value product of water vis-a-vis economics, social and environmental output basin wide.

REFERENCES

- Artificial Recharge in India, A Publication of National Geophysical Research Institute, Hyderabad.
- Asati S.R., "A case study on Rooftop rainwater Harvesting," Proceedings in National Conference and sustainable Development, L.A.D. and
- Smt.R.P.College for women, Nagpur dated 16-17 Dec.2005.
- Asati S.R. and Sharma N.S."Roof top Rainwater Harvesting: A case study,"proceedings in 38th Annual Convention of I.W.W.A. hold at Jaipur (Rajasthan), 06- 08 Jan2006.
- Ashtankar T, Kelkar P and Nanoti M, ., "Rainwater Harvesting in Urban Areas- A Review ," proceedings in 38th Annual Convention of I.W.W.A. hold at Jaipur (Rajasthan), 06-08 Jan2006.

* M.D. Vachhani

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 26 - 29
ISSN 2319 - 8168

ગુજરાતમાં સામાજીક ક્ષેત્રોનો વિકાસ

પ્રસ્તુત સંશોધન લેખમાં ગુજરાત રાજયમાં થયેલ સામાજીક ક્ષેત્રનાં વિકાસનો અભ્યાસ કરવામાં આવેલ છે. અહી શિક્ષણ અને આરોગ્યને સામાજીક ક્ષેત્રનાં પાસા તરીકે ધ્યાનમાં લીધેલ છે અને સાક્ષરતાનો દર, પ્રવેશ ગુણોતર, શાળા છોડી જવાનો દર અને વિદ્યાર્થી–શિક્ષક પ્રમાણને શિક્ષણના નિર્દેશકો તરીકે તેમજ અપેક્ષિત આયુષ્ય, બાળમૃત્યુદર, શિશુ મૃત્યુ દર, સાદો મૃત્યુ દર અને માતા મૃત્યુદર ને આરોગ્યના નિર્દેશકો તરીકે ધ્યાનમાં લીધેલ છે. પ્રસ્તુત અભ્યાસ પરથી જાણવા મળ્યું કે, ૧૯૯૧ થી ૨૦૧૧ દરમ્યાન શિક્ષણ અને આરોગ્ય ક્ષેત્રમાં ઘણો સુધારો થયો છે. તેમજ ભારતના કેટલાક રાજયને બાદ કરતાં અન્ય રાજયની સરખામણીમાં ગુજરાત શિક્ષણ અને આરોગ્ય ક્ષેત્ર આગળ છે. પરંતુ હજુ પણ શિક્ષણ અને ખાસ કરીને આરોગ્ય ક્ષેત્રે ગુજરાત રાજયની સ્થિતિ ઓછી સંતોષકારક છે.

ચાવીરૂપ શબ્દોઃ સાક્ષરતાનો દર, પ્રવેશ ગુણોતર, શાળા છોડી જવાનો દર, વિદ્યાર્થી–શિક્ષક પ્રમાણ, અપેક્ષિત આયુષ્ય, બાળ મૃત્યુદર, શિશુ મૃત્યુ દર, સાદો મૃત્યુ દર, માતા મૃત્યુદર.

કોઈપણ અર્થતંત્રના આર્થિક વિકાસ માટે (૧) ભૌતિક મૂડી (૨) નાણાંકીય મૂડી અને (૩) માનવમૂડીની આવશ્યકતા રહે છે આ પૈકી ઘણા વર્ષો સુધી અર્થશાસ્ત્રીઓએ ઝડપી અને ટકાઉ આર્થિક વિકાસ માટે પ્રથમ બે પ્રકારની મૂડી ઉપર જ વધુ ધ્યાન કેન્દ્રીત કર્યુ હતું અને જણાવ્યુ હતુ કે ''દેશમાં જેમ આ બે પ્રકારની મૂડીનુ પ્રમાણ અને ગુણવંત્તા ઊંચી તેમ દેશનો આર્થિક વિકાસ ઊંચો રહેવા પામે છે.'' પરંતુ વર્તમાન સમયે કેટલાક અર્થશાસ્ત્રીઓએ દેશનો આર્થિક વિકાસ માનવમૂડી પર વધુ આધારીત રહે છે એવું જણાવીને એક એવી પરીકલ્પના ઊભી કરી છે કે ''જો દેશમાં માનવમૂડીનો વિકાસ થયેલો હોય તો તે દેશને ઊંચા આર્થિક વિકાસ તરફ લઈ જાય છે.'' પ્રો. ગુન્નાર મિરડાલે પણ એશિયન ડ્રામા ૧, ૨, અને ૩ માં *"Quality of Population"* ઉપર ભાર મૂકતાં જણાવ્યુ હતું કે ''દેશમાં વસ્તીની ગુણવત્તા જેમ ઊંચી તેમ તેનો આર્થિક વિકાસ પણ ઊંચો રહે છે. ''

આર્થિક વિકાસમાં માનવમૂડીનું મહત્વ સ્વીકારાયા પછી માનવમૂડીમાં સામાજીક આયામ ઉમેરાયો છે અને *"Human Capital as Social Capital"*નો ખ્યાલ વિકસ્યો છે. જેથી ઘણા અર્થશાસ્ત્રીઓ માનવમૂડીને સામાજીક મૂડી તરીકે ઓળખાવે છે. આ સામાજીક મૂડી સાથે સંકળાયેલું ક્ષેત્ર એટલે સામાજીક ક્ષેત્ર. શિક્ષણ અને આરોગ્ય એ બે આ ક્ષેત્રના આધારસ્તંભો છે.

શિક્ષણ અને આરોગ્યનું મહત્વ :–

શિક્ષણ તથા આરોગ્ય એ વ્યકિત અને સમાજની એક મહત્વની સંપતિ છે. દેશના ઝડપી આર્થિક વિકાસમાં ફાળો આપવાની દ્રષ્ટિએ બંને સરખું મહત્વ ધરાવે છે. ''શિક્ષણ અને સ્વાસ્થ્ય કોઈપણ દેશ માટે મહત્વની બૌધ્ધિક સંપદા છે. તે સ્થાયી મૂડી કરતાં વધુ મૂલ્યવાન છે'' *(Karnik – TOI)*, પ્રો. ટી. ડબ્લ્યુ શુલ્ટઝે જણાવ્યું છે કે ''શિક્ષણ, આરોગ્ય અને આહાર માટે કરવામાં આવતું મૂડી રોકાણ માનવમૂડી સંચયમાં ફાળો આપે છે. તે વ્યકિતની ઉત્પાદકતા અને આવકને ઊંચે લઈ જાય છે. '' આમ શિક્ષણ એ આવક તથા વ્યવસાય સાથે સીધો સંબંધ ધરાવે છે. શિક્ષણમાં કરેલા રોકાણનું આર્થિક વળતર ભૌતિક મૂડીમાં કરેલા રોકાણના વળતર કરતાં ઊંચું છે અને વળી તેના પરનું ખાનગી વળતર પણ સામાજીક વળતર કરતાં ઊંચું છે. તેમાં પણ પ્રાથમિક શિક્ષણમાં કરેલા રોકાણનું વળતર તો તાર્કીક હોવુ જોઈએ તો જ ઉચ્ચશિક્ષણમાં કરેલા રોકાણ કરતાં વળ તર ઊંચું મળે. *(Tilak – 1995)*.

મેરીબાઉમેન, માકેબ્લોગ, એન્ડરસન તેમજ શુલ્ટઝ જેવા અર્થશાસ્ત્રીઓ આર્થિક વિકાસ માટે શિક્ષણ ખૂબ જ મહત્વનું છે તેમ જણાવે છે. તેમના અભ્યાસનું એક તારણ એવું છે કે ''જયાં શિક્ષણની પરંપરા ઘણા વર્ષોથી ચાલી આવે છે તેવા દેશોની તુલનામાં શિક્ષણની સગવડોની શરૂઆત કરનારા દેશોમાં શિક્ષણનો આર્થિક વૃધ્ધિમાં ફાળો વધુ માલુમ પડે છે'' કદાચ આથી જ વર્તમાન સમયે વિશ્વના દેશોમાં પ્રાથમિક શિક્ષણના સાર્વત્રીકરણ પર વધુને વધુ ભાર મૂકવામાં આવી રહયો છે.

માનવીના વિકાસમાં આરોગ્ય પણ શિક્ષણ જેટલું જ મહત્વનું સ્થાન ધરાવે છે. અર્થાત રાષ્ટ્રના આર્થિક વિકાસમાં, જેનું મહત્વનું પ્રદાન છે તે માનવ શકિતના વિકાસનો આધારસ્તંભ સ્વાસ્થ્ય જ છે. રાષ્ટ્રમાં લોકોનું આરોગ્ય જેટલું સા□ તેટલી માનવ સંપત્તિ વધારે સારી. પરીણામે રાષ્ટ્રનો આર્થિક વિકાસનો દર ઊંચો રહે. કેમ કે સ્વાસ્થ્યનું નીચુ સ્તર ધરાવતા લોકોની તુલનામાં સારૂં સ્વાસ્થ્ય ધરાવતી વ્યકિતઓની ઉત્પાદકતા ઊંચી હોવાથી તેઓ આર્થિક વિકાસમાં ઊંચુ પ્રદાન આપી શકે છે.

* Teacher. Sadhana Vidhyalaya, Baruch

પ્રો. વાઈનર આ સંદર્ભમા જ જણાવે છે કે ''વર્તમાન સંજોગોમાં ઝડપી આર્થિક વિકાસ માટે શ્રમિકોની ઊંચી ઉત્પાદકતા જરૂરી બને છે અને તેના માટે દેશના મોટાભાગના લોકો સાક્ષર, તંદુરસ્ત અને *Wellfed* હોવા જોઈએ.''

વિશ્વ બેંકના ૧૯૯૩ ના અહેવાલમાં પણ જણાવાયું છે કે'' આરોગ્યમાં થતો સુધારો સમાજના આર્થિક વિકાસને ચાર રીતે અસર કરે છે. એક તેનાથી કામદારોની માંદગીના કારણે ઉત્પાદનમાં થતી ખોટ ઘટે છે. બીજુ, તંદુરસ્ત કામદારોની ઉપલબ્ધિમાં કુદરતી સાધનોનો ઈષ્ટ ઉપયોગ થાય છે. ત્રીજુ, તંદુરસ્ત સમાજના બાળકો શાળામાં દાખલ થાય, શિક્ષણ મેળવે અને પોતાની ક્ષમતા વધારે છે. ચોથું લોકોનું આરોગ્ય સુધરતાં તેમનામાં રોગો અને માંદગીનું પ્રમાણ ઘટે તેથી સરકારનું આરોગ્ય પાછળનું ખર્ચ ઘટે તેથી જે નાણાંની બચત થાય તેને વિકાસ માટે વાપરી શકાય.''

વિષય પસંદગી :–

સામાજીક વિકાસ એ આર્થિક વિકાસનું એક ખૂબ જ અગત્યનું પાસું છે. વર્તમાન સમયે ગુજરાત એ ભારતનું ઝડપથી વિકસી રહેલું રાજય છે. રાજયમાં થયેલા ઊંચા ઔદ્યોગિક વિકાસના કારણે વર્ષ ૨૦૦૪–૦૫ થી ૨૦૦૮–૦૯ ના સમયગાળા દરમ્યાન *SGDP* માં ૧૧.૦૫% ના સરેરાશ વાર્ષિક વધારા સાથે ગુજરાત ભારતના વિવિધ રાજયોમાં પ્રથમ સ્થાને રહયુ છે. આમ રાજયનો આર્થિક વિકાસનો સારા એવા પ્રમાણમાં થયો છે. પરંતુ આ આર્થિક વિકાસને સામાજીક વિકાસમાં રૂપાંતરિત કરવામાં રાજય કેટલું સફળ રહયુ છે તે જાણવા માટે આ વિષયની પસંદગી કરવામાં આવી છે.

અભ્યાસનાં હેતુઓ :

- ગુજરાતમાં સાક્ષરતાનું પ્રમાણ તથા તેમાં થયેલા સુધારાનો ખ્યાલ મેળવવો.
- ગુજરાતમાં સ્ત્રી–પુરૂષ સાક્ષરતાનું પ્રમાણ તથા તેની વચ્ચેનો તફાવત જાણવો.
- ગુજરાતમાં ગ્રામીણ–શહેરી વચ્ચેનો સાક્ષરતાનો તફાવત જાણવો.
- ગુજરાતમાં અપેક્ષિત આયુષ્યમાં થયેલો વધારો તેમજ સ્ત્રી અને પુરૂષ વચ્ચેનાં તફાવતની જાણકારી મેળવવી.
- બાળ મૃત્યુદરમાં થયેલા ઘટાડાનો ખ્યાલ મેળવવો.
- માતૃત્વ મૃત્યુદરનાં થયેલા ઘટાડાની જાણકારી મેળવવી.

અભ્યાસ પધ્ધતિ :–

પ્રસ્તુત અભ્યાસ ત્રણ વિભાગોમાં વહેંચાયેલો છે પ્રથમ વિભાગમાં શિક્ષણ અને આરોગ્યના વિવિધ નિર્દેશકોની બાબતમાં – ગુજરાત સામાજીક આર્થિક સર્વે, ઓલ ઈન્ડિયા એજયુકેશન સર્વે, ઈકોનોમીક સર્વે, નેશનલ હેલ્થ પ્રોફાઈલ વગેરેના અહેવાલોમાંથી આંકડાકીય માહિતી મેળવી. છેલ્લા કેટલાક વર્ષોમાં આ બાબતે થયેલી પ્રગતિની રજૂઆત કરવામાં આવી છે.

બીજા વિભાગમાં શિક્ષણ અને આરોગ્યના નિર્દેશકોની ભારતના મોટા રાજયોમાં પ્રવર્તમાન સ્થિતિના આધારે રાજયોને ક્રમ આપી વિવિધ રાજયો સાથે ગુજરાતની તુલના કરવામાં આવી છે.

ત્રીજા વિભાગમાં અભ્યાસના તારણો દર્શાવવામાં આવ્યા છે.

ગુજરાતમાં શિક્ષણ અને આરોગ્યનો વિકાસ :–

શિક્ષણ સમાજની આર્થિક તંદુરસ્તી માટે શિક્ષણ અત્યંત ઉપયોગી છે. શિક્ષણમાં કરવામાં આવતું મૂડી રોકાણ શ્રમની, ઉત્પાદકતા, આવક સર્જન, ગરીબીમાં ઘટાડા તથા માનવ સંસાધનના વિકાસમાં મદદરૂપ બની દેશના આર્થિક વિકાસમાં યોગદાન આપે છે.

ગુજરાતમાં શિક્ષણ પાછળ કરવામાં આવતુ ખર્ચ ૨૦૦૦–૦૧ માં કુલખર્ચના ૧૩.૬% હતું તે ૨૦૦૯–૧૦ માં ૧૩.૮% અને ૨૦૧૧–૧૨ માં કુલખર્ચના ૧૬.૧% થવા પામ્યુ છે. શિક્ષણ પાછળ થતા ખર્ચમાં થયેલા વધારાની શિક્ષણના વિકાસ પર હકારાત્મક અસર પડી છે.

ગુજરાતમાં શિક્ષણના નિર્દેશકો (ટેબલ નં. ૧)

ક્રમ	વિગત	1991	2001	2011
1	સાક્ષરતાનો દર	61.29 (51.6)	69.14 (64.8)	79.3 (73.0)
	પુરૂષ સાક્ષરતાનો દર સ્ત્રી સાક્ષરતાનો દર	73.13 (63.4) 48.64 (38.3)	79.66 (75.3) 57.80 (53.7)	85.75 (80.9) 69.68 (64.6)
	ગ્રામીણ સાક્ષરતાનો દર શહેરી સાક્ષરતાનો દર	53.09 (44.0) 76.51 (73.1)	61.29 (58.7) 81.84 (79.9)	71.71 (61.8) 86.31 (84.1)
2	પ્રવેશ ગુણોતર ધો. ૧ થી ૫ ધો. ૧ થી ૮		 126.16 103.26	 120.03 107.20

3	શાળા છોડી જવાનો દર ધો. ૧ થી ૫ ધો. ૧ થી ૭	 49.02 64.48	 20.93 38.92	 2.20 * 8.66*
4	વિદ્યાર્થી–શિક્ષક પ્રમાણ પ્રાથમિક માધ્યમિક ઉચ્ચ માધ્યમિક	 45# 26# 34#	 40	 25* 32* 39*

નોંધ :
- કૌંસમાં દર્શાવેલા આંકડાઓ સમગ્ર ભારતની સ્થિતિ દર્શાવે છે.
- "#" માં દર્શાવેલ આંકડાઓ ૧૯૯૩ ના વર્ષના છે.
- " * " માં દર્શાવેલ આંકડાઓ ૨૦૦૯–૧૦ ના વર્ષના છે.

Source: 8th all India Education Survey
Primary Census Abstract Census of India - 2011

ટેબલ નં. ૧ માં ગુજરાતમાં શિક્ષણના નિર્દેશકોમાં છેલ્લા કેટલાંક વર્ષોમાં થયેલા ફેરફારો દર્શાવવામાં આવ્યા છે. જેના ઉપરથી જોઈ શકાય છે કે,

સમગ્ર ભારતની (૭૩.૦%) ની સરખામણીમાં ગુજરાતનો (૭૯.૩૧%) સાક્ષરતાનો દર વધુ છે. જો કે સમગ્ર વિશ્વની સાક્ષરતાની સરેરાશ (૮૪) કરતાં ગુજરાતમાં સાક્ષરતાનું પ્રમાણ નીચુ છે. ૨૦૦૧ થી ૨૦૧૧ ના દાયકા દરમ્યાન ભારતમાં સાક્ષરતાના પ્રમાણમાં ૮.૨ ટકાવારી બિંદુનો વધારો થયો છે. જયારે ગુજરાતમાં સાક્ષરતાનું પ્રમાણ ૮.૮૯ ટકાવારી બિંદુ જેટલું વધ્યું છે.

પુરૂષોમાં સાક્ષરતાનો દર ૨૦૦૧ માં ૭૯.૬૬ થી વધીને ૨૦૧૧માં ૮૫.૭૫% થયો છે. અર્થાત તેમાં ૬.૦૯ ટકાવારી બિંદુનો વધારો થયો છે. આ પ્રમાણ ઉપરોકત સમયગાળા દરમ્યાન ભારતમાં જોવા મળેલા ૭૫.૩%, ૮૦.૯૦% અને ૫.૬ ટકાવારી બિંદુ કરતાં વધુ જણાય છે.

સ્ત્રી સાક્ષરતાની રીતે જોઈએ તો છેલ્લા દાયકામાં ગુજરાતમાં સ્ત્રી સાક્ષરતાના દરમાં નોંધપાત્ર વધારો થયો છે. સ્ત્રી સાક્ષરતા દર ૨૦૦૧ માં ૫૭.૮૦% થી વધીને ૨૦૧૧ માં ૬૯.૬૮ થયો છે એટલે કે તેમાં ૧૧.૮% નો વધારો થયો છે. આના ઉપરથી જોઈ શકાય છે કે ગુજરાતમાં પુરૂષ સાક્ષરતા (૬.૦૯)ની તુલનામાં સ્ત્રી સાક્ષરતા (૧૧.૮) માં બમણો વધારો થયો છે. જોકે હજી આ વાતને વધારે ગર્વથી લઈ શકાય તેમ નથી કારણ કે સ્ત્રી સાક્ષરતા ટકાવારીની રીતે જોઈએ તો હજી પણ રાજયમાં દર ૧૦ સ્ત્રીઓમાંથી ૩ સ્ત્રીઓ નિરક્ષર છે.

સ્ત્રી સાક્ષરતામાં થયેલા તીવ્ર વધારાના કારણે સ્ત્રી–પુરૂષ સાક્ષરતાના પ્રમાણમાં જોવા મળતો તફાવત ૨૧.૮૬% (૨૦૦૧) થી ઘટીને ૧૬.૦૭ (૨૦૧૧) થવા પામ્યો છે, જે અત્યાર સુધીમાં સૌથી નીચો જણાય છે.

૨૦૦૧ થી ૨૦૧૧ ના સમયગાળા દરમ્યાન ગુજરાતમાં શહેરી સાક્ષરતાના દરમાં ૪.૪૭% અને ગ્રામીણ સાક્ષરતામાં ૧૦.૪૨% વધારો થયો છે અહીં પણ ગ્રામ્ય સાક્ષરતામાં ઝડપી વધારાના કારણે સાક્ષરતામાં ગ્રામીણ શહેરી તફાવત ૨૦.૫૫% થી ઘટીને ૧૪.૬૦% થયો છે.

શિક્ષણ ક્ષેત્રે ધોરણ ૧ થી ૮ માં પ્રવેશ મેળવતા બાળકોની સંખ્યા ગણનાપાત્ર રીતે વધી છે. જેથી રાજયમાં પ્રવેશ ગુણોત્તરમાં સુધારો થયો છે. દેશના પંદર મોટા રાજયોમાં પ્રવેશ ગણતરની દ્રષ્ટિએ ગુજરાત (૧૦૭.૨) ચોથુ સ્થાન ધરાવે છે.

અધવચ્ચે અભ્યાસ છોડી દેનારા બાળકોની સંખ્યા ઘટાડવામાં પણ રાજયને નોંધપાત્ર સફળતા પ્રાપ્ત થઈ છે. ધોરણ ૧ થી ૫ માં શાળા છોડી જવાનો દર ૧૯૯૧માં ૪૯.૦૨% હતો, તેને ઘટાડીને ૨૦૦૧ માં ૨૦.૯૩% અને ૨૦૧૧માં ૨.૨૦% કરી શકાયો છે. ધોરણ ૧ થી ૭ માં આ પ્રમાણ ૬૪.૪૮% થી ઘટાડીને અનુક્રમે ૩૮.૯૨% અને ૮.૬૬% કરી શકાયું છે.

શિક્ષક વિદ્યાર્થી પ્રમાણ પ્રાથમિક વિભાગમાં ૧૯૯૧માં ૧:૪૫ હતુ, જેને ૨૦૦૯માં ઘટાડીને ૧:૨૫ કરી શકાયુ છે. જો કે માધ્યમિક અને ઉચ્ચતર માધ્યમિક કક્ષાએ આના કરતાં વિપરીત સંજોગોનું નિર્માણ થયુ છે. અહીં યાદ રાખવું જોઈએ કે વિકસિત દેશોમાં શિક્ષક વિદ્યાર્થી પ્રમાણ ૧:૧૮ કે ૧:૧૪ જેટલુ જ હોય છે.

આમ એકંદરે શિક્ષણના ક્ષેત્રે રાજયની પ્રગતિ સંતોષકારક રહી હોવાનું જણાય છે.

આરોગ્ય

લોકોના આરોગ્યનું ઊંચુ સ્તર એ આર્થિક અને સામાજીક વિકાસની પૂર્વશરત ગણાય છે. પ્રો. અમત્યસેન, ડ્રેજ વગેરેના લખાણો જણાવે છે કે ''કોઈપણ દેશનો આર્થિક વિકાસ સાધવા માટે અને તેને લાંબાગાળા સુધી ટકાવી રાખવા માટે સૌપ્રથમ દેશના માનવ સંસાધનોને વિકસાવવા પડે છે અને તેની બે મુખ્ય ચાવીઓ છે, એક છે શિક્ષણ અને બીજુ આરોગ્ય.

ગુજરાતમાં આરોગ્યની સેવાઓ પાછળ કરવામાં આવતું ખર્ચ ૨૦૦૦–૦૧માં કુલખર્ચના ૩.૪% હતું, જે ૨૦૦૯–૧૦ માં વધીને ૩.૮% તથા ૨૦૧૧–૧૨ માં વધીને ૪.૨% થવા પામ્યુ છે. જે ગુજરાતમાં આરોગ્ય પાછળ થતી નાણાંકીય સાધનોની ફાળવણીમાં વધારો સૂચવે છે. આ ફાળવણીની આરોગ્યના ક્ષેત્રે સકારાત્મક અસરો પડેલી જણાય છે.

ગુજરાતમાં આરોગ્યના નિર્દેશકો (ટેબલ નં. ૨)

ક્રમ	વિગત	1991	2001	2011
1	અપેક્ષિત આયુષ્ય પુરૂષ સ્ત્રી કુલ	 60.9 62.7 61.0	 62.9 65.2 64.1	 64.9 69.0 66.8
2	બાળમૃત્યુદર (000) પુરૂષ સ્ત્રી કુલ	 74 85 78	 61 60 60	 39 42 41
3	શિશુ મૃત્યુ દર (000)	31.7	18.5	13.7
4	સાદો મૃત્યુ દર (000)	8.5	7.8	6.9
5	માતા મૃત્યુદર ૧ લાખ જીવીત જન્મોએ	 389	 202	 148

Family walfare statistics India – 2009.

ટેબલ નંબર – ૨ માં ગુજરાતમાં આરોગ્યના વિવિધ નિર્દેશકોમાં છેલ્લા બે દાયકાઓ દરમ્યાન થયેલી પ્રગતિની આંકડાકીય માહિતી દર્શાવવામાં આવી છે. તેના ઉપરથી જોઈ શકાય છે કે, અપેક્ષિત આયુષ્ય અને બાળમૃત્યુદર જેવા આરોગ્યના બે ખૂબ જ મહત્વના ગણાતા નિર્દેશકોમાં સુધારો થવા પામ્યો છે.

ગુજરાતના લોકોનું અપેક્ષિત આયુષ્ય ૧૯૯૧માં ૬૧.૦ વર્ષ હતું તે ૨૦૦૧માં વધીને ૬૪.૧ વર્ષ અને ૨૦૧૧ માં ૬૬.૮ વર્ષ થયુ છે. આનો અર્થ એ થાય છે. ૧૯૯૧ થી ૨૦૦૧ ના દાયકા દરમ્યાન અપેક્ષિત આયુષ્યમાં ૩.૧ વર્ષનો અને ૨૦૦૧ થી ૨૦૧૧ દરમ્યાન ૨.૭ વર્ષનો વધારો થયો છે. પુરૂષો અને સ્ત્રીઓના અપેક્ષિત આયુષ્યની વાત કરીએ તો ૨૦૦૧ થી ૨૦૧૧ દરમ્યાને પુરૂષોનું અપેક્ષિત આયુષ્ય ૨.૦ વર્ષ જેટલુ વધ્યુ છે. જયારે સ્ત્રીઓનું અપેક્ષિત આયુષ્યમાં લગભગ ૪ વર્ષ એટલે કે બે ગણો વધારો થયો છે.

રાજયમાં બાળમૃત્યુ દર પણ ઉત્તરોતર ઘટતો રહયો છે. દર હજારે બાળમૃત્યુનું પ્રમાણ ૧૯૯૧માં ૭૮ હતું. આ પ્રમાણ ૨૦૦૧ માં ઘટી ને ૬૦ તથા ૨૦૧૧ માં ૪૧ જેટલું થયુ છે. આ આંકડાઓ બતાવે છે કે, પ્રથમ દાયકામાં બાળમૃત્યુના પ્રમાણમાં ૧૮ બિંદુનો અને બીજા દાયકામાં ૧૯ બિંદુનો ઘટાડો થયો છે. તેમજ ૧૯૯૧ થી ૨૦૧૧ ના વીસવર્ષોના ગાળામાં બાળમૃત્યુના પ્રમાણમાં ૩૭ બિંદુ જેટલો નોંધપાત્ર ઘટાડો થવા પામ્યો છે. પુરૂષોમાં બાળમૃત્યુનું પ્રમાણ છેલ્લા દાયકામાં ૨૨ બિંદુ જેટલુ ઘટયું છે જયારે સ્ત્રીઓમાં આ ઘટાડો ૧૯ બિંદુ જેટલો જ છે.

૦ થી ૪ વર્ષના બાળકોમાં મૃત્યુનું પ્રમાણ એટલે કે શિશુ મૃત્યુ દરમાં ૧૯૯૧ થી ૨૦૦૧ દરમ્યાન ૧૩.૨ તથા ૨૦૦૧ થી ૨૦૧૧ દરમ્યાન ૪.૮ બિંદુનો ઘટાડો થયો છે.

સાદો મૃત્યુ દર ૧૯૯૧માં દર હજારે ૮.૫ થી થોડો ઘટીને ૨૦૧૧માં ૬.૯ થવા પામ્યો છે.

૧ લાખ જીવીત જન્મોએ થતાં માતાઓના મૃત્યુનું પ્રમાણ ૧૯૯૧ માં ૩૮૯ જેટલું ઊંચું હતું તેને ૨૦૧૧ ઘટાડીને અડધાથી પણ ઓછુ કરી શકાયુ છે. ૧૯૯૧ થી ૨૦૧૧ દરમ્યાન આ પ્રમાણમાં ૨૪૧ નો ઘટાડો થયેલો જોઈ શકાય છે.

૧૯૯૧ થી ૨૦૧૧ ના સમયગાળા દરમ્યાન ગુજરાતે શિક્ષણ અને આરોગ્યના વિવિધ નિર્દેશકોની બાબતમાં નિરપેક્ષ રીતે તો પ્રગતિ કરી છે. વર્તમાન સમયે ભારતના ૧૫ મોટા રાજયોના સંદર્ભમાં શિક્ષણ અને આરોગ્યના વિવિધ નિર્દેશકોની આંકડાકીય માહિતિ ટેબલ નં. ૩ માં રજૂ કરવામાં આવી છે જેથી વિવિધ રાજયોની વચ્ચે ગુજરાતની સ્થિતિનો ખ્યાલ આવી શકે.

સૌપ્રથમ શિક્ષણના નિર્દેશકોને ધ્યાનમાં લઈએ તો સાક્ષરતાની ટકાવારીને રીતે કેરલ (૯૩.૯૧), મહારાષ્ટ્ર (૮૨.૯૧), તમિલનાડું (૮૦.૩૩) પછી ગુજરાત (૭૯.૩) ચોથાક્રમે આવે છે. આમ ગુજરાત વિશ્વમાં સાક્ષરતાના સરેરાશ ૮૪% ના પ્રમાણને પ્રાપ્ત કરી શકયુ નથી. વળી તે સૌથી વધુ સાક્ષરતા ધરાવતા રાજય કેરલ કરતા લગભગ ૧૪.૬૧ ટકાવારી બિંદુ જેટલું પાછળ છે.

અભ્યાસના તારણો

(૧) છેલ્લા દાયકામાં ગુજરાતમાં સાક્ષરતાના પ્રમાણમાં ૮.૮૯% બિંદુનો વધારો થયો છે, જે ભારતના ૮.૨% બિંદુ કરતાં વધારે છે.

(૨) રાજયમાં પુરૂષ સાક્ષરતાની (૬.૦૯) વૃધ્ધિની તુલનામાં સ્ત્રી સાક્ષરતામાં (૧૧.૮) બમણી વૃધ્ધિ થઈ છે, તેથી સ્ત્રી પુરૂષ સાક્ષરતામાં તફાવત ઘટીને ૧૬.૦૭% થયો છે.

(૩) શહેરી સાક્ષરતાની (૪.૪૭%) તુલનામાં ગ્રામણી સાક્ષરતા (૧૦.૪૨) નો ટકાવારી વધારો બમણાથી પણ વધુ રહયો છે. તેથી ગ્રામીણ શહેરી સાક્ષરતાનો તફાવત ઘટીને ૧૪.૬૦% થયો છે.

(૪) ધોરણ–૧ થી ૫ માં શાળા છોડી જવાનો દર ઘટાડી ૨.૨૦ કરી શકાયો છે.

(૫) પુરૂષોની (૨ વર્ષ) તુલનામાં સ્ત્રીઓમા (૪ વર્ષ) અપેક્ષિત આયુષ્યમાં વધુ પ્રમાણમાં સુધારો થયો છે.

સંદર્ભસૂચિ

- All India Education Survey – 2009.
- B. K. Bhatt (2004-05) Economics of Social Sector and Environment popular Prakashan Surat.
- Development in India's Social Sector (2002). EDI VOL-55 Published by Academic Foundation.
- Economic Survey 2005-06, 2007, 08, 2008-09, 10-11, 2012-13.
- જોશી વી. એ. (૨૦૧૩) – ભારતમાં સાક્ષરતાનું વિશ્લેષણ – અર્થસંકલન.

* G.A. Patel

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 30 - 32
ISSN 2319 - 8168

IN 21 CENTURY: ENTREPRENEURSHIP CHALLENGES

When we quit our day job to become an entrepreneur, we have also quit the rat race. Yes! But life is a continuous race, isn't it? Just when we think that everything is going to be alright when we have our own business, all of a sudden you find yourself in a different kind of race, a different set of challenges, a different level of tackling and handling them.Whether we're a successful and well-established entrepreneur, one way or another, you might have encountered a few of the challenges like **Negative Mindset, Delayed payments, Return to the investor, Lack of Support, Growing a Business, Feelings of Wanting to Give Up, Changes around the globe etc. the objective of this research is to come out from the same challenges.**

What is Entrepreneurship?

An individual who, rather than working as an employee, runs a small business and assumes all the risk and reward of a given business venture, idea, or good or service offered for sale. The entrepreneur is commonly seen as a business leader and innovator of new ideas and business processes.

The Supply of Entrepreneurship and Economic Development:

British economists such as Adam Smith, David Ricardo, and John Stuart Mill briefly touched upon the concept of entrepreneurship, though they referred to it under the broad English term "business management". Whereas the writings of Smith and Ricardo suggest that they undervalued the importance of entrepreneurship, Mill goes out of his way to stress the significance of entrepreneurship for economic growth. In his writings, Mill claims that entrepreneurship requires 'no ordinary skill", and he laments the fact that there is no good English equivalent word to encompass the specific meaning of the French term 'entrepreneur'.

The necessity of entrepreneurship for production was first formally recognized by Alfred Marshall in 1890. In his famous treatise Principles of Economics, Marshall asserts that there re four factors of production: land, labour, capital and organization. Organization is the coordinating factor, which brings the other factors together, and Marshall believed that entrepreneurship is driving element behind organization. By creatively organizing, entrepreneurs create new commodities or improve "the plan of producing an old commodity". In order to do this, Marshall believed that entrepreneurs must have a thorough understanding about their industries, and they must be natural leaders. Additionally, Marshall's entrepreneurs must have the ability to foresee changes in supply and demand and be willing to act on such risky forecasts in the absence of complete information.

Though the idea that entrepreneurs are innovators is largely acceptable, it can be difficult to apply this theory of entrepreneurship to less developed countries (LDCs). Often in LDCs, entrepreneurs are not truly innovators in the traditional sense of the word. Entrepreneurs in LDCs rarely produce brand new products: rather they imitate the products and production processes that have been invented elsewhere in the world (typically in developed countries). This process, which occurs in developed countries as well, is called "creative imitation". Creative imitation takes place when when the imitators

* Assi. Pro. Shri J.M. Patel Arts and Smt. M.N. Patel Commerce Mahila College, Unjha

better understand how an innovation can be applied, used, or sold in their particular market niche (namely their own countries) than do the people who actually created or discovered the original innovation. Thus, the innovation process in LDCs is often that of imitating and adapting, instead of traditional notion of new product or process discovery and development. By combining the above thoughts it can be generalized that entrepreneurs are risk-bearers, coordinators and organizers, gap fillers, leaders, and innovators or creative imitators. Thus, by encouraging these qualities and abilities, governments can theoretically alter their country's supply of domestic entrepreneurship.

Creating Indian Entrepreneurs

Today's knowledge based economy is fertile ground for entrepreneurs, in India. It is rightly believed that India has an extraordinary talent pool with virtually limitless potential to become entrepreneurs. Therefore, it is important to get committed to creating the right environment to develop successful entrepreneurs. To achieve this, India must focus on four areas.

1. Create the Right Environment for Success: Entrepreneurs should find it easy to start a business. To do so, most Indians would start slow with capital borrowed from family and friends, the CEO playing the role of salesman and strategist, a professional team assembled months or perhaps years after the business was created, and few, if any, external partners. Compare this with a start-up in Silicon Valley: a Venire Capitalist (VC) or angel investor would be brought in early on; a professional management team would drive the business; a multifunctional team would be assembled quickly; and partnerships would be explored early on to scale up the business. A major challenge for India is to create a handful of areas of excellence- the breeding ground where ideas grow into businesses

2. Ensure that Entrepreneurs have access to the Right Skill: A survey conducted by McKinsey & Company last year revealed that most Indian start-up businesses face two skill gaps: entrepreneurial (how to manage business risks, build a team, identify an get funding) and functional (product development know-how, marketing skills, etc.) India can move toward ensuring that the curriculum at universities is modified to address today's changing business landscape, particularly in emerging markets, and to build 'centers of entrepreneurial excellence' in institutes that will actively assist entrepreneurs.

3**. Enable Networking and Exchange:** Entrepreneurs learn from experience-theirs and that of others. The rapid pace of globalization and fast growth of Asian economies present tremendous opportunities and challenges for India. Through planning and focus, India can aspire to create a pool of entrepreneurs who will be the region's –and the world's-leaders of tomorrow.

Conclusion

The definition of entrepreneurship has evolved over time as the world's economic structure has changed and become more complex. Risk taking, innovation, and creation of wealth are the criteria that have been developed as the study of new business creations has evolved.

The decision to start an entrepreneurial venture consists of several sequential steps (1) the decision to leave a present career or lifestyle. (2) The decision that an entrepreneurial venture is desirable; and (3) the decision that both external and internal factors make new venture creation possible.

There are both pushing and pulling influences active in the decision to leave a present career: the "push" of job dissatisfaction or even layoff, and the "pull" toward entrepreneurship of seeing an unfilled need in the market place. The desirability of starting one's own company is strongly influenced by culture, sub-culture, family, teachers, and peers. Any of these influences can function as a source of encouragement for entrepreneurship, with support ranging from government support that favor business to strong personal role models of family or friends, Beyond the stage of seeing entrepreneurship as a "a good idea", the potential entrepreneur must possess or acquire the necessary education, management skills, and financial resources for launching the venture.

The study of entrepreneurship has relevance today, not only because it helps entrepreneurs better fulfill their personal needs but because of the economic contribution of the new ventures. More than increasing

national income by creating new jobs, entrepreneurship acts as a positive force in economic growth by serving as the bridge between innovation and market place. Although government gives great support to basic and applied research, it has ot had great success in translating the technological innovations to products or services. Although entrepreneurship offers a promise of marriage of those research capabilities and business skills that one expects from a large corporation, the results have not been spectacular. This leaves the entrepreneur, who frequently lacks both technical and business skills, to serve as the major link in the process of innovation development, and economic growth and revitalization. The study of entrepreneurship and education of potential entrepreneurs are essential parts of any attempt to strengthen this link so essential to a country's economic well-being.

REFERENCE

- Entrepreneur Development-New Venture Creation; By SatishTaneja&S.L.Gupta
- Lectures on Entrepreneurship Development ByDr.B.M. Kacholia of NarseeMonjeeInsitute of Management Studies, Mumbai
- Entrepreneurship-ICFAI Publication

* B. Kamdar

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 33 - 35
ISSN 2319 - 8168

CORPORATE SOCIAL RESPONSIBILITY

Corporate Social Responsibility also called as corporate conscience, citizenship, social performance, or sustainable responsible business, is a form of corporate self-regulation integrated into a business model. It is inclusion of public interest into corporate decision making. The goal of CSR is to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere. CSR has broad scope including Environment, community suppliers, health and safety, work force, human rights. Standards of business conduct. The importance of all forms of global CSR in evident with the increasingly widespread adoption of ISO9000 and ISO4000 management systems by global corporations. Over the recent years, there have been social, political and economic pressures on corporate management to pay attention in social and environmental consequences of corporate activities.

Introduction

Corporate Social Responsibility also called as corporate conscience, citizenship, social performance, or sustainable responsible business, is a form of corporate self-regulation integrated into a business model. It is inclusion of public interest into corporate decision making. The World Business Council for Sustainable Development (WBCSD) defines CSR as & Quote; The continuing commitment by business to behave ethically and contribute to economic development while improving the quality of like of the work force and their families as well as of the local community and society at large.

Mallin (2007) defines CSR as voluntary actions that a company may take in relation to the management of social, environment and ethical issues. Mallin (2007) quoting Carrol (1979) expounds on CSR by explaining that the business has a responsibility to produce goods that it sells at a profit, to abide by legal requirements, to do what is right and fair and to do what might be desired of companies in terms of supporting the local community and making charitable donations. The terms is often used interchangeably for other terms such as corporate citizenship and is also linked to the concept of Triple Bottom Line Reporting (TBL), which is used as a framework for measuring an organization's performance against economic, social and environmental parameter.

The goal of CSR is to embrace responsibility for the company's actions and encourage a positive impact through its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere. The term "corporate social responsibility" came in to common use in the early 1970s, after many multinational corporations formed. In the last twenty years, there has been a sea change in the nature of the triangular relationship between companies, the state and the society. CSR policy functions as a built-in, self-regulating mechanism whereby business monitors and ensures its active compliance with the spirit of the law, ethical standards, and international norms.

CSR has broad scope including Environment, community suppliers, health and safety, work force, human rights. Standards of business conduct.

The importance of all forms of global CSR in evident with the increasingly widespread adoption of ISO9000 and ISO4000 management systems by global

* Student M.phil., Swami Sahjanand College of Comm. & Mgt., Bhavnagar.

corporations. Over the recent years, there have been social, political and economic pressures on corporate management to pay attention in social and environmental consequences of corporate activities. These pressures motivated the corporate management to actively participate in a wide range of social welfare activities. As CSR is becoming popular day by day there are different areas where CSR may be effective.

There are different types of corporate social responsibility including

· Cause related marketing
· Cause promotion
· Socially responsible business practice
· Community volunteering
· Corporate philanthropy
· Corporate social marketing

CSR has been influenced by two major concepts. One is stakeholder model, wherein it is recognized that good business practice entails engaging all stakeholders include authorities, customer groups, business partners such as employees, unions, suppliers, distribution service providers, etc., and external influences, such as community members, media, special interest groups, etc. the second concepts is Triple Bottom Line, where companies would no longer be judged by the conventional single, i.e., financial bottom line but also on their performance in social and environmental bottom lines. Triple bottom line concept measures the overall performance of a company based on its combined contribution to economic prosperity, environmental quality and social capital.

Some of the drivers pushing business towards CSR

1. The shrinking role of government In the past, governments have relied on legislation and regulation to deliver social and environmental objectives in the business sector. Shrinking government resources, coupled with a distrust of regulations, has led to the exploration of voluntary and non-regulatory initiatives instead.

2. Demands for greater disclosure There is a growing demand for corporate disclosure from stakeholders, including customers, suppliers, employees, communities, investors, and activist organizations.

3. Increased customer interest There is evidence that the ethical conduct of companies exerts a growing influence on the purchasing decisions of customers. In a recent survey by **Environics International**, more than one in five consumers reported having either rewarded or punished companies based on their perceived social performance.

4. Growing investor pressure Investors are changing the way they assess companies' performance, and are making decisions based on criteria that include ethical concerns. The Social Investment Forum reports that in the US in 1999, there was more than $2 trillion worth of assets invested in portfolios that used screens linked to the environment and social responsibility. A separate survey by **Environics International** revealed that more than a quarter of share-owning Americans took into account ethical considerations when buying and selling stocks. (More on socially responsible investment can be found in the 'Banking and investment' section of the site.)

5. Competitive labour markets Employees are increasingly looking beyond paychecks and benefits, and seeking out employers whose philosophies and operating practices match their own principles. In order to hire and retain skilled employees, companies are being forced to improve working conditions.

6. Supplier relations As stakeholders are becoming increasingly interested in business affairs, many companies are taking steps to ensure that their partners conduct themselves in a socially responsible manner. Some are introducing codes of conduct for their suppliers, to ensure that other companies' policies or practices do not tarnish their reputation.

Some of the positive outcomes that can arise when businesses adopt a policy of social responsibility

1. Company benefits:

· Improved financial performance;
· Lower operating costs;
· Enhanced brand image and reputation;
· Increased sales and customer loyalty;

· Greater productivity and quality;
· More ability to attract and retain employees;
· Reduced regulatory oversight;
· Access to capital;
· Workforce diversity;
· Product safety and decreased liability.

2. Benefits to the community and the general public:

· Charitable contributions;
· Employee volunteer programs;
· Corporate involvement in community education, employment and homelessness programs;
· Product safety and quality.

3. Environmental benefits:

· Greater material recyclability;
· Better product durability and functionality;
· Greater use of renewable resources;
· Integration of environmental management tools into business plans, including life-cycle assessment and costing, environmental management standards, and eco-labeling.

CSR challenges and opportunities

Environmental The environmental dimension of corporate social responsibility refers to your business's impact on the environment. The goal, as a socially responsible company, is to engage in business practices that benefit the environment. For example, you might choose to use recycled materials in your packaging or ad renewable energy sources like solar power to your factory.

Social The social dimension of corporate responsibility involves the relationship between your business and society as a whole. When addressing the social dimension, you should aim to use your business to benefit society as a whole. This could involve sourcing fair trade products, for example, or agreeing to pay your employees a livable wage. It could also involve taking on endeavors that benefit society, for instance using your resources to organize charitable fundraisers.

Economic The economic dimension refers to the effect that corporate social responsibility has on the finances of your company. In an ideal world, where corporate social responsibility had no costs, there would be no reason to limit it. But in the real world it is important to recognize the financial impact that these actions have and to balance being a good corporate citizen with making a profit.

Stakeholder The stakeholders are all of the people affected by your company's actions. These include employees, suppliers and members of the public. When considering the stakeholder dimension of corporate social responsibility, consider how your business decisions affect these groups. For example, you might be able to increase your output by having employees work more, but you should consider the impact it will have on them, not just your bottom line.

Voluntariness Actions that fall into the voluntariness dimension are those that you are not required to do. These actions are based in what your company believes is the correct thing to do. They may be based in specific ethical values that your company holds. For example, you may believe that using organic products is the right thing to do even if you are not required to do so.

REFERENCES

⇨ http://en.wikipedia.org/wiki/Corporate_social_responsibility

⇨ CORPORATE SOCIAL RESPONSIBILITY, ASOCIO Policy Paper, June 2004

⇨ Dr. G. Muruganantham, 2010, Case study on corporate Social Responsibility of MNC's in India, International Trade & Academic Research Conference (ITARC)-London 2010

⇨ http://www.iisd.org/business/issues/sr.aspx

⇨ http://smallbusiness.chron.com/corporations/

* V.B. Vala

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 36 - 38
ISSN 2319 - 8168

IMPACT OF ADVERTISEMENT ON STUDENTS

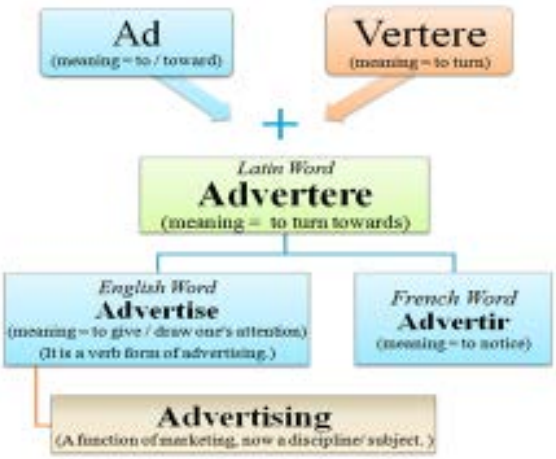
Advertisement is omnipresent in modern society. It can be found in everywhere such as television, the Internet, newspapers, magazines, billboards and t-shirts. Teenagers are a prime target market as they are very impressionable to fashionable trends. In this essay, I intend to explore the both positive and negative sides of this issue. With the advent of modern technologies; high-tech electronic devices which are highly promoted by advertisers have become indispensible tools with massive popularity among the young generation. Teenagers keep the pace with the trend is mainly because that electronic product provides great advantages to people's lives.

The products like portable computer, iPod or smart phone enable you to access any information you need in efficient way. It could also assist you greatly on the educational purpose, However there are some negative impacts should not be overlooked. Excessively following the trend and addiction to electronic gadgets creates much distraction to students from their learning which actually a primary task is in youth. While Student put long hours on their gadgets, they spend less attention to assignments. Furthermore, a sedentary lifestyle which discourages exercises will eventually lead to many health issues, like obesity, eyes problems etc... In addition, constantly chasing modern products could bring some financial pressure to parents as we understand teenage is not mature enough to judge wisely what exactly they need. As a consequence, most of time they are induced to impulse shopping by attractive advertisements, which turned out to be a waste. In conclusion, I believe Advertisement of promoting consuming electronic products has undoubtedly influence to our youth both negatively and positively. However both parents and schools should give good guidance and supervision to the Younger's so that they will become wise consumers.

Definition

"Advertisement is a means of communication with the users of a product or service. Advertisements are messages paid for by those who send them and are intended to inform or influence people who receive them,"

Chart



Types of Advertisement

1. News Paper.
2. Magazine.
3. Radio.
4. Television.
5. Online.
6. Outdoor.
7. Pemplet/Flyer

Advantages of Advertisements

The advertisement informs the consumer about qualities and price of goods and this makes purchasing easy for the consumers.

*** Asst. Librarian, M.K. Bhavnagar University, Bhavnagar**

· As the prices are already advertised, the consumers cannot be over charged.

· By regular advertisement, the manufacturer can sell the goods directly to the consumers without depending on middlemen this eliminates the Middleman's charges and profit. It means higher profit to the manufacturer and lower prices to the consumers.

· It helps in improvement of the quality of the goods.

· The consumers are attracted by the quality of the products that are advertised. If the consumers are convinced that the quality is the same that is advertised, they continue buying.

· It helps the consumer to save time. As the consumer has already been the consumer is not required to spend time in getting the products.

· It raises the living standard of consumers.

· It provides knowledge about the new designs of the commodities to consumers and thus

Consumers consume those commodities and increase their living standard.

Positive Impacts of Advertisement on Students

· Advertisement makes the Students aware of the new products available in the market. It increases their knowledge about the latest innovations in the field of technology.

· Convincing advertisements, which center around healthy food products, can help improve the diet of a child, if they are attractive enough.

· Certain advertisements, with strong messages motivate the Students in chasing their future prospects such as becoming a doctor, scientist or an engineer. They generate the passion in Student, regarding their future and make them realize the importance of education.

· Some advertisements inculcate good habits in Student, as all the toothpaste companies create strong awareness regarding dental hygiene in Students.

Negative Impacts of Advertisement on Students

· Advertisements encourage the Student to persuade their parents to purchase the products shown in the commercials, whether useful or not. The little ones tend to get adamant to buy the product.

· Student often tend to misinterpret the messages conveyed in commercials. They overlook the positive side and concentrate more on the negatives.

· Many advertisements in the present times include dangerous stunts, which can be performed only by experts. Even though, the commercials broadcast the statutory warnings with the advertisement, the Students often try to imitate the stunts at home, with fatal results.

· The flashy advertisement broadcast in television generates impulse shopping in Student.

· Student, after watching the glitter of commercials, often lose the ability to live a life without materialistic joy. Gradually, they get used to a lifestyle which is reflected in television and other media.

· The Students usually get more attracted towards the costly branded products, such as jeans and accessories. They disregard the inexpensive, but useful, ones that are not shown in the commercials.

· Advertisements have an indirect effect on the behavior of Student. They might develop temperamental tantrums, when deprived of the latest toys and clothes that are shown in the commercials.

· The personal preferences in clothing, toys, food and luxuries of Student are altered by the advertisements, to a great extent.

· Junk foods, such as pizzas, burgers and soft drinks, are heavily promoted during Student's programs. This develops a craving for fatty, sugary and fast foods in Students, thereby affecting their health adversely. These unhealthy eating habits lead to diseases, such as obesity. It even influences the way the Students think about the actual taste of food.

· The advertisements shown in the television are sometimes related to the use of tobacco, alcohol which adversely affects the Students. It makes the perception that, drinking beer makes you a cool person. The vulnerability of the Students towards these advertisements is a major concern.

· Advertisement may affect the self-esteem of Students, as they feel inferior to others if they do not possess an endless array of products which are shown in the television.

· Some of the advertisements portray women as sex objects through flashy images, which create a bad impact on the Student.

· Almost all the advertisements do not convey the

message clearly or Student fail to comprehend the complete information. This can have an adverse effect on the Student.

· As more and more commercials are becoming animated, there seems to be hardly any difference between the real life and TV advertisements. As a result, Student are unable to understand the difference between real world and fantasy. Thus, these advertisements distort the sense of reality of Students.

· Studies have shown that, those Students who watch fast-paced television advertisements find it difficult to do tasks that take a much longer time, such as solving puzzles and reading.

Conclusion

Advertisement is always present, though people may not be aware of it. In today's world, Advertisement uses every possible media to get its message through. It does this via television, print (newspapers, magazines, journals etc), radio, press, internet, direct selling, hoardings, mailers, contests, sponsorships, posters, clothes, events, colors, sounds, visuals.

The Advertisement industry is made of companies that advertise, agencies that create the advertisements, media that carries the ads, and a host of people like copy editors, visualizes, brand managers, researchers, creative heads and designers who take it the last mile to the customer or receiver. A company that needs to advertise itself and/or its products hires an Advertisement agency. The company briefs the agency on the brand, its imagery, the ideals and values behind it, the target segments and so on. The agencies convert the ideas and concepts to create the visuals, text, layouts and themes to communicate with the user. After approval from the client, the ads go on air, as per the bookings done by the agency's media buying unit.

REFERENCE

- www. Studymode.com
- Callen, Barry (2009) Managers Guide to Marketing, Advertisement, and Publicity .New Delhi.
- March, Hopes (2011) Advertisement and Marketing, Risk Publication.Kolkatta.
- Shah, M.K (1998) Types of Advertisements, Jai Hind Publisher, Ahmadabad.
- Walter, B.K. (2006) Media Marketing & Society, Arihant Pub.ltd, Chennai.

* T.S. Shaikh ** J.D. Patel

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 39 - 42
ISSN 2319 - 8168

RISK MANAGEMENT

Risk management is a central part of strategic management. It is the process whereby organization methodically addresses the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities. The focus of good risk management is the Identification and treatment of these risks. Its objective is to add maximum sustainable value to all the activities of the organization. It marshals the understanding of the potential upside and downside of all those factors which can affect the organization. It increases the probability of success, and reduces both the probability of failure and the uncertainty of achieving the organization's overall objectives. Risk management should be a continuous and developing process which runs throughout the organization's strategy and the implementation of that strategy.

Key Words: Maximum Sustainable Value, Knowledge Management, Primary Responsibility, Life Safety Systems

What is risk?

Risk is virtually anything that threatens or limits the ability of a community or non-profit organization to achieve its mission. It can be unexpected and unpredictable events such as destruction of a building, the wiping of all your computer files, loss of funds through theft or an injury to a member or visitor who trips on a slippery floor and decides to sue. Any of these or a million other things can happen, and if they do they have the potential to damage your organization, cost you money, or in a worst case scenario, cause your organization to close.

What is Risk Management?

Risk Management is the process of identifying and evaluating the risks associated with activities and operations of an organization; developing a means to control, reduce or eliminate those risks, as well as finance them. These risks include natural disasters, illness, injury, and loss of property resulting from unsafe practices or conditions as well as the financial cost of these losses. The University attempts to eliminate or control these risks through hazard identification and correction, accident prevention, training, installation of life safety systems in buildings, fire protection systems, and other various measures. The University finances these risks through the transfer to commercial insurance carriers, or to others by contract, and the establishment of cash reserves to pay uninsured claims. On an individual level, risk management is the effort by each employee to make the fullest use of his or her personal capabilities to eliminate or reduce hazards in his or her working environment.

Risk management begins with three basic questions:

- What can go wrong?
- What will we do to prevent it?
- What will we do if it happens?

Introduction

Risk management is a central part of strategic management. It is the process whereby organization methodically addresses the risks attaching to their activities with the goal of achieving sustained benefit within each activity and across the portfolio of all activities. The focus of good risk management is the Identification and treatment of these risks. Its objective is to add maximum sustainable value to all

* Lecturer, M.K. College of Commerce, Bharuch
** Lecturer, M.K. College of Commerce, Bharuch

the activities of the organization. It marshals the understanding of the potential upside and downside of all those factors which can affect the organization. It increases the probability of success, and reduces both the probability of failure and the uncertainty of achieving the organization's overall objectives. Risk management should be a continuous and developing process which runs throughout the organization's strategy and the implementation of that strategy. It should address methodically all the risks surrounding the organization's activities past, present and in particular, future. Must be integrated into the culture of the organization with an effective policy and a programmer led by the most senior management. It must translate the strategy into tactical and operational objectives, assigning responsibility throughout the organization with each manager and employee responsible for the Management of risk as part of their job description. It supports accountability, performance measurement and reward, thus promoting operational efficiency at all levels.

Risk Identification

Risk identification sets out to identify an organization's exposure to uncertainty. This requires an intimate knowledge of the Organization, the market in which it operates, the legal, social, political and cultural Environment in which it exists, as well as the development of a sound understanding of its strategic and operational objectives, including factors critical to its success and the threats and opportunities related to the achievement of these objectives. Risk identification should be approached in a methodical way to ensure that all significant activities within the organization have been identified and all the risks flowing from these activities defined. All associated volatility related to these activities should be identified and categorized. Business activities and decisions can be classified in a range of ways, examples of which include:

- Strategic – This concern the long-term strategic objectives of the organisation. They can be affected by such areas as capital availability, sovereign and political risks, legal and regulatory changes, reputation and changes in the physical environment.
- Operational - These concern the day-today issues that the organization is confronted with as it strives to deliver its strategic objectives.
- Financial - These concern the effective management and control of the finances of the organization and the effects of external factors such as availability of credit, foreign exchange rates, interest rate movement and other market exposures.
- Knowledge management - These concern effective management and control of the Knowledge resources, the production, protection and communication thereof. External factors might include the unauthorized use or abuse of intellectual Property, area power failures, and competitive technology. Internal factors might be system malfunction or loss of key staff.
- Compliance - These concern such issues as health & safety, environmental, trade descriptions, consumer protection, data protection, employment practices and regulatory issues. Whilst risk identification can be carried out by outside consultants, an in-house approach with well communicated, consistent and co-ordinate processes and tools is likely to be more effective. In-house 'ownership' of the risk management process is essential.

Risk Analysis methods and Techniques:-

A range of techniques can be used to analyze risks. These can be specific to Upside or downside risk or be capable of dealing with both.

Risk Profile

The result of the risk analysis process can be used to produce a risk profile which gives a significance rating to each risk and provides a tool for prioritizing risk treatment efforts. This ranks each identified risk so as to give a view of the relative importance. This process allows the risk to be mapped to the business area affected, describes the primary control procedures in place and indicates areas where the level of risk control investment might be increased, decreased or reapportioned. Accountability helps to ensure that 'ownership' of the risk is recognized and the appropriate management resource allocated.

Risk Management Policy

An organization's risk management policy should set out its approach to and appetite for risk and its approach to risk Management. The policy should also

set out responsibilities for risk management throughout the organization. Furthermore, it should refer to any legal Requirements for policy statements egg. For Health and Safety. Attaching to the risk management process is an integrated set of tools and techniques for use in the various stages of the business process. To work effectively, the risk management process requires:

- Commitment from the chief executive and executive management of the organization.
- Assignment of responsibilities within the organization.
- Allocation of appropriate resources for training and the development of enhanced risk awareness by all stakeholders.

Risk Evaluation

When the risk analysis process has been completed, it is necessary to compare the estimated risks against risk criteria which the organization has established. The risk criteria may include associated costs and benefits, legal requirements, socioeconomic and environmental factors, concerns of stakeholders, etc. Risk evaluation therefore, is used to make decisions about the significance of risks to the organization and whether each specific risk should be accepted or treated.

Role of the Board

The Board has responsibility for determining the strategic direction of the Organization and for creating the environment and the structures for risk Management to operate effectively. This may be through an executive group, a non-executive committee, an audit committee or such other function that suits the organization's way of operating and is capable of acting as a 'sponsor' for risk Management. The Board should, as a minimum, consider, in evaluating its system of internal control.

- The nature and extent of downside risks acceptable for the company to bear within its particular business.
- The likelihood of such risks becoming a reality.
- How unacceptable risks should be managed.
- The company's ability to minimize the probability and impact on the business.
- The costs and benefits of the risk and control activity undertaken.
- The effectiveness of the risk management process.
- The risk implications of board decisions.

Role of the Business Units

This includes the following:

- The business units have primary responsibility for managing risk on a day to- day basis.
- Business unit management is responsible for promoting risk awareness within their operations; they should introduce risk management objectives into their business.
- Risk management should be a regular management-meeting item to allow consideration of exposures and to reprioritize work in the light of effective risk analysis.
- Business unit management should ensure that risk management is incorporated at the conceptual stage of projects as well as throughout a project.

The Structure and Administration of Risk Management

A) Role of the Risk Management Function

Depending on the size of the organization the risk management function may range from a single risk champion, a part time risk manager, to a full scale risk management department. The role of the Risk Management function should include the following:

- Setting policy and strategy for risk management.
- Primary champion of risk management at strategic and operational level
- Building a risk aware culture within the organization including appropriate.
- Establishing internal risk policy and structures for business units.
- Designing and reviewing processes for risk management.
- Co-coordinating the various functional activities which advise on risk management issues within the organization.
- Developing risk response processes, including contingency and business continuity programmers.
- Preparing reports on risk for the board and the stakeholders.

B) Role of Internal Audit:-

The role of Internal Audit is likely to differ from one

organization to another. In practice, Internal Audit's role may include some or all of the following:

- Focusing the internal audit work on the significant risks, as identified by management, and auditing the risk management processes across an Organization.
- Providing assurance on the management of risk.
- Providing active support and involvement in the risk management process.
- Facilitating risk identification/assessment and educating line staff in risk management and internal control.
- Co-coordinating risk reporting to the board, audit committee, etc In determining the most appropriate role for a particular organization, Internal Audit should ensure that the professional requirements for independence and Objectivity are not breached.

Resources and Implementation

The resources required to implement the organization's risk management policy should be clearly established at each level of management and within each business unit. In addition to other operational functions they may have, those involved in risk management should have their roles in coordinating risk management policy/strategy clearly defined. The same clear definition is also required for those involved in the audit and review of internal controls and facilitating the risk management process. Risk management should be embedded within the organization through the strategy and budget processes. It should be highlighted in induction and all other training and development as well as within operational processes e.g. product/service development projects.

DISCLAIMER

The material provided in this help sheet has been prepared to provide general information only. It is not intended to be relied upon or be a substitute for legal or other professional advice.

REFERENCE

- Babbel, D. And Santomero, A. "Risk Management by Insurers: An Analysis of the Process," Working Paper 96-16, Wharton Financial Institutions Center, University of Pennsylvania , 1996.
- Froot, K., D. Scharfstein, and J. Stein, "Risk Management: Coordinating Investment and Financing Policies," Journal of Finance, December, 1993.
- Furash, E. "Organizing the Risk Management Process In Large Banks," Risk Management Planning Seminar, Federal Financial Institutions Examination Council, Washington, D.C., September 29, 1994.
- Marshall, C. and Siegel, M., "Value at Risk: Implementing a Risk Measurement Standard," June,1996.
- Phelan, M. "Probability and Statistics Applied to the Practice of Financial Risk Management: The Case of JP Morgan's RiskMetrics " Working Paper 95-19, Wharton Financial Institutions Center, TM The Wharton School, University of Pennsylvania , 1995.
- Santomero, A. "Financial Risk Management: The Whys and Hows," Journal of Financial Markets, Institutions and Investments, 4, 1995.

* P.M. Chapaneri

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 43 - 46
ISSN 2319 - 8168

ANALYSIS OF COST STRUCTURE OF ALUMINIUM INDUSTRY IN INDIA PRECIS

The Aluminium Sector is core sector for any of the country. Further now-a-days this sector is open for free market. Energy privatization has been part and parcel of recent trend. This Industry plays a vital role in development of economics of enterprise as well as country. So at this stage cost structure of Aluminium Industry will be very useful to many of its company. The researcher has taken golden opportunities to analyze the cost structure of the leading Industry.

Here, the most leading five Industries have been taken as sample units and the researcher period is from the year 2005-2010. The dissertation is mainly based on the secondary database. Its main objective are to evaluate the raw material, overheads, other working capacity with expenses etc. Further, correlation of the cost structure and other important factors that effects the cost structure of the unit is used to find out in the study. Thus, Overall performance and comparison of units related to cost structure are included in the study. The researcher has tried to fulfill all objectives and to make the study useful. The study has been very useful to researcher to enhance the deep knowledge and experience regarding the study.

Introduction

For most of the last century, firms in certain Industries, especially public utility Industries such as energy, transportation, and communication, have been public owned or regulated to alleviate public fears that such firms would use market Power to raise cost prices artificially. Many of these Industries exhibited scale economics, Which meant that a single firm would have the lowest cost of production and could monopolies and regulated to control entry, prices, cost structure and profits.

Aluminium privatization has been part and parcel of a recent trend, Which has placed greater NALCO on market forces and less dependence in government in the allocation of resourses. For many nation, their formerly state owned aluminium companies have been among the largest companies to be privatized. Energy companies that have been privatized include some of world's largest Aluminium Companies based in the Industrialized nations.

Although privatization efforts differ substantially from country to country, in general, nation have privatized state-owned aluminium industry to achieve one or more of several objective.

These Objectives Include:

1. Cost structure for the Industry, being private or government Industry.
2. Government's industry role in the economic
3. Increasing Cost Material
4. Introducing greater competition ,,and
5. Exposing firms to market discipline.

RESEARCH METHODOLOGY

Aluminium is crucial to the development of any modern economy and is considered to be the backbone of human civilization. The level of per cost consumption of Aluminium is treated as an important index of the level of socioeconomic development and living standards of the people in any country. It is a product of a large and technologically complex industry having strong forward and backward linkages in terms of material flows and income generation. All major industrial economies are characterized by

* Principal, Shri M.M. Doshi Arts & Commerce College, Jesar

the existence of a strong Aluminium industry and the growth of many of these economies has been largely shaped by the strength of their Aluminium industries in their initial stages of development. Aluminium industry was in the vanguard in the liberalization of the industrial Sector and has made rapid strides since then. The new Greenfield plants represent the latest in technology. Output has increased, the industry has moved up in the value chain and exports have raised consequent to a greater integration with the global economy. The new plants have also brought about a greater regional dispersion easing the domestic supply position notably in the western region. At the same time, the domestic steel industry faces new challenges. Some of these relate to the trade barriers in developed markets and certain structural problems of the domestic industry notably due to the high cost of commissioning of new projects. The domestic demand too has not improved to significant levels. The litmus test of the Aluminium industry will be to surmount these difficulties and remain globally competitive.

Financial soundness and Cost structure of a business enterprise largely depend upon the working cost structure management of firm. Working cost structure comprises of different components like raw material, Labour work, Overhead cost, Overall cost, and other cost etc. The management of receivable is very crucial in order to control collection cost and bad debt. The cash management is also very significant because firm should have optimum level of cash during the year. The raw material and work in progress and finished goods are very important part of inventory therefore they should be properly managed. Another problem of the industry is short fall in electricity supply and heavy electric charges. It also makes effect on cost of production and financial position. The objectives of financial analysis can be classified on the basis of persons interested in the analysis as (a) External and (b) Internal. An external analyst has to depend upon the published information of cost structure statements, which are not enlightening themselves. While internal analysis knows everything regarding information provided in cost structure.

Study of cost structure analysis always is made objectively. Generally, external analysts use information as per their requirement. Financier would like to know cost structure. Management would be interested in the operational efficiency cost structure and profitability. The various stakeholders of business enterprises like management, investors, bankers, financial institutions, creditors, employees, government, economist, prospective investor's etc., look at sound cost structure Position of the business enterprise.

Limitations of the study

1. This study will be based on secondary data taken from published annual reports and accounts of selected companies and as such its findings depends entirely on the accuracy of such data.
2. There are different methods to measure the cost structure of an industry in this connection views of experts differ from one-another.
3. The study will be based on different ratio of cost structure has its own limitations which also applies to the study.
4. The different views will be applied in the calculation of the elements of cost by the units.
5. The analysis of cost structure of business enterprise gives diagnostic indicators. Researcher being outside external analyst obviously has no access to internal data. Therefore, inside view of the organization shall not be characterized in the study.

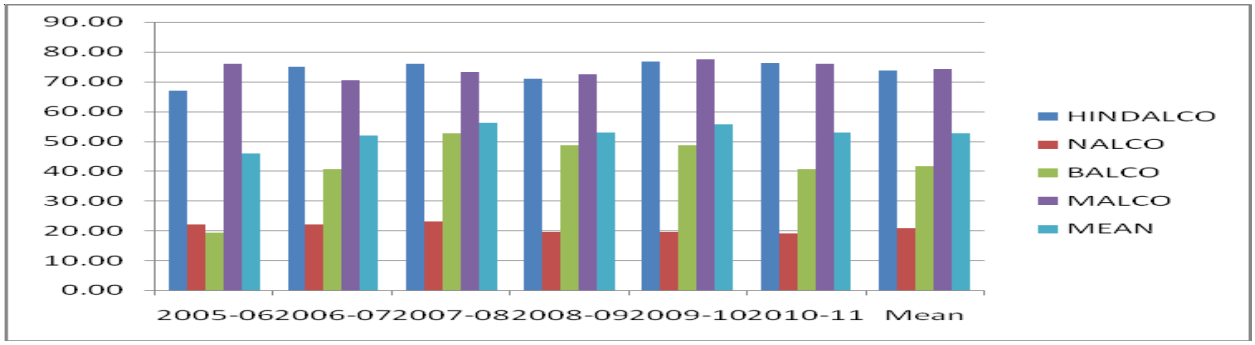
E Cost Data Analysis Table.

This Cost Analysis is mainly annual reports of aluminium industry from 2005-06 to 2010-11. Table 2.1 depicts the cost of selected aluminium industry in India for the period 2005-06 to 2010-11 under study.

Table 2.1 Material to Total Cost In Aluminium Industry in India.

Material to total cost							
Company Name	**2005-06**	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**Mean**
HINDALCO	66.87	75.04	75.85	70.99	76.76	76.20	73.62
NALCO	21.98	22.07	22.95	19.68	19.64	19.17	20.92
BALCO	19.22	40.49	52.75	48.75	48.58	40.65	41.74
MALCO	75.89	70.40	73.24	72.35	77.48	75.89	74.21
MEAN	45.99	52.00	56.20	52.94	55.62	52.98	52.62

Sources:- Annual Reports of Aluminium Industry From 2005-06 to 2010-11



The above Table No:-2.1 shows the material to total cost of the HINDALCO from the year 2005-06 to 2010-11. During the Five years study period researcher found many thing. The highest material to total cost was 76.76 percent in the year 2009-10 and the lowest material to total cost was 66.87 percent in the year 2005-06. The average MEAN of the material to total cost of company was MEAN 73.62 during the study period.

The above Table No:-2.1 Shows the material to total cost of the BALCO from the year 2005-06 to 2010-11. During the Five years study period researcher found many things. The highest material to total cost 52.75 percent in the year 2007-08 and the lowest material to total cost was 19.22 percent in the year 2005-06. The average MEAN of the material to total cost of company was MEAN 41.74 during the study period.

The Table No:- 2.1 Shows the material to total cost of MALCO with fluctuated and progressive trend during researcher period. The highest material to total cost 77.48 in the year 2009-10 and the lowest material to total cost 70.40 percent in the year 2006-07 and average MEAN material to total cost was 74.21 percent.

E ANOVA Test.

Null Hypothesis:- There is no any significant difference in material to total cost in aluminium industry under study.

Alternative Hypothesis:- There is significant difference in material to total cost of Aluminium industry under study.

Level of Significance:-5 Critical cost:- 3.11 Degree of freedom:-17

Table No:-2.2, Material to total cost (ANOVA Test)

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	215.6419	5	43.12839	0.056158	0.997437	3.105875
Within Groups	9215.797	12	767.9831			
Total	9431.439	17				

Table No: - 2.2 Indicates there is no significant difference in material to total cost of aluminium industry under study because the calculated cost of "F" is lower than table cost so, null hypothesis is rejected and

alternative hypothesis accepted. It can be concluded that there is a significance difference in the material to total cost of aluminium industry under study.

Summary

Aluminium Industry is one of the Key industries in India. It plays dominant role in the national economy. Aluminium Industries ranks second after the necessary inputs such as raw. India is well endowed with all the necessary inputs such as raw material. Skilled nun power equipment and technology or this major industry in the modern sector of our economy. The production and consumption of aluminium, to a large extent, indicates, a country's progress.

It must, however he emphasized that India has not yet been able to exploit the potentials that this industry offers in rising growth by utilization the internal and external markets. Despite remarkable achievements during the last decade the industry faces certain problem viz administered price of inputs. Insufficient infrastructure support wagon shortage, packing control etc.

The present study deals with the cost structure of aluminium industry India. State which are engaged in manufacturing and selling of "Aluminium Industry" only. For this purpose four leading companies viz: HINDALCO, NALCO, BALCO, And MALCO LTD. Have been chosen for detailed study as they are considered as the large aluminium plants in aluminium industry in India.

REFERENCE

- Accounting For Management, Dr. Jawahar lal "Himalaya Publishing House.
- Aluminium Fact, November – 2009.
- The Basic fact about the Indian Aluminium market – 1993.
- IISI – India Steel and Aluminium in figures – 1995.
- Sharma R.P. 1988, Capital Financial Structure University of Delhi.
- Indian Aluminium Industry
- Aluminium an Industry Profile – 1993

WEBSITE

- www.world-aluminium.org

* **Akkata Pandya**

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 47 - 49
ISSN 2319 - 8168

પરંપરાગત વેપાર વ્યવસ્થા ઉપર આધુનિક મોલ કલ્ચરની અસર

ભારતીય સમાજ વ્યવસ્થાએ સૌથી જુની અને ઉત્તમ વ્યવસ્થા છે. આપણો ઈતિહાસ તપાસતાં ખ્યાલ આવશે કે સમાજની દરેક જરૂરીયાતો પૂર્ણ થાય તેવી વ્યવસ્થા આપણા સમાજની હતી. સામાજીક, આર્થિક, શૈક્ષણિક, આરોગ્યલક્ષી, ભૌતિક વગેરેનો વ્યવસ્થિત સમતોલીત સ્થિતિ જાળવવામાં આવતી કૌટલ્યનું અર્થશાસ્ત્ર આજના યુગમાં ભણવામાં આવે છે. તેવી આર્થિક વ્યવસ્થા યોગ્ય માળખામાં ગોઠવાયેલ હતી. આપણી વેપાર વ્યવસ્થાની ગોઠવણી વર્ગ વ્યવસ્થા અને ત્યારબાદ જ્ઞાતિ વ્યવસ્થામાં રૂપાંતરિત થઈ અને આ વ્યવસ્થાની અસર રોજગારી ઉપર થયેલ ન હતી. જેથી આર્થિક વ્યવસ્થાનું સમતુલન જળવાય રહેતું. જેમ–જેમ પરિવર્તનની હવા લાગતી ગઈ અને મોલકલ્ચર અહિ પગપક્ષેશે કરતાં આપણી પરંપરાગત અર્થવ્યવસ્થામાં ખલેલ પહોંચી છે. મોલકલ્ચરની શરૂઆત સામાન્ય સમાજ ઉપર તો અસર સામાન્ય લાગે છે. પરંતુ આપણા દેશમાં નાના–નાના વેપારીઓની સંખ્યા ઘણી છે અને સાથે–સાથે ખેડૂતો કે ઉત્પાદકો પણ સીધું વેચાણ કરતા આમ દરેકને સમાન રોજગારી ઉપલબ્ધ બનતી પરંતુ આજે નાના–નાના મોટો આવવાથી નાના વેપારીઓને રોજગારીના પ્રશ્નો સમર્થ છે. આપણું પરંપરાગત વ્યવસ્થા ઉપર સીધી અસર થાય છે.

પ્રસ્તાવના :

અર્થ વ્યવસ્થા અને વ્યાપાર વ્યવસ્થા એ દરેક સમાજનું અનિવાર્ય અંગ છે. અર્થશાસ્ત્ર મુજબ માનવીની જરૂરીયાતો અમર્યાદિત છે, અને આ જરૂરીયાતો પૂર્ણ કરવા સમાજમાં વિવિધ વ્યવસ્થાઓનું સર્જન કરવામાં આવ્યું છે. આવી વિવિધ જરૂરીયાતો માટે વ્યવસ્થિત વ્યવસ્થાતંત્ર ઉભા કરી એક સમતુલીત સમાજ ઉભો કરવાની વ્યવસ્થા આપણા સમાજમાં ઘડતર કરવામાં આવેલી છે.

ભારતીય સમાજનાં ઈતિહાસની આર્થિક વ્યવસ્થા વિનિમય પ્રથાયી શરૂઆત થયેલી છે. વર્ણ વ્યવસ્થા દરમ્યાન વેશ્યને ઉત્પાદન વેપાર અને વિવિધ જરૂરીયાતોની પૂર્તિનું કામ શોધવામાં આવ્યું. ધીરે–ધીરે વર્ણ વ્યવસ્થા તુટવા લાગી અને જ્ઞાતિ વ્યવસ્થામાં જ્ઞાતિ આધારિત વેપાર વ્યવસ્થા અસ્તીત્વમાં આવી. જેમ કે, સોનું–સોની, લોખંડ–લુહાર, લાકડું–સુથાર, શાકભાજી–કાછીયો, માટી–કુંભાર, ખેતી–પટેલ, પશુપાલન–ભરવાડ, ગૌવાર, આહિર જેમા એક જ્ઞાતિ બીજી જ્ઞાતિ, એક વ્યકિત બીજી વ્યકિત સાથે પરોક્ષ અને પ્રત્યક્ષ જોડાયેલી રહેતી. જેમાં માનવી જરૂરિયાતોની પૂર્તિમાં કોઈ સમસ્યા ઉભી ન થતી. સમતોલીત વ્યાપાર વ્યવસ્થા જળવાય રહેલી. પરંતુ વર્ગ વ્યવસ્થા આવતા આ વ્યવસ્થા તુટવા લાગી. સાથે–સાથે ઈ.સ. ૧૯૯૧ ની વૈશ્વિકીકરણની નિતિથી વિદેશ કંપનીઓનું ભારતમાં આગમન થતા આપણી પરંપરાગત આર્થિક સંસ્કૃતિ (ઈકોનોમીક કલ્ચર) તુટવા લાગી. સાથે–સાથે આપણે બે વર્ગોનો ઉદ્‌ભવ થવો એક આપણી પરંપરાગત વિનિમય પ્રથા અને એક મોડેલિંગ ફોરેન બિઝને (વિદેશ વ્યાપાર) જે બંને વચ્ચે સંબંધમાં અસ્થિરતાનું અસ્તિત્વ થયું અને મોલ કલ્ચર આવ્યું. જેની અસર દુકાન ધારકો અને ગ્રાહકો ઉપર કેવી અસર છે. જેમાં અમુક હકારાત્મક (સારી) અને કદાચ વધુ નકારાત્મક (ખરાબ) બાબતોનો સમાવેશ થયેલ છે.

આમ, જોતા તો આ અસર સામાન્ય ામય વિશે ઘણું લખાયું હોવા છતાં આ વિષય ઉપર હજુ સુધી અભ્યાસ થયો હોય એવું મારી જાણમાં નથી, કે ભાવનગરમાં મોલકલ્ચરનો કેવો સ્વીકાર થયો છે ? તેની સામાન્ય દુકાન ધારકો ઉપર કેવી અસર થઈ છે ? વેચાણ કરનાર અને ઉત્પાદન કરનાર વચ્ચે કેવી વિનિમય પ્રથા છે ? આ વિવિધ પ્રશ્નો દ્વારા આ અભ્યાસ હાથ ધર્યો છે.

પરંપરાગત ભારતીય વેપાર વ્યવસ્થા :

ભારતનો ઈતિહાસ ઘણો જુનો છે. પરંતુ આપણાં સમાજની વ્યવસ્થા સમતોલીત અને સમાજવાદી છે. આથી દરેક વ્યવસ્થાનો ઝીણવટપૂર્વકનો અભ્યાસ કરવામાં આવે તેમ છતાં તેના ખરાબ પાસા ઓછા છે. ઈ.સ.પૂર્વેથી ઈ.સ. ની દસમી સદી સુધી વર્ણ વ્યવસ્થા અસ્તિત્વ ધરાવતી હતી. આ સમય એટલે ભારતનો સૂવર્ણ યુગનો સમય જેમાં દરેક વ્યવસ્થાને ચાર વિભાગમાં ગોઠવવામાં આવેલી હતી. જેમાં માનવી જરૂરીયાતોનું પણ વિભાજન હતું. પ્રાથમિક જરૂરીયાત (અન્ન, પાણી, વસ્ત્ર) ભૌતિક જરૂરિયાતો, રક્ષણાત્મક જરૂરીયાતો અને અન્ય જરૂરીયાતોની વ્યવસ્થાના આધારે વર્ણના આધારે વિભાજીત કરવામાં આવેલ.

*** Student, Dept of Comm, M.K. Bhavnagar University, Bhavnagar**

લગભગ ૧૧મીસદીમાં જ્ઞાતિ વ્યવસ્થા અસ્તિત્વમાં આવી અને જરૂરીયાતોને જ્ઞાતિમાં વિભાજીત કરવામાં આવી. આ વ્યવસ્થાથી વ્યાપાર અને વેપાર ચક્ર ઉપર તેની ખાસ અસર થયેલ નહિ. આજના આધુનિક વેપાર ચક્રમાં અનુક્રમે તેજી મંદી ફુગાવો જેવી સ્થિતિનો ઉદ્‌ભવ ત્યારબાદ થયેલ વેપાર–રોજગારી અને જરૂરીયાતનું સમતોલન વ્યવસ્થિત બન્યું.

સ્વતંત્રતા બાદ બદલાયેલ અર્થતંત્ર :

ભારત દેશ ૧૯૪૮ માં સ્વતંત્ર તો બન્યું પરંતુ ભારતમાં ત્યારે ખરેખર કોઈ ચોકકસ માળખું કે વ્યવસ્થા અસ્તિત્વમાં ન હતી. દરેક દેશ અન્ય દેશની તુલનાએ સ્વતંત્ર હતા. કોઈ દેખાવ કે સ્પર્ધા જેવું વાતાવરણ ન હતું અને ભારતીય પરંપરા મુજબ વિનિમય પ્રથા ચાલુ હતી. ધીમે–ધીમે ભારતીય કલા અને ગૃહઉદ્યોગની જગ્યા હવે ઉદ્યોગ તરફ પ્રગતિશીલ બન્યા હતા. ઈ.સ. ૧૯૯૧ માં ભારતીય વ્યાપાર અને ઉદ્યોગનિતિમાં પરિવર્તન લાવવા માટે માનનીય ડો. મનમોહનસિંહ દ્વારા વૈશ્વિકીકરણ, ખાનગીકરણ અને ઉદારીકરણની નિતિ અપનાવતા એક વૈશ્વિક બજાર ઉભુ થયું. તેમની અસર વેપારી વર્ગ ઉપર નકારાત્મક અસર થઈ. જે દેશના વિકાસ માટે હકારાત્મક હતી.

આધુનિક સંસ્કૃતિનો ઉદય અને તેની અસર :

ઈ.સ. ૧૯૯૧ની આર્થિક નિતિના સ્વીકાર પછી વિવિધ મોલ સ્થાપવાની શરૂઆત. અમદાવાદમાં Big Bajar ની ૨૦૦૧માં શરૂઆત થઈ. ત્યારબાદ V-Mart, Reliance Fresh, ઈસ્કોન મોલ, હિમાલયા જેવા મોલની શરૂઆત થયેલ. તેની અસર નાના વેપારીઓને વિવિધ સમસ્યાઓની શરૂઆત કરનાર ગણાવ્યા છે.

નાના સ્ટોર ઘરથી થોડા અંતર હોય છે. વસ્તુઓ તેમાં વધારે સરળતા રહેતી હોય છે. જેટલી વસ્તુ જેટલા પ્રમાણમાં જોઈએ તો આવા છુટક સ્ટોરમાંથી સરળતાથી પ્રાપ્ત થઈ શકતી હોય છે. જયારે મોલમાં એક જ જગ્યા એવી બધી જ વસ્તુઓ પ્રાપ્ત થતી હોય છે. જેમ કે, ઈલેકટ્રીક ડિપાર્ટમેન્ટમાંથી ઈલેકટ્રીક વસ્તુઓ, ખાદ્ય સમગ્રીના ડિપાર્ટમેન્ટ માંથી ખાદ્ય સામગ્રી, શાકભાજીના વિભાગો, રેશન, જવેલરી સ્ટોક, સિનેમા વગેરે બધી જ વસ્તુઓ એક જ જગ્યાએથી અને ઝડપથી પ્રાપ્ત થતી હોવાને થાય છે. મોલમાં ગ્રાહકોને આકર્ષણ માટે વિવિધ ચીજવસ્તુઓ માટે ઓફરો રાખવામાં આવે છે. FDI (Foreign Direct Investment) નામની સંસ્થાએ મોલની સ્થાપના કરવા તથા છૂટક વેપારોને બંધ કરવા ઘણા દેશોમાં શ્રેષ્ઠ કામગીરી બજાવી છે. આ દેશ થાઈલેન્ડ, મલેશિયા, બ્રાઝીલ, પોલેન્ડ, ચાલના વગેરે છે. પરંતુ ભારત સરકારે આ સંસ્થાને નાના સ્ટોર ધારકોના હિત માટે ભારતમાં પ્રવેશવાની પરવાનગી આપી નથી. આ માટે દેશના લોકો દ્વારા પણ વિરોધો કરવામાં આવ્યા હતા અને આજે પણ ઘણા પ્રશ્નો જોવા મળે છે.

આજે લોકો મોલમાંથી વસ્તુઓ ખરીદવાનો આગ્રહ રાખે છે. પરિણામે નાના સ્ટોર ધારકોનો ધંધો પડી ભાંગ્યો છે. તેઓની આવક અને રોજી–રોટી પર તેની અસર થઈ છે. તેઓના સ્ટોરની વસ્તુઓના ઓછા વેચાણ ને કારણે તેને ખોટ સહન કરવી પડે છે. વેપારમાં વધારે ખોટ ને કારણે તેના પર દેવાંનો બોજો વધી જાય છે. તેની આર્થિક ખુબ જ નબળી બનતા તે બેરોજગાર બને છે. તે પોતાની આર્થિક સધ્ધરતા ગુમાવતા સંપૂર્ણ બેરોજગાર બને છે.

હવે, અહીંયા એ પ્રશ્ન ઉદ્‌ભવે કે રોજગારી માટે ઉત્તમ વેપાર મોલ કે નાના સ્ટોર, મોલમાંથી લોકોને રોજગારી જ પ્રાપ્ત થતી હોય છે અને નાના સ્ટોરમાંથી પણ રોજગારી પ્રાપ્ત થતી હોય છે. પરંતુ પરંપરાગત વેપાર એ નાના સ્ટોરનો વેપાર એ જ છે. તેનો મુખ્ય હેતુ ગ્રાહકોને મહત્તમ સંતોષ પ્રાપ્ત થાય તેનો હોય છે. તેમાં ગ્રાહકોનું હિત ન જોખમાય તેની કાળજી રાખવામાં આવતી હોય છે. ગ્રાહકો પોતાની જરૂરીયાત પુરતી અને જેટલો જરૂરી હોય તેટલી વસ્તુ છુટક ત્યાંથી લઈ શકે છે. જયારે મોલમાં અમુક નિયત કરેલી રકમ સુધીની વસ્તુ ગ્રાહકે ફરજયાત ખરીદવી પડે છે. તેમાં છેતરપિંડીનો ભય પણ રહે છે. વિવિધ આકર્ષક ઓફરો દ્વારા પરિણામે ગ્રાહકનો વિશ્વાસ તૂટે છે, અને ગ્રાહકોનું હિત પણ જોખમાય છે.

આ તારણો પરથી સ્પષ્ટ થાય છે કે મોલ કલ્ચર કરતાં નાના સ્ટોરમાં થતો વેપાર ગ્રાહકોના હિત તથા સંતોષ માટે જરૂરી છે. તેમાં ગ્રાહોકને અગ્રિમતા આપવામાં આવે છે. ત્યાં પ્રમાણિકતાનો વધારે પડતું મહત્વ આપવામાં આવી રહયું છે.

પધ્ધતિ :

હેતુ :

* પરંપરાગત વેપાર વ્યવસ્થાનું ગોઠવણ વિષયક જાણકારી.
* પરંપરાગત વેપાર ઉપર પડેલી અસર જાણવી.
* પરંપરાગત વેપારની ઉદ્‌ભવેલી સમસ્યાની વેપારવર્ગ ઉપર પડેલી અસરની જાણકારી.

વ્યાપ વિશ્વ

આ અભ્યાસમાં ભાવનગર શહેરના દક્ષિણ વિસ્તારે આવેલ રામમંત્ર, લખુભા હોલ, કાળીયાબીડ અને તળાજા જકાતનાકાના વિસ્તારમાં આવેલ વેપારી વર્ગ અને સામાન્ય નાગરિક પૂરતો સિમિત બનાવવામાં આવ્યો.

નમુના :

આ અભ્યાસમાં ૩૦ વેપારી (૨૨ ભાઈઓ ૮ બહેનો) ૪૦ સામાન્ય નાગરિક (૨૦ ભાઈઓ અને ૨૦ બહેનો) એમ કુલ મળી ૭૦ નિદર્શન પસંદ કરવામાં આવ્યા.

ઉપકરણ :

આ અભ્યાસમાં રૂબરૂ મુલાકાત અને નિરિક્ષણ પધ્ધતિનો ઉપયોગ કરવામાં આવ્યો છે. રૂબરૂ મુલાકાત માટે રચિત સંભવિત વિધાનો પ્રથમથી જ તૈયાર કરેલ અને તેના આધારે
માહિતી એકત્ર કરવામાં આવી.

માહિતીનું પૃથ્થકરણ :

આ અભ્યાસમાં સૌપ્રથમ મુલાકાત અને નિરિક્ષણ દ્વારા જે માહિતી ઉપલબ્ધ બની તેનું સામાન્યીકરણ કરવામાં આવ્યું.

તારણો :

પરંપરાગત વેપાર વ્યવસ્થાનું વ્યવસ્થાપન :

મોટાભાગના ઉત્તરદાતાઓ પાસેથી જે જવાબો પ્રાપ્ત થયા તે મુજબ આપણી પરંપરાગત વેપાર વ્યવસ્થામાં દરેક ચીજ–વસ્તુ માટે અલગ–અલગ સ્ટોરની વ્યવસ્થા હતી. પ્રાચિન સમયમાં જ્ઞાતિ આધારિત વસ્તુનું ઉત્પાદન અને વેચાણ કરવામાં આવતું. જેનું ઉદ્યોગીક સ્વરૂપ આવતા આજે જ્ઞાતિ આધારિત નહિ પણ ચીજ વસ્તુ આધારિત સ્ટોર (દુકાન) વ્યવસ્થા છે. બીજી બાબત આજના સમયે એવી પણ છે કે અગર ગ્રાહક પાસે હાથ ઉપર નાણું નથી તો ઉધાર (ધિરાણ) થી પણ ચીજ–વસ્તુઓ ખરીદી શકે છે. બીજી બાબત આપણી પરંપરાગત વેપાર વ્યવસ્થામાં ખેડૂત, ફેરીયા, દલાલ અને વેપાર બધાને સમાન આવક મળી રહે છે. તેમ છતાં તે ચીજ ગ્રાહકે ખરીદી અનુકૂળ કિંમતે કરી શકે છે.

પરંપરાગત વેપાર વ્યવસ્થા ટુટવા લાગી છે :

૩૦ ટકા ઉત્તરદાતા ઓનું માનવું છે કે આપણી પરંપરાગત વેપાર વ્યવસ્થા સારી હતી અને તેની તુલનાએ આજના વેપાર વ્યવસ્થા (મોલ સંસ્કૃતિ) ની વ્યવસ્થા યોગ્ય નથી. આપણી વ્યવસ્થા ટુટવા લાગી અને રોજગારીમાં પણ ઘટાડો થવા લાગ્યો છે.

એક જ જગ્યાએથી દરેક ચીજ–વસ્તુઓ સહેલાયથી ઉપલબ્ધ થાય છે :

૬૨ ટકા ઉત્તરદાતાનું એવું માનવું છે કે આપણી પરંપરાગત વેપાર વ્યવસ્થામાં વિવિધ ચીજ–વસ્તુની ખરીદી માટે અલગ–અલગ સ્ટોર અને અલગ–અલગ વિસ્તારમાં જવું પડતું તેમાં છેતરાવાનો પણ ભય રહેતો પરંતુ મોલમાં એક જ જગ્યાએ દરેક વસ્તુ ઉપલબ્ધ બનાવવામાં આવેલ છે. જેથી સમયનો બચાવ કરી શકાય છે. સાથે–સાથે કિંમતમાં છેતરાવાનો ભય પણ ઓછો રહે છે.

રોજગારીનું સર્જન ઓછું થાય છે :

ભાવનગરમાં જ સેવાઓ અને વેપારી વર્ગ કે તેમની સાથે સંકળાયેલા લોકોનું પ્રમાણ લગભગ ૬૯ ટકા છે. જયારે મોલ કલ્ચરમાં ભાવનગરમાં ૪ થી ૫ મોલ આવેલા છે. દરેક મોલમાં સરેરાશ ૩૦ થી ૩૫ કર્મચારી કામ કરે છે. આવી રોજગારીના સર્જનની બાબતમાં પરંપરાગત વેપાર વ્યવસ્થા કરતા ઘણું જ ઓછું છે.

સ્થાનિક ઉત્પાદકોને સીધા વેચાણમાં સમસ્યા :

આપણી વેપાર વ્યવસ્થા સમાન્ય હતી જેમાં ઉત્પાદક પોતે વેપારી બની અને પોતાના માલનું વેચાણ કરી શકતો અથવા ઉત્પાદક સિધો વેપારીને પોતાનું ઉત્પાદન વેચાણ કરી શકતો અને તેમની પાસેથી ખરીદનાર એક કરતા વધુ વેપારી રહેતા જેથી તેમની ઉચ્ચી કિંમત પ્રાપ્ત થઈ શકતી.

(હરાજીજી પ્રથા)પરંપરાગત વેપાર સાથે સંકળાયેલ રોજગારી ગુમાવવાનો ભય :

૮૬ ટકા લોકો પાસેથી એક સમાન જવાબ પ્રાપ્ત થયો છે કે જો માલની વ્યવસ્થા આપણા સમાજમાં સફળ થઈ તો આપણા વેપાર સાથે સંકળાયેલ દલાલ, મજુર અને વેપારી બે રોજગાર બનશે.

પરંપરાગત વેપાર વ્યવસ્થાનું વ્યવસ્થાપન :

દરેક રીતે આપણે જોવામાં આવે તો આપણી પરંપરાગત વેપાર વ્યવસ્થા સારી હતી. પરંતુ મોલકલ્ચરમાં પણ અમુક બાબતો ઉત્તમ છે. જેમ કે સરળતાથી અને ગુણવતા વારી ચીજ–વસ્તુઓ મળી રહે છે. અને વેચાણમાં પણ સમાન કિંમત કરી ચીજ–વસ્તુઓ ઉપર ફુગાવાની અસર ઉપર કંટ્રોલ કરી શકાય છે. પરંતુ બીજી બાજુ જોવા જઈએ તો રોજગારી સર્જન માટે આ વ્યવસ્થાને બરાબર ગણાવી શકાય નહી. આપણા દેશને રોજગારીની જરૂર છે. સંપૂર્ણ રોજગારીની પ્રાપ્તી પછી આ વ્યવસ્થા ઉત્તમ છે.

સંદર્ભ

પાંડેય રામ નરેશ *'વિશ્વ વ્યાપાર સંગઠન તથા ભારતીય અર્થવ્યવસ્થા'* (૨૦૦૪) એન્ટલાટીક

- શર્મા અનુરાગ *'વિશ્વ વ્યાપાર એવમ ભારતીય અર્થવ્યવસ્થા'* (૨૦૧૨)રીતુ પબ્લીકેશન
- પાંડેય ગણેશ *'ભારતીય સામાજીક વ્યવસ્થા'* (૨૦૦૮) દયા પબ્લીકેશન
- Dr. Bhati Usha *Foreign Direct Investment-Contemporary Issues (2006) jain book*
- Dr. Bala Indu `*Foreign Resources and Economic Development* ` (2003) jain book

* Pratik Trivedi

Commerce
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 50 - 53
ISSN 2319 - 8168

A MATHEMATICAL STUDY ON MARKETING MANAGEMENT

An important concern in all business and economic activities is to have some fair idea as to whether the future trends are going to be favorable or unfavorable. It helps the top management take appropriate policy decisions in advance. For example sales may be expected to rise substantially after, say, 5 years. This demand taking measures well in time to build adequate productive capacity so that the future profit potential is not lost to the rival producers. An anticipation of this kind involves long-term planning.On the other hand, product sales may be expected to go up shortly or in the near future. A prudent management would rise to the occasion to take advantage of such opportunities. It may call for making necessary adjustments in the existing production schedule and taking other steps, as the situation calls for. All this effort would be aimed at ensuring that sufficient stocks are kept ready with the given capacity so that the product is easily available when needed. A situation of this kind involves short-term planning.Irrespective of the length of future time period one is interested in being long or short, planners and policy makers at all levels need to know the future trends in business activity relating to several other variables and predict the likely cause-effect relationships among them. This is made possible through business forecasting, which consists of methods of acquiring knowledge about the future. Competition is an essential characteristic of modern business. Many a time, competition tends to be so intense that it poses a constant threat to the very stability of business activity. This factor alone makes fore-knowledge about future business trends extremely important as it enables a business firm to evolve appropriate strategies for holding on to its position or retaining market share already attained. In the absence of any serious impending threat of competition, neither would the need to know about the future be so imperative, nor would the concern for long-term and short-term planning be so impelling.

Research Methodology :

The analysis of time series implies its decomposition into various factors that affect the value of its variable in a given period. It is a quantitative and objective evaluation of the effects of various factors on the activity under consideration.

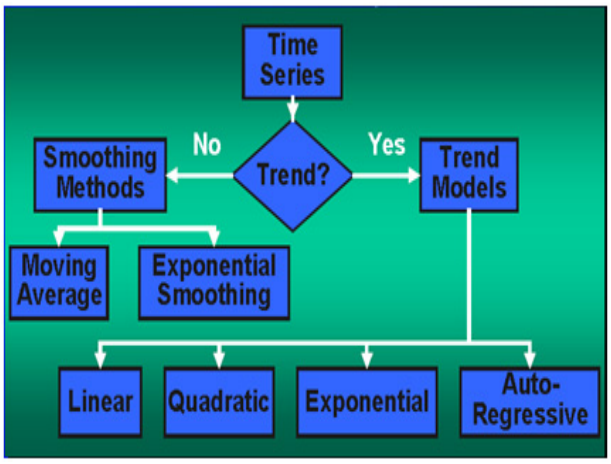
There are two main objectives of the analysis of any time series data:

· To study the past behavior of data.

· To make forecasts for future.

The study of past behavior is essential because it provides us the knowledge of the effects of various forces. This can facilitate the process of anticipation of future course of events, and, thus, forecasting the value of the variable as well as planning for future.

Time Series forecasting flow chart :



* Lecturer, Shree Narayan College of Commerce, Ahemdabad

Literature Review :

Forecasting techniques can be categorized in two broad categories: quantitative and qualitative. The techniques in the quantitative category include mathematical models such as moving average, straight-line projection, exponential smoothing, regression, trend-line analysis, simulation, life-cycle analysis, decomposition, expert systems, and neural network. The techniques in the qualitative category include subjective or intuitive models such as jury or executive opinion, sales force composite, and customer expectations (Kress, 1985; Mentzer& Kahn, 1995).

Along with qualitative and quantitative, forecasting models can be categorized as time-series, causal, and judgmental. A time-series model uses past data as the basis for estimating future results. The models that fall into this category include decomposition, moving average, exponential smoothing, and others. The premise of a causal model is that a particular outcome is directly influenced by some other predictable factor.

These techniques include regression models. Judgmental techniques are often called subjective because they rely on intuition, opinions, and probability to derive the forecast.

These techniques include expert opinion, Delphi, sales force composite, customer expectations (customer surveys), and simulation (Kress, 1985; Wilson & Keating, 1994).

The data presents forecasting techniques categorized by quantitative or qualitative.

Typically, the two forms of forecasting error measures used to judge forecasting performance are mean absolute deviation (MAD) and mean absolute percentage error (MAPE). For both MAD and MAPE, a lower absolute value is preferred to a higher absolute value. MAD is the difference between the actual sales and the forecast sales, absolute values are calculated over a period of time, and the mean is derived from these absolute differences. MAPE is used with large amounts of data, and forecasters may prefer to measure error in percentage (Wilson & Keating, 1994).

Quantitative and Qualitative Techniques of Forecasting :

Quantitative Forecasting Techniques:

* Regression Analysis: statically relates sales to one or more explanatory (independent) variables. Explanatory variables may be marketing decisions (price changes, for instance), competitive information, economic data, or any other variable related to sales.
* Exponential smoothing makes an exponentially smoothed weighted average of past sales, trends, and seasonality to derive a forecast.
* Moving average takes an average of a specified number of past observations to make a forecast. As new observations become available, they are used in the forecast and the oldest observations are dropped.
* Box-Jenkins uses the auto correlative structure of sales data to develop an autoregressive moving average forecast from past sales and forecast errors.
* Trend line analysis fits a line to the sales data by minimizing the squared error between the line and actual past sales values. This line is then projected into the future as the forecast.
* Decomposition breaks the sales data into seasonal, cyclical, trend and noise components and projects each into the future.
* Straight-line projection is a visual extrapolation of the past data, which is projected into the future as the forecast.
* Life-cycle analysis bases the forecast upon whether the product is judged to be in the introduction, growth, maturity, or decline stage of the life cycle.
* Simulation uses the computer to model the forces, which affect sales: customers, marketing plans, competitors, flow of goods, etc. The simulation model is a mathematical replication of the actual corporation.
* Expert systems use the knowledge of one or more forecasting experts to develop decision rules to arrive at a forecast.
* Neural networks look for patterns in previous history of sales and explanatory data to uncover relationships. These relationships are used to produce the forecast.

· **Qualitative Forecasting Techniques**

* Jury of executive opinion consists of combining top executives' views concerning future sales.
* Sales force composite combines the individual

forecasts of salespeople.

* Customer expectations (customer surveys) use customers' expectations as the basis for the forecast. The data are typically gathered by a customer survey by the sales force.

* Delphi model is similar to jury of executive opinion in taking advantage of the wisdom of experts. However, it has the additional advantage of anonymity Among participants.

* Naïve model assumes that the next period will be identical to the present. The forecast is based on the most recent observation of data.

* **Data Presentation and Data Analysis :**

Measures of Forecast Accuracy

There are various parameters for measuring forecast accuracy. They can be divided as follow:

* Mean Squared Error (MSE)

* Mean Absolute Deviation (MAD)

4.1.1 Mean Squared Error (MSE)

The average of the squared forecast errors for the historical data is calculated. The forecasting method or parameter(s) which minimize this mean squared error is then selected.

4.1.2 Mean Absolute Deviation (MAD)

The mean of the absolute values of all forecast errors is calculated, and the forecasting method or parameter(s) which minimize this measure is selected. The mean absolute deviation measure is less sensitive to individual large forecast errors than the mean squared error measure.

One may choose either of the above criteria for evaluating the accuracy of a method (or parameter).

Conclusions :

Methods of least square

The trend project method fits a trend line to a series of historical data points and then projects the line into the future for medium-to-long range forecasts. Several mathematical trend equations can be developed (such as exponential and quadratic), depending upon movement of time-series data.

Reasons to study trend: A few reasons to study trends are as follows:

1. The study of trend allows us to describe a historical pattern so that we may evaluate the success of previous policy.

2. The study allows us to use trends as an aid in making intermediate and long-range forecasting projections in the future.

3. The study of trends helps us to isolate and then eliminate its influencing effects on the time-series model as a guide to short-run (one year or less) forecasting of general business cycle conditions.

Linear Trend Model

If we decide to develop a linear trend line by a precise statistical method, we can apply the least squares method. A least squares line is described in terms of its y-intercept (the height at which it intercepts the y-axis) and its slope (the angle of the line).

If we can compute the y- intercept and slope, we can express the line with the following equation

$$\hat{y} = a + bx$$

where $\hat{y}$ = predicted value of the dependent variable

a = y-axis intercept

b = slope of the regression line

x = independent variable (which is time in this case)

Least squares is one of the most widely used methods of fitting trends to data because it yields what is mathematically described as a 'line of best fit'. This trend line has the properties that

a) The summation of all vertical deviations about it is zero, that is, Ó(y-) = 0

b) The summation of all vertical deviations squared is a minimum, that is, Ó(y-)is the least and

c) The line goes through the mean values of variables x and y. For linear equations, it is found by the simultaneous solution for a and b of the two normal equations:

ÓyÓy = *na*+ *b*Ó*x* and Ó*xy* = *a*Ó*x* + *b*Ó*x*

= na+ bÓx and Óxy = aÓx + bÓx

Where the data can be coded so that "x = 0, two terms in three equations drop out and we haveÓy = na and Óxy = bÓx

Coding is easily done with time-series data. For coding the data, we choose the centre of the time period as x = 0 and have an equal number of plus and minus periods on each side of the trend line which sum to zero.

Alternately, we can also find the values of constants aandb for any regression line as:

$$b = \frac{\sum xy - nxy}{\sum x - n(x)^2} \text{ and } a = y - bx$$

Parabolic Trend Model

The curvilinear relationship for estimating the value of a dependent variable y from an independent variable x might take the form

$$\hat{y} = a + bx + cx^2$$

This trend line is called the parabola.

For a non-linear equation the values of constants a, b, and c can be determined by solving three normal equations.

$$\Sigma y = na + b\Sigma x + c\Sigma x^2$$

$$\Sigma xy = a\Sigma x + b\Sigma x^2 + c\Sigma x^3$$

$$\Sigma x^2y = a\Sigma x^2 + b\Sigma x^3 + c\Sigma x^4$$

When the data can be coded so that Óx = 0 and Óx = 0, two term in the above expressions drop out and we have

$$\Sigma y = na + c\Sigma x^2$$

$$\Sigma xy = b\Sigma x^2$$

$$\Sigma x^2y = a\Sigma x^2 + c\Sigma x^4$$

To find the exact estimated value of the variable y, the values of constants a, b, and c needs to be calculated. The values of these constants can be calculated by using the following shortest method:

$$a = \frac{\sum y - c\sum x^2}{n}; b = \frac{\sum xy}{\sum x^2} \text{ and } c = \frac{n\sum x^2y - \sum x^2 \sum y}{n\sum x^4 - (\sum x^2)^2}$$

* **Dr. Hemu Jambukiya**

Rural Study
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 54 - 56
ISSN 2319 - 8168

શેરીબાળકોની સ્થિતિનો અભ્યાસ: અમદાવાદ

પ્રસ્તાવના

વર્તમાન સમયમા શહેરીકરણની પ્રક્રિયા ખુબ જ ઝડપથી વધતી જાય છે. સતત અનાવૃષ્ટિ, અતિવૃષ્ટિ, વાવાઝોડુ, ભૂકંપ જેવી કુદરતી આફતોના કારણે રોજગારીની યોગ્ય તકોને અભાવે રોજીરોટીની શોધમા ગ્રામીણ લોકોએ સ્થળાંતર કરવુ પડે છે. તેઓ શરૂઆતમા વૈકલ્પિક રોજગારી માટે શહેરોમા આવે છે અને ધીમે ધીમે તેઓ જે તે શહેરમા સ્થાયી થઇ જાય છે. શહેરોમા રહેવા યોગ્ય જગ્યાના અભાવના કારણે તેમને જયા પણ જગ્યા મળે ત્યાં ગંદા વસવાટોમા સ્થાયી થવુ પડે છે. ઘણાં લોકોને ગંદા વસવાટો કે ઝુપડપટ્ટીમા પણ જગ્યા ન મળતા તેઓ શહેરના રસ્તાઓ, ધાર્મિક સ્થળો, ફુટપાથ, પાર્કની જગ્યાઓ વગેરે સ્થળોએ રહે છે. આ જગ્યાઓ પર રહેતા લોકોમા મહિલાઓ અને બાળકોની સ્થિતિ ખુબ જ કફોડી હોય છે. નગર કે શહેરોમા પણ ધંધા રોજગારની નિયમિત વ્યવસ્થા નિશ્ચિંત હોતી નથી જેના કારણે કૌટુંબિક કલેશો વધી જાય છે અથવા લોકો અસામાજીક ધંધાઓમા જોડાય છે, જેમાથી અનેક સમસ્યાઓ ઉદભવે છે. હાલમા બાળકો પ્રત્યે થતા અવ્યવહારૂ અને અમાનવીય વર્તનનાં કારણે ઉભી થતી સમસ્યાઓ નજર અંદાજ કરી શકાય નહિ કારણ કે આપણે સૌ માનીએ છીએ કે આજના બાળકો એ રાષ્ટ્રના આવતી કાલના નાગરિકો અને દેશનુ ભાવિ છે. બાળકોની મોટાભાગની સમસ્યાઓ બાળકો પ્રત્યે દુવ્યવહારમાથી ઉત્પન્ન થાય છે. શેરી બાળકોની વાસ્તવિક ઘટનાએ બાળકો પ્રત્યે થતા દુવ્યવહારની નીપજ છે. બાળકોની જુદી જુદી કક્ષામા શેરી બાળકોની કક્ષા ખુબજ જોખમી ગણી શકાય કારણ કે શેરીબાળકોએ બીજા બાળકોની સરખામણીમા વંચિતતાનો ભોગ બનવાની શકયતા બીજા બાળકોની સરખામણીમા સૌથી વધારે છે તેથી શેરી બાળકોની સમસ્યાઓ ખુબ જ પડકાર જનક છે.

યુનિસેફની યૂ.કે. સમિતિ દ્વારા શેરી બાળકોની કક્ષા નકકી કરવાનો આધાર પુરો પાડે છે. શેરી બાળકોના કુટુંબના કુટુંબ સાથેના સબંધો અનુસાર તેમને ત્રણ કક્ષામા મુકી શકાય.

૧. શેરીમાના બાળકો (Children on the Street)

એવા બાળકો જે સતત કટુંબના સંપર્કમા રહે છે તેમના જીવવાનું કેન્દ્રબિંદુ ઘર હોય છે. બહુ જ થોડા બાળકો શાળા એ જતાં હોય છે. શાળાના કામના દિવસોમા મોટાભાગના શાળા પુરી થતાં ઘરે પાછા ફરતા હોય છે અને મોટાભાગનાના ઘર જે લતામા હોય ત્યાંના સ્થાનિક સમાજના તેઓ અંગ છે તેવી લાગણી ધરાવતા હોય છે.

૨. શેરી પર રહેનાર અને નભનાર બાળકો: (Children of the Street)

આ જુથના નાનું પરંતુ જટિલ છે. આ જૂથના બાળકો શેરીને જ પોતાનું ઘર સમજે છે અને તેઓ ત્યાંજ પોતાના સાથીદારો વચ્ચે જ પોતાનો ખોરાક, આશ્રય વગેરે શોધે છે અલબત્ત કુટુંબના બંધનો તો છે જ પરંતુ તે ઘણાં દુરના છે અને તેઓ પોતાના જુના ઘરે કયારેક જાય છે.

૩. ત્યજાયેલા બાળકો: (Abandoned Children)

એવા બાળકો કે જેમને કુટુંબ સાથે તદાન સંપર્ક નથી કે કુટુંબ વગરના બાળકો છે, તેમજ અવગણેલા અને ત્યજાયેલા બાળકો છે જેમા અનાથ, ઘરેથી ભાગી આવેલા તથા નિરાશ્રીતોનો સમાવેશ થાય છે, જેમને શેરીમાના બાળકો કહે છે. આ સૌથી દબાયેલા બાળકો છે, તેઓ સંપૂર્ણપણે સ્વનિર્ભર હોય છે, માત્ર સામગ્રી માટે જ નહીં પણ મનૌવૈજ્ઞાનિક રીતે પોતાનું અસ્તિત્વ ટકાવવામા પણ તેઓ આમતો શેરીના બાળકો છે.

પ્રસ્તુત સંશોધન પ્રપત્રમા સંશોધન કર્તાએ શેરી પર રહેનાર અને નભનાર બાળકો (Children of the Street) નો અભ્યાસ કર્યો છે.

અભ્યાસના હેતુઓ:

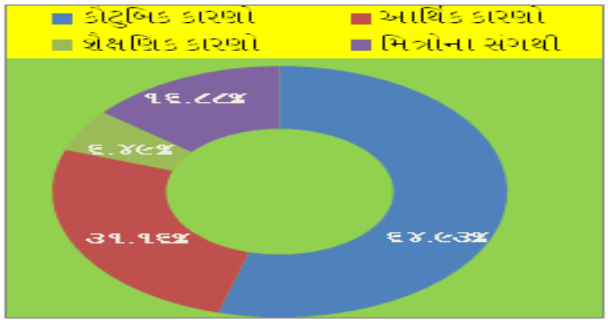
૧. શેરીબાળકોએ શા માટે ઘર છોડ્યુ તેનો અભ્યાસ
૨. શેરીબાળકોના વ્યવસાયનો અભ્યાસ
૩. શેરીબાળકોનું મિત્રો સાથેના જીવનનો અભ્યાસ
૪. શેરીબાળકોનું પુનઃસ્થાપન

નમૂના પસંદગી:

સંશોધક દ્વારા શેરી પર રહેનાર અને નભનાર ૭૭ બાળકોને હેતુલક્ષી નમૂના પધ્ધતિથી અભ્યાસ માટે પસંદ કર્યા છે.

પ્રત્યેક બાળક પ્રેમ, લાગણી અને હુંફ ઇચ્છે છે જે તેમને તેમના માતાપિતા, ભાઇ-બહેન પાસેથી મળે છે, પરંતુ કયારેક પરિસ્થિતિવશ માતા કે પિતાના મૃત્યુ થવાથી સાવકી માતા પિતાના ત્રાસરૂપ વ્યવહારથી અથવા તો કુટુંબમા સતત કલેશમય વાતાવરણ રહેવાના કારણે બાળક આવા વાતાવરણમા સમાયોજન ન સાધી શકતા પ્રેમ અને લાગણી મેળવવા વતન છોડી દે છે. શેરીબાળકોને કેવા પરિબળોને કારણે વતન છોડવાની ફરજ પડી છે તે નીચેની આકૃતિ પરથી જોઇ શકાય છે.

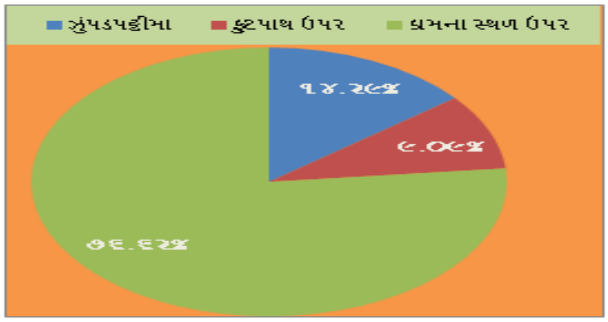
*** Lecturer, Mahadevbhai Desai Gram Seva Mahavidhyalaya, Randheja**



કૌટુંબિક કારણો: માતાપિતાના ત્રાસથી, સોતેલી માતા કે પિતાના ત્રાસથી. કુટુંબના સભ્યોનો બાળકો સાથે ભેદભાવના કારણે, નશામા મારઝુડના કારણે, ચોરીના આરોપનાં કારણે, સ્થળાંતરના કારણે, માતાપિતા સતત દુર રહેવાના કારણે, ઘરે ન ગમવાના કારણે.

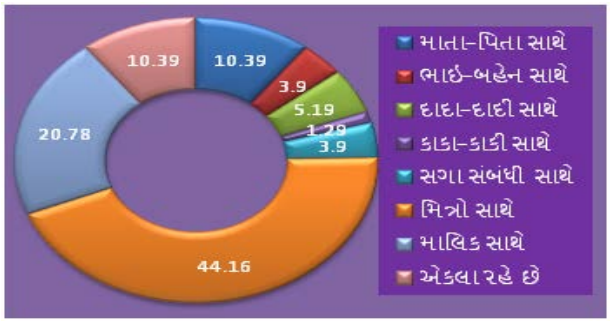
આર્થિક કારણો: નબળી આર્થિક સ્થિતિના કારણે, જબરદસ્તીથી કામ પર મોકલવાના કારણે, માલિકનાં ત્રાસથી, અનાથ હોવાના કારણે.

શૈક્ષણિક કારણો: બળજબરીથી શાળાએ મોકલવાના કારણે, શાળામા શિક્ષકના ડરથી, અભ્યાસમા નાપાસ થવાના કારણે.

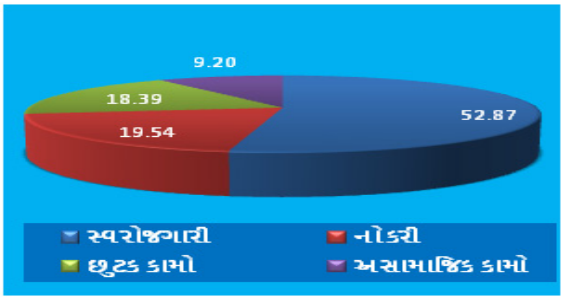


અન્ય કારણો: મિત્રોના સંગથી

જે બાળકો શેરી ઉપર રહે છે, જાહેર સ્થળોએ રહે છે, જેઓ બિલકુલ કુટુંબના સંપર્કમા નથી, આ ત્યજાયેલા વંચિત બાળકોને દિન-પ્રતિદિન પોતાના અસ્તિત્વ ટકાવી રાખવાનો પ્રશ્ન હોય છે, તેને સમાજ ભલે નૈતિક કહે કે ના કહે, કાયદા તેને કાયદેસર કહે કે ના કહે પરંતુ પોતાનું જીવન ટકાવવા માટે તે કામો એમના માટે આશીર્વાદરૂપ હોય છે. આ બાળકો ખીસ્સા કાપવા, ચોરી કરવી, ભીખ માંગવી, અનૈતિક કામો વગેરે જેવા કામો તેમની દ્રષ્ટિમા કાયદેસરના કામો છે. શેરી બાળકોને પોતાનું જીવન ખુબ જ કષ્ટદાયક અને હાડમારીથી ભરેલુ લાગે છે. અસહ્ય પરિસ્થિતિમા પણ તેઓ પોતાના ખોવાયેલા બાળપણને શોધે છે અને તેને ગમે તે રીતે પામવાના પ્રયાસો કરે છે. શેરીબાળકોની સૌથી વિકટ સમસ્યા આશરાની છે. ઘર છોડયા પછી આ બાળકો ઉપર આભ અને નીચે ધરતી જેવી અત્યંત દયાજનક સ્થિતિમા રાત-દિવસ પસાર કરે છે. શેરીબાળકો શિયાળાની કડકડતી ઠંડીમા, ઉનાળામા ધોમધખતા તાપમા, ચોમાસામા મુસળધાર વરસાદમાં આશરા વિનાના ટુંટીયુ વળીને કયાંક ખૂણે ખાંચરે કે બગીચાના બાકડા નીચે રક્ષણ શોધવા મથામણ કરતા હોય છે. રેલ્વે સ્ટેશન અને જાહેર સ્થળો પર રાત્રિઓ પસાર કરતા બાળકોની સ્થિતિ અત્યંત ચિંથરેહાલ અને અકલ્પનીય હોય છે. રેલ્વે સ્ટેશન પર રહેતા બાળકો પ્લેટફોર્મમા સીમેન્ટના પતરાની છત ઉપર કે રેલ્વે ટ્રેક આસપાસ પડેલ સિમેન્ટના થાંભલા વચ્ચે ટુંટીયુ વળીને સંતાઈને પોલીસની લાઠી અને આમજનતાની નજરથી બચવાની ચિંતામા રાત્રિઓ પસાર કરે છે. ઘર વિહોણી સ્થિતિ ભલે કુદરતી કે સમાજ નિર્મિત હોય પણ આ લાચારીનો તેમની પાસે કોઇ જવાબ નથી. શેરી બાળકો કયાં અને કોની સાથે નિવાસ કરે છે તે ઉપરની આકૃતિઓ પરથી સ્પષ્ટ થાય છે.



શેરીબાળકો મોટાભાગે પ્લાસ્ટિક એકત્રિત કરવુ, બુટ પોલીસ, ટ્રેનમા હાથ મોઢુ ધોવાના પાઉચ વેચવા, ટ્રેનમા ઝાડુ લગાવી મુસાફરો પાસેથી પૈસા એકત્રિત કરવા, ટ્રેનમા પાણીની બોટલ વેચવી અને ખાલી બોટલ એકઠી કરવી, ટ્રેનમા ભોજનમા વપરાતુ સીલ્વર ફોઇલ એકઠુ કરવુ, છાપા કે મેગેઝિન વેચવા, પાન મસાલા, ગુટખા કે સીગારેટ વેચવી, પરચુરણ માલ સામાનની હેરફેર, ટેકસીઓ સાફ કરવી, પાર્કીંગમા ગાડીઓની દેખરેખ રાખવી, બાંધકામના સ્થળે માલસામાનની હેરાફેરી કરવી, હાથલારી કે પેડલ રીક્ષા ચલાવવી, બગીચામા મુલાકાતીઓ માટે ભાડેથી સાદડીઓ પાથરવી, કચેરીના મકાનોમા ભોંયતળીયા સાફ કરવા, બસ અને ગાડીઓમા ગીત ગાવા કે વાજિંત્રો વગાડવા વગેરે જેવા કામો કરે છે. કયારેક અસામાજિક કે ગુંડા તત્વો આ બાળકો પાસે શારિરીક મારઝુડ કે માનસિક ત્રાસથી દારૂ બનાવવો, પેક કરવો અને વેચવો તેમજ એક જગ્યાએથી બીજી જગ્યાએ તેની હેરફેર કરવી વગેરે જેવા કામો પણ તેઓ કરે છે. કુટુંબ અને સમાજથી ત્યજાયેલા આ વંચિત બાળકોને દિન-પ્રતિદિન પોતાના અસ્તિત્વ ટકાવી રાખવાનો પ્રશ્ન હોય છે, આથી તેઓ જે કામ કરે છે તેને સમાજ ભલે નૈતિક કહે કે ન કહે, કાયદો તેમના કામોને કાયદેસરના કામો કહે કે ના કહે પરંતુ પોતાનું જીવન ટકાવવા માટે આ કામો શેરીબાળકો માટે આશીર્વાદરૂપ છે તેમની દ્રષ્ટિમા આ તમામ કામો કાયદેસરના છે. શેરી બાળકો આ મુજબના કામો કરતા હોય છે.



સ્વરોજગારી: ટ્રેનમા સીટ રોકવી, ટ્રેનમા હાથ મોઢુ ધોવાના પાઉચ વેચવા, ટ્રેનમા પાણીની બોટલ વેચવી અને ખાલી બોટલ એકઠી કરવી, ટ્રેનમા ભોજનમા વપરાતુ સીલ્વર ફોઇલ એકઠુ કરવુ અને ઝાડુ લગાવવુ.

નોકરી: ચાની લારી ઉપર, ખાણી પીણીના સ્ટોલ ઉપર, હોટલમા કચરા પોતુ કરવુ, સોડાની લારી ઉપર, બંગલા કામ અને કુલી તરીકેની કામગીરી

છુટક કામો: બુટ પોલીસ, ફેરી, કાગળ વીણવા, સમાચાર પત્રો વેચવા, છુટક વસ્તુઓ વેચવી.

અસામાજિક કામો: ભીખ માગવી, નશાકારક દ્રવ્યોની હેરાફેરી, દેહવેપાર

વિશ્વ આરોગ્ય સંસ્થાએ ૧૯૪૮ના વાર્ષિક અહેવાલમા સ્વાસ્થ્ય વિશે સ્પષ્ટતા કરતા જણાવ્યુ છે કે સ્વાસ્થ્ય એ ભૌતિક, માનસિક અને સામાજિક વિકાસ માટે પાયાની બાબત છે, જેમા વ્યકિત સ્વસ્થ રહે છે. આ સ્થિતિ કેળવવી એ માત્ર રોગોનું ન હોવા સાથે સબંધિત નથી, પણ સ્વાસ્થ્યએ માનવ જીવનના દરેક પાસાની અનુકુળતાને કહી શકાય. કોઇપણ વ્યકિત પોતાની દિનચર્યા દાંત સાફ કરવાથી કરતા હોય છે. દાંત સાફ કરવા અલગ અલગ વસ્તુઓનો ઉપયોગ કરતા હોય છે. અભ્યાસ હેઠળના ૪૫.૪૫% શેરીબાળકો દાંત સાફ કરતા નથી, ૫૪.૫૫% શેરીબાળકો દાંત સાફ કરે છે, જેમાથી ૫૫.૫૪% શેરીબાળકો ટુથ પેસ્ટ, પાવડર અને દાંતણથી સાંત સાફ કરે છે, ૪% શેરીબાળકો ઈટના ભુકાથી દાંત સાફ કરે છે.

શેરીબાળકો ગરીબડા, કહ્યાગરા અને કોઇપણ જાતની માંગણી ન કરનાર તથા નહિવતા પગારે કલાકોના કલાકો સુધી માલિક કે વેપારીઓની અંગત માંગણીઓ સંતોષવા સુધીના કામો કરતા હોય છે. ગંદા, જોખમી કામ તથા ખોરાક અને પોષણના અભાવના કારણે આ બાળકોનુ સ્વાસ્થ્ય બગડતા સમય લાગતો નથી. આ બાળકોમા ખાસ કરીને ચામડીના રોગોનું પ્રમાણ વિશેષ જોવા મળે છે. દિવસભરની અનેક ઠોકરો અને થાક પછી આ દુ:ખને ભૂલવા તેઓ ઘેનની ગોળીઓ લીધા પછી સુએ છે. ખુલ્લા કે બંધિયાર જગ્યા પર સુવાના કારણે જીવજંતુ અને મચ્છરો એને સતત કરડતા હોય છે. ઘેનમા તેઓ હાથના નખ વડે ખૂબ જ ખજવાળે છે જેનાં કારણે લોહી નીકળે છે અને શરીરની સ્વચ્છતાના અભાવના કારણે ખજવાળેલી જગ્યા પર પાક થાય છે તેમાથી ચામડીના અનેક અસહય પીડાદાયક રોગોનું નિર્માણ થાય છે. આ હાલતમા પણ તેઓ શોષણનો ભોગ બને છે. આ બાળકોને માંદગીમા સારવાર માટે કોણ મદદ કરે છે તે ઉપરની આકૃતિ પરથી સમજી શકાય છે.

શેરીબાળકોનું પુન: સ્થાપન:

શહેરીકરણની પ્રક્રિયાના કારણે અનેક સમસ્યાઓ વિકટ બનતી જાય છે તેમાંય ખાસ કરીને સમાજમા શેરીબાળકો ખૂબ જ તરછોડાયેલા અને અવગણના પામેલા છે. તેથી તેઓ સમાજના મુખ્ય પ્રવાહથી સતત દુર ધકેલાતા જાય છે. શેરીબાળકોની સમસ્યા સામાજીક સમસ્યાઓમાની એક વિકટ સમસ્યા બનતી જાય છે. આ એક એવી સમસ્યા છે જેમા અસરકારક માર્ગદર્શન અને સલાહ પરામર્શનની સેવાઓની જરૂર છે. મોટાભાગના શેરીબાળકોના માતાપિતા કે કુટુંબીજનો પોતાની નબળી સામજીક અને આર્થિક સ્થિતિના કારણે તેમની ઉછેરની જવાબદારીમાથી છટકી જાય છે. ઘણા દેશોમા પુરવાર થયુ છે કે શેરીબાળકોને સ્વાવલંબી જીવન જીવવાની તાલીમ આપી શકાય આ પ્રકારની તાલીમ શેરીબાળકોને સમાજમા સ્વમાનભેર જીવન જીવવામા મદદ કરે છે. શેરીબાળકોની મુખ્ય જરૂરીયાત તેમની સંભાળ લેવાય અને સલામતીની ખાતરી અપાય તે છે. તેઓ સમાજનો એક મહત્વનો ભાગ છે તેઓ અહેસાસ તેમને કરાવવો ખૂબ જરૂરી છે. બાળકોની ઉત્તમ પરિસ્થિતિ બાળકના પોતાના ઘરે કે સગાવહાલાની સાથે જ હોય છે. તેમ છતાં કાયમ આમ જ હોય એવુ જરૂરી નથી. શેરીબાળકોને પ્રેમ, સ્નેહ, વાત્સલ્ય અને સલામતીની જરૂરીયાત ખોરાક અને કપડા કરતા પણ વધુ છે આથી દરેક બાળકને સલામત અને સ્વાસ્થ્યપૂર્ણ વાતાવરણ પુરૂ પાડવું જોઇએ.

સંદર્ભસૂચિ:

- A Gosh; Street Children of Calcutta- UNICEF and National Labour Institute-1992
- Jambukiya Hemu; Street Children of Ahmadabad-2004
- Pandey Rajendra; Street Children of Kanpur- UNICEF and National labour Institute-1992
- Ms. Reddy; Street Children of Bangalore- UNICEF and National Labour Institute-1992
- W.S.K. Phillips; Street Children in India- Rawat Publications Jaipur and New Delhi-1994
- www.amnesty.org
- www.idcr.org
- www.thehoat.org

* P.M. Kherala

Rural Study
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 57 - 59
ISSN 2319 - 8168

સામાજિક વિલુપ્ત : વિચરતી અને વિમુકત જાતિ

પ્રસ્તાવના :

આપણા સ્વતંત્ર ભારતમાં હજુ પણ એવા સમુદાયો વસવાટ કરે છે જે સમાજનો તિરસ્કાર અને સમાજની અવગણના વેઠી રહયું છે. જે આપણા વર્ગીકરણમાં છેવાડાના લોકો તરીકે પણ આપણે તેનો સમાવેશ કર્યો નથી. આ સમુદાયો માટે આપણે અમૂક ગેર માન્યતાઓ, ગેર વલણો અને ખરાબ પ્રકારની છાપ આપણા મનમાં કંડારાઈ રહી છે. એમાંની કેટલીક જાતિઓ સાથે આપણે સંપર્ક પણ કયો નથી અને કેટલીક જાતિઓનો પૂરો પરિચય પણ આપણને નથી. કારણ કે તે લોકો આપણા ગામ, શેરી કે મહોલ્લામાં આપણે રહેવા નથી દેતા કે એ લોકો જોવા પણ નથી મળતા. આ જાતિઓના બાળકોને જન્મતાની સાથે જ જાતિ આધારિત અને અપરાધિ તરીકેની ઓળખ મળી જાય છે અને પૂર્વગ્રહયુકત અનિષ્ઠતત્વ એમના માટેની છાપ બની જાય છે. આ જાતિઓ એટલે ડફેર, સાંસી, હિંગોરા, મિયાણા, સંધી, ઠેબા, વાઘેર, રાપર કોળી, બાફણ, મે મેતા અને દેવીપૂજક કે (ગુજરાત સરકાર દ્વારા પ્રમાણિત વિમુકત જાતિ ૨૦૧૪ની સ્થિતિએ) જેઓને હજુ ગામમાં રહેવા માટે ઘર નથી અને ગામથી દૂર એવા છેવાડાના અંતરીયાળ વિસ્તારમાં કાચા ઝૂંપડાં બાંધીને રહે છે કે જેઓ માટે વીજળી અને પાણી તેમજ અન્ય સુવિધાઓથી વંચિત છે.

સમસ્યા :

સ્વતંત્રતાના ૬૫ વર્ષના આપણા કહેવાતા વિકાસથી વંચિત આ સમુદાયો માટે રહેવા માટે આશરો ન હોય તે ચિંતાજનક છે. એક સ્થળેથી બીજા સ્થળે સતત ફરતા આ લોકોને વૈશ્વિકરણની ખૂબ મોટી અસર થઈ છે. આ સમુદાયો વર્ષોથી પરંપરાગત વ્યવસાય આધારિત હતા પરંતુ નવા કાયદા અને જીવનશૈલીમાં પરિવર્તન આવતાં આ સમુદાયો પાસે નવી આવડત કસબના અભાવે સામાજિક પ્રવાહથી ઈચ્છા–અનિચ્છા એ દૂર ધકેલાયા. વર્ષો થી સમાજથી અલિપ્ત રહેતાં હોવાથી શિક્ષણ અને અક્ષરજ્ઞાનથી પ્રમાણમાં વંચિત રહયાં છે અને ગામડામાં રહેતા હોવાથી ખેતી પશુપાલનમાં મજૂરી કરે પરંતુ તેમાં પણ તેમની ખાસ કોઈ આવડતના અભાવે અને લોકોએ આપેલાં 'અપરાધી' લોકોને કોઈ વધારે કામ પણ આપે નહીં, આથી આ વિચરતી જાતિ શિક્ષણ વિકાસ, ઘર, આરોગ્ય અને સામાજિક ગતિશીલતાથી સતત વિલુપ્ત રહી હજી પણ આ જાતિના લોકોને સ્થાનિક સ્તરે અપરાધ થાય તો સૌપ્રથમ તેમને જ પોલીસ સ્ટેશનમાં બોલાવવામાં આવે છે. કારણ કે તેઓ જન્મજાત અપરાધી છે.

ક્રિમીનલ ટ્રાઈબલ એકટ અને વિમુકત જાતિ નામાભિધાન :

૧૯મી સદીના સમયગાળા દરમ્યાન બ્રીટીશ સરકારે લગભગ ૨૦૦ સમુદાયો કે જેઓ રખડતું ભટકતું જીવન જીવતા હતા તેમને અપરાધી જનજાતિ કાયદો–૧૮૭૧ હેઠળ અપરાધી જનજાતિના રૂપમાં જાહેર કર્યા. કારણ કે યુરાપીય પૃષ્ઠભૂમિમાં બધાજ જીપ્સીઓ (રખડતી ભટકતી જાતિઓ) અપરાધી છે તેવું માની લેવામાં આવ્યુંઅને એ તર્કના આધારે બધીજ રખડતી ભટકતી જાતિઓ અપરાધી છે તેવું ભારતમાં પણ માની લેવામાં આવ્યુંઅને તેના કારણે અપરાધી જાતિઓ અને પરંપરાગત વ્યાવસાયિક દ્રષ્ટિકોણથી ફરતી અને આજીવિકા કમાતી જાતિ વચ્ચે કોઈ સ્પષ્ટ ભેદરેખા રહી નહીં.

૧૨ ઓકટોબર–૧૮૭૧માં ગવર્નર ઓફ જનરલ દ્વારા અપરાધી જાતિઓની નોંધણી, તપાસ અને નિયંત્રણ માટે ક્રિમીનલ ટ્રાઈબ એકટ ૧૮૭૧ના નામ હેઠળ બ્રીટીશ સરકાર દ્વારા ધારા–૨૦ હેઠળ બ્રીટીશ કબજાના ભારતમાં પ્રથાપિત કરવામાં આવ્યા અને સ્થાનિક રાજય સરકારને રાજપત્ર દ્વારા અધિકાર અપાયા કે તેઓ આવી જાતિને અપરાધી જાહેર કરે કે જેઓ અપરાધી પ્રકૃતિ ધરાવતા હોય, કોઈ ગેંગ ચલાવતા હોય, જેની રહેવાની કોઈ નિશ્ચિત જગ્યા ન હોય, તેઓ કાયદેસર વ્યવસાય ન કરતા હોય, કે કાયદેસર વ્યવસાયના બહાનાહેઠળ અન્ય પ્રવૃત્તિઓ ચલાવતા હોયતો તેને અપરાધી જનજાતિ ગણવામાં આવી. આ જાતિઓએ જે તે વિસ્તચારમાં રહેવા માટે અથવા વિસ્તાર બદલવા માટે કાયદાકીય પ્રક્રિયા ફરજીયાત બનાવાઈ. આ જાતિઓની નોંધણી પણ રખાઈ અને શંકાસ્પદ તબક્કે તેમને પોલીસ સ્ટેશનમાં દૈનિક હાજરી આપવી પણ જરૂરી માનવામાં આવી. ૧૮૭૧ના જનજાતિ અધિનિયમ અંતર્ગત આ જાતિઓને ૬ વગો માં વિભાજીત કરવામાં આવી.

* Lecturer, Shree J.C. Kumaraappa Mahavidhyalaya, Gadhada (Swami.)

(અ) પશુઓની પીઠ પર સામાન નાખી ધંધો કરવાવાળા નાના ફેરીયાઓ જે મીઠું, જંગલની પેદાશોની પૂર્તિ કરતા હોય.
(બ) મનોરંજનના ખેલ બતાવી, અંગ કશરત, ગાયક, કઠપૂતળી અને દોરડા પર ચાલતા વ્યકિતઓ.
(ક) રીંછ, વાંદરા, સાપ, ઘૂવડ જેવા પક્ષીઓ વગેરે પ્રાણીઓની મદદથી લોકોનું મનોરંજન કરતા હોય.
(ડ) જંગલમાં શિકાર અને પશુપાલન કરતી પ્રજાતિઓ.
(ઈ) વાંસ, લોખંડ, માટીમાંથી ઉપયોગી વસ્તુ બનાવવી અને તેનું સમારકામ કરતી કે વેચાણ કરતી જાતિઓ.
(ફ) ભટકતી જાતિઓ જે પરંપરાગત રીતે ભીક્ષાવૃત્તિ, ભવિષ્યકથન, વંશાવલી અનેઔષધિ વસ્તુઓમાંથી આજીવિકા ચલાવતી હોય.

દરેક માણસ સ્વતંત્ર અને સમાન જન્મે છેના સિધ્ધાંતથી અપરાધી જનજાતિ અધિનિયમ ૧૮૭૧ને ભારતની સ્વતંત્રતા બાદ અપ્રતિકૂળ માની પંડિત જવાહરલાલ નહેરુંએ તેને નિષ્ક્રિય કર્યો. પરિણામ સ્વરૂપે આ સમુદાયોને વિમુકત જાતિઓ કહેવામાં આવે છે.

વસ્તી અને વર્ગીકરણ :

સામાન્ય રીતે ભારત સ્તરે આ સમુદાયોનું યોગ્ય વર્ગીકરણ કરવામાં આવ્યું નથી. એક રાજયમાં એક જાતિ એસ.સી.માં હોય તો અન્ય રાજયમાં એસ.ટી.માં હોય છે અને ત્રીજા રાજયમાં ઓ.બી.સી.માં સમાવેશ થતો હોય દા.ત. વણજારા જાતિ મહારાષ્ટ્રમાં ડી.એન.ટી. (વિમુકત જાતિ)માં આવે છે તો કર્ણાટકમાં તેનો સમાવેશ એસ.સી.માં થયેલો છે. આથી સમાનતાનો અભાવ જોવા મળે છે. પ્રથમ તો આ અસુરક્ષિત જાતિ છે તો બીજી બાજુ પ્રિવેન્શન ઓફ એટ્રોસીટી એકટ ૧૯૮૯ અંતર્ગત એસ.સી., એસ.ટી.નો સમાવેશ થયો છે પરંતુ એન.ટી. અને ડી.એન.ટીનો સમાવેશ થયો નથી. આથી તેમનો સામાજિક સુરક્ષાનો વિકાસ પણ રુંધાઈ જાય છે.

ભારતમાં સામાન્ય રીતે વિચરતી અને વિમુકત જાતિની સંખ્યા ૮૦ લાખ માનવામાં આવે છે. જેમાંથી તેઓને રાજય પ્રમાણે અનુસૂચિત જાતિ, અનુસૂચિત જનજાતિ અને પછાત જાતિઓમાં તેનો સમાવેશ કરવામાં આવ્યો છે. આ જાતિઓ ભારત સ્તરે ૩૧૩ જાતિઓ વિચરતી જાતિ અને ૧૯૮ વિમુકત જાતિઓ જોવા મળે છે. પરંતુ ભારત સ્તરે સંવેધાનિક સ્તરે તેમની વસ્તી અને વર્ગીકરણના પણ પ્રશ્નો છે. ૨૦૧૦માં સુપ્રિમકોટે રજીસ્ટ્રાર જનરલ મેનેજર અને સેન્સસ કમિશ્નરને નોટીસ ઈસ્યુ કરવામાં આવી કે ૨૦૧૧ની વસ્તી ગણતરીમાં વિચરતી અને વિમુકત જાતિની અલગથી ગણતરીમાં સમાવેશ કરવામાં આવે તેમજ તેમનું વર્ગીકરણ કરવામાં આવે પરંતુ તેવું થયું નહી અને આજના સ્તરે તેમની ગણતરી જાતિ આધારિત કરવામાં આવતી નથી આથી તેમનો હાલનો ચોક્કસ વસ્તીનો આંકડો કહેવો મુશ્કેલ છે. ૧૯૩૧ની વસ્તી ગણતરી એક એવી છેલ્લી ગણતરી હતી જેમાં વિચરતી અને વિમુકત જાતિની જાતિ આધારિત ગણતરી કરવામાં આવતી હોય.

જૈવિક સંરક્ષણ અને જૈવિક વિવિધતા સંરક્ષણ કાયાદાઓની સમુદાય પર અસર :

વિવિધ પ્રકારના કાયદાઓના અમલીકરણ દ્વારા પર્યાવરણના પ્રદૂષણ અટકાવ અને સંરક્ષણ માટે રચના થઈ. પરંતુ વિમુકત જાતિ પરંપરાગત રીતે શિકાર, જંગલ ઉત્પાદનો અને આડપેદાશો દ્વારા તેમનું જીવન નિર્ભર કરતી હતી. આ કાયદાઓથી તેમની સંસ્કૃતિ ઉપર તો અસર પડી છે પરંતુ તેમને ગરીબી તરફ ધકેલવા માટે પણ કારણભૂત છે. સરકાર પર્યાવરણને પ્રોત્સાહન આપવામાં આ સમુદાયના અધિકારો ચૂકીદે હોય તેવું લાગે છે કારણ કે તેમના માટે સક્ષમ કે પૂરતા પ્રમાણમાં તેમના માટે અન્ય કોઈ વૈકલ્પિક વ્યવસાય કે વ્યવસ્થા ગોઠવવામાં ન આવી. મુખ્યત્વે નીચેના કાયદાઓથી આ સમુદાયોના પરંપરાગત જીવનશૈલી પર અસર ઊભી થયેલી જોવા મળે છે.

(અ) જંગલ જાળવણી અધિનિયમ ૧૯૭૨ના કાયદા અંતર્ગત જંગલી પ્રાણીઓના શિકાર કરવા, પકડવા પર પ્રતિબંધ કરવામાં આવ્યો તો જંગલમાંથી વૃક્ષો અને જંગલી પેદાશો, ઔષધિઓ લાવી વેચવી, તેમાંથી ઉત્પાદન કરવા અને તે આધારે તેમનું ગુજરાન ચાલતું તે પણ બંધ થયું. આ ઉપરાંત કોઈપણ પ્રકારના જંગલ આધારિત વ્યવસાયો બંધ થયા અને તેમને પ્રતિબંધિત વિસ્તારમાંથી ખસેડવામાં આવ્યા.

(બ) ભારતીય વન અધિનિયમ ૧૯૭૨નું ઘડતર રાજય સરકાર દ્વારા જંગલ, જમીન અને પેદાશોના સંરક્ષણ માટે થઈ કરવામાં આવ્યું. જેમાં તેને સંરક્ષિત જાહેર કરાયા. રાજય સરકારના જંગલના સ્ત્રોતો, જમીન અને લાકડા સહિતના અધિકારો સંરક્ષિત કરવામાં આવ્યા. જેમાં કાપણી, સફાઈ, શિકાર પર પણ પ્રતિબંધ મૂકવામાં આવ્યો પરંતુ તેનાથી ઉપરોકત પેદાશો પર પ્રત્યક્ષ અને પરોક્ષ રીતે નિર્ભર સમુદાયોની આજીવિકા પર ખૂબ મોટી અસર થઈ.

(ક) જમીન સંપાદન અધિનિયમ ૧૯૯૪ દ્વારા વિચરતી અને વિમુકત જાતિના લોકોનું શોષણ થયું છે. સરકાર દ્વારા ગ્રામ્ય, શહેરી અને સીમતળની કે ખાનગી જમીનોનું સંપાદન કરવાનો અધિકૃત અધિકાર બન્યો. તેના દેખીતા ત્રણ લક્ષણો છે. જેમાં પ્રથમ સરકાર તેમના દેખાતા ઉદ્દેશ્ય અને વિકાસના નામે કોઈપણ જમીનને સંપાદિત જાહેર કરી શકતી. દ્વિતિય તબક્કે કોઈપણ વ્યકિતને જો તેમાં હિત કે વિરોધ હોય તો દિવસ ૩૦માં તેની સામે જમીન સંપાદન જાહેર થયાના ૩૦ દિવસમાં વાંધો લઈ શકે છે. ત્રીજા તબક્કે જો કોઈને વળતર, હક્ક કે સામુહિક અહિત સંબંધિ વાંધો હોય તો તેના આધારભૂત દસ્તાવેજ કે કાયદાકીય પ્રક્રિયાના પ્રમાણભૂત આધાર રજૂ કરવા પડે છે. પરંતુ વિચરતી અને વિમુકત જાતિઓ અમૂક જગ્યાએ કાયમી

સ્થળાંતર માટે આવતી હોય, રહેતી હોય, વસાહતો હોય કે પેદાશો લેતી હોય તેમજ તેમના પશુઓ –પ્રાણીઓ તેના પર નિભાવ કરતા હોય તો તેને કાયમી ધોરણે ખાલી કરવું પડે છે અથવા ન કરવા બદલ તેમને દંડિત કરવામાં આવે છે. સાથે મૂળ પ્રશ્ન એ પણ છે કે તેમની પાસે આ માટે પ્રમાણભૂત આધારો પણ હોતા નથી.

સમાપન :

વિચરતી અને વિમુકત જાતિઓનું જીવન એ અન્ય સમુદાય કરતાં જાતિ આધારિત અને સાંસ્કૃતિક, આર્થિક દ્રષ્ટિકોણથી અલગ પડે છે. આથી માનવ અધિકારની દ્રષ્ટિએ તેમનું શોષણ ન થાય તે જોવું રહયું. તેમના જીવન, સુરક્ષા અને સમાનતાના અધિકારો ફરી પાછા છીનવાઈ ન જાય તેનું પણ ધ્યાન રાખવું જોઈએ. સાથે એ પણ મહત્વનું છે કે માનવ અધિકારોનું હનન થતું હોય તેવા કાયો જેમ કે પોલીસતંત્ર, આંતરિક પ્રશ્નો અને આર્થિક રોજગારીની તકો માટેની સજાગતા રાજય સરકારે પણ દાખવવી પડશે. અપરાધની પ્રવૃત્તિમાં તેનો પ્યાદા (સ્કેપગોટ) તરીકે ઉપયોગ પણ ઘીણી વખત થતો હોય છે તો તેવા અપરાધિ તંત્ર ચલાવતા લોકોથી પણ આ સમુદાયને બચાવવો રહયો. સાથો સાથ ભારતમાં વિશિષ્ટ જાતિ તરીકેના તેમના અધિકારો પણ બચાવવાના પ્રયત્નો, સુરક્ષા, કલ્યાણ, અનામત જેવા ક્ષેત્રોમાં વિશેષ લાભ આપી સાચવવા પડશે. ભારત સરકારના સામાજિક ન્યાય અને અધિકારીતા મંત્રાલય દ્વારા વિચરતી અને વિમુકત જાતિ પર બનેલી કમીટીએ ઘણી બધી ભલામણો કરેલી છે જેને પણ ધ્યાનમાં લઈ કલ્યાણના કામો કરવા પડશે. જો સમાજ આ સમુદાયને નહીં અપનાવે તો ગુનાખોરી વધવાની છે અને અમીરી–ગરીબીની

- વિષમતામાં આ સમુદાયો હાંસિયામાંથી દુર ફેંકાતા જશે.

સંદર્ભસૂચિ

- Lim Ai Li, Ananad Rita(2004), Confroting discrimination nomadic communities in Rajasthan, Housing and Land Right
- Network, Delhi-110003, India.
  Disouza Dilip (2001), Branded by Law: Looking At India's De notified Tribes, Penguin Books, New Delhi-110003.
  Karan Revthi Sampath, Tukdeo Shivali
- (2012), The Education Question From The Perspective Of Adivasis: Conditions, Policies And Structures, National Institute Of Advanced Studies, Banglore-560012.
- Mishra r .r (2011), The Journal of the Anthropological Survey of India, Anthropological Survey Of India, Kolkata-7000016, India.
  Tanaji Rathod (2005), Banjaras The Forgotten Children Of India, Karnataka Thanda Development Corporation Ltd, Banglore-560051, India.

* Dilip Gohil

Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 60 - 62
ISSN 2319 - 8168

Äkuhý-Lkðkk rðkÚkeoykuÃkh ytøkúSÔkfhýLkk 'NOUN' yuf{{kxuLkk C.A.I. (fBÃoqh yMMxuzRLMÙfpLk) fkroq{LkeyMkfkfîkk: yuf«kkurøkfyÇhMk

«MkøÄkk

rpûkýyuSðtíkyLkunúkwÃkðofLke«rtkAu. rpûkýLkkuwÄLp çkk«fLkuMðkøkeðfMkfhðkLkuAu. rk÷LkkykÄwrLkfhwk «{kyuÔÃíkLkkuMðkøkeðfMkLkðeLkðexfTLku÷kurs1kykÄku sfhepfkP. yk{, rðjkkLkyLkuxfTLku÷kurs1kkfhkyurpûkýfkt yLku{kuðrðfMk{ktÃkrnðkdkykÔwtAu. yksurðrðÄ{kæ{kuyu rðMik]ík«{kýfkt¿kkLkk«{kh«MkkLkwtMÚkLk÷R÷ëÄwtAu. yk{kLkwtyuf{kæ{Au "fBÃoqh". yksurpûkýúkfkufBÃoqhLkku WÄkkudkrððÄhe1kúkÚR[qtkuAu. s.u{fuðkk¼tz{ktyæhÃkLk {kxu,Mðyæh Lk{kxu,Ëqðíkeorpûkýfkxu WÄkkt1krpûkýfkt {qtkfLkLke«rtk{kxu1kLkkuWÄkkudkúkkeAu. ïkhze(2011). fBÃoqh{ktRxhLkuxykurðrðÄ{kmíkeMkúkkLkk{kæ{Úe ytøkúSÔkfhýLkuyæhÃkLk{kmíke«kÃík fhe C.A.I. îkhk yæhÃkLkðÄwyMkfkfçkLkðefpfkPAu. C.A.I. îkhk ytøkúS ¼xkkLkktÔkfhýLkt¿kkrðkÚkeoyku{kxuÔhðkmfWÄkudk{kt ydk1LkwtçkLkehmuAu. C.A.I. fkroq{ytøkúS¼xkkLkuSðtík yLkur[hËkeçkLkkðk{kt LkðeLk«fkhLkewW#k{«hwÃõík Au. ïkhze(2011). ykçkçkkuLkuæhLk{kth¾eMkpkuÄfu{kæ{f fûkyytøkúS¼xkkLktÔkfhýLkt "NOUN" yuf{LkwtyæhÃkLk fhkððk {kxu Computer Assisted Instruction (C.A.I.) fkroq{LkkuWÄkkudkfhðk{kxuLkkuyÇhMkrnkÚkÄðkLkku rð[kmfkuoMku.

yÇhMkkuLkkyku

1. Äkuhý LkðLkk ytøkúSÔkfhýLkk NOUN yuf{{kxuLkk C.A.I. fkroq{yLkuÔkËkLk Ãkðr1kLkerðkÚkeoykuLkepûkýfrMÄðLkkMkËÆ{ktyMkfkfîkk [fkMðe.

2. ònkpîkkLkktMkËÆ{ktC.A.I. fkroq{LkeyMkfkfîkk[fkMðe.

MkpkÄkyÇhMkLkwfÕÃLkkyku

1. Äkuhý LkðLkk ytøkúSÔkfhýLkk 'NOUN' yuf{{kxuLkk C.A.I. fkroq{îkkyLkuÔkËkLk Ãkðr1kîkkyæhÃkLkÃkk{u÷k rðkÚkeoykuLkeyuf{fMkuxeÃkhLkk«kÃíkkfkuLkeMkfkMkeðk[u MkkÚkfíkVðíkLkmkuP.

2 'NOUN' yuf{Lke{qtkfLkfMkuxeÃkhÚkeC.A.I. fkroq{ îkkyÇhMkfmíkkt«kkurøkfsqíkyLkuÃkhÃkhøkíkyæhÃkLk Ãkðr1kÚkeyÇhMkfmíkktrLkkrºkíksqíkLkkfw{khkuyu{unðu÷ «kÃíkkfkuLkeMkuhkpMkðqtMkkÚkfíkVðíkLkmkuP.

3 'NOUN' yuf{Lke{qtkfLkfMkuxeÃkhÚkeC.A.I. fkroq{ îkkyÇhMkfmíkkt«kkurøkfsqíkyLkuÃkhÃkhøkíkyæhÃkLk Ãkðr1kÚkeyÇhMkfmíkktrLkkrºkíksqíkLkkeFLkykuyu{uðu÷ «kÃíkkfkuLkeMkuhkpMkðqtMkkÚkfíkVðíkLkmkuP.

MkpkÄkkuøkk

«MíkwíkMkpkÄkLkwtûkfk¼xkkrpûký, rpûký{ktLkkrðLkyku þûkýfxfTLku÷kurs1kw.

MkpkÄk«fhykuMkpkÄkÃkðr1k

«MíkwíkMkpkÄkLkku«fkhMkËíkýfMkpkÄkíkkÚkÔkøkhf MkpkÄkníkku.sMkpkÄkLke«kkurøkfÃkðr1kjkkrkÚkÄu÷ «fkhz

MkpkÄk{kcMk{krðiî÷ku

«MíkwíkyÇhMk{ktMk{krðiî÷kuLke[u{wsçkrnðk.

<Ekk	[÷Lkku«fkh	[÷	[÷Lkefûkk
1.	Nðíkek[÷	yæhÃkLk ÃkðrÍk	(1) C.A.I. fkroq{ îkkyæhÃkLk (2) ÔkËkLkk ÃkðrÍkîkkyæhÃkLk
2.	Ãkríkek[÷	þûkýf rMÃðØ	(1) Vðq[þûkýf rMÃðØ (2) r[MÃ^þûkýf rMÃðØ
3.	Ãkhðíkeo[÷	ònrík	(1) fqÝkh (2) fLk÷k
4.	yfuþoík[÷	1.rðNMkh — 2.yÇhMk ÄkuÝ — 3.rð>k÷kðNMkuk {ÝÃE÷	þnnh ÄkuÝ 9 ytøkúS ÔkËkfhýLkkyfu{ : 'NOUN'
5.	ykuk÷ðíkeo[÷	1.sûkuLkk÷kku ðq[Lkeykuk÷k 2.rðqkuLkkuykuk ðhÞðíkf íkVðíkrík 3. rðqkuLkkuykuke yæh÷kûk{íkk	----------

* Assi.Pro, Shree K.H. Patel M.Ed. Institute, Modasa

yçMkuLe{kdkyku

«MkwkMkpkuÄkLkefux«ef{kdkykuLke[u{wsçkrníe.

• «MkwkMkpkuÄk{kt«kkurdkfMkpkuÄkkusLkkkuy{÷fhðkLkku rníku.yk{kxuÃkqnkkt«{kýk{ktfBÃkqxkLkeMkdðz{ºlmu¼ku {kxuyhÕ«ersÕ«kLke{kuzkMkpnuhLke{kæ«r{ffpk«kMkru¼kwf he¼kuÃMktËfhðk{ktykðenítE.

• «MkwkMkpkuÄkLkdwsLkk¼e{kæ{LkepkMk{kxusrkÚkÄk«kwt rníw

• «MkwkMkpkuÄkLkÄkuýLkðLkkytdkúSÕkfhýLkkyuf{ÃkqnkwLkt {kxuËkrníw.

• «MkwkMkpkuÄkLkpiûkrýfð»ko 2013-'14 {ktÄkuýLkð yçMk{ktfnkkrðaÚkeoykuÃkqnkwt{kxuËkrníw.

• Mk{kxuËkkfhýu«kudkLkwtÃwLkhðkLkfhðk{ktykðu«Lk rníw

Õkhkrðiykunkeo

«MkwkMkpkuÄk{ktMkpkuÄfuzwsLkkhkÕ¼keyhÕ«ersÕ«kLke {kuzkMkpnuhLkezwsLkk¼e{kæ{LkepkMkykukkkkÄkuhýLkðLkkt piûkrýfð»ko 2013-'14 {ktyçMkfnkkrðaÚkeoykuLku ÕhkÃkrðiLkkefuMðefkhu«rník.

«MkwkMkpkuÄk{ktMkpkuÄfu{kuzkMkpnuhLke@e.fu.yuk.þkn {kuzkMkkrnkMfq«Lkk{kæ«r{ffÚkkLkkÄkuhýLkðLkkfw«80 rðaÚkeoykuLku{kqLkk1kefu«ëÄu«rník.Lk{kqLkkÃkMktËzkeMkn ru¼kwfÃkØr1kðzufhðk{ktykðenítE.

«kkuhkdkusLkk

«MkwkMkpkuÄk«kkurdkf«fkhkwtrnðÚkeMkpkuÄfuçkusqÚk, Mk{kxuk{kqLkkÃk«kuLkeMkÚkykuf{kwkfMkuekusLkkLke ÃkMktËzkefhu«rníe.sLkerðMk]jkhsqykiLke[u{wsçkAu.

sÚkt	ÃkðqfNkke	Nðkrk[÷(X) {kðsíkyæk¤kÃkØrík	VkhfNkke
«kkuhkdkf sÚkE$_R$	.....	C.A.I.fkÞo¢{	T_{2E}
rLkÞtºkíksÚkC$_R$	.....	ÕhkÞkLkÁkeík	T_{2C}

⇨E$_R$«kkurdkfsqÚk(sLkufkÞo¢{îkhk{kðsíkykÃkðk{kt ykðenítE.)

⇨C$_R$rLkÞtºkíksqÚk(sLkuÕhkÞkLkÃkØríkîkhk{kðsík ykÃkðk{ktykðenítE.)

⇨XMðíktºk[÷(«kkurdkfsqÚk{ktfkÞo¢{Lke{kðsík ÷ekzðk{ktykðenítE.)

⇨T$_{2E}$«kkurdkfsqÚkkuykÃkðk{ktykðu«efMkuve.

⇨T$_{2C}$rLkÞtºkíksqÚkkuykÃkðk{ktykðu«efMkuve.

yreE$_R$ykuC$_R$yu{çkusqÚkAu.sLk{kt«kkurdkfsqÚkE$_R$Lku CA.I.ÃkØríkîkhkyæk¤kÃkkfhðk{ktykÕMntníwt.ÕhkuC$_R$Lku ÕhkÞkLkÃkØríkîkhkyæk¤kÃkkfhÕMntníwt.{kðsíkkuytíkuçktLku sqÚkkuwkfMkuve1kefuyuf{fMkuveykÃenítE.

wÃkfhý

«MkwkMkpkuÄk«kkurdkf«fkhkwtrnðÚkeMkpkuÄfu{kmíekwt yuºkefhýfhðkÏkhze(2011)ÖkhkhåkíkytdkúS¼»kkLkkt ÕhkfhýLkkt "NOUN" yuf{Lkwtyæk¤kÃkLkfhkðk{kxu Computer Assisted Instruction (C.A.I.) fkÞo¢{ ÕÚkkyuf{fMkuekkuÃkfhý1kefuÃkkudkfhe{kuzkMkpnuhLke@e.fu. yuk.þkn{kuzkMkkrnkMfq«Lkk{kæ«r{ffÚkkLkkÄkuhýLkðLkk fw«80rðaÚkeoykuÃkkMkúe{kmíe{kmðenítE.ykrðaÚkeoykuLku çkusqÚk{ktðnuðeyLku«kkudkLkkuy{÷fhe{kmíe{kmðk{kt ykðenítE.sLkeLkeðku{wsçkAu.

{kmíekwtyuºkefhýfhðk

«MkwkMkpkuÄk«kkurdkf«fkhkwtrnðÚkeMkpkuÄfu{kmíekwt yuºkefhýfhðk{kxu«kkudkLkkuy{÷fhu«rníku.yk«kkudk{kt Ïkhkze(2011)ÖkhkhåkíkytdkúS¼»kkLkkt ÕhkfhýLkkt "NOUN" yuf{Lkwtyæk¤kÃkLkfhkðk{kxu Computer Assisted Instruction (C.A.I.) fkÞo¢{ ÕÚkkk yuf{ fMkuekkuÃkfhý1kefuÃkkudkfhe{kuzkMkpnuhLke@e.fu. yuk.þkn{kuzkMkkrnkMfq«Lkk{kæ«r{ffÚkkLkkÄkuhýLkðLkkk fw«80rðaÚkeoykuÃkkMkúe{kmíe{kmðenítE.ykrðaÚkeoykuLku çkusqÚk{ktðnuðeyLku«kkudkLkkuy{÷fhe{kmíe{kmðk{kt ykðenítE.sLkeLkeðku{wsçkAu.

sqÚkytdkuLkeMkhýe

¢{	rðaÚkeoykuLkeMkfhk	Ãkhý	«kkurdkf sÚkt	rLkÞtºkíksÚkt
1	40	9	C.A.I.fkÞo¢{ îkhkyæk¤kÃkk	.....
2	40	9	.....	ÕhkÞkLkÁkeík îkhkyæk¤kÃkk

{kmíekwtÃkÚkhýykuÚkoÞxk

çkkusqÚkkÃkkuÃkkuMkúe{kðu«{kmíekwtÃkÚkhýykuÚkoÞxk 't'-fMkuekîkhkfhðk{ktykÕMntníw.sLkykÃkhuffÕkLkkykuLke [fkMkýefhðk{ktykðenítE.

wffÕkLkkLke[fkMkýe

þqLÞwffÕkLkkLke[fkMkýe{kxu«kkurdkfsqÚkykuLku rLkÞtºkíksqÚkkurðaÚkeoykuLke'NOUN'yuf{Lke{qÕkkfLk fMkueÃkúLke{kmðu«MkðkÃkkfkuLkwtfMkuekkhkÃkÚkhýykuÚkoÞxkfhðk{ktykÕMntníw.

wífÕkuk 1

«kkurdkfyku rLkt^kiksúkuk Ãk^kuyu {nðu÷ yuf{ {qÕkt fLk fMkue Ãkúe {nðu÷ «kÃ1kt fkuLwt't' fMkue îkhÃk]Ú÷ hý fhíkt ckkrýíkefhe íku't' Lwt {qÕ÷ 3.97 nGw. su 0.01 fÕkyu MkúkofnGw. ykúe þqÞwífÕÃkuk - **1** Lkuy Mðefhúkurnðku.

yu÷ ufuCA.I. Ãkaðr íkyuku Ãkht Ãkhckík yæhÃkuk Ãkaðr íkfkt ¼ck÷ eÄu÷ yuf{ {qÕkt fLk fMkue Lkk Ãkrhýk{kuLkt {nðu÷ «kÃ1kt fkuLe MkhMkhe ðå[u MkúkofíkVðíkhu÷ kunðku. sÚÞkoðu AufuCA.I. Ãkaðr íkyu Ãkht Ãkhckík Ãkaðr íkfhíkkðÄwyMkhfkhf hnnðe.

wífÕkuk 2

«kkurdkfyku rLkt^kiksúkuk fw{khku yu {nðu÷ rhúkfhr[ík yuf{ {qÕkt fLk fMkue Ãkúe {nðu÷ «kÃ1kt fkuLwt't' fMkue îkhÃk]Ú÷ hý fhíkt ckkrýíkefhe íku't' Lwt {qÕ÷ 2.37 nGw. su 0.05 fÕkyu MkúkofnGw. ykúe þqÞwífÕÃkuk - **2** Lkuy Mðefh Úkurnðku.

íkúefnepfk÷ fuÃhtÃkhckík Ãkrík yuLku CA.I. Ãkrík çkË÷ eÄu÷ yuf{ {qÕkt fLk fMkue Lkk tÃkrhýk{kuLkt {nðu÷ «kÃ1kt fkuLwt't' MkúkofíkVðíkhu÷ kunðku. ykúefnepfk÷ fuæhÃkuk Ãkrík yufw{khku Lkepíckrýfr MÂÚÃkhyMhfhLkkh Ãkrhçkr nGw.

wífÕkuk 3

«kkurdkfyku rLkt^kiksúkuk efLkyku {nðu÷ rhúkfrlŠ{ík yuf{ {qÕkt fLk fMkue Ãkúe {nðu÷ «kÃ1kt fkuLwt't' fMkue îkh Ãk]Ú÷ hý fhíkt ckkrýíkefhe íku't' Lwt {qÕ÷ 3.25 nGw. su 0.01 fÕkyu MkúkofnGw. ykúe þqÞwífÕÃkuk - **3** Lkuu yMðefhúkurnðku.

íkúefnepfk÷ fuÃhtÃkhckík yæhÃkuk Ãkrík çkË÷ eÄu÷ yuf{ {qÕkt fLk fMkue {kfLkyku {nðu÷ «kÃ1kt fkuLe MkhMkhe ðå[u MkúkofíkVðíkhu÷ kunðku. ykúefnepfk÷ fuæhÃkuk Ãkrík yufLkyku Lkepíckrýfr MÂÚÃkhyMhfhu Au.

yçkwkkhku

«Mkwík Mkþkuk yçkMk{kt {kmíkuk Ãk]Ú÷ hýyku yúkÞ½ukk ykÃhu «kÃ1kÚhu÷ kt íkhýkuLe [u{sçkmíkkt.

1. «Mkwík Mkþkuk{kt ytckúSÕkfhý{kt yæhÃkuk Ãkrík yku Ãkife (1) C.A.I. fkþo t{ yLku (2) Õ÷ kÏ÷ kLk Ãkrík Lkku íkw÷ Lkkí{fyçkMkfhðk{kt ykÕ÷ kuník u. íku{kt C.A.I. fkþo t{ Õ÷ kÏ÷ kLk Ãkrík fníkt ðÄwyMkhfkhf Ãkqðhúkurníkku.

2. «Mkwík Mkþkuk{kt fw{khku yLku fLkyku{kt "NOUN" yuf{ Lkwt yæhk.Lkfkþo C.A.I. fkþo t{ Lkkt MktË¼uÕ÷ kÏ÷ kLk Ãkrík fníkkt ðÄwyMkhfkhf mhkurníkku.

3. «Mkwík Mkþkuk{kt 'NOUN' yuf{ Lkwt yæhÃkuk fkþo C.A.I. fkþo t{ Lkkt MktË¼uÕ÷ kÏ÷ kLk Ãkrík fníkkt ðÄwyMkfhf mhkurníkku. yu÷ ufuCA.I. fkþo t{ îkhÚíkwt yæhÃkuk fkþo yuf Mkkh rhúkfLkeokhs Mkhu Au.

MkËÞkq[

⇨ Bhatt, A. B. (1998). **Progressive English Grammar 9 Composition Part-2 (5th ed.)** Ahmedabad: Rannade Publication Ltd.

⇨ Navneet , (2004). **Vikash English Grammar & Composition.** Navneet Publication : Ahmedabad.

⇨ w[kx, æe.yu. (2009). **rhúkýykuMk{krsfrðkkuk{kt MkþkuÄkkwÃkrík kt**]Ú÷ hksfkux÷ ¼f.

⇨ îkhkze, yuk. (2011). **Äkuhýuk Ãkkytckúsõ÷ kfhýuk "Noun" yuf{ Ãkh (C.A.I.) fkþo t{ Lke Mkh [Lkkyku 1kuLeyMkfhfík.** y«fkr÷ kík÷ ½þkuakrLkçkak, {kMxh ykuVuõ÷ fuþkFÛMxâqx, {kuzMkk.

⇨ ËuMkkR, yu[. S. yLku ËuMkkR, fu. S. (1979). **MkþkuÄk Ãkrík ykuyku «rðÄyku.** y{ÞkÞkË : þwrLkõMxe ckúLkrLk{koý çkxo

⇨ rLkþk{f©e, ckwshkíkhkÞ. (2004). **Äkuhýytckús Ãkkaðkwík.** ckwÄkdh.

⇨ {kuËe, æe. (Mkt). (1991). **MkþkuÄkkuLe {kÄfhe ¼ðkdh** þwrLkõMxe: rhúkýþkf ¼ðk.

⇨ þkn, rËrÃkfk½ýuþ (2005). **þíckrýfMkþkuÄk.** y{ÞkÞkË : þwrLkõMxe, ckúLkrLk{koýçkxo.

⇨ þwõ÷, yuMk. yLku Ãkkxf, fu. yu[. (2003). **RLV{uþdk xfLkku«kusRkyuõ÷ nfþk.** y{ÞkÞkË : ðkrh»kuý«fkþík.

* V.B. Chauhan

Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 63 - 65
ISSN 2319 - 8168

TO STUDY THE EFFECT OF STRESS ON STRESS-MANAGEMENTOF HIGHER SECONDARY STUDENTS

The present study is an attempt to explore stress and its management among higher secondary students students. The sample includes 320 higher secondary students of the age group of 16-17 years. The data were collected by using self-made test of stress and stress-management. The results revealed that both high and low stress students are using same kind of stress-management techniques. There is no significant difference between them and they are using similar types of techniques relationship to deal with their stress.
Key-words- Stress, Stress-management, Higher secondary students,

Introduction-

The Modern world is the world of mind. But the mind is man's last unconquered frontier. Mankind is paying a steep price for failing to learn about mind on the race for success. Stress is the price we are paying. It is believed that as far as stress is concerned, the individual is responsible and it is his own personal problem to be managed and controlled by himself. There are so many factors that might be leading to stress among students such as the geographical areas of both the school and the students environment, Socio-economic status or background, culture, religion, education background (Forchard et.al.,1991),status of the family, occupation of the parents, parental involvement and parental motivation, limited facilities around the school environment for the students hence causing all the kinds of inconvenience for students of concentrate on their studies.(Barone et.al.,1991).The teacher who handle the classes may not be showing adequate interest in teaching the subject, the teacher may not be well qualified and yet one another big problem of the peer group influences which may lead to academic neglect(Srinivas,2000).

Objective of the study-

· To study the difference between high stress group and low stress group in stress-management.

Hypothesis-

· There will be no significant difference in the stress-management between high and low stress group.

Delimitations-

· The study is limited to higher secondary students of Durg District of Chhattisgarh in India.

· The variable of study is stress and stress-management.

· The study is limited to twelfth grade students.

Methodology-

In this study scientific research ,normative survey method was used in this study.

Sample:

For the present study 320 students were selected from higher secondary schools of Durg district in Chhattisgarh state. Non probability sampling technique was adopted in this study.

Tool:

For the present study self made stress and stress management tool was developed by investigator.

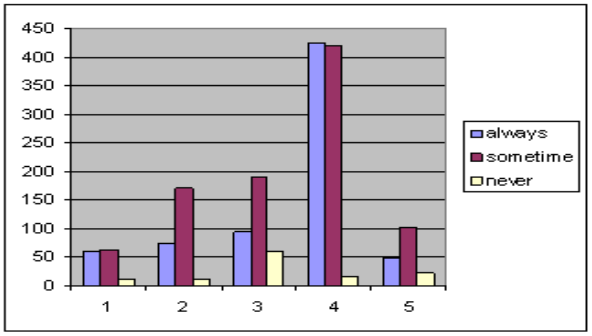
Statistics for analysis: -

Percentage was applied to find out the difference between two group.

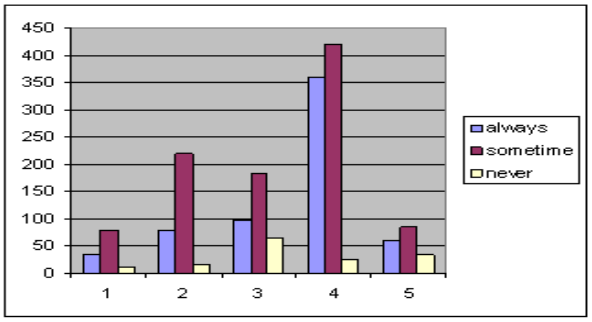
* H.O.D., Bhilai School of Education & Research, Chandkhuri-Durg (Chhatishgadh)

Analysis and Interpretation:

High Stress					
Source of Stress Management	Always	Some time	Never	Total	%
Yoga	60	62	11	133	7.53
Recreation	75	170	11	256	14.54
Avoidance	93	189	61	343	19.48
Relationship	424	418	15	857	48.69
Other	49	101	21	171	9.71



Low Stress					
Source of Stress Management	Always	Some time	Never	Total	%
Yoga	33	78	11	122	6.93
Recreation	78	220	16	314	17.84
Avoidance	98	182	64	344	19.54
Relationship	360	418	25	803	45.62
Other	59	84	34	177	10.05



The observed frequency distribution of various Stress Management resources under high and low stress of students is presented in table – 1.1,1.2 and graphically represented in graph- 1, 2 from the table, it is obtained that the high stress students are most using their Stress Management resources as relationship (48.69 %) and students use always it. Other managing resources such as avoidance (19.48%); recreation (14.54 %); yoga (7.55%) and other (9.71 %) are minimally used,In the case of low stress students they are using more of relationship only as their Stress Management but avoidance; recreation and yoga and others are using very rarely.

Reddy, P. Viswanatha; Reddy V. Srikanth (2004) studied in Stress and Coping strategies in children. The results indicate that the children have experienced more stress in physical and educational fronts and have less stress in the areas of psychological and social fronts. Appraisal focused and problem focused coping has been used more than emotional focused by the children.Reddy, P. Viswanatha ; Reddy V. Srikanth (2004) studied in Stress and Coping strategies in children.The results indicate that the children have experienced more stress in physical and educational fronts and have less stress in the areas of psychological and social fronts.Appraisal focused and problem focused coping has been used more than emotional focused by the children.

Baum and Singer (1982) defines coping resources as adaptive capabilities that provide immunity against damage from stress. Anderson et. al.(1991) conducted a study on a sample of 158 men and 243 women. Find significant differences between males and females on 8 stress producers and 5 coping strategies were obtained. Impact of affiliation of board of education on the stress and coping styles of adolescents depicted the CBSE students to be more stressful experiencing moderate to high levels of stress whereas students of state board schools reflected moderate to low levels of stress. Similar trend was observed for the adoption of coping strategies where CBSE students were for better than their counterparts of the other setting. Relationship with classmates, teachers, peer and parents seem to complement one another. Parents provide affection and guidance, which grants children the security and social skills they need to enter the world of peers. Peer interaction, in turn, enables children to expend their social skills. Peers can also stand in, to some extent, for the early parent-child bond. Teacher and classmates ties promote good school adjustment and improve attitudes towards school. When children and students enjoy interacting with friends at school, perhaps they begin to view all aspects of school life more positively. It means that students with high or low stress give equal preference to all stress - management, which support the present study.Relationship with classmates,teachers,peer and

parents seem to complement one another. Parents provide affection and guidance, which grants children the security and social skills they need to enter the world of peers.Peer interaction, in turn, enables children to expend their social skills.Peers can also stand in, to some extent, for the early parent-child bond.Teacher and classmates ties promote good school adjustment and improve attituds towards school.When children and students enjoy interacting with friends at school,perhaps they begin to view all aspects of school life more positively. It means that students with high or low stress give equal preferance to all stress -management,which support the present study. Baum and Singer (1982) defines coping resources as adaptive capabilities that provide immunity against damage from stress. Anderson et. al.(1991) conducted a study on a sample of 158 men and 243 women. Find significant differences between males and females on 8 stress producers and 5 coping strategies were obtained. Impact of affiliation of board of education on the stress and coping styles of adolescents depicted the CBSE students to be more stressful experiencing moderate to high levels of stress whereas students of state board schools reflected moderate to low levels of stress.Similar trend was observed for the adoption of coping trategies where CBSE students were for better than their counterparts of the other setting.The observed frequency distribution of various Stress Management resources under high and low stress of students is presented in table - 5.29,5.30 and graphically represented in figure 5.11, 5.12 from the table, it is obtained that the high stress students are most using their Stress Management resources as relationship (48.69 %) and students use always it. Other managing resources such as avoidance (19.48%); recreation (14.54 %); yoga (7.55%) and other (9.71 %) are minimally used. From the table,In the case of low stress students they are using more of relationship only as their Stress Management but avoidance; recreation and yoga and others are using very rarely.

It means that students with high or low stress give equal preference to all Stress Management, so this hypothesis accepted i.e. - It means that students with high or low stress give equal preferance to all Stress Management,so this hypothesis accepted i.e. -

"There will be no significant difference in the stress-management between high and low stress group."

TherewillbenosignificanteffectofStressandits ManagementofHigher SecondaryStudents.

All the formulated hypothesis were tested statistically and the study has come to an end with certain results which are mentioned here with. All the formulated hypothesis were tested statistically and the study has come to an end with certain results which are mentioned here with .

There is no significant difference in the Stress - management between high and low stress group.

Conclusion: -

High stress and low stress are using similar types of stress management technique to deal with there stress. Boys and girls with stress are effectively using similar source of management style to manage there stress.

REFERENCE

- Anderson et al (1991*). Coping with employment and family stress*.Employment arrangements and gender differences,Sex Roles, 24,223-237.
- B. Mathew and c. jayan(2006), *academic stress and coping style among +2 students*. Indian PsychologicalReview,vol. 66,No.1,2006,Page 41-48.
- Baum, A and Singer, J.E. (1982). *Psychological aspects of health, stress and illness*. In A.H.
- Hastarf & A.M. I sen (Eds.), cognitive social psychology, NewYork Elsevier.
- Reddy P. Viswanatha and Reddy V. Srikanth (2004) *: Stress And Coping Strategies In Children*,Edutracks (June), PP-30-32.
- Srinivas, P.B.(2000) Graph 5.11- Graphical Represention of Stress Management in high stress, *academic stress, adjustment and academic success among students*. Doctoral dissertation: S. V. university.

* Ranjana Devi

Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 66 - 69
ISSN 2319 - 8168

PROPER LISTENING HABIT IN ENGLISH LANGUAGE IMPROVES SPEAKING, READING AND WRITING SKILL IN COLLEGE GOING STUDENTS: AN EXPERIMENTAL STUDY

The purpose of this study is to find effect of listening skill on speaking, reading and writing skill in English as a second language. For this purpose researcher has conducted an experiment on 26 college going student. The data were collected through using TSL ESOL English assessment program developed by Tripada Singapore International Pvt. Ltd. Hypothesis had tested through comparing two related samples. To get proper result total score before and after experiment for reading, writing and speaking has been taken. This score helps to calculate difference between score taken before and after experiment. Mean of difference, standard deviation of difference and t value calculated which helps to reveal significance of hypothesis.

Key Words: Listening English, Writing English, Reading English, Listening habit, listening skill, Reading skill and writing skill.

INTRODUCTION:

Effective communication skills open the path to success. Communication skills can be inherent or can be learnt. There are many instances of failure of person because of poor or bad communication skills. This study is intended to find out effect of proper listening habit on speaking, reading and writing so it is necessary to improve listening skills. India being the rural country, the students from rural part need prime attention. This study focuses on how to develop their listening skills in English. Thus this experimental study undertaken result in practical measures to improve the listening skills of rural students. So that rural students can improve their personality and compete with urban students in their studies and career selection. The communication in English needs to be developed so as to make India a developed country. Hence the statement of problem is "Proper Listening habit in English language improves speaking, reading and writing skill in college going students: An Experimental Study".

Listening is yet another necessity in language. If you are more efficient listener then you will be the more successful and satisfied. In the words of Janis we find that *Listening is not merely hearing: it is a state of receptivity that permits understanding of what is heard and grants the listener full partnership in the communication process.* We need to develop a keen interest in making ourselves better listener. The fact that we listen more than our ears and we listen far more than the sound is very true. As any member in a society, listening is one important skill to possess as good listening is an integral part of communication process. A good listener shows readiness and possesses an ability to manipulate the sound into words and their contextual meaning. Then the good listener relates given meanings to other experiences and he shares responsibility with the speaker. Academically, listening skills plays a vital role in the teaching-learning cycle. A student learns better when he can listen better. A teacher is also in need of a good listening skill. All the way, listening should be enhanced in your life as to be a greater speaker.

CONCEPTUAL FRAMEWORK:

Impact of proper listening on speaking develops

*** Assi. Pro., Smt. N.C. Gandhi Mahila Arts & Comm. College, Bhavnagar.**

confidence in student for learning English as a second language.

Impact of proper listening on writing develops students written communication skills and makes them confident to present them self before others

Importance of proper listening skills in interviews boost candidate to speak rightly answer correctly

Impact of proper listening on reading develops confidence in student for proper pronunciation and understand correct accent.

OBJECTIVES OF THE STUDY:

1. To find-out impact of listening on speaking, reading and on writing.
2. To analyze impact of listening skills of rural students on speaking, reading and writing.

HYPOTHESES:

H_{01} There will be no significant impact of listening on difference between score before and after experiment for speaking skill in English as a second language on student.

H_{02} There will be no significant impact of listening on difference between score before and after experiment for reading skill in English as a second language on student.

H_{03} There will be no significant impact of listening on difference between score before and after experiment for writing skill in English as a second language on student.

DELIMITATION OF THE STUDY:

1. This study is limited to college going graduate student.
2. The sample was selected rural area of Bhavnagar district, Gujarat.

SIGNIFICANCE OF THE STUDY:

1. This study tells us that proper listening is very essential to improve speaking, reading and writing skill in English as a second language.
2. Dramatization may be used to improve the students' speaking skill in English as a second language.
3. Student will be train to read and write certain short passages listened in audio program to improve their reading and writing skill in English as a second language.

METHODOLOGY:

An experimental method was used for this study.

SAMPLE:

The sample was selected from rural area of Bhavnagar District, Gujarat. In this study total 26 students who belong to Gujarati medium were selected randomly.

TOOL:

The data were collected through using TSL ESOL English assessment program developed by Tripada Singapore International Pvt. Ltd.

DATA COLLECTION:

The researcher conducted test in a fully equipped computer lab with micro phone facility. English assessment program run on computer and each student listen this program with the help of micro phone. Researcher tried that there won't be any disturbance. Test was completed in two rounds. In one round test administered on 13 students and their score has been noted for speaking, reading and writing skill. The researcher run three assessment program first program run for speaking, second program run for reading and third program run for writing. Before recording score for each program researcher has given opportunity to listen each program before attempt. For each program performance of the student recorded as score. The same process followed for the remaining 13 students by researcher.

STATISTICAL ANALYSIS:

For this purpose a paired t-test is used, it is necessary that the performance of the two samples be collected in the form of matched pairs. Each performance in the one sample must be paired with performance in the other sample in such a manner that these performances match anyhow. Such a test is generally appropriate in a before and after experimental study. Researcher conducted this experiment to find whether the appropriate listening is necessary for speaking, reading and writing English as a second language. To apply this test researcher taken the difference score for each matched pair, and then find out the average of such differences along with the sample variance of the difference score.

STATISTICAL TECHNIQUE USED:

For the analysis of data paired t-test is used for comparing two related samples. To find the value of

t, researcher worked out on the mean and standard deviation of differences.

RESULT AND FINDING:

TABLE 1

Significant impact of listening on difference between score before and after experiment for speaking skill in English as a second language

No. Of Student	df	Total Score of speaking Before Experiment Xi	Total Score of speaking after experiment Yi	Diff. Di =(Xi-Yi)	Diff. Squa. Di^2	Mean Of Diff. D	Standard Deviation Of diff.	t Val.
26	25	141	202	-61	189	-2.346	1.355	-8.828

The observed value of t is -8.828 which is not in the acceptance region and thus we reject H_{01} for determining the rejection region at 5 percent level and conclude that the difference in score before and after experiment is significant. So the null hypothesis "There will be no significant impact of listening on difference between score before and after experiment for speaking skill in English as a second language on student". It can be conclude that "there is significant impact of listening on difference between score before and after experiment for speaking skill in English as a second language on student"

TABLE 2

Significant impact of listening on difference between score before and after experiment for reading skill in English as a second language

No. Of Student	df	Total Score of Reading Before Experiment Xi	Total Score of Reading after experiment Yi	Diff. Di =(Xi-Yi)	Diff. Squa. Di^2	Mean Of Diff. D	Standard Deviation Of diff.	t Val.
26	25	165	219	-54	152	-2.076	1.597	-6.628

The observed value of t is -6.628 which is not in the acceptance region and thus we reject H_{02} for determining the rejection region at 5 percent level and conclude that the difference in score before and after experiment is significant. So the null hypothesis "There will be no significant impact of listening on difference between score before and after experiment for reading skill in English as a second language on student". It can be conclude that "there is significant impact of listening on difference between score before and after experiment for reading skill in English as a second language on student"

TABLE 3

Significant impact of listening on difference between score before and after experiment for writing skill in English as a second language

No. Of Student	df	Total Score of writing Before Experiment Xi	Total Score of writing after experiment Yi	Diff. Di =(Xi-Yi)	Diff. Squa. Di^2	Mean Of Diff. D	Standard Deviation Of diff.	t Val.
26	25	128	183	-55	157	-2.115	1.275	-8.458

The observed value of t is -8.458 which is not in the acceptance region and thus we reject H_{03} for determining the rejection region at 5 percent level for df = 25 and conclude that the difference in score before and after experiment is significant. So the null hypothesis "There will be no significant impact of listening on difference between score before and after experiment for writing skill in English as a second language on student". It can be conclude that "there is significant impact of listening on difference between score before and after experiment for writing skill in English as a second language on student"

DISCUSSION:

Observation of Table 1 shows that experiment for proper listening was effective for speaking English as a second language.

Observation of Table 2 shows that experiment for proper listening was effective for reading English as a second language.

Observation of Table 3 shows that the experiment for proper listening was effective for writing English as a second language.

CONCLUSION:

As a student, the skills of language will make you academically sound. The four skills never stand out as individual areas but they form a chain cycle, where you break one ring of the chain and the whole chain would collapse. In the changing competitive world, your command over a language and even more the level of your English can determine your life.

REFERENCES:

- Bailey, K.M., & Savage, L. (1994). *New ways in teaching speaking.* Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Brown, H.D. (1994). *Teaching by principles: an interactive approach to language pedagogy*. Englewood Cliffs, NJ: Prentice Hall Regents.
- Burns, A., & Joyce, H. (1997). *Focus on speaking.* Sydney: National Center for English Language Teaching and Research.
- Carter, R. & McCarthy, M. (1995). Grammar and spoken language. *Applied Linguistics, 16* (2), 141-158.
- Cohen, A. (1996). Developing the ability to perform speech acts. *Studies in Second Language Acquisition, 18* (2), 253-267.
- Grognet, A.G. (1997). *Integrating employment skills into adult ESL instruction.* ERIC Digest. Washington, DC: National Center for ESL Literacy Education.
- Garrett, Henery E. (2008). *Statistics in Psychology and Education.* Delhi : Surjeet Publication.
- Kothari, C.R. (2004). *Research Methodology: Methods and techniques*. Washington, New Delhi: New age International Pvt. Ltd.
- Lewis, M. (Ed.) (1997). *New ways in teaching adults.* Alexandria, VA: Teachers of English to Speakers of Other Languages.

* **Dr. Ajay. Boricha**

Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 70 - 71
ISSN 2319 - 8168

માધ્યમિક શિક્ષક – પ્રશિક્ષણ કોલેજના પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા

પ્રાસ્તાવિક સ્વ–કાર્યસાધકતાના ખ્યાલના જનક સુપ્રસિધ્ધ અમેરિકન મનોવિજ્ઞાની બાન્દુરા છે. તેમનો Psychological Review નામના સામયિકમાં (૧૯૭૭)માં સ્વ–કાર્યસાધકતાના વિશેનો લેખ પ્રકાશિત થયો હતો. ત્યારથી શિક્ષણ અને મનોવિજ્ઞાનના ક્ષેત્રમાં સ્વ–કાર્યસાધકતાનો ઉદય થયો. શિક્ષક પ્રશિક્ષણના ક્ષેત્રમાં પેજેરીસે (૧૯૯૬)માં સૌ પ્રથમ સ્વ–કાર્યસાધકતા (Self - Efficacy) ના ખ્યાલની સૈદ્ધાત્તિક આધારશિલા રજૂ કરી હતી.

સ્વ–કાર્યસાધકતા એટલે ચોકકસ કાર્ય કરવાની પોતાનામાં શકિત છે તેવી વ્યકિતની માન્યતા. આ એક મનોવૈજ્ઞાનિક ખ્યાલ છે. પ્રશિક્ષણાર્થીઓની ચોકકસ કાર્ય કરવાની તેમનામાં શકિત છે એવી તેમની માન્યતા ઉપર તેમની સફળતાનો આધાર રહેલો છે. માટે જેટલી કાર્ય કરવાની શકિત વિશે માન્યતા ઊંચી તેટલી સફળતા વધારે અને કાર્ય કરવાની શકિત વિશે માન્યતા નીચી તેટલી સફળ તા ઓછી. તો આવી નીચી માન્યતા ધરાવતા પ્રશિક્ષણાર્થીઓને ઊંચી માન્યતા તરફ વાળવા હોય તો સૌ પ્રથમ તેમની સ્વ–કાર્યસાધકતા જાણવી જરૂરી છે. જેથી તેના દ્વારા સ્વ–કાર્યસાધકતા જાણી પ્રશિક્ષણાર્થીઓને ઊંચી સિદ્ધિ તરફ લઈ જઈ શકાય છે. જયારે ઊંચી માન્યતા ધરાવતા પ્રશિક્ષણાર્થીઓને વિશિષ્ટ સિદ્ધિ તરફ લઈ જઈ શકાય છે. તેથી બી.એડ્.ના પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતાનો અભ્યાસ હાથ ધરવાનું વિચાર્યુ હતું.

અભ્યાસના હેતુઓ

પ્રસ્તુત અભ્યાસના હેતુઓ નીચે મુજબ હતા.

૧. પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા જાણવી.

૨. પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા અને જાતીયતા વચ્ચેનો સંબંધ તપાસવો.

૩. પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા અને વિદ્યાશાખા વચ્ચેનો સંબંધ તપાસવો.

૪. પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા અને વિસ્તાર વચ્ચેનો સંબંધ તપાસવો.

અભ્યાસની ઉત્કલ્પનાઓ

પ્રસ્તુત અભ્યાસની ઉત્કલ્પનાઓ નીચે પ્રમાણે હતી.

(૧) પુરૂષ અને સ્ત્રી પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા માપદંડ પરના પ્રાપ્તાંકોની સરાસરીઓ વચ્ચે સાર્થક તફાવત નહીં હોય.

(૨) વિજ્ઞાન અને વિજ્ઞાનેતર વિદ્યાશાખાના પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા માપદંડ પરના પ્રાપ્તાંકોની સરાસરીઓ વચ્ચે સાર્થક તફાવત નહીં હોય.

(૩) શહેરી અને ગ્રામ્ય વિસ્તારના પ્રશિક્ષણાર્થીની સ્વ–કાર્યસાધકતા માપદંડ પરના પ્રાપ્તાંકોની સરાસરીઓ વચ્ચે સાર્થક તફાવત નહીં હોય.

અભ્યાસની ક્ષેત્ર મર્યાદા

પ્રસ્તુત અભ્યાસ ભાવનગર જિલ્લાની એમ.કે. ભાવનગર યુનિવર્સિટી સંલગ્ન બી.એડ્. કોલેજોના પ્રશિક્ષણાર્થીઓ પૂરતો મર્યાદિત હતો.

સંશોધન યોજના

• નમૂના પસંદગી

પ્રસ્તુત અભ્યાસમાં એમ.કે. ભાવનગર યુનિવર્સિટી સંલગ્ન બી.એડ્.કોલેજો પૈકી ૪ બી.એડ્. કોલેજોની સ્તરીકૃત નમૂના પસંદગી પદ્વતિ દ્વારા પસંદ કરી હતી. જેમાં શહેરી વિસ્તારની ૨ અને ગ્રામ્ય વિસ્તારની ૨ એમ કુલ ૪ બી.એડ્. કોલેજોના ૩૪૨ પ્રશિક્ષણાર્થીઓનો નમૂનામાં સમાવેશ કરવામાં આવ્યો હતો. માહિતી એકત્રીકરણ દરમિયાન ૩૬૭ રહયા હતા અને ૨૧ પ્રશિક્ષણાર્થીઓએ ગેરહાજર રહયા હતા. જયારે ૪ પ્રશિક્ષણાર્થીઓએ પ્રતિચાર આપવામાં નિષ્કાળજી દાખવી હોવાથી તે પાત્રોને નમૂનામાંથી રદ કરવામાં આવ્યા હતા. આમ કુલ ૩૪૨ પ્રશિક્ષણાર્થીઓનો પ્રસ્તુત અભ્યાસમાં સમાવેશ કરવામાં આવ્યો હતો.

• ઉપકરણ

પ્રસ્તુત અભ્યાસમાં અભ્યાસકે સ્વ–રચિત 'અધ્યાપનમાં સ્વ–કાર્યસાધકતા માપદંડ' પાંચ બિંદુવાળો લિકર્ટ પ્રકારના માપદંડનો ઉપયોગ કર્યો હતો. તેમાં કુલ ૨૫ કલમો હતી.

માહિતી એકત્રીકરણ :–

સૌ પ્રથમ નમૂનામાં પસંદ થયેલ કોલેજોના આચાર્યશ્રીઓની અનુમતિ મેળવી હતી. ત્યારબાદ નિશ્ચિત થયેલ તારીખે, સમયે નમૂનામાં પસંદ થયેલી કોલેજોમાં અભ્યાસકે રૂબરૂ જઈ પ્રશિક્ષણાર્થીઓને ઉપકરણ આપીને માહિતી મેળવી હતી.

• માહિતીનું વિશ્લેષણ

પ્રસ્તુત અભ્યાસમાં મળેલ માહિતીના વિશ્લેષણ માટે વર્ણનાત્મક

*** Lecturer, Shree Sahjanand B.Ed. College, Akwada**

અંકશાસ્ત્રીય ગણતરીઓ કરવામાં આવી હતી આ ઉપરાંત ઉત્કલ્પનાની ચકાસણી માટે સરાસરી, પ્રમાણવિચલન અને ટી–ગુણોતરની ગણતરી કરવામાં આવી હતી. જેના માટે spss કમ્પ્યુટર પ્રોગ્રામનો ઉપયોગ કરવામાં આવ્યો હતો.

• અભ્યાસના તારણો

૧. પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા સામાન્યથી ઉચ્ચતર હતી.

૨. પુરૂષ અને સ્ત્રી પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા માપદંડ પરના સરેરાશાંકોનો તફાવત ૦.૦૫ કક્ષાએ સાર્થક ન હતો. એટલે કે પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતાને જાતીયતા સાથે સાર્થક સંબંધ ન હતો.

૩. વિજ્ઞાન અને વિજ્ઞાનેતર વિદ્યાશાખાઓના પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા માપદંડ પરના સરેરાશાંકોનો તફાવત ૦.૦૫ કક્ષાએ સાર્થક ન હતો. એટલે કે પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતાને જાતીયતા સાથે સાર્થક સંબંધ ન હતો.

૪. શહેરી અને ગ્રામ્ય વિસ્તારના પ્રશિક્ષણણાર્થીઓની સ્વ–કાર્યસાધકતા માપદંડ પરના સરેરાશાંકોની તફાવત ૦.૦૧ કક્ષાએ સાર્થક હતો. એટલે કે શહેરી વિસ્તારના પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા ગ્રામ્ય વિસ્તારના પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા કરતાં ઊંચી હતી.

: સંદર્ભસૂચિ :

⇨ Pajares, F. (1996). **Self-efficacy beliefs in academic settings,** *Review of educational Research*, 66,543-578.

⇨ ઉચાર, ડી. (૨૦૦૯). **શિક્ષણ અને સામાજિક વિજ્ઞાનોમાં સશોધનનું પદ્ધતિશાસ્ત્ર**. *સૌરાષ્ટ્ર યુનિવર્સિટી*, રાજકોટ.

⇨ બોરીચા, એ. (૨૦૧૩). **પ્રશિક્ષણાર્થીઓની સ્વ–કાર્યસાધકતા અને શૈક્ષણિક સિદ્ધિનો કેટલાક ચલોના સંદર્ભમાં અભ્યાસ**. અપ્રકાશિત પી.એચ.ડી. મહાનિબંધ, ગણપત યુનિવર્સિટી, ખેરવા.

* H. Prajapati

Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 72 - 73
ISSN 2319 - 8168

TECHNICAL SKILLS OF TEACHING

This article present some of the technical skills of teaching that have been included in teacher education programmes, describes ways in which they have been used, discusses evidence concerning their validity, and presents criticisms made of their use, as well as advantages associated with them.

The initial list of technical skills of teaching developed was by no means exhaustive and other skills were added during the years. The competency-based teacher education (CBTE) or performance-based teacher education (PBTE) movement, which developed at the end of the 1960s has contributed greatly to the identification and development of a wider range of classroom interactive skills in the cognitive, affective, and meteoric domains. It should be stressed, however, at this point that the original concept of technical skills of teachers was not clear, and many practitioners have adopted only the Stanford list of teaching skills or even only part of that list.

This concept of specific teaching skills seems first to have been implemented in teacher education in the microteaching programme at Stanford University in the early 1960s. With the subsequent widespread acceptance of microteaching as a technique for training teachers, the concept of technical skills of teaching became well-known. In time the concept became an important component of competency-based teacher education and even of competency-based teacher certification.

According to Allen and Ryan the first technical skill used in the microteaching clinic at Stanford University was "how to begin a lesson". Subsequently such skills as achieving "closure", providing "frame of reference", and probing student responses were added until a list was developed which included the following skills :

(a) Stimulus variation : using stimulating material and variations in movement, gestures, interaction techniques and sensory channels in order to alleviate boredom and inattentiveness.

(b) Set induction : preparing students for a lesson by clarifying its goals, relating it to student's prior knowledge and skills, through using analogies, demonstrations and posing stimulating problems.

(c) Closure : assisting students to establish links between new and past knowledge by reviewing and applying material to familiar and new examples, cases and situations.

(d) Silence and nonverbal cues : reducing reliance on teacher talk by encouraging teachers in the proper use of pauses and in the effective use of facial expression, body movement, and gestures.

(e) Reinforcing student participation : encouraging students to respond through the use of praise and acceptance as well as nonverbal cures such as nodding and smiling.

(f) Fluency in asking questions : eliminating unnecessary hesitations and repetitions of questions.

(g) Probing questions : skills in framing questions which lead students to elaborate on, or riase the level of, their responses,

(h) Higher order questions : questions which elicit responses that require higher intellectual levels from students instead of responses that involve only fact stating or descriptions.

(i) Divergent questions : questions which elicit student responses that are unconventional, imaginative and cannot be judged simply to be correct or incorrect.

Other skills to become incorporated in the Stanford

* M.Phil. Student, Department of Education, Ganpat University, Kerava

list were "recognizing attending behavior", "illustrating and use of examples", "lecturing", "planned repetition", and "completeness of communication".

As an indication of the widespread adoption of the concept of technical skills of teaching institutions as far apart as the University of Striling in Scotland and the University of Sydney in Australia implemented teacher education programmes incorporating them. An Australian team of authors developed a system for classifying teaching skills under which seven categories emerged. These were :

(a) Motivational skills, including reinforcing student behavior, varying the stimulus, set induction, encouraging student involvement, accepting and supporting student feelings, displaying warmth and enthusiasm, and recognizing and meeting students needs.

(b) Presentation and Communication skills, including explaining, dramatizing, reading, using audio-visual aids, closure, using silence, encouraging student feedback, clarity, expressivenees, pacing and planned repetition.

(c) Question skills, including refocusing and redirecting, probing, high-level questions, convergent and divergent questions, convergent and divergent questions, stimulating student initiative.

(d) Skills of small group and individual instruction, such as organizing small group work, developing impendent learning, counseling, encouraging co-operative activity and student to student interaction.

(e) Developing student thinking, such as fostering inquiry learning, guiding discovery, developing concepts, using simulation, role playing and gaming to stimulate though, developing student problem solving skills, encouraging students to evaluate and make judgments and developing critical thinking.

(f) Evaluative skills, including recognizing and assessing student progress, diagnosing learning difficulties, providing remedial techniques, encouraging self-evaluation and handling evaluative discussion.

(g) Classroom management and discipline, including recognizing attending and non-attending behavior, supervising class group work, encouraging task oriented behavior, giving directions and coping with multiple issues.

Used in the above way, the technical skills of the teaching approach involved both conceptual and theoretical, as well as behavioral development of student teachers, through the emphasis was on the latter. In other cases, focus was placed more on the cognitive than the per formative, and skills of conceptualizing, analyzing and hypothesizing were emphasized. If teaching could be broken down into specific skill or competencies, such skills or competencies could become the basis not only of training programmes but also of attempts to evaluate teaching effectiveness.

REFERENCE

- Aslam, M. **Educational and Training for Millions – Pedagogical Challenges for Distance Education.** Paper presented at Open and Distnace Learning in New Millennium, ICDE Asian Regional Conference, New Delhi, India, 2000.
- Duffy, T., & Cunningham, D., **Constructivism : Implications for the design and delivery of instruction.** Handbook of research for educational telecommunications and technology, New York : MacMillan, 1996.

* M.N. Thadeshwar

Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 74 - 76
ISSN 2319 - 8168

INNOVATIVE METHODS OF TEACHING

Introduction

One overriding challenge is now coming to the fore in public consciousness: We need to reinvent just about everything. Whether scientific advances, technology breakthroughs, new political and economic structures, environmental solutions, or an updated code of ethics for 21st century life, everything is in flux—and everything demands innovative, out of the box thinking.

The burden of reinvention, of course, falls on today's generation of students. So it follows that education should focus on fostering innovation by putting curiosity, critical thinking, deep understanding, the rules and tools of inquiry, and creative brainstorming at the center of the curriculum.

This is hardly the case, as we know. In fact, innovation and the current classroom model most often operate as antagonists. The system is evolving, but not quickly enough to get young people ready for the new world. But there are a number of ways that teachers can bypass the system and offer students the tools and experiences that spur an innovative mindset. Here are ten ideas:

Move from projects to Project Based Learning. Most teachers have done projects, but the majority do not use the defined set of methods associated with high-quality PBL. These methods include developing a focused question, using solid, well crafted performance assessments,allowing for multiple solutions, enlisting community resources, and choosing engaging, meaningful themes for projects. PBL offers the best method we have presently for combining inquiry with accountability, and should be part of every teacher's repertoire. See my website or the Buck Institute for methods.

Teach concepts, not facts. Concept-based instruction overcomes the fact-based, rote-oriented nature of standardized curriculum. If your curriculum is not organized conceptually, use you own knowledge and resources to teach ideas and deep understanding, not test items.

Distinguish concepts from critical information. Preparing students for tests is part of the job. But they need information for a more important reason: To innovate, they need to know something. The craft precedes the art. Find the right blend between open-ended inquiry and direct instruction.

What Is an Innovator

An innovator is an individual who introduces new methods, products and ideas. It refers to a pioneer, an individual who helps to open up a new line of art, research.

How are we teaching innovation?

Innovation is not formulaic. While I agree with the other response here that innovation is difficult to teach in a classroom, I believe that innovative problem solving is a skill that anyone can learn.

What is the Methods Innovation Rule?

The Methods Innovation Rule (MIR) is an important step toward a performance-based measurement system (PBMS), and part of the Agency's efforts toward "Innovating for Better Results.

What are the teacher centered method of teaching?

The method of teaching and equipping students to a world of proper understanding by way of practicalmethods,proper teaching aids is known as a teacher centered methodology.

*** M.Phil. Student, Ganpat University, Mahesana**

Three Innovative Methods of Teaching for High School Educators

Innovative methods of teaching are a goal of many educators. Teaching students in ways that keep them engaged and interested in the material can sometimes be a challenge. This proves especially true when it comes to high school students. In the short-attention span world we live in, it can be harder than ever to keep high school students excited and engrossed in learning what they're there to learn.

Visualization, technology tools and active learning : 3 innovative methods of teaching for high school educators

Finding new and innovative methods of teaching is a crucial skill for high school teachers. Brain research has shown that certain methods and approaches can truly enhance the learning process for students. Applying innovative learning and attention-management techniques to classes is a win-win for both students and teachers.

1. Visualization

A list of disconnected facts will not lead to a deep understanding in students or an integration of knowledge from one situation to another. Knowledge that is organized and connected to concepts with a goal of mastery, including the ability to visualize the concepts, can lead to the ability to transfer knowledge and lead to a deeper, longer-term understanding of what is taught.

Visualization is an especially good teaching strategy for reading and literacy teachers. Here's a lesson in how to use visualization to help students illustrate mental images from a portion of text that is read aloud: Teaching students visualization skills help them understand, recall and think critically about subjects they study.

2. Wisely-managed classroom technology

Computers, tablets, digital cameras, video conferencing technology and GPS devices can enhance a student's learning experience. Using video games to teach math and foreign languages, leveraging Skype to video conference with classrooms or guest speakers from around the world, or multimedia projects that allow students to explore subject matter using film, audio and even software they create are all possible uses of classroom technology.

3. Active learning: Peer instruction, discussion groups and collaborative problem solving

All high school educators dread a roomful of blank faces or silence after they open up a topic for class discussion. According to the Johns Hopkins Center for Educational Resources (CER), devoting time to active learning projects is one way to get students thinking, talking and sharing information in the classroom. The CER publishes a series called the The Innovative Instructor that explores these methods.

Innovative methods of teaching can be of great help in aiding high school students in getting the most out of their education. These are just three ideas for directions you can go in your quest for innovative learning for your students.

Creative teaching

In order to teach creativity, one *must* teach creatively; that is, it will take a great deal of creative effort to bring out the most creative thinking in your classes. Of course, creativity is not the only required element for creative instructors. They must also know their fields and know how to create an appropriate learning environment. When will it be most important for you to offer direct instruction? When is discovery most important? What are your expectations and how can you best communicate them?

Because answers to these questions are so diverse — even for individual instructors teaching different courses or at various times of the semester — no one technique will fit all needs. Here are several approaches or techniques for teaching creatively, both general and specific to certain fields. More examples of field-specific approaches or techniques appear in the Creative teachers section.

General Techniques

These creative thinking techniques were culled from the Internet and summarized by Yao Lu, a graduate student in AESHM (Apparel, Educational Studies, and hospitality Management). Some of the techniques listed below are used in business training or in K-12 settings but can easily be adapted for college students.

Role-playing

What: In most role-playing exercises, each student

takes the role of a person affected by an issue and studies an issue or events from the perspective of that person.

How: Role plays should give the students an opportunity to practice what they have learned and should interest the students. Provide concrete information and clear role descriptions so that students can play their roles with confidence. Once the role play is finished, spend some time on debriefing.

What: Story-boarding can be compared to spreading students' thoughts out on a wall as they work on a project or solve a problem. Story boards can help with planning, ideas, communications and organization.

Benefits: This method allows students to see the interconnections, how one idea relates to another, and how pieces come together. Once the ideas flow, students become immersed in the problem and hitch-hike other ideas.

Questioning activity

What: In this exercise in questioning, students create a list of 100 questions. There are no directions regarding what questions to ask and no judgments or criticism of questions.

Benefits: Students will ask a wide range of questions, increasing student productivity and motivation. As students focus on what they want to discover and generate their own questions, they pursue answers without prodding. Questions can be general or based on a particular topic or reading; instructors can give several examples from their own lists.

Brain-sketching

What: To solve a specific problem, students make sketches and then pass evolving sketches to their neighbors.

How: Students sit in a group of 6-8 around a table or in a circle. Questions or problems should be well explained and understood by each student. Each participant privately makes one or more sketches and passes the sketch to the person on the right when it is finished or when a brief set time has passed. Participants develop or annotate the sketches passed to them, or use them to inspire new sketches which are also passed in turn. For effective learning, sketches could be posted are discussed by students.

REFERENCE

- **Varnum, K. (2006). RSS4Lib: Innovatite ways libraries usehttp://blogs.fletcher.tufts.edu.**
- **Wubels, T.(2007). Do we know community of practice.Technology, Pedagogy and education.**

* Dr. B.G. Pandya

Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 77 - 78
ISSN 2319 - 8168

ઈન્ટરનેટ આધારિત આઠમા ધોરણના વિજ્ઞાનની પ્રશ્ન સંચયિકાની રચના અને યથાર્થીકરણ

વર્ષોથી શિક્ષણજગતમાં અનેક નાના–મોટા સંશોધનો થઈ રહ્યા છે. જેમાના અમુક સંશોધનો મૂલ્યાંકનની પદ્ધતિમાં સુધારણા માટે થયા છે. જે સંશોધનનો મૂળ હેતુ તો શિક્ષણની ગુણવતા સુધારવા માટેનો જ છે. પ્રસ્તુત અભ્યાસ પણ વિદ્યાર્થીઓની પરીક્ષા પદ્ધતિની સુધારણા માટે હાથ ધરવામાં આવ્યો હતો. વિદ્યાર્થીઓમાં પરીક્ષા એટલે કાગળ, પેન, પ્રશ્નપત્ર જ સમજે છે. આ જૂની સંકલ્પનામાંથી તેમને બહાર લાવી આજના એકવીસમી સદીના ટેકનોલજીના યુગમાં પરિક્ષાની સંકલ્પના તેમને સમજાવવા પ્રસ્તુત અભ્યાસ થયો. ત્યારબાદ આધુનિક પધ્ધતિથી પરીક્ષા લેવાઈ છે. આ અભ્યાસ માટે નીચે મુજબના હેતુઓ રાખવામાં આવ્યા (૧) આઠમાં ધોરણના વિજ્ઞાનના એક થી ત્રણ પ્રકરણો પર જુદા–જુદા પ્રકારના પ્રશ્નનોની રચના (૨) રચાયેલા પ્રશ્નોની અજમાયશ કરી સરળતા–મૂલ્ય, તારવણી–મૂલ્યો અને વિકર્ષકોની અસરકારકતા (૩) કમ્પ્યુટરીકૃત પ્રશ્નસંચયિકાની રચના અને અજમાયશ. પ્રસ્તુત અભ્યાસમાં બહુવિકલ્પવરણી, ખાલીજગ્યા, ખરાં–ખોટાં વિધાનો, જોડકાં પ્રશ્નોનો સમાવેશ કરવામાં આવ્યો હતો. તેમજ પરત્પાત્રોને સ્તરીકૃત યાદચ્છિક ઝુમખામાં પદ્ધતિથી પસંદ કરવામાં આવ્યા હતા તેમજ પ્રસ્તુત અભ્યાસમાં પ્રશ્નાવલી અને મુકતોતર અભિપ્રાયાવલી એમ બે પ્રકારના ઉપકરણની રચના કરવામાં આવી હતી પ્રસ્તુત અભ્યાસના તારણો નીચે મુજબ મળ્યા હતા (૧) પ્રકરણ–૧ની કુલ ૯૦ કલમોમાંથી ૮૯ કલમો યોગ્ય નીવડી હતી. (૨) પ્રકરણ–૨ની કુલ ૯૦ કલમો યોગ્ય નીવડી હતી. (૩) પ્રકરણ–૩ની કુલ ૯૩ કલમો યોગ્ય નીવડી હતી. તેમજ મુકતોતર અભિપ્રાયવલીમાં વિદ્યાર્થીઓ દ્વારા મળેલા જવાબના તારણો આ મુજબ હતા (૧) ઈન્ટરનેટ (કમ્પ્યુટર) ના માધ્યમ દ્વારા ૯૦% વિદ્યાર્થીઓને કસોટી આપવી ખૂબ જ ગમી (૨) ૮૦% વિદ્યાર્થીઓ ભવિષ્યમાં પેપર–પેન્સિલ કસોટી કરતા ઓનલાઈન કસોટી આપવાને સમર્થન આપ્યું. (૩) ૩૦% વિદ્યાર્થીઓને કમ્પ્યુટરનું સામાન્ય જ્ઞાન ન હોવાથી તેવો આ કસોટી આપવા માટે મુશ્કેલી અનુભવતા હતા.

ભૂમિકા

વર્ષોથી શિક્ષણ સુધારણાના પ્રયત્નો થઈ રહ્યા છે. શિક્ષણની ગુણવત્તા સુધારી ઉત્તમોત્તમ શિક્ષણ બનાવવા કેટલાક પ્રયાસો થઈ રહ્યા છે. શિક્ષણની ગુણવત્તા સુધારવા માટે અધ્યાપન,અધ્યાપન પદ્ધતિ, અભ્યાસક્રમ, મૂલ્યાંકન વગેરેમાં સુધાણા કરવામાં આવે છે અને અસરકારક શિક્ષણ બનવાની ઝુંબેશમાં સારું વર્ગખંડ અધ્યાપનકાર્ય એક જ માર્ગ નથી અને તે પૂરતું પણ નથી તેના ઘણા જ રસ્તા છે. પદ્ધતિ છે, પ્રયુકતિ છે. તેમાનું એક મૂળભુત સોપાન છે પરિક્ષા સુધારણા કે આદર્શ મૂલ્યાંકન પદ્ધતિ સાંપ્રત સમયમાં મૂલ્યાંકન કે પરિક્ષા સુધારણાના ક્ષેત્રમાં અનેક નાના મોટા પાયાના સશોધનો થઈ રહ્યા છે. તેમાં પ્રશ્નપત્ર રચના, સ્વાધ્યાયના પ્રશ્નો તૈયાર કરવામાં પ્રશ્નસંચયિકાનું મૂલ્ય સ્વયંસિદ્ધ છે જ.

અત્યાર સુધી વિદ્યાર્થીઓના મન પરીક્ષા એટલે કાગળ, પેન, પ્રશ્નપત્ર અને સહાધ્યાયીઓ સાથેની બેઠક. એટલે કે પરંપરાગત રીતે ચાલ્યું આવે છે એ જ વિદ્યાર્થીને ઈચ્છા હોય કે ન હોય પરિક્ષા તો આપવી જ પડે. આ જુની રૂઢિથી બહાર લાવવા માટે અને વિદ્યાર્થીઓની પરિક્ષાની સંકલ્પના કાગળ, પેન, પ્રશ્નપત્રથી માંડીને કમ્પ્યુટર સુધી વિસ્તરે. વિદ્યાર્થીઓ ઈચ્છિત સમયે, સ્થળે, શિક્ષક વગર અને ઈચ્છિત ગુણાંકયુકત કસોટી આપી શકે. તેમજ આ સંચયિકા સાર્વત્રિક બને તેમજ સરળ, સહજ અને પ્રચીન પદ્ધતિઓથી થોડી વૈવિધ્યવાન બને તે માટે 'વિશ્વની બારી' સમા ઈન્ટરનેટ સિવાય યોગ્ય અને યથાર્થ માર્ગ બીજો કયો હોઈ શકે ?

આમ, વિદ્યાર્થીઓની અધ્યયનમાં, શિક્ષકને અધ્યાપનમાં, પ્રાશ્નિકોને પ્રશ્નપત્રની રચનામાં, લેખકોને પાઠયપુસ્તક તથા સ્વાધ્યાયપોથીના લેખનમાં અને સંશોધકોને પરીક્ષણને લગતા સંશોધનમાં કમ્પ્યુટરીકૃત પ્રશ્નસંચયિકા ઉપયોગી બની શકે તે માટે સંશોધકે આ અભ્યાસ હાથ ધરવાનો નમ્ર પ્રયાસ કર્યો હતો.

અભ્યાસના હેતુઓ નીચે મુજબના હતા

૧. આઠમાં ધોરણના વિજ્ઞાનના એકથી ત્રણ પ્રકરણો પર જુદા જુદા પ્રકારના પ્રશ્નોની રચના કરવી.

૨. રચાયેલા પ્રશ્નોની અજમાયશ કરી સરળતા–મૂલ્ય, તારવણી–મૂલ્ય અને વિકર્ષકોની અસરકારકતા તપાસવી.

૩. રચાયેલ પ્રશ્નોની યોગ્યતા ચકાસવી.

* Lecturer, Shree Sahjanand B.Ed. College, Akwada

૪. કમ્પ્ટરીકૃત પ્રશ્નસંચયિકાની રચના કરવી.
૫. ઈન્ટરનેટ આધારિત આઠમા ધોરણના વિજ્ઞાન પર તૈયાર કરેલ કમ્પ્યુટરીકૃત પ્રશ્નસંચયિકાની
અજમાયશકરવી.

અભ્યાસના પ્રશ્નો નીચે મુજબના હતા

૧. અજમાયશ કરેલા પ્રશ્નો યોગ્ય સરળતા–મૂલ્ય ધરાવે છે ?
૨. અજમાયશ કરેલા પ્રશ્નો યોગ્ય તારવણી–મૂલ્યો ધરાવે છે?
૩. અજમાયશ કરેલા બહુવિકલ્પ પ્રકારના પ્રશ્નો પૈકી કેટલા પ્રશ્નો વિકલ્પોની દ્રષ્ટિએ યોગ્ય છે?
૪. અજમાયશ કરેલા પ્રશ્નો પૈકી કેટલા પ્રશ્નો પ્રશ્નસંચયિકામાં સમાવિષ્ટ કરવા યોગ્ય છે?

પ્રસ્તુત અભ્યાસ માટે નીચે મુજબની કલમોની રચના કરવામાં આવી હતી.

સૌ પ્રથમ પ્રશ્નસંચયિકાની રચના માટે સંશોધકે સંબંધિત સાહિત્યનો અભ્યાસ કર્યો હતો. અભ્યાસક્રમને લગતા પુસ્તકોનો અભ્યાસ કરી, શૈક્ષણિક મુદ્દા પરથી પાઠયક્રમનું વિશ્લેષણ કર્યું હતું. પાઠયક્રમના મુદ્દા અને પેટા મુદા અનુસાર નીચેના ચાર પ્રકારના પ્રશ્નોની રચના કરી હતી. જેમાં બહુવિકલ્પવરણી વાળા, ખાલી જગ્યા પ્રકાર, ખરાં ખોટા વિધાનો પ્રકાર તથા જોડકાં પ્રકારના પ્રશ્નોની રચના કરી હતી. પાઠયક્રમના તમામ મુદ્દાઓને આવરી લઈ કુલ ૨૭૩ પ્રશ્નોની રચના કરી અજમાયશ કરવાનું નકકી કર્યું હતું. સાથે સાથે સંશોધકે આ પ્રશ્ન સંચયિકાને ઈન્ટરનેટ પર મુકવા માટે વેબસાઈટની રચના,અને કમ્પ્યુટરીકૃત પ્રશ્નસંચયિકા રચવાનું અને તેની અજમાયશ કરવાનું નકકી કર્યું હતું.

પ્રાપ્ત માહિતીનું વિશ્લેષણ અને અર્થઘટન નીચે મુજબ કરવામાં આવ્યુ હતું

સંશોધકે તૈયાર કરેલ 'જવાબચાવી' મુજબ કસોટીના જવાબો તપાસ્યાં. જવાબપત્રોના વિશ્લેષણ દ્વારા સમગ્ર જુથ પરથી પ્રત્યેક કલમનું સરળતા–મૂલ્ય, તારવણી – મૂલ્ય પ્રકરણ–૩ માં દર્શાવ્યા મુજબ રાઠોડ(૨૦૦૦) રચિત NRT 2000 કમ્પ્યુટર પ્રોગ્રામ દ્વારા શોધવામાં આવ્યું હતું. તેમજ બહુવિકલ્પવરણી વાળા કલમોના વિકર્ષકોની અસરકારકતા સમગ્ર જુથ દ્વારા વિકર્ષકોને મળેલા પ્રાપ્ત પ્રતિચારના સૂત્રની મદદથી શોધવામાં આવી હતી. બહુવિકલ્પવરણી પ્રકારના પ્રશ્નોના વિકર્ષકોની અસરકારકતાની હાથેથીગણતરી કરી હતી મુકતોતર અભિપ્રાયાવલિ દ્વારા મળેલા વિદ્યાર્થીઓના પ્રતિચારનું વિષયવસ્તુ વર્ગીકરણ દ્વારા પૃથ્થકરણ કરવામાં આવ્યું હતું

પ્રસ્તુત અભ્યાસમાં પ્રશ્નોના સંદર્ભમાં નીચેના તારણો પ્રાપ્ત થયાં હતા.

સામાન્ય

૧. અજમાયશ કરેલ કલમોનું સરળતા–મૂલ્ય ૦.૨૯ થી ૦.૯૫ સુધી જોવા મળ્યું હતું.
૨. અજમાયશ કરેલ કલમોનું તારણી–મૂલ્ય –૦.૦૮ થી ૦.૪૯ સુધી જોવા મળ્યું હતું.
૩. અજમાયશ કરેલ કલમો પૈકી ૨૭૩ કલમોમાંથી ૨૭૨ (૯૯.૬૩%) કલમો સરળતા–મૂલ્ય,
તારવણી–મૂલ્ય અને વિકર્ષકોની અસરકારકતાની દ્રષ્ટિએ યોગ્ય નીવડી હતી.

પ્રશ્ન પ્રકારના સંદર્ભમાં

૧. બહુવિકલ્પવરણીવાળી ૮૩ કલમોમાંથી બધી જ (૧૦૦%) કલમો યોગ્ય નીવડી હતી.
૨. ખાલી જગ્યા પૂરો પ્રકારની ૮૦ કલમોમાંથી બધી જ (૧૦૦%) કલમો યોગ્ય નીવડી હતી.
૩. ખરાં–ખોટાં વિધાનો પ્રકારની ૯૦ કલમોમાંથી ૮૯ (૯૮.૮૮%) કલમો યોગ્ય નીવડી હતી.
૪. જોડકાં પ્રકારની ૨૦ કલમોમાંથી બધી જ (૧૦૦%) કલમો યોગ્ય નીવડી હતી.

પ્રકરણના સંદર્ભમાં

મુકતોતર અભિપ્રયાવલિ દ્વારા મળેલા સુચનોનું અર્થઘટન નીચે મુજબ હતું
૧. પ્રકરણ–૧ની કુલ ૯૦ કલમોમાંથી ૮૯(૯૮.૮૮%) કલમો યોગ્ય નીવડી હતી.
૨. પ્રકરણ–૨ની કુલ ૯૦ કલમો યોગ્ય નીવડી હતી.
૩. પ્રકરણ–૩ની ૯૩ કલમો યોગ્ય નીવડી હતી.
૪. ૧૦% વિધાર્થીઓને કમ્પ્યુટરમાં અંગ્રેજી શબ્દોનું જ્ઞાન ન હોવાથી મુશ્કેલી અનુભવતા હતા.

સંદર્ભસૂચિ

- બારડ, જે. ડી. (૧૯૯૪). ધોરણ નવના વિજ્ઞાન વિષયના ગુરુત્વાકર્ષણ એકમ પર પ્રશ્નસંચયિકાની રચના અપ્રકાશિત એમ. એડ્. લઘુ શોધનિબંધ, ભાવનગર યુનિવર્સિટી.
- વીડજા, વી.એન. (૨૦૦૩). જી.સી.ઈ.આર.ટી. ના પાયલોટ પ્રોજેકટ અંતર્ગત ધોરણ આઠના વિજ્ઞાન પાઠયપુસ્તકના પ્રકરણ એકથી ત્રણ ઉપર પ્રશ્નસંચયિકાની રચના અને યથાર્થીકરણ. અપ્રકાશિત એમ. એડ્. લઘુ શોધનિબંધ, ભાવનગર યુનિવર્સિટી.
- Gyanprayagam, N.S. (1981). Setting up of a Question Bank of Question Bank of objectives tests Abstaracted in Buch, M.B.(Ed.). Second Survey of Research in Education. Society for Education Research and Devlopment,Baroda

* J.V. Bhatt

Arts [ECONOMICS]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 79 - 80
ISSN 2319 - 8168

જિલ્લાની : ભાવનગર યુનિવર્સિટી

ભાવનગર જિલ્લો તેની શિક્ષણ અભિમુખતા માટે જાણીતો છે. સ્વાતંત્ર્ય પૂર્વે અહીના રાજાઓ શિક્ષણ માટે સજાગ હતા. અને તે માટે આયોજન કરવામાં આવેલુ છે. આમ છતાં જિલ્લાને તેની યુનિવર્સિટી મેળવતા ઘણો લાંબો સમય ગયો છે. આજે ભાવનગર યુનિવર્સિટી અભ્યાસક્રમોની વિવિધતા, વિધાર્થીઓની શિસ્ત, સામેલ ગીરી, અધ્યાપકોની સજજતા અને વહીવટની કુશળતા માટે પ્રશંશનીય બની છે. જિલ્લાની ઉચ્ચ શિક્ષણની આવશ્યકતાને સંતોષતી આ સંસ્થા માટે સમય સાથે બદલાતી રહી છે. સૌરાષ્ટ્રમાં ઉચ્ચ શિક્ષણનો આરંભ ૧૮૮૫ માં ભાવનગરમાં શામળદાસ કોલેજ ની સ્થાપનાથી થયો હતો. મુંબઈ યુનિવર્સિટી સાથે સંલગ્ન શામળદાસ કોલેજ શરૂ થઈ ત્યારે ગુજરાતમાં માત્ર બે જ કોલેજ હતી, અમદાવાદમાં ગુજરાત કોલેજ અને વડોદરામાં બરોડા કોલેજ, સૌરાષ્ટ્રમાં શામળ દાસ કોલેજની સ્થાપનાથી ઉચ્ચ સભ્ય સાથે સૌરાષ્ટ્ર બહાર જતા વિદ્યાર્થીઓ શામળદાસ કોલેજ તરફ વળ્યા અને દૂષ્ટિએ સૌરાષ્ટ્રની પ્રજાને ઉચ્ચશિક્ષણનાં સંસ્કારો આપવામાં ભાવનગર અગ્રેસર ભૂમિકા ભજવી છે.

શિક્ષણનો વ્યાપ વધતા ગુજરાને પોતાની યુનિવર્સિટી હોવી જોઈએ એવી ભાવના પણ વિકસી ૧૯૫૦ માં ગુજરાત યુનિવર્સિટી કાર્યન્વિત થઈ, ૧૯૬૦ માં ગુજરાત રાજય અસ્તિત્વમાં આવ્યું, બળવંતરાય મહેતા રાજયનાં મુખ્યમંત્રી પદે હતા, ત્યારે તેમનાં શાસનકાળ દરમિયાન ૧૯૬૩ માં સૌરાષ્ટ્રમાં બે નવી યુનિવર્સિટીઓ સ્થાપવાનો ઠરાવ અમલમાં આવ્યો, એ ઠરાવ અનુસાર ગુજરાત યુનિવર્સિટીનાં એ સમયનાં ઉપકુલપતિ ઓફ સાયન્સ અને એમ.જે.કોલેજ ઓફ કોમર્સ, ને સૌરાષ્ટ્ર યુનિવર્સિટીનાં ભાવનગર મથકનાં સંચાલન હેઠળ મુકવામાં આવી.

સૌરાષ્ટ્ર યુનિવર્સિટીનાં ભાવનગર મથક માટે પ્રથમ પ્રો.વાઈસ ચાન્સેલર તરીકે ૧૪ મી ઓગષ્ટ ૧૯૬૭ નાં રોજ હરભાઈ ત્રિવેદીનાં સમયમાં જ રાજય સરકારે ભાવનગરને નિવાસી (residential)યુનિવર્સિટી આપવાનાં હેતુથી ગુજરાત વડી અદાલતનાં નિવૃત ન્યાયમૂર્તિ એ.આર.બક્ષીની અધ્યક્ષતામાં એક સમિતિની રચના કરી. આ સમિતિએ વ્યાપક વિચાર વિમર્શને અંતે ૧૯૭૩ માં પોતાનો અહેવાલ સરકારને આપ્યો,જેમાં ભાવનગર ખાતે નિવાસી યુનિવર્સિટી સ્થાપવા માટે સર્વાનુમતે ભલામણ કરવામાં આવી.બક્ષી સમિતિનાં અહેવાલનો અમલ માટે ભાવનગર નિવાસી યુનિવર્સિટી ને લગતો ૨૬ મો ધારો ૨૭ મી એપ્રિલ ૧૯૭૮ માં પ્રો.આર.એસ.ત્રિવેદીની ભાવનગર રેસીડેન્સિયલ યુનિવર્સિટી પ્રથમ કુલપતિ તરીકે અને લલીતભાઈ ભટ્ટની કુલસચિવ તરીકે પસંદગી થઈ તે પછી સ્ટેચ્યુટ ઓર્ડિનન્સ ઘડવાની પ્રક્રિયા આરંભાઈ તે માટે પંદર સભ્યોની સમિતિની રચના કરવામાં આવી.આમ તા.૨૪ મી મે–૧૯૭૯ નાં રોજ ભાવનગર રેસિડેન્શિયલ યુનિવર્સિટી એક અલગ યુનિવર્સિટી તરીકે કાર્યન્વિત થઈ.

ભાવનગર રેસિડેન્શિયલ યુનિવર્સિટીનાં આરંભ કાળે રસાયણ વિભાગ, ગણિતશાસ્ત્ર, અર્થશાસ્ત્ર, વાણિજય, શિક્ષણ અને ભૌતિકવિજ્ઞાનનાં વિષયોમાં યુનિવર્સિટીનાં સીધા સંચાલન હેઠળ અનુસ્નાતક કેન્દ્રો ચાલતા હતાં. યુનિવર્સિટી ગ્રાન્ટસ કમિશનની આર્થિક સહાય માટે પ્રયાસો થયા. યુ.જી.સી.ની સૂચનાની યુનિવર્સિટી ધારામાં સુધારો કરીને ભાવનગર રેસિડેન્શિયલ યુનિવર્સિટીનું નામાભિધાન બદલીને ભાવનગર યુનિવર્સિટી કરવામાં આવ્યુ. જેને પરિણામે ભાવનગર યુનિવર્સિટીનાં સીમા વિસ્તાર

* Lecturer, S.V. Arts & Commerce College, Mandavi-Kutchh

ભાવનગર શહેર પુરતો મર્યાદિત ન રહેતા સમસ્ત ભાવનગર જિલ્લાને એમાં આવરી લેવાયો.

૧૯૮૭ માં ડોલર રાષ્ટ વસાવડા, ભાવનગર યુનિવર્સિટીનાં પ્રથમ ઉપકુલપતિ થયા. ગુજરાતી, અંગ્રેજી, હિન્દુ, મનોવિજ્ઞાન, ઈતિહાસ સમાજશાસ્ત્ર અને આંકડાશાસ્ત્ર જેવા અનુસ્નાતક તેની માંગ વધતા સ્વનિર્ભર સંસ્થાઓ શરૂ થાય છે, આ રીતે ભાવનગર યુનિવર્સિટી સાથે સંલગ્ન સ્વનિર્ભર કોલેજો આવવા લાગી છે.

સ્વનિર્ભર કોલેજો વિશે મંતયોમાં વિવાદ છે. તજજ્ઞો આવી સંસ્થાઓ પરત્વે દેખરેખ રાખવાનું ખુબ જ જરૂરી ગણે છે,(M.SEN-1999) કેમ કે નહી તો, શિક્ષણ કમાણી માટેનો વ્યવસાય થઈ જવાની ભીતિ છે, હજુ આપણે ત્યાં ઉચ્ચ શિક્ષણ લેનારા ની ટકાવારી અન્ય વિકસતા દેશોની તુલનાએ નીચી છે. અને વસ્તીને વધારો તેમજ આવક વધારાની અસર થી માંગમાં સતત વધારો થતો રહે તેવી પરિસ્થિતિ છે. આ સાથે વૈશ્વિકરણનાં પ્રવાહ થી ઉચી આવક કમાવી શકતા અભ્યાસક્રમો પ્રચલીત થતા જાય છે. તો સ્વનિર્ભર સંસ્થાઓ માટે આકર્ષક સંજોગો સર્જાય છે. આ સંજોગોમાં વિદ્યાર્થીઓ ની શિક્ષણ માટેની તત્પરતા સંતોષવા સ્વનિર્ભર કોલેજો જ યોગ્ય વિકલ્પ બની રહે છે. વિશ્વનાં લગભગ બધા જ દેશોમાં આ વ્યવસ્થા શરૂ થઈ છે, અને સંસ્થાઓ ધ્વારા સમાજ હિત પણ જાળવી શકાય અને જરૂરી માનવ સંશાધન તૈયાર થઈ શકે તે માટે વિવિધ પ્રયોગો થતા જોવા મળે છે. આથી શિક્ષણનું આંતરમાળખુ વિસ્તૃત થયું છે. અને વિદ્યાર્થીઓને રોજગારીની તકો અને પ્રાપ્ત થતુ વળતરનો દર પણ સુધાર્યો છે. અલબત સંસ્થાઓ પરત્વે સતત નિરીક્ષણ પરિક્ષણ આવશ્યક બને છે. આ અંગે ગુજરાત સરકાર યોગ્ય રીતે નિયંત્રણ રાખી રહી છે. પ્રવેશના ધોરણો અને ફી બાબતે સરકારે નિયમોનો આગ્રહ રાખ્યો છે. તો આંતરમાળખાની સુવિધા તેમજ શૈક્ષણિક સ્ટાફની લાયકાત માટે યુનિવર્સિટી તકેદારી રાખતી હોય છે.

આ રીતે ભાવનગર જિલ્લામાં ઉચ્ચ શિક્ષણનો પ્રારંભ છેક ૧૮૮૫ માં શામળદાસ કોલેજની સ્થાપના થી થયે શરૂઆતમાં તે મુંબઈ યુનિવર્સિટી સાથે, ત્યારબાદ ગુજરાત યુનિવર્સિટી સૌરાષ્ટ્ર યુનિવર્સિટી સાથે જોડાણ થયેલ.

* Dr. P.M. Kasundra

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 81 - 85
ISSN 2319 - 8168

EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON REACTION AND CO-ORDINATION TIME OF TENNIS AND CRICKET PLAYER

The purpose of this study was to examine the effect of combination of biofeedback and autogenic training for Reaction and co-ordinations time of tennis and cricket player. The biofeedback involves the combination of body, mind and apparatus or machine. At the other hand autogenic training is a technique of self hypnosis which would help in developing relaxation. 40 male players 17 to 24 years of age of Lawn Tennis and Cricket Mahadev Desai Sharirik Shikshan Mahavidyalaya, Sadra. Dist. Gandhinagar. *of Gujarat Vidyapeeth were selected as the subject of the study. Audio-visual reaction timer, eye-hand coordination apparatus and GSR biofeedback were used to test reaction ability, and coordination. Paired t-test and applied for analyzing pre test and post test data of training of eight (8) week. It was observed that biofeedback training combined with autogenic training helped to improve reaction ability and coordination whereas reduce of experimental groups of Lawn Tennis and Cricket players.*

Key worlds: Reaction ability, coordination, lawn tennis and cricket.

Introduction:

India is a vast country with a lot of scope in the field of sports. But we find that our players do not fare so well at the international level in spite of the fact that there is a lot of talent with them. Leaving about other factors like the facilities available, researcher feels that this is due to because of the lack of concentration, co-ordination, self confidence and psychological training for the players / sports persons. There is a need to understand the Psychology & Physiology of the players viz. the tension, stress and trauma that they feel before the game and to train them to overcome that. In modern age, we have considered the role of sport psychology, within the overall field of sport and exercise science. We will consider sport psychology as a distinct discipline in more detail. It is true that sport psychology is a branch of sport and exercise science that focus on the psychological aspects of sports and exercise, but nowadays limits of sport psychology are not restricted, it has developed and is constructed broadly to include various recreational activities, competitive sports, and health oriented exercise program.

Methodology:

The purpose of this study was to find out the effect of The combination of biofeedback and autogenic training on performance enhancement of Indian sport person. Samples were consisted of 40 sports persons of national level includes 20 Tennis, 20 Cricket players and 40 control group (20 Tennis, 20 Cricket players for control group). They were selected from Inter university camps in their respective games at Mahadev Desai Sharirik Shikshan Mahavidyalay, SADRA in the year 2011-12. For the present investigation researcher has selected them for experimentation of the study. The inclusion and exclusion criteria was framed with the central aim of getting homogeneous, comparable and well defined sample. The subjects were only male and there age was ranging from 17 to 22 years. The Biofeedback

*** Proffesor, Mahadev Desai Sharirik Shikshan Mahavidhyalaya, Sadra**

and Autogenic training were applied for 8 week. Control group was not provided any biofeedback and autogenic training. The pre and post test was conducted for Reaction time and Co ordination by Audio visual reaction timer and eye hand co ordination apparatus respectively. Mean & standard deviation of experimental group and control group were calculated. Paired t-test was calculated and applied for the analysis of data.

In this program, researcher had provided 2 sessions per day. Each Session was of 40 minutes for 5 days in which Biofeedback along with autogenic training was involved. In morning session heaviness exercise was given and in evening session warmness exercise was given to the subjects. After completed the training programme the Post Testing was done on dependant variables.

Analysis of Data and Results :

Table 1

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON SIMPLE VISUAL REACTION TIME WITH REFERENCE TO TENNIS

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	0.1826	0.02631	**0.04227**
	Control	20	0.1822	0.02605	
Post test	**Experimental**	20	0.1586	0.0276	**3.33315****
	Control	20	0.1882	0.02856	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 1 comparing the means of simple visual reaction time for experimental group and control group of Pre-test, obtained t-value is not significant; it means both the groups were similar in beginning as far as simple visual reaction time is concerned. There is no significant difference between experimental group and control group for pre-test of Tennis. So, before experimentation both the groups were identical. Comparing the means of simple visual reaction time of experimental group and control group for post-test, calculated t-value is 3.33315, which is significant at 0.05 level.

Table 2

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON CHOICE VISUAL REACTION TIME WITH REFERENCE TO TENNIS

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	0.2449	0.03132	**0.84092**
	Control	20	0.2366	0.3148	
Post test	**Experimental**	20	0.2313	0.3288	**0.85497**
	Control	20	0.2396	0.02835	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 2 comparing the means of choice visual reaction time for experimental group and control group of pre-test, obtained t-value is not significant; it means both the groups were similar in beginning as far as choice visual reaction time is concerned. There is no significant difference between experimental group and control group for pre-test of Tennis. So, before experimentation both the groups were identical. Comparing the means of choice visual reaction time of experimental group and control group for post-test, calculated t-value is 0.85497, which is not significant. It means there is no significant difference between the choice visual reaction time of experimental group and control group.

Table 3

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON SIMPLE AUDIO REACTION TIME WITH REFERENCE TO TENNIS PLAYERS

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	0.1542	0.1216	**6.97794***
	Control	20	0.1901	0.01949	
Post test	**Experimental**	20	0.1433	0.01054	**9.11680****
	Control	20	0.2028	0.02724	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 3 comparing the means of simple audio reaction time for experimental group and control group of pre-test, obtained t-value is significant. There is significant difference between experimental group and control group for pre-test of Tennis. Comparing the means of simple audio reaction time of experimental group and control group for post-test, calculated t-value is 9.11680, which is significant at 0.05 level. It means there is a significant difference between the simple audio reaction time of

experimental group and control group after experimentation.

Table 4

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON CHOICE AUDIO REACTION TIME WITH REFERENCE TO TENNIS

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	0.2558	0.01443	**7.65561****
	Control	20	0.5014	0.14274	
Post test	**Experimental**	20	0.2473	0.01462	**8.94641****
	Control	20	0.5611	0.15618	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 4 comparing the means of choice audio reaction time for experimental group and control group of pre-test, obtained t-value is significant; There is significant difference between experimental group and control group for pre-test of Tennis. So, before experimentation both the groups were not identical. Comparing the means of choice audio reaction time of experimental group and control group for post-test, calculated t-value is 8.94641, which is significant at 0.05 level. It means there is a significant difference between the choice audio reaction time of experimental group and control group after experimentation.

Table 5

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON EYE HAND COORDINATION TIME WITH REFERENCE TO TENNIS

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	24.9500	5.04167	**2.68031***
	Control	20	29.7500	6.22284	
Post test	**Experimental**	20	17.3500	3.40704	**7.11344****
	Control	20	29.4500	6.80151	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 5 comparing the means of Eye hand coordination time for experimental group and control group of pre-test, obtained t-value is significant. it means both the groups were not similar in beginning as far as eye hand coordination time is concerned. There is significant difference between experimental group and control group for pre-test of Tennis. Comparing the means of eye hand coordination time of experimental group and control group for post-test, calculated t-value is 7.11344, which is significant at 0.05 level. It means there is a significant difference between the eye hand coordination time of experimental group and control group after experimentation.

Table 6

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON SIMPLE VISUAL REACTION TIME WITH REFERENCE TO CRICKET PLAYERS

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	0.1852	0.00944	**1.43595**
	Control	20	0.1977	0.03761	
Post test	**Experimental**	20	0.1627	0.01293	**3.97848****
	Control	20	0.2039	0.04441	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 6 comparing the means of simple visual reaction time for experimental group and control group of pre-test, obtained t-value is not significant; it means both the groups were similar in beginning as far as simple visual reaction time is concerned. There was no significant difference between experimental group and control group for pre-test of Cricket players. So, before experimentation both the groups were identical. Comparing the means of simple visual reaction time of experimental group and control group for post-test, calculated t-value is 3.97848, which is significant at 0.05 level. It means there is a significant difference between the simple visual reaction time of experimental group and control group after experimentation.

Table 7

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON CHOICE VISUAL REACTION TIME WITH REFERENCE TO CRICKET PLAYERS.

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	0.2801	0.01085	**0.84092**
	Control	20	0.2498	0.05177	
Post test	**Experimental**	20	0.2594	0.01487	**2.56602****
	Control	20	0.2517	0.05167	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 7 comparing the means of choice visual reaction time for experimental group and control group of Pre-test, obtained t-value is not significant; it means both the groups were similar in beginning as

far as choice visual reaction time is concerned. There was no significant difference between experimental group and control group for pre-test of Cricket players. So, before experimentation both the groups were identical. Comparing the means of simple visual reaction time of experimental group and control group for post-test, calculated t-value is 2.56602, which is significant at 0.05 level. It means there is a significant difference between the choice visual reaction time of experimental group and control group after experimentation.

Table 8

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON SIMPLE AUDIO REACTION TIME WITH REFERENCE TO CRICKET PLAYERS

Test	Group	N	Mean	SD	t-value
Pre test	Experimental	20	0.1607	0.01007	4.32289**
	Control	20	0.2011	0.04051	
Post test	Experimental	20	0.1464	0.01057	5.63128**
	Control	20	0.2037	0.04430	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 8 comparing the means of simple audio reaction time for experimental group and control group of pre-test, obtained t-value is significant; it means both the groups were not similar in beginning as far as simple audio reaction time is concerned. There was significant difference between experimental group and control group for pre-test of Cricket players. So, before experimentation both the groups were not identical. Comparing the means of simple audio reaction time of experimental group and control group for post-test, calculated t-value is 5.63128, which is significant at 0.05 level. It means and there is a significant difference between the simple audio reaction time of experimental group and control group after experimentation.

Table 9

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON CHOICE AUDIO REACTION TIME WITH REFERENCE TO CRICKET PLAYERS

Test	Group	N	Mean	SD	t-value
Pre test	Experimental	20	0.2605	0.01034	8.75372**
	Control	20	0.4826	0.11297	
Post test	Experimental	20	0.2448	0.00861	9.63739**
	Control	20	0.5290	0.13160	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 9 comparing the means of choice audio reaction time for experimental group and control group of pre-test, obtained t-value is not significant; it means both the groups were not similar in beginning as far as choice audio reaction time is concerned. There is significant difference between experimental group and control group for pre-test of Cricket players. So, before experimentation both the groups were not identical. Comparing the means of choice audio reaction time of experimental group and control group for post-test, calculated t-value is 9.63739, which is significant at 0.05 level. It means there is a significant difference between the choice audio reaction time of experimental group and control group after experimentation.

Table 10

THE EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON EYE HAND COORDINATION TIME WITH REFERENCE TO CRICKET PLAYERS

Test	Group	N	Mean	SD	t-value
Pre test	Experimental	20	27.2000	2.98417	3.35168**
	Control	20	30.0000	2.24781	
Post test	Experimental	20	19.3000	4.66905	9.74817**
	Control	20	30.4500	2.08945	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 10 comparing the means of Eye hand coordination time for experimental group and control group of Pre-test, obtained t-value is significant; it means both the groups were not similar in beginning as far as Eye hand coordination time is concerned. There is significant difference between experimental group and control group for pre-test of Cricket players. So, before experimentation both the groups were not identical. Comparing the means of eye hand coordination time of experimental group and control group for post-test, calculated t-value is 9.74817, which is significant at 0.05 level. It means H_o is rejected and there is significant difference between the eye hand coordination time of experimental group and control group after experimentation.

FINDINGS & CONCLUSIONS :

1. The independent variable, Biofeedback combined with autogenic training had effect on dependent variables, ie., simple visual reaction time, choice visual

reaction time, simple audio reaction time, and choice audio reaction time. Biofeedback combined with autogenic training has helped Tennis experimental group to improve their Reaction ability, whereas there was no change in Tennis control group which were not given treatment. Biofeedback combined with autogenic training has been effective to improve the Reaction ability of Tennis.

2. The independent variable, Biofeedback combined with Autogenic training had effect on dependent variables, ie., eye hand coordination time. The combination of Biofeedback and autogenic training has helped Tennis experimental group to improve Coordination, whereas there was no change in Tennis control group which were not given treatment. Biofeedback combined with autogenic training has been effective to improve the Coordination of the Tennis.

3. The independent variable, Biofeedback combined with Autogenic training had effect on dependent variables, ie., simple visual reaction time, choice visual reaction time, simple audio reaction time, and choice audio reaction time. Biofeedback combined with autogenic training has helped Cricket players experimental group to improve their Reaction ability, whereas there was no change in Cricket players control group which were not given treatment. Biofeedback combined with autogenic training has been effective to improve the Reaction ability of Cricket players.

4. The independent variable, Biofeedback combined with Autogenic training had effect on dependent variables, ie., eye hand coordination time, and eye hand coordination error. The combination of Biofeedback and autogenic training has helped Cricket players experimental group to improve Coordination, whereas there was no change in Cricket players control group which were not given treatment. Biofeedback combined with autogenic training has been effective to improve the Coordination of the Cricket players.

REFERENCES

- Abadie, B.R., et al., (1989). Effect of competitive outcome on state anxiety. *Perceptual and Motor Skills*, 69(3) 1057 - 1058.
- Abreau, F., Templer, D.I. & Schuyler, B.A. (1990). Neuropsychological assessment of Soccer Players, *Neuropsychology*. 4(3) 175 - 181.
- Angele Mc Grady., et al., (1995). application of biofeedback to diabetes mellitus. *Clinical Applications of Biofeedback and Applied Psychology* 1(3), 8-11.
- Broota, K. D. (1992). *Experimental Design in Behavioral Research* (2nd ed.).New Delhi : Wiley Eastern Limited.
- Brucker, B.S. et al., (1984). Biofeedback in Rehabilitation. *Current Topics in Rehabilitation Psychology*. 36(4) 353 - 361.
- Caruso, C.M., Dzewaltowski, D.A., Gill, D.L. et al., (1990) Psychological and physiological changes in competitive state anxiety during non-competition and competitive success and failure. *Journal of Sport and Exercise Psychology*. 12(1) 6-20.
- Edwards, A.L. (1971). *Experimental Design in Psychological in Psychological Research*. New Delhi : Amerind Publishing Co. Pvt. Ltd.

Rice, K.M., Blanchard, E.B., & Purecell, M. (1993). Biofeedback treatments of generalized

* Dr. C.G. Jhala

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 86 - 87
ISSN 2319 - 8168

HEALTH PROMOTION DURING AGING

The general public is fast realizing that good health is not something that can be purchased at the corner pharmacy or from visiting a physician. Keeping the body and mind in optimal condition, well into old age, is largely a personal responsibility- a lifelong quest in which lifestyle and health habits makes all the difference. Three commonly accepted pillars of health promotion- wellness program during aging are nutrition, exercise and stress management. In the last three decade greater emphasis has been given on these three components by medical scientists too.

1. Nutrition

Nutritional status affects directly one's mental, emotional, and physical status at any given point. It is cumulative process as well as an immediate one. What one has eaten for breakfast will affect mood, energy level, and physical functioning. With advancing age, one's general state of health is determined to a great extent by the effects of dietary pattem over years.

There is considerable evidence that in our society overeating is a serious problem at all age levels. Eating too little can be harmful as well. People of old age who eat unbalanced diets may exhibit symptoms of nutrient deficiency including fatigue, iffitability, decreased appetite anxiety, loss of recent memory, insomnia, lack of concentration, and even delusional states. All too often these correctable signs of malnutrition are attributed erroneously to the serious problems of old age. Calcium, iron and B-complex vitamins are nutrients that have most often been found to be deficient in the diets of the elderly people. The role of various nutrients in the maintenance of good health must be emphasized throughout the life span but it is never too late to encourage positive dietary pattern in old age to remain 100% fit. The importance of eating a balanced diet that provides adequate amounts of protein, complex carbohydrates, vitamins and minerals must be emphasized during old age.

Proteins-

The body's requirement for protein can be easily met if foods are properly combined to provide usable proteins. Pulses and dairy products are complete proteins and should be consumed in adequate amount daily because they contain good proportions of all essential amino acids. Although combining of protein sources may appear somewhat complex initially, for anyone interested in pursuing it, it can be relatively easy and is a prudent choice that can lead to a lower food dudget, increased variability in food sources, and most importantly, a dramatic reduction in fat intake.

Carbohydrates-

Fruits vegetables and whole grain cereals (coarse cereals), those are sources of complex carbohydrate along with their fiber content, should be consumed in adequate amount. They should be taken unrefined to save the fiber content and avoid the reducation of B and E vitamins along with trace minerals during the process of refining. Whole grain foods include whole wheat cereals, oatmeal, whole wheat or rye crackers barley, brown rice and cornmeal. The best suggested snack foods are plain vegetables and fruis which are high in vitamins and low in calories, fats, sugar and salt.

Vitamins and Minerls-

Many older people do not get enough calcium, which is especially important to maintaining bone strength

*** Director of Physical Education, M.K. Bhavnagar University, Bhavnagar**

and avoiding osteoporosis (a bone disease).

2.Exercise

one of the unique feature of human body is that the more it is used- within reasonable limits – the better it works. There is ample suggestive evidence that exercise is a preventive action against a multitude of diseases. Not only do the lungs and circulatory system work better but the digestive system is stimulated, bowel function improves, and back weakness and pain are often prevented. Bones are greatly benefited from physical exercise.

Jogging, brisk walking asanas, pranayam should be integral part of daily routine. Such a regular programe improves functions of heart and lungs, enhances muscular strength and flexibility, helps in maintaining homeostatic balance and reverse the several obvious physical decline. There is a least doubt in stating that regular physical exercise and asanas- pranayam combine helps in human body to maintain , repair and improves the reversing capacity to an amazing degree. It also elevates levels of high density lipoproteins (HDL cholesterol) which is belived to slow or resist the built up cholesterol existing in the arteries in aged people. Other risk factors such as stress, obesity and hypertension are being reduced significantly by certain exercise.

3. Stress Management

Old age is often followed by a series of losses-loss of financial security and status, loss of social support and loss of loved ones. There circumstances, coupled with negative stereotype of aging and feelings of inadequacy can cause high levels of stress and tension. Stress is a significant risk for heart disease and stroke and is known to be contributor to nearly all chronic illness. Consequently, reducing or managing excessive stress is essential for improving health and managing it as well as preventing chronic disease.

Technique for relaxation to reduce stress are multiple and varied . There are several common factors in all those techniques. Few of them, which are easy to adopt, are given here to be practiced.

A. The Quieting Response:- The quieting response offers a mechanism for arriving at a appropriate tension level by keeping a balance between relaxation and over taxation of the body system. This techniques focuses on three behavioral skills for reducing tension:

(a) Recognizing instantly undesirable increase in physiological response.

(b) Reducing both skeletal and smooth muscle activity.

B.Meditation:- Meditation is a calm silencing of the mind that develops concentration and increase in mental activity. It Is a form of self-listening and a process of bringing mind and body to calmness along in the letting healing energy, and getting in touch with one's inner self. Preksha Meditation is a system of meditation which involves the Processof the concentration of perception. it ultimately brings about several significant changes in physiology of body, in terms of lowering of metabolic rate. Decline in metabolic rate and decreased heart rate and decresed heart rate, less oxygen consumption and elevated omission of alpha brain waves all these, bring about physical relaxion and mental calmnesss. This lays the foundation of balancad mind-body interation. Finally it affects it physical & mental health. There are eight integral components of preksha Meditation which are very useful in combating the disastrous effects of stress.

C. Preventive Imagery: - Some self-care practices require considerable investments of time, efforts, and planning, others are relatively simple, such as use of preventive imagery. Imagery and creative visulization have a long varied effects of healing. It involves techniques of relaxion, pain control, and autonomic self regulation, It basically yields greater self-awareness in relation to one's health through introspection and has been proved to be most useful therapeutic tool to take better care of old people. The process of preventive imagery is being practiced well in the system of Preksha Meditation, where imagery visulization leads to on enhancements of the immune system. During this process, the principle of self caring of body-mind-spirit is to be taken into consideration which shows a far-reaching impact upon health-care system, perticularly in order people who haeve well developed capability of following the concepts.

* Dr. G.M. Patel

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 88 - 90
ISSN 2319 - 8168

A COMPARATIVE STUDY OF ANTHROPOMETRY OF NATIONAL LEVEL PLAYERS OF KARATE, JUDO AND WRESTLING

The aim of the present study was to find out the anthropometrical difference among national level payers of Karate, Judo and Wrestling. 15 players in each game and total 45 of national level players were selected as the subject of the study. Height, circumference of arm, circumference of chest, circumference of waist, circumference of thigh and circumference of calf were selected as anthropometrical variables. F (ANOVA) was applied for statistical analysis at 0.05 level of significance. The result of the study shows that there were no significant difference of height and circumference of arm among Karate, Judo and Wrestling players. Whereas there was a significant difference of circumference of chest, waist, thigh and calf among karate, Judo and Wrestling players.

Key Words: Height, circumference of arm, circumference of chest, circumference of waist, circumference of thigh and circumference of calf.

INTRODUCTION:

There are various factors which contribute to player's performance among these anthropometry is one. In the last two decades anthropometry and related research in physical education and sports has shown its importance with the advancement of research and performance related matter. Researches show that these anthropometrical variables have a high impact on players' performance and vice versa.

It is often asked "what makes a successful athlete?" The answer is obviously multifaceted and involves emphasis on a range of factors including physiological, biomechanical and skill traits within different sports. The athlete's anthropometric dimensions, reflecting body shape, proportionality and composition, are variables which play some (sometimes a major) role in determining the potential for success in a chosen sport.

It was hypothesized that there will be significant difference of selected anthropometrical variables among Karate, Judo and Wrestling players.

METHODOLOGY:

For the purpose of this study 15 Karate players, 15 Judo players and 15 Wrestling players of national level were selected as the subject of the study. All the subjects were given instruction about the purpose and procedure of the study for their understanding. Height, circumference of arm, circumference of chest, circumference of waist, circumference of thigh and circumference of calf were selected as anthropometrical variables and measured in cm. For the statistical analysis F ratio (ANOVA test) was applied at the significance level of 0.05.

FINDINGS OF THE STUDY AND DISCUSSION:

Table – 2

Table showing the Mean, and F – ratio of Height of all three groups

Group	Mean	SS	df	Square of Mean	"F"
Karate	169.93	9.65	2	4.83	0.12
Judo	170.13				
Wrestling	171.00	1761.66	42	41.94	

* Asso. Proff. Mahadev Desai Sharirik Shikshan Mahavidhyalaya, Sadra

F 0.05 (2, 42) = 3.22

Table – 2 shows that there is not any significant difference among the means of height of Karate Judo and Wrestling players, as the calculated value of F ratio is 0.12 which is less than the tabulated value 3.22 with (2, 42) degree of freedom at 0.05 level of significance.

Table – 3

Table showing the Mean, and F – ratio of circumference of arm of all three groups

Group	Mean	SS	df	Square of Mean	"F"
Karate	28.6	7.78	2	2.89	0.45
Judo	29.27	270.55	42	6.55	
Wrestling	29.47				

F 0.05 (2, 42) = 3.22

Table – 3 shows that there is not any significant difference among the means of circumference of arm of Karate Judo and Wrestling players, as the calculated value of F ratio is 0.45 which is less than the tabulated value 3.22 with (2, 42) degree of freedom at 0.05 level of significance.

Table – 4

Table showing the Mean, and F – ratio of circumference of chest of all three groups

Group	Mean	SS	df	Square of Mean	"F"
Karate	84.33	368.05	2	184.03	11.71*
Judo	85.60	659.86	42	15.71	
Wrestling	90.93				

F 0.05 (2, 42) = 3.22

Table – 4 shows that there is significant difference in relation to circumference of chest as calculated F ratio is 11.71 which is higher value than the tabulated value 3.22 at 0.05 level of significance with (2, 42) degree of freedom.

Since the one way analysis of variance is found significant in relation to circumference of chest, the Least Significant Difference (LSD) test was applied to find out which of differences of means amongst the three groups were statistically significant. Results are presented in table – 5.

Table – 5

Table showing CD and Mean Difference of circumference of chest of all the groups.

No	Group A	Group B	Group C	CD	Difference
1	84.33	85.6		2.07	1.27
2	84.33		90.33	2.07	6*
3		85.6	90.33	2.07	4.73*

It is evident from table – 5 that significant difference exists between the means of Group A and Group C, Group B and Group C; whereas there is no significant difference exists between the means of Group A and Group B.

Table – 6

Table showing the Mean, and F – ratio of circumference of waist of all three groups

Group	Mean	SS	df	Square of Mean	"F"
Karate	75	270.4	2	135.2	22.68*
Judo	75	250.4	42	5.69	
Wrestling	80.20				

F 0.05 (2,42) = 3.22

Table – 6 shows that there is significant difference in relation to circumference of waist as calculated F ratio is 22.68 which is higher value than the tabulated value 3.22 at 0.05 level of significance with (2, 42) degree of freedom.

Since the one way analysis of variance is found significant in relation to circumference of waist, the Least Significant Difference (LSD) test was applied to find out which of differences of means amongst the three groups were statistically significant. Results are presented in table – 7.

Table – 7

Table showing CD and Mean Difference of all the groups.

No	Group A	Group B	Group C	CD	Difference
1	75	75		1.29	0
2	75		80.2	1.29	5.2*
3		75	80.2	1.29	5.2*

It is evident from table – 7 that significant difference exists between the means of Group A and Group C, Group B and Group C; whereas there is no significant difference exists between the means of Group A and Group B.

Table – 8

Table showing the Mean, and F – ratio of circumference of thigh of all three groups

Group	Mean	SS	Df	Square of Mean	"F"
Karate	49.80	107.25	2	53.63	6.50*
Judo	52.73				
Wrestling	53.33	346.66	42	8.25	

F 0.05 (2,42) = 3.22

Table – 8 shows that there is significant difference in relation to circumference of thigh as calculated F ratio is 6.50 which is higher value than the tabulated value 3.22 at 0.05 level of significance with (2, 42) degree of freedom.

Since the one way analysis of variance is found significant in relation to circumference of thigh, the Least Significant Difference (LSD) test was applied to find out which of differences of means amongst the three groups were statistically significant. Results are presented in table – 9.

Table – 9

Table showing CD and Mean Difference of all the groups.

No	Group A	Group B	Group C	CD	Difference
1	49.8	51.73		1.51	1.93*
2	49.8		53.33	1.51	3.53*
3		51.73	53.33	1.51	1.6*

It is evident from table – 9 that significant difference exists between the means of Group A and Group C, Group B and Group C, & Group A and Group C.

Table – 10

Table showing the Mean, and F – ratio of circumference of calf of all three groups

Group	Mean	SS	df	Square of Mean	"F"
Karate	30.27	168.94	2	84.47	17.63*
Judo	34.20				
Wrestling	34.53	201.06	42	4.79	

F 0.05 (2,42) = 3.22

Table – 10 shows that there is significant difference in relation to circumference of calf as calculated F ratio is 17.63 which is higher value than the tabulated value 3.22 at 0.05 level of significance with (2, 42) degree of freedom.

DISCUSSION OF HYPOTHESIS AND CONCLUSION:

The result of the study shows that there is no significant difference of height and circumference of arm among Karate, Judo and Wrestling players. Whereas the significant difference was observed in relation to circumference of chest, waist, thigh and calf among karate, Judo and Wrestling players. In a way the hypothesis is rejected in relation to height and circumference of arm and accepted in relation to circumference of chest, waist, thigh and calf of karate, judo and wrestling players.

REFERENCE

Books

⇨ Hussain Tahir P., **ANTHROPOMETRY IN PHYSICAL EDUCAITON AND SPORTS,** Delhi: Sports Publicaiton, 2011.

⇨ Norton Kevin & Olds Tim, ed. **ANTHROPOMETICA**, Sydney: Univeristy of New Wales Press Ltd, 2004.

Journales

⇨ **Hoffman J. R. at. al. (2009)** "Anthropometric and performance comparisons in professional baseball players", Journal of Strength and Conditioning Research 23 (8). Page 2173 – 2178.

* N.D. Chaudhari

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 91 - 94
ISSN 2319 - 8168

EFFECT OF SELECTED PILATES EXERCISES ON BODY COMPOSITION PERCENTAGE OF OBESE PEOPLE

The purpose of the present study was to find out the effect of selected pilates exercises on body fat percentage of obese people. The sample of 30 obese male between the age 20-30years were selected frome the general population of Gujarat vidyapith, sadra. Gandhinagar Gujarat India and the selected subjects were divided into two groupa i.e. 15 as experimental group and 15 as control group. In the present study purposive -random sampling technique was Students to select the sample. For measuring body fat percentage the body Composition Analyzer and WHO's BMI norms table were used. The BMI was calcuated easily from the following formula BMI= (Weight in kg /Square of height in meters). After assessment of per test as experimental treatment pliates exercise training was conduted for experimental group for 09 week and no traning give to control group. After the completion of 09 week pilates exercises trining the post test (measure body fat percentage) was conducted to know the significance difference. The 't' test was applied to analyxe the data. Statistically significant effect of selected pilates exercises was found on body fat percentage of experimental group as comared to control group at. 05 level of singificance.

Keywords: *Pilates, Body Composition, BMI, Obese People, Body Composition Analyzer.*

INTRODUCTION:-

Measurement, assessment and monitoring of Body Composition in humans have been three of the main challenges for health sciences professionals. Human body mass or weight is the broadest measure of body size and gives no information about metabolically active tissue such as muscle mass. Therefore, human Body Composition refers to the assessment of the absolute and relative amounts of bone, muscle, and fat mass measured by different methods depending on the technology at hand (e.g., skinfold calipers, hydrostatic weighing, Dual-emission X-ray absorptiometry). From these variables, fat mass or body fat percentage has been the most important estimate for health purposes given the strong correlation with cardiovascular diseases (Heyward and Wagner, 2004; Wang et al., 1995; Yasumura et al., 2000). Genetics, behavior (e.g., sedentary lifestyle, tobacco and alcohol consumption), and several diseases (e.g., bulimia, anorexia), may negatively impact Body Composition, where overweight, obesity, or a dramatic reduction of muscle mass, are some consequences of these conditions. For instance, children diagnosed with genetic nervous anorexia have shown anxious behavior associated with caloric restriction and low body mass index (BMI) (Dellava et al., 2010). More than 50% of the anorexic patients present with osteopenia at the time of examination (Ferna´ndez Soto et al., 2010). Also, a recent study by Thibault et al. (2010), links parental physical activity behavior to their offspring's increased risk forbecoming overweight and obese adolescents. Indeed, the risk decreases when at least one of the parents has a physically active lifestyle.

These ûndings emerge after more than 80 years devoted to the study of overweight and obesity (Hartman and Ghrist, 1929; Prble, 1923; Terriy, 1923). Today, researchers continue in their efforts to understand how new exercise techniques might impact Body Composition in humans. Although control

*** Assi. Proff. Mahadev Desai Sharirik Shikshan Mahavidhyalaya, Sadra**

or modiûcation of the Body Composition was not the primary motivation for Joseph Pilates in the early 30's; recently, his exercises and methods have become popular. Pilates created a body conditioning method ûrst called 'Contrology' (Pilates and Miller, 1945). Pilates introduced this method in the United States between 1930 and 1940 (Anderson and Spector, 2000), attracting choreographers and dance instructors who used his exercises for rehabilitation. After Pilates' death in 1967, the method became more widely spread and was introduced to other areas, under the name 'Pilates' (Latey, 2001). Today, dancers, athletes, and other population use Pilates for rehabilitation and to increase their physical activity and ûtness (Latey, 2001; von Sperling and Brum, 2006).

Pilates designed a comprehensive method of muscle stretching and strengthening with the goal of building a strong body under the philosophy of mind-over-body control. According to Lange et al. (2000), Pilates exercises provides beneûts in physiological (e.g., resistance, strength, muscle power), psychological (e.g., mood, attention, motivation), and motor functions (balance, static and dynamic posture, general coordination). In spite of these purported effects, researchers have questioned the lack of scientiûc evidence supporting the use of this method for ûtness and rehabilitation (Curnow et al., 2009; Da Fonseca et al., 2009; Sorosky et al., 2008; Sekendiz et al., 2007, von Sperling and Brum, 2006; Maher, 2004).

A review by Bernardo and Nagle (2006), demonstrated the effectiveness of Pilates exercises on strength and body alignment in dancers and gymnasts. Bernardo (2007), also showed Pilates effectiveness on ûexibility, transversus abdominis activation, pelvic-lumbar stability, and muscular activity in healthy adults. However, this effectiveness might be spurious due to methodological weaknesses, such as small sample size, the lack of true experimental research designs, selection bias, a poor validity and reliability of measurement instruments, as well as the lack of speciûc parameters for the application and description in the Pilates exercises used (i.e., description of the method). La Touche et al. (2008), found positive effects of Pilates exercises such as increased general function and pain reduction in patients with nonspeciûc low-back pain, and concludes that further research is needed to better understand what is the best combination of exercises and whether a doseeresponse relationship exists.

In a survey by von Sperling and Brum (2006), 18.4% of the subjects believed that regular practice of the Pilates method would increase lean mass and thus muscle tone. However, published scientiûc evidence on the effects of Pilates exercises on Body Composition are scarce. Therefore, the purpose of this review is to determine the effectiveness of Pilates exercises on Body Composition.

MATERIAL AND METHODS:

SUBJECTS:

To achieve the purpose of the study 30 male obese people were selected as subjects from general population of Gujarat Vidyapith, Ahmedabad Mahadev Desai Sharirik Shikshan Mahavidyalaya, Biogas Research & Microbiology Centre & Mahadev Desai College Of Social Work, Sadra. Dist. Gandhinagar.(Gujarat) India. Purposive sample technique was Students to select the subjects. Selected subjects were divided into two equal group i.e. 15 as experimental and 15 as control group. Age group ranged from 20-30 year.

VARIABLE AND INSTRUMENT:

For measuring body fat percentage the body composition analyxer and WHO's BMI norms table were used. The BMI was calulated easily from the following formula BMI = (weitht in kg/ Square of height in meters.) As far as experimental training is concern the ten week pilates exercise training was couducted in a systematic manner.

09 weeks training programme of various pilates exercise

CATEGORY	DURATION OF TIME	EXERCISE NAME
Beginner	3 weeks	The hundred, The Roll Up, Standing Foot Work series.
Intermdiate	3 Weeks	The Double Straight Leg stretch, The saw, The criss cross.
Advanced	3 Weeks	The Sawn Dive, The Shoulder Bridge, The side Band, The push Ups, Teaser iind.

Procedure:

For the measurment of body fat percentage as pre test the subjects were divided into two equal groups

i.e. 15 as experimental and 15 as control group. Body fat percentage was measured by Body Composition Analyzer and WHO's BMI norms table. The BMI was calculated easily from following formula.

BMI = (Weight in kg/Square of height in meters)

After assessment of pre test as experimental treatment pilates exercise training was conducted for experimental group for 09 week and no training given to control group. After the completion of 09 week pilates exercises training, the post test (measure body fat percentage) was conducted to know the significance difference.

Statistical Technique:

The 't' test was used to determine the effects of selected pilates exercise training no body fat percentage of obese people. Further the level of significance was set at 0.05 level.

RESULTS:

Table-1

Significance difference in pre-test(Body fat Percentage Score) between Control and Experimenta Group

Group	Mean	S.D	t-ratio
Control Group	33.7	2.88	**0.88**
Experimental Group	33.58	2.33	

Significant at 0.05 level t 0.05(28) = 2.04

It is observed from table 1 that the calculated 't' (0.88) is less than the tabulated 't' (2.04). Hence, it may be considere that there was no signinficant difference found between the control and experimental group on the pre test scores of body fat percentage.

TheThe scores are also illustrated in the fiaure-1

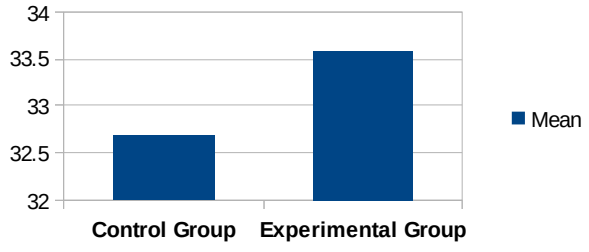


Table-2

Significance difference in Post-test(Body fat Percentage Score) between Control and Experimenta Group

Group	Mean	S.D	t-ratio
Control Group	32.91	3.04	**4.75***
Experimental Group	28.27	2.02	

Significant at 0.05 level t 0.05(28) = 2.04

Table-2 reveals that there was significant difference found between the control and experimental group on the post test scores of body fat percentage at 0.05 level of significance because the calculated 't' (4.75) is more than the tabulated 't' (2.04).

Above score are very well depicted in figure-2

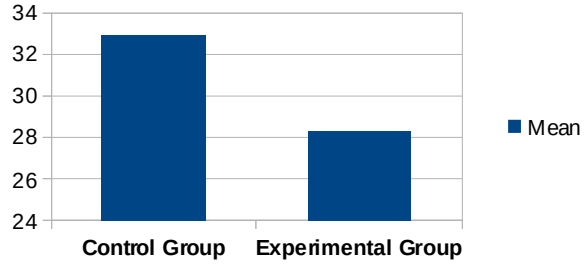


Table-3

Significance difference in Body fat Percentage Score between Pre- test and Post- test of Control Group

Group	Mean	S.D	t-ratio
Pre-test body fat percentage control group	32.7	2.88	**0.26**
Post-test body fat percentage control group	32.91	3.04	

Significant at 0.05 level t 0.05(28) = 2.04

It is observed from table-3 that the calculated 't' (0.26) is less than the tabulated 't' (2.04). Hence, it may be considered that there was no significant difference found in body fats percentage between pre- test of control group at 0.05 level of significance.

The scores are also illustrated in the figure-3

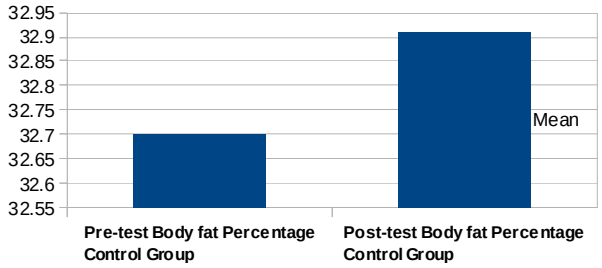


Table-4

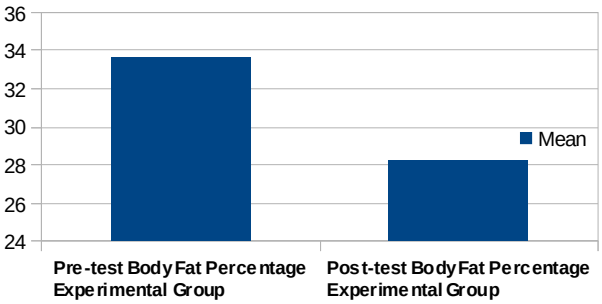
Significance difference in Body fat Percentage Score between Pre- test and Post- test of Experimenta Group

Group	Mean	S.D	t-ratio
Pre-test body fat percentage Experimenta group	33.58	2.33	**6.44***
Post-test body fat percentage Experimenta group	28.27	2.04	

Significant at 0.05 level t 0.05(28) = 2.04

It is observed from table-4 that the calculated 't' (6.44) is more than the tabulated 't' (2.04). Hence, it may be considered that there was significant difference found in body fats percentage between pre-test and post test of experimental group at. 0.05 level of significance.

The scores are also illustrated in the figure-4



DISCUSSION:

On the basis of obtained results, it has been observed that there was no significant difference found between control and experimental group on pre-test scores as body fats percentage. Results also revealed that there was no significant difference found in body fat percentage scores between pre-test and post-test of control group but as far as 09 week pilates exercise training is concern there was significant difference found in post test scores of body fats percentage between control and experimental group as well as in preand post-tast of experimental group.

By the pilates exerpcise trining the body fats percentage of experimental group was improved(reduced in body fats percentage) in comparison to control group which didn't have any training . So their performance with respect to pilates exercise training was found to be significant because by the 09 week pilates exercise training experimental group was also improved (reduced in body fats percantage) in comparison to pre and post-tast as body fats percentage. Which confirmed scientifically that piltes reduce body fat percentage.

CONCLUSIONS:

Within the limitation of the study it was concluded that there was no signinificant similartities found between control and experimental group on per test scores as body fats percentage. Further it was concluded that by the 09 weeks pilates exercise training the experimental group those having no training. The overall result showed that the effect of selected piltes exercises was significant on body fat percentage of experimental group as compared to control group.

REFERENCE

- Aaron, D., Mazzardo, O., Satchidanand, N., Thompson, A.,Jekal, Y., Nagle, E., Robertson, R., 2006. Why Dick and Jane don't run!! reasons why young adults don't participate in physical activities. Medicine and Science in Sports and Exercise 38 (5), 252.
- Anderson, B., Spector, A., 2000. Introduction to Pilates-based rehabilitation. Orthopaedic Physical Therapy Clinics of North America 9, 395e410.
- Baltaci, G., Bayrakci, V., Yakut, E., Vardar, N., 2005. A comparison of two different exercises on the weight loss in the treatment of knee osteoarthritis: Pilates exercises versus clinical-based physical therapy. Osteoarthritis and Cartilage 13 (1), 141.
- Bernardo, L.M., Nagle, E.F., 2006. Does Pilates training beneût dancers? An appraisal of Pilates research literature. Journal of Dance Medicine and Science 10 (1e2), 46e50.

* M.D. Bhatt

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 95 - 97
ISSN 2319 - 8168

A STUDY IN THE FIELD OF PHYSICAL FITNESS OF STUDENTS AND THEIR EFFECTS THROUGH MULTIMEDIA PACKAGE PROGRAMME

This is study's main aim was to study the effect of physical fitness training by the multimedia package on Saurashtra University students. 80 Students selected by randomly and it was between 18 to 28 years old and then divide in four Group (A, B, C, D), Group-A – Web Training, Group-B Video base training, Group-C-live Virtual training and Group-D- Control. The training programme was 12 weeks (6 days in a week) Aahpard youth fitness test taken by the teacher, that test was like this (1) Measurement of Muscular strength and endurance of hand and shoulder-Pull-ups test. (2) Measurement of Abdominal Strength and Endurance – Sit–ups. (3) Measurement of Speed and Co-ordination – Shatal Run. (4) Measurement of Leg Explosive strength – Standing Broad Jump (5) Measurement of Speed and Explosive Strength – 50 yard run – walk. (6) Measurement of Cardio-respiration endurance – 600 yard run-walk. In this research for these statistical analysis, ANCOVA was done. The level of significant was taken 0.05 for evaluation significant different of "F" value. On the base of available information by these examination Group-C live virtual training was effective for the improved performance comparatively Group-A Web baise training.

Introduction :

In today's Multimedia age, Physical Education has to develop constantly through new innovation and for this, teachers have to use different multimedia devices vis. Computer to see Web Sites, C.D. Player to watch Video etc. Through these he can make teaching interesting. In today's age people aquair various knowledge via multimedia where as people who do not use these multimedia devices may become less aware of new technology and also remain untrained. By using these, developed country like America, England, Germany, France, Australia, Japan etc. are able to drive a car without a driver. They can controle train, missble, research vehicles through remote control.

Thus, physical eduation is equally important for human's all round development and different innovations are also necessary. For development of a country, young generation's health is important. People become weak by using allmaterial luxurious things and don't forget weak young generation can not develop a country.

For this, study was made on the subject "Effect of Physical eligibility braining through multimedia package" of Saurashtra University students, which result is useful for young generation.

Method :

This study's main aim was to study "The effect of Physical fitness training by multimedia package" on Saurashtra University student. For these to learn effect on different / various Physical comp like pull ups, sit ups, shuttle run, standing broad jump, 60 yard run, 600 yard run or walking ability. For this Saurashtra University's male students of various age group from 18 to 28 years were selected randomly 20 male subjects made a group. Thus 4 groups were formed like A, B, C, D 'A' group was given Web base training, 'B' group was given Video base training, 'C' group was given live Virtual training and 'D' group was controlled.

*** Lecturer, Department of Phisical Education, Saurashtra University, Rajkot**

· 12 week training programme of Web base training was given to Saurashtra computer science's male students. Timing of this programme was 9.00 am. To 10.00 am. Sunday was totally rest.In this training, students received information of exercise through website. In the first month they done 50 Min. exercise, in the second month they done 55 Min. exercise and in the third month they done 60 Min. exercise.

· 12 week training programme of Video base training was given to students of Saurashtra University at P. G. Department of Physical Education Saurashtra University. Timing of this programme was 8.00 am. To 9.00 am. Sunday was totally rest.In this training, students received information of exercise through Video Tape. In the first month they done 50 Min. exercise, in the second month they done 55 Min. exercise and in the third month they done 60 Min. exercise.

· 12 week training programme of live Virtual training was given to the students of Saurashtra University M.P.Ed. Bhavan. Timing of this programme was 7.00 am. To 8.00 am. This training was done by Fitness trainer with all necessary instrument. In the first month they done 50 Min. exercise in the second month they done 55 Min. exercise and in the third month they done 60 Min. exercise. This all was done under supervision and instruction of fitness trainer.

Before starting the training schedule of 12 weeks student's pre and post test records were maintained. After this training schedule final test was also taken and noted. To find study result ANCOVA was applied. Through this youth fitness test various flexibility like (1) hand and shoulder's muscles muscular power and pull up to measure endurance (2) Bent sit up to measure Muscles strength and endurance of stomach (3) Shuttle run test to measurement combination of speed and motion (4) Standing broad jump to measure legs 'blasting force (5) 50 yard desh run to measurement speed and blasting force (6) 600 yard run-walk test to measure circulatory system, breathing endurance power. Under guidance of experts these were arranged.

Statistical Analysis :

For figurative analysis in this study, ANCOVA was applied. To see the difference of 'F' ratio, standard of appropriacy was 0.05 taken. Figurative Analysis of Pre and last test of subject hara of Group – A Web base training, Group-B Video training, Group-C live virtual training and Group-D control group.

Results :

(1) Measurement of Muscular strength and endurance of Hand and Should Pull-Ups. (Mean of four group's pre-pullup test)(Group-A = 74.1, Group-B = 69.5, Group-C = 60.50 Group-D= 60.5) 'F' value was 1.969 which is not significant at 0.05 level. Randomly allotment was successful in all group A, B, C and D All four groups' Post Pull up test's means were like this (Group-A = 79.5, Group-B = 88, Group-C = 87.5 and Group-D= 64) and it's 'F' value 9.667 which is significant at 0.05 level. The adjusted means of all four groups like this (Group-A = 73.96, Group-B = 85.66, Group-C = 91.43 and Group-D= 67.93) and It was significant F-value 35.56. The test significant between adjustment mean and critical difference LSD (Least Significant Difference) test was used.

(2) Measurement of Abdominal Muscular Strength and Endurance Sit-Ups. In ths Sit-ups test we have mean of four group's Pre-Sit-ups test (Group-A = 11.25, Group-B = 10, Group-C = 9 and Group-D= 9)'s 'F' value 0.379 random allotment was successful in all groups A,B,C,D all four groups Post-Sit-ups test's means were like this (Group-A = 13.75, Group-B = 16.75, Group-C = 45 and Group-D= 9.5) and it's 'F' value 90.64 which was significant at 0.05 level. The adjusted means of all four groups like this (Group-A = 12.66, Group-B = 16.61, Group-C = 45.62 and Group-D= 10.12) and it was significant 'F' value 181.03 The test significant between adjacent mean and captical difference LSD (Least Significant Difference) test was used.

(3) Measurement of Speed and Co-ordination Mean of four group's Pre-shuttle run test was (Group-A = 6.25, Group-B = 5, Group-C = 4.25 and Group-D= 7)'s 'F' value was 0.82 which was not significant at 0.05 level, and randomly allotment was successful in all groups A, B, C, D all four groups post Shuttle run test's means were like this (Group-A = 8.25, Group-B = 8.50, Group-C = 15 and Group-D= 6.50) 's 'F' value was 3.49 which was significant at 0.05 level.

The adjusted means of all four groups like this (Group-A = 6.690, Group-B = 8.425, Group-C = 15.82 and Group-D= 7.22) 's 'F' value 17.834 The test significant between adjacent mean and critical difference LSD (Least significant difference) test was used.

(4) Measurement of Leg Explosive Strength Standing Broad Jump. Mean of four group's Pre standing broad jump test was (Group-A = 29.5, Group-B = 34, Group-C = 34.75 Group-D= 34.75) it's 'F' value was 0.49 which was not significant at 0.05 level, and randomly allotment was successful in all groups A, B, C, D all four groups post standing broad jump mean was like this (Group-A = 36.5, Group-B = 43.5, Group-C = 51.75 and Group-D= 36.25) it's 'F' value 4.42 which was significant at 0.05 level. The adjusted means of all four groups like this (Group-A = 39.35, Group-B = 42.92, Group-C = 50.60 and Group-D= 35.10) and it was significant 'F' value was 14.87.The test significant between adjcement mean and critical difference LSD (Least si. Diff.) test was used.

(5) Measurement of Speed and Explosive Strength 50 yard Desh Run Mean of four group's pre 50 yard desh run test was (Group-A = 4.75, Group-B = 5.5, Group-C = 4.5 and Group-D= 4.5) It's 'F' value was 0.30 which was not significant at 0.05 level, and randomly allotment was successful in all group A, B, C, D. All four groups post test 50 yard desh run mean was like this (Group-A = 10.75, Group-B = 17.25, Group-C = 36.75 and Group-D= 5.75) It's value was 'F' value 57.13 which was significant at 0.05 level. The adjusted means of all four groups like this (Group-A = 10.75, Group-B = 17.27, Group-C = 36.74 and Group-D= 5.74) and It was significant 'F' value was 56.09 the test significant between adjucement mean and critical different LSD (Least Si. Diff.) test was used.

(6) Measurement of Cardio-Respiration Endurance 600 Yard Run-Walk Mean of four groups Pre 600 yard run walk test was (Group-A = 0.25, Group-B = 0.00, Group-C = 0.00 and Group-D= 0.00) It's 'F' value was 1.00 which was not significant at 0.05 level, and randomly allotment was successful in all groups A, B, C, D. All four groups post test 600 yard run-walk mean was like this (Group-A = 1.00, Group-B = 3.25, Group-C = 12.75 and Group-D= 0.00) and It's value was 18.00 which was significant at 0.05 level. The adjusted means of all four groups like this. (Group-A = 0.84, Group-B = 3.30, Group-C = 12.80 and Group-D= 0.05) and It was significant 'F' value was 18.01 The test significant between adjucement mean and critical difference LSD (least Si. Diff.) test was used.

Research Discussion :

It was significant improvement at 0.05 level in selected components like (1) Muscular strength and endurance of hand and shoulder (2) Abdominal muscular strength and endurance (3) Speed and co-ordination (4) Leg-explosive strength (5) Speed and explosive strength and (6) Cardio-respiration endurance by web base training video based and like virtual training. Such hypothesis of this study becomes significant.

There was more significant in performance of Group-C live virtual training comparatively. Group-A Web base training & Group-B Video base training.

So in Group-C live virtual training given by the teacher with all types of multimedia equipments and Group-A Web base training and Group-B Video base training but Group-D was control group they have not any kind of train guide line.

So, It is proved here that because of special type live virtual training (Group-C) performance was improved, so teaches was very important for learning in any kind of new knowledge and it was very useful to improve the performance.

REFERENCE

- ⇨ Bent, Renested, Miles Qwani and Ornstine Sunde, "Short term effect of strength and plyometric training on sprint and jump performance in professional soccer player". The journal strength and conditioning research, 22, No. 3, (May, 2008), 773-780.
- ⇨ Flucher, I. M., "The effect of combine cireling hurdle training on professional sprinting majors part of physical quality and middle distance race technique", http://www/s-paper.com/47021/index.html, (April, 2012).

* Dr. B.K. Joshi

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 98 - 101
ISSN 2319 - 8168

EFFECTIVENESS OF BIOFEEDBACK AND AUTOGENIC TRAINING ON REACTION AND CO-ORDINATION TIME OF TENNIS AND CRICKET PLAYER

The purpose of this study was to examine the effect of combination of biofeedback and autogenic training for Reaction and co-ordinations time of tennis and cricket player. The biofeedback involves the combination of body, mind and apparatus or machine. At the other hand autogenic training is a technique of self hypnosis which would help in developing relaxation. 40 male players 17 to 24 years of age of Lawn Tennis and Cricket Mahadev Desai Sharirik Shikshan Mahavidyalaya, Sadra. Dist. Gandhinagar. of Gujarat Vidyapeeth were selected as the subject of the study. Audio-visual reaction timer, eye-hand coordination apparatus and GSR biofeedback were used to test reaction ability, and coordination. Paired t-test and applied for analyzing pre test and post test data of training of eight (8) week. It was observed that biofeedback training combined with autogenic training helped to improve reaction ability and coordination whereas reduce of experimental groups of Lawn Tennis and Cricket players.

Key worlds: Reaction ability, coordination, lawn tennis and cricket.

Introduction:

India is a vast country with a lot of scope in the field of sports. But we find that our players do not fare so well at the international level in spite of the fact that there is a lot of talent with them. Leaving about other factors like the facilities available, researcher feels that this is due to because of the lack of concentration, co-ordination, self confidence and psychological training for the players / sports persons. There is a need to understand the Psychology & Physiology of the players viz. the tension, stress and trauma that they feel before the game and to train them to overcome that. In modern age, we have considered the role of sport psychology, within the overall field of sport and exercise science. We will consider sport psychology as a distinct discipline in more detail. It is true that sport psychology is a branch of sport and exercise science that focus on the psychological aspects of sports and exercise, but nowadays limits of sport psychology are not restricted, it has developed and is constructed broadly to include various recreational activities, competitive sports, and health oriented exercise program.

Methodology:

The purpose of this study was to find out the effect of The combination of biofeedback and autogenic training on performance enhancement of Indian sport person. Samples were consisted of 40 sports persons of national level includes 20 Tennis, 20 Cricket players and 40 control group (20 Tennis, 20 Cricket players for control group). They were selected from Inter university camps in their respective games at Mahadev Desai Sharirik Shikshan Mahavidyalay, SADRA in the year 2011-12. For the present investigation researcher has selected them for experimentation of the study. The inclusion and exclusion criteria was framed with the central aim of getting homogeneous, comparable and well defined sample. The subjects were only male and there age was ranging from 17 to 22 years. The Biofeedback and Autogenic training were applied for 8 week. Control group was not provided any biofeedback

*** Asst. Prof. Shah C.K. Municipal Commerce College, Kalol**

and autogenic training. The pre and post test was conducted for Reaction time and Co ordination by Audio visual reaction timer and eye hand co ordination apparatus respectively. Mean & standard deviation of experimental group and control group were calculated. Paired t-test was calculated and applied for the analysis of data.

In this program, researcher had provided 2 sessions per day. Each Session was of 40 minutes for 5 days in which Biofeedback along with autogenic training was involved. In morning session heaviness exercise was given and in evening session warmness exercise was given to the subjects. After completed the training programme the Post Testing was done on dependant variables.

Analysis of Data and Results :

Table 1

The effectiveness of biofeedback and autogenic training onSimple visual reaction time with reference to Tennis

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	0.1826	0.02631	**0.04227**
	Control	20	0.1822	0.02605	
Post test	**Experimental**	20	0.1586	0.0276	**3.33315****
	Control	20	0.1882	0.02856	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 1 comparing the means of simple visual reaction time for experimental group and control group of Pre-test, obtained t-value is not significant; it means both the groups were similar in beginning as far as simple visual reaction time is concerned. There is no significant difference between experimental group and control group for pre-test of Hockey. So, before experimentation both the groups were identical. Comparing the means of simple visual reaction time of experimental group and control group for post-test, calculated t-value is 3.33315, which is significant at 0.05 level.

Table 2

The effectiveness of biofeedback and autogenic training on Choice visual reaction time with reference to hockey

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	0.2449	0.03132	**0.84092**
	Control	20	0.2366	0.3148	
Post test	**Experimental**	20	0.2313	0.3288	**0.85497**
	Control	20	0.2396	0.02835	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 2 comparing the means of choice visual reaction time for experimental group and control group of pre-test, obtained t-value is not significant; it means both the groups were similar in beginning as far as choice visual reaction time is concerned. There is no significant difference between experimental group and control group for pre-test of Tennis. So, before experimentation both the groups were identical. Comparing the means of choice visual reaction time of experimental group and control group for post-test, calculated t-value is 0.85497, which is not significant. It means there is no significant difference between the choice visual reaction time of experimental group and control group.

Table 3

the Effectiveness of biofeedback and autogenic training on simple audio reaction time with reference to Tennis

Test	Group	N	Mean	SD	t-value
Pre test	**Experimental**	20	0.1542	0.1216	**6.97794***
	Control	20	0.1901	0.01949	
Post test	**Experimental**	20	0.1433	0.01054	**9.11680****
	Control	20	0.2028	0.02724	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 3 comparing the means of simple audio reaction time for experimental group and control group of pre-test, obtained t-value is significant. There is significant difference between experimental group and control group for pre-test of Tennis.Comparing the means of simple audio reaction time of experimental group and control group for post-test, calculated t-value is 9.11680, which is significant at 0.05 level. It means there is a significant difference between the simple audio reaction time of experimental group and control group after experimentation.

Table 4

The Effectiveness of biofeedback and autogenic training on choice audio reaction time with reference to Tennis

Test	Group	N	Mean	SD	t-value
Pre test	Experimental	20	0.2558	0.01443	7.65561**
	Control	20	0.5014	0.14274	
Post test	Experimental	20	0.2473	0.01462	8.94641**
	Control	20	0.5611	0.15618	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 4 comparing the means of choice audio reaction time for experimental group and control group of pre-test, obtained t-value is significant; There is significant difference between experimental group and control group for pre-test of Tennis. So, before experimentation both the groups were not identical. Comparing the means of choice audio reaction time of experimental group and control group for post-test, calculated t-value is 8.94641, which is significant at 0.05 level. It means there is a significant difference between the choice audio reaction time of experimental group and control group after experimentation.

Table 5

The Effectiveness of biofeedback and autogenic training on eye hand coordination time with reference to Tennis

Test	Group	N	Mean	SD	t-value
Pre test	Experimental	20	24.9500	5.04167	2.68031*
	Control	20	29.7500	6.22284	
Post test	Experimental	20	17.3500	3.40704	7.11344**
	Control	20	29.4500	6.80151	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 5 comparing the means of Eye hand coordination time for experimental group and control group of pre-test, obtained t-value is significant. it means both the groups were not similar in beginning as far as eye hand coordination time is concerned. There is significant difference between experimental group and control group for pre-test of Tennis. Comparing the means of eye hand coordination time of experimental group and control group for post-test, calculated t-value is 7.11344, which is significant at 0.05 level. It means there is a significant difference between the eye hand coordination time of experimental group and control group after experimentation.

Table 6

The Effectiveness of biofeedback and autogenic training On Simple visual reaction time with reference to Cricket players

Test	Group	N	Mean	SD	t-value
Pre test	Experimental	20	0.1852	0.00944	1.43595
	Control	20	0.1977	0.03761	
Post test	Experimental	20	0.1627	0.01293	3.97848**
	Control	20	0.2039	0.04441	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 6 comparing the means of simple visual reaction time for experimental group and control group of pre-test, obtained t-value is not significant; it means both the groups were similar in beginning as far as simple visual reaction time is concerned. There was no significant difference between experimental group and control group for pre-test of Cricket players. So, before experimentation both the groups were identical. Comparing the means of simple visual reaction time of experimental group and control group for post-test, calculated t-value is 3.97848, which is significant at 0.05 level. It means there is a significant difference between the simple visual reaction time of experimental group and control group after experimentation.

Table 7

The effectiveness of biofeedback and autogenic training on choice visual reaction time with reference to Cricket players

Test	Group	N	Mean	SD	t-value
Pre test	Experimental	20	0.2801	0.01085	0.84092
	Control	20	0.2498	0.05177	
Post test	Experimental	20	0.2594	0.01487	2.56602**
	Control	20	0.2517	0.05167	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 7 comparing the means of choice visual reaction time for experimental group and control group of Pre-test, obtained t-value is not significant; it means both the groups were similar in beginning as far as choice visual reaction time is concerned. There was no significant difference between experimental group and control group for pre-test of Cricket players. So, before experimentation both the groups were identical. Comparing the means of simple visual

reaction time of experimental group and control group for post-test, calculated t-value is 2.56602, which is significant at 0.05 level. It means there is a significant difference between the choice visual reaction time of experimental group and control group after experimentation.

Table 8

The effectiveness of biofeedback and autogenic training on Simple audio reaction time with reference to Cricket players

Test	Group	N	Mean	SD	t-value
Pre test	Experimental	20	0.1607	0.01007	4.32289**
	Control	20	0.2011	0.04051	
Post test	Experimental	20	0.1464	0.01057	5.63128**
	Control	20	0.2037	0.04430	

* Significant at $t._{05}$ level (2,40) = 1.69

As per Table 8 comparing the means of simple audio reaction time for experimental group and control group of pre-test, obtained t-value is significant; it means both the groups were not similar in beginning as far as simple audio reaction time is concerned. There was significant difference between experimental group and control group for pre-test of Cricket players. So, before experimentation both the groups were not identical. Comparing the means of simple audio reaction time of experimental group and control group for post-test, calculated t-value is 5.63128, which is significant at 0.05 level. It means and there is a significant difference between the simple audio reaction time of experimental group and control group after experimentation.

FINDINGS & CONCLUSIONS :

1. The independent variable, Biofeedback combined with autogenic training had effect on dependent variables, ie., simple visual reaction time, choice visual reaction time, simple audio reaction time, and choice audio reaction time. Biofeedback combined with autogenic training has helped Tennis experimental group to improve their Reaction ability, whereas there was no change in Tennis control group which were not given treatment. Biofeedback combined with autogenic training has been effective to improve the Reaction ability of Tennis.

2. The independent variable, Biofeedback combined with Autogenic training had effect on dependent variables, ie., eye hand coordination time. The combination of Biofeedback and autogenic training has helped Tennis experimental group to improve Coordination, whereas there was no change in Tennis control group which were not given treatment. Biofeedback combined with autogenic training has been effective to improve the Coordination of the Tennis.

3. The independent variable, Biofeedback combined with Autogenic training had effect on dependent variables, ie., simple visual reaction time, choice visual reaction time, simple audio reaction time, and choice audio reaction time. Biofeedback combined with autogenic training has helped Cricket players experimental group to improve their Reaction ability, whereas there was no change in Cricket players control group which were not given treatment. Biofeedback combined with autogenic training has been effective to improve the Reaction ability of Cricket players.

4. The independent variable, Biofeedback combined with Autogenic training had effect on dependent variables, ie., eye hand coordination time, and eye hand coordination error. The combination of Biofeedback and autogenic training has helped Cricket players experimental group to improve Coordination, whereas there was no change in Cricket players control group which were not given treatment. Biofeedback combined with autogenic training has been effective to improve the Coordination of the Cricket players.

REFERENCES

- Abadie, B.R., et al., (1989). Effect of competitive outcome on state anxiety. *Perceptual and Motor Skills*, 69(3) 1057 - 1058. Abreau, F., Templer, D.I. & Schuyler, B.A. (1990). Neuropsychological assessment of Soccer Players, *Neuropsychology*. 4(3) 175 - 181.
- Angele Mc Grady., et al., (1995). application of biofeedback to diabetes mellitus. *Clinical Applications of Biofeedback and Applied Psychology* 1(3), 8-11.

* A.D. Chaudhari

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 102 - 104
ISSN 2319 - 8168

EFFECT OF SOCIO-ECONOMI STATUS AND ANXIETY ON THE PERFORMANCE OF PHYSICAL EUCATION STUDANT

INTRODUCTION:

Some competitors do better when their anxiety levels are high and that moderate levels of anxiety seeems to elicit increase in performance. Some performers react adversely to the competitive situation by reacting states of hyper-anxiousness which often results in the inability to achieve optimum levels of performance. Hence, it is generally considered that perormance is optimal at intermediate level of anxiety. The present Socio-Economic Status has been to seek clarity of distinct aspects of Social and Economic status of an individual separately and integrally. The connection of hurlock. 'The economic status of a family freqent;y determines what the family social status will be' dose not appear to be appropriate and quite vocal in the Indian Socio-cultural setting. Keeping this in view, it has been considered appropriate to determine social and economic status separately in two areas of social and economic aspects, and then the two scores of different areas switched to one continuous or in standrd scores, which can give the Socio- Econmic status of an individual.

MATERIALS AND METHODS:

The athletes for the study have been selected from Gujarat University, Ahamedabad Socio Economi Status is an independent variable and based on Socio Economi Status criteria. A sample of 120 athletes were selected on whom anxiety scale was administered, to asses the level of anxiety. Subsequently, categories based on level of anxiety were made. The other variables like religion and sex wer taken to match the saple. Thus there are an equal namber of sports persons on variables like Soci Economi Status, anxiety, religion and sex. The sample design is as under.

TABLE-1
DISTRIBUTION OF SAMPLE

Category	High Socio-Economic Status	Low Socio-Economic Status	Total
MEN	30	30	60
WOMAN	30	30	60
TOTAL	60	60	120

TOOLS USED:

1 Personal Bio-data: This is framed to collect the demographic variables of the athletes.

2 Anxiety Scale: This scale is developed by Sinha,1975, which consists of 100 items. The response categories are true of false. The responese are scored with the help of manual.

3 Socio-Economic status Scale: Devloped by Gupta and Chauhan 198, was used in the present study to measure social, educational, professional and economic perspe ctive of the norms that were given in the manual.

STATISTICAL TECHNIQUES:

1 The t-tests are calculated to examine the difference betweeen the saple subgroups.

2 The correlation r-test is done to know the relationship.

RESULTS:

1. Socio-Economic status

*** Asst. Prof., N.M. College of Agriculture, Navsari**

TABLE-2

Sports performanace 100 meters sprint in two Socio-Economic Status

Socio-Economic Status	Mean	SD	t-value
High(N=60)	10.5	1.4	3.0**
Low (N=60)	11.31	1.54	

***Significant at 0.01 level**

Results given in table-2 indicate that the performance of high Socio- Economic Status athletes is significantly higher 10.50 than they are of low Socio economic Status11.31. The t-value of 3.0 is significant at 0.01 leveks to rveal significant differences between the two groups. It can be noted that one who takes less time in sprint speed test of 100 meters is said performance is found to be in high Socio economic Status group. Availing more excellence in sports activities.

2. ANXIETY

TABLE-3

Sports performanace 100 meters sprint in two anxiety

ANXIETY	Mean	SD	t-value
High(N=60)	13.21	2.08	9.66**
Low (N=60)	10.02	1.57	

***Significant at 0.01 level**

Table-3 clearly reveals that anxiety is an important factor of sport activity. It can be observed that the mean score of high anxiety group is significant lower 13.21 than that of low anxiety group 10.02. The t-value 9.66 is significant. Then higher anxiety is found to inhibit the performance isn 100 meter sprint.

3. RELIGION

TABLE-4

Sports performanace 100 meters sprint in two religions

RELIGION	Mean	SD	t-value
High(N=60)	11.91	1.49	1.92 N
Low (N=60)	11.39	1.51	

N- Not significant

Table – 4 cleary reveal that there is no significant different in sports performance between two rgligions. The t-value is not significant. Thus religious belongining ness has nothing to do whith sports performance.

4.SEX

TABLE-5

Sports performanace 100 meters sprint in male-female subgroups

SEX	Mean	SD	t-value
MALE (N=60)	9.79	1.56	5.81**
FEMALE (N=60)	11.71	2.01	

***Significant at 0.01 level**

Table-5 reveals that the male athletes have significantly higher means 9.79 than female 11.71 in 100 meter sprint. The t-value 5.81 is significant at 0.01 level. This clearly indicates that there are significant sex differences in sports performance. Sex belongingness is a factor, which makes a difference in better achievement of sports activites.

TABLE-6

CORRELATION BETWEEN VARIABLES

VARIABLES	r-VALUES
Anxiety Vs Performance	0.91*
Sex Vs Performance	0.52*
Socio-Economic Status Vs Performance	0.84*
Religions Vs Performance	0.11 **NS**

***Significant at 0.01 level**

N- Not significant

An attempt is made to correlate variables with performance and table – 6 demonstrates the r- value. R- values are significant between anxiety and performance Socio-Economic Status and performance at 0.01 level. This reveals that there is a strong relationship between these variables and performance in 100 meter sprint. R-value between religion and performance is not significant which speaks the fact that religon is not correlated with performance of athletes.

CONCLUSIONS:

1. High Socio-Economic Status sports persons have significantly higher performance in 100 meters sprint than low Socio-Economic Status respondents.
2. There is a significant effect of anxiety on sports performaance. Lower anxiety group achieved better.
3. There is significant sex difference in sports performance, males achieved better than females.
4. There is significant correlation of Socio-Economic Status, anxiety and sex with sports performance.
5. Religion is found to be insignificant factor in sports performance.

REFERENCE

- **Hammer,** W.H (1969). Anxiety and sport performance. In keryon G.S (ed.) Proceedings of the second International Congress of sport psychology, Chicago: Athletics Insititute.
- **Martens,** R.(1977). Sports Competiton Anxiety Test. Champaign iii:Human Kinetics Publications.
- **Singh,** A. J. (1985). Sports Competitive Anxiety of Indian Athletes as a function of their age, playing experience and sex. In :L.S. Sidhu and N.N. Mall (eds.) Modern perspectives in phy. Edu and sport Sicences, New Delhi: Harnam publ., pp 273.
- **Sinha,** A.K.D and sinha, L.N.K.(1995). Manual for Sinha's Comprehensive Anxiety Test. National psychological Corporation, Agra.

* H.R. Pansuria

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 105 - 106
ISSN 2319 - 8168

A STUDY OF DIET AND HEALTH RELATED HABITS OF PROFESSORS OF COLLEGES AFFILIATED TO VEER NARMAD SOUTH GUJARAT UNIVERSITY

The objective of this study was to understand and assess the diet and health related habits of professors of collages affiliated to Veer Narmad South Gujarat University, Surat. For this study 251 volunteer professors of Arts, Commerce, Science, BCA, BBA, Medical and Engineering collages of Surat city affiliated to Veer Narmad South Gujarat University were selected as the subjects of this study. A questioner was developed to assess diet and health related habits. The same was also corrected and modified by the subject experts. The questioner contains 10 questions in each part i.e. diet related habits, health related habits. Mean and percentage was calculated from raw data to get the result of the study.

INTRODUCTION:

Health is such assets that we cannot buy it by money or technology. To leave a healthy life everyone has to work hard. As the saying goes "health is wealth", if you have everything but if you do not have a good health everything else is in vain. What is good health, what is positive health? Can you say that you are completely healthy? Each and everyone has to be healthy not just physically but mental and socially also. Each and every aspects of human life has one or the other effects on him. In today's world we are facing health related problems one or the other way. This is due to our diet and health related habits, lack of physical activity, sedentary life style and some of hereditary causes. But above all stress is the main cause for our poor health. Body and mind are related to each other closely.

We know it very well that "healthy mind in a healthy body", but we do we really show our concern to this? Do we care for our body? Do we care for our diet? Do we care for our health related habits? Each and every one tires to achieve one or the other thing but at the coast of health.

METHODOLOGY:

For this study 251 volunteer professors of Arts, Commerce, Science, BCA, BBA, Medical and Engineering collages of Surat city affiliated to Veer Narmad South Gujarat University were selected as the subjects of this study. A questioner was developed to assess diet and health related habits. The same was also corrected and modified by the subject experts. The questioner contains 10 questions in each part i.e. diet related habits, health related habits. Mean and percentage was calculated from raw data to get the result of the study.

RESULT OF THE STUDY AND CONCLUSION:

Diet Related Conclusions

· 76.49 % of professors have a habit of having breakfast in morning, whereas 23.51 % of professors do not have habit of having breakfast in morning.

· 56.97 % of professors take heavy meal, whereas 43.03 % of professors take light meal.

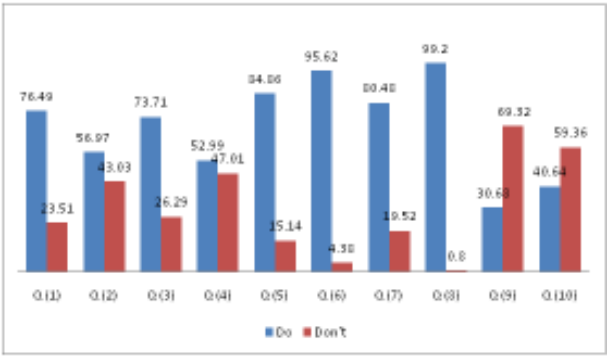
· 73.71 % of professors take heavy supper, whereas 26.29 % of professors have the habit to take light supper.

· 52.99 % of professors take junk food, whereas 47.01 % of professors do not take junk food.

· 84.86 % of professors take fried and sweet foods, whereas 15.14 % of professors do not.

*** Asst. Pro. Shree J.D. Gabani Commerce College & SAS college of Mgt., Surat**

· 95.62 % of professors take fruits, whereas 4.38 % of professors do not.
· 80.48 % of professors take ice-cream and cold-drinks, whereas 19.52 do not.
· 99.20 % of professors take green vegetables in their diet, whereas 0.80 % of professors do not.
· 30.68% of professors do fasting, whereas 69.32 % of professors do not.
· 40.64 % of professors take supplementary diet, whereas 59.64 % of professors do not take any sort of supplementary diet.

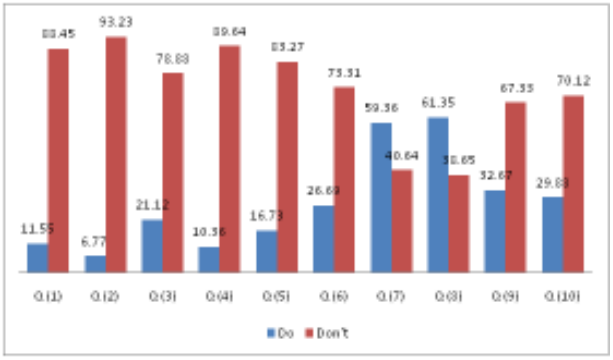


Health Related:

· 11.55 % of professors suffer from neck pain, whereas 88.45 % of professors do not.
· 6.77 % of professors have wrist pain, whereas 93.23 % of professors do not.
· 21.12 % of professors have knee pain, whereas 78.88 % of professors do not.
· 10.36 % of professors suffer from diabetes, whereas 89.64 % do not.
· 16.73 % of professors have high level of cholesterol, whereas 83.27 % of professors have normal level of cholesterol.
· 26.69 % of professors have problems related to digestive system, whereas 73.31 % of professors do not.
· 59.36 % of professors have spectacles, whereas 40.64 % of professors do not.
· 61.35 % of professors have habit to go to bed late, whereas 38.65 % of professors do not.
· 32.67 % of professors have habit of awake late in the morning, whereas 67.33 % of professors do not.
· 29.88 % of professors do exercise regularly either in the morning or evening, whereas 70.12 do not.

Chart – II

Chart showing response (in percentage) of participants to health related questions



Recommendations:

· This type of study can be taken at Taluka, District, State or National level.
· This type of study can be taken selecting parents of children.
· This type of study can be taken selecting teachers of primary or secondary school.
· This type of study can be taken selecting ruler and urban students.
· This type of study can be taken selecting government officers.
· This type of study can be taken to compare physical education teacher and other subject teacher.
· This type of study can be taken selecting male and female students.

REFERENCE

⇨ Chaniyara N. J. et. Al. (2007) **Sanshodhan Aheval (Rachna Ane Paddhati)**, Ahmedabad : Om Printers.
⇨ Shah C. P., (1982) **Vyayam Vigyan Kosh – 5,** Rajpipala: Gujarat Vyayam Pracharak Mandal.
⇨ Shah P. M., (1982) **Purani Bandhuoni Krantikari Vyayam Chadval,** Rajpipala: Gujarat Vyayam Pracharak Mandal.
⇨ Swami Adyanand, (2009), **Yoga ane Aarogya,** Ahmedabad: Dhaval Publication
⇨ Varma, J. P. (2000) **A Textbook on Sports Statistics**, New Delhi: Sports Publication.
⇨ Vasani V. S., at el (1997), **Svasthya ane Sharirik Shikshan,** Gandinagar: Gujarat Rajya Shala Pathyapustak Mandal.

* V.S. Vakani

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 107 - 108
ISSN 2319 - 8168

PHYSIOLOGY OF YOGA POSES

Asanas or Yoga Poses or Yoga position or Yoga posture –

In ashtanga yoga, patanjali defines asana as 'Sthirsukham Asanas' that is steady and comfortable body posture is called asana. Asanas have gained popularity due to the great physical and mental benefits they offer. The real purpose of Asana is for balancing body and mind. Asanas increase body and breathe awareness and strengthen different body systems.

Various different asana practices are recommended in Yoga. But careful study of all these styles reveal that asanas or yoga poses can be divided in to 2 main types of practices. First type is dynamic practices and second static practices. Let us first see the dynamic practices and their effect of the body and vaious systems in the body.

Dynamic practices are series of yoga poses practiced with a constant speed and may include holding of postures for less than 10 sec.

Dynamic practices are

· Stimulating Sympathetic Nervous system similar to exercise.

· These practices involve nervous system reflex which is knee jerk (myotatic stretch reflex) which, contracts active muscles in that pose.

· Blood Pressure & Heart rate increased, sweating

· White muscle fibers of skeletal muscles work more than red muscles fibres

· Reciprocal inhibition (flexors and extensors) is affected by stretch reflex limiting the stretch

· Stress is on mostly on skeletal muscles.

· Dynamic practices are suitable for Beginners to intermediate level

· Dynamic practices are Comparable to exercise.

Static practices include holding any yoga pose for more than 15 to 20 sec. the time duration for holding the pose can go up to few hours as well.

· Stimulation to Parasympathetic Nervous system

· These practices involve nervous system reflex which is Golgi tendon or clasp & knife reflex relaxes the muscles

· Blood Pressure & heart rate decrease, no sweating

· Red muscle fibres of skeletal muscles work more than white muscles fibres

· Reciprocal inhibition achieves maximum stretch and protection to the muscles

· Stress is on skeletal muscles and is also passed onto the deeper muscles which support the organs

· Intermediate and Advance level practices

· Make muscles more flexible

Now we will see the effects of these dynamic practices on various body systems and various benefits that these practices offer.

Dynamic Yoga Practice -

• Dynamic practices includes Vinyasa, Sun Salutations, warm ups and flow which include holding of yoga pose for less than 10 sec.

• Rhythm is very important to these practices, as rhythm is natural and inherent to our body systems; any rhythmic movements increase the neuromuscular coordination and efficient use of energy of all body organs such heart, brain, lungs, and other organs.

• Higher brain and cerebral cortex is involved in controlling of body movements.

· Dynamic practices make mind calm and peaceful. These practices allow control of emotions and thoughts.

• Slow & controlled movements results in more control and more stretching of muscles and joints.

*** Lecturer, Department of Physical Education, Saurashtra University, Rajkot**

Also results in increased neuromuscular coordination. Slow and controlled movements have good effect on Joints; they also increase range of movements of joints, making them more flexible, while protecting joints by stopping excessive and fast movements.

· Dynamic yoga poses prevent injuries in more advance poses and general day to day activities.

• In Dynamic poses, breathing integrated with movements is very important, generally Ujjayi breathing is preferred, as Ujjayi breathing is relaxing and reduces stress. This breathing awareness promotes deep breathing which is bringing relaxed and peaceful state of body and mind. Breathing awareness brings down thoughts and emotions, resulting in stress free and anxiety free mind.

• Effect of Dynamic poses on Muscular system – more white muscle fibers used, more useful to increase strength and power, Burn more calories, consume large amount of ATP and glucose relatively little oxygen, protein and fat and produce large amount of lactic acid

• Dynamic poses result in Secretion of endorphins; the natural pain killers and which, bring positive state of well-being.

• Temporary increase in BMR (Basal Metabolic Rate), but long term effects on BMR are not seen.

Static yoga poses -

• Static Yoga practice - Holding a pose for more than 15 to 20 sec

• Effect of Static poses on Brain - Primary motor cortex involved in "Awareness of the posture". While holding the asana, one needs to focus on stressed areas, different joints and muscles.

• Effect of Static poses on Nervous system - Focusing on a body part increases blood flow and nervous system activity in that area. Every asana, there are different areas where one needs to focus so by practicing asanas regularly, important parts of body are strengthened.

• Endocrine system – yoga poses pressurize and stretch the glands, affecting secretion of hormones, making the glands stronger, and balancing the hormones which in turn affect every other organ and metabolism.

• Practice of Static poses results in secretion of endorphins; the natural pain killers those bring positive state of well-being.

• Effect of Static poses on Muscular system – more activity of red muscle fibers, which consume more of fats, carbohydrates and red muscle fibers specialize in long-duration, low-intensity movement, increased endurance

• Effect of Static poses on Digestive system - Superficial muscles (skeletal muscles) relax, so internal organs get more blood, they are pressurized, squeezed, and made efficient and stronger

• Effect of Static poses on Respiratory system - Different static poses make the breathing more efficient, expand lungs, increase lung capacity, promote slow, deep and relaxed breathing.

• Effect of Static poses on Blood circulation and heart – different static poses exert pressure on heart making it strong, impure blood is drained from various parts of body, entire circulatory system is affected positively.

• Static Yoga poses reduce the metabolic rate (BMR). Studies of humans living more than 100 + years have shown lower BMR.

REFERENCE

⇨ **Light on Yoga: The Bible of Modern Yoga... by B.K.S. Iyengar,**

⇨ **Yoga Anatomy by Leslie Kaminoff, Amy Matthews (Contributor), Sharon Ellis (Goodreads Author) (Illustrator)**

* Akash Gohil

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 109 - 110
ISSN 2319 - 8168

IMPORTANCE OF FOOD NUTRITION IN PHYSICAL EDUCATION

Introduction of Food Nutrition in Physical Education

We all are given many lessons on the importance of nutrition, in our schools as well as at home, when we are young. Even elders, who are suffering from different diseases, are asked to improve the quality of the food, which they intake. The truth is that, nutrition is an essential part of every person's life - be it children, teenagers, adults or aged people. What most of the doctors and nutritionists suggest is that only a balanced diet can provide us with the essential nutrients and minerals which are necessary for growth and wear and tear of our body. The importance of nutritious food for athletes is well-known, as they would be able to achieve high stamina and endurance levels only after eating healthy foods.

Details of Food Nutrition

Why is Eating Nutritious Food Essential?

A diet can be called the one which provides proper nutrition to the body, only if we get the essential macro nutrients such as proteins, fats and carbohydrates and also the micro nutrients like the vitamins and minerals. The function of the macro nutrients is to provide energy and strength to the body while the micro nutrients play an important role in the working of the cells of our body. Adequate and proportionate intake of carbohydrates, proteins and fats, which are the components of nutrition is very essential to stay away from infections, cardiovascular and contagious diseases. The proteins do the task of building the tissues of the muscles and also maintaining and repairing them. By consuming protein rich foods, you can meet the need for amino acids, which are necessary for proper functioning of the body. You can meet the protein requirements of your body, if you eat food items such as milk, milk products, yolk, eggs, meat, almonds, etc.

Carbohydrates are very useful to meet the energy requirements of the body, but at the same time, we should not consume them in excessive quantities, as this can cause an increase in the fat content on the body. The storage of fat on the body takes place if the carbohydrates which are consumed, are left unused. The carbohydrates are basically of two types - the simple carbohydrates and the complex carbohydrates. The simple carbohydrates are useful in meeting the immediate energy requirements of the body, as they are the sources of quick energy. On the other hand, the complex carbohydrates provide you with energy, which can be used over a period of time. The main function of the fats is to protect the delicate and important organs in the body. The fats are the insulators of the human body and hence consuming them in sufficient amounts is extremely essential.

Now, talking about the minerals and calcium which assist in proper contraction of the muscles and clotting of the blood is undoubtedly the most important aspect for the human body. Apart from calcium, phosphorus, which assist the growth of bones and teeth, and iron which supplies oxygen to the lungs, are equally important for the human body. Sodium in right quantities is also essential for overall development of the body. Parents should understand nutritional value so that they will be able to take right decisions regarding what to feed their children. Good nutrition is essential for the physical as well as the mental growth of the children. It has been observed that the children who receive undernourished food, which is devoid of the nutrition components mentioned above,

* M.Phil. Student, K.S.V. University, Gandhinagar

suffer from many diseases and disorders and often experience stunted growth. Many awareness programs are being conducted by health organizations in order to explain why nutrition is important. Along with eating nutritious foods, it is important that you exercise well to burn the calories and stay fit.

While dietary supplements can help some people meet their nutrition needs, eating a wide variety of nutrient-rich foods is the best way for most people to obtain the nutrients they need to be healthy and reduce their risk of chronic disease, according to the Academy of Nutrition and Dietetics.

Two newly published studies in Annals of Internal Medicine, and an accompanying editorial, indicate there is no clear benefit for most healthy people to consume vitamin supplements.

"These findings support the evidence-based position of the Academy of Nutrition and Dietetics that the best nutrition-based strategy for promoting optimal health and reducing the risk of chronic disease is to wisely choose a wide variety of foods," said registered dietician nutritionist and Academy spokesperson Heather Mangier. "By choosing nutrient-rich foods that provide the most nutrients per calorie, you can build a healthier life and start down a path of health and wellness. Small steps can help you create healthy habits that will benefit your health now and for the rest of your life."

The Academy's position on supplements also acknowledges that nutrient supplements may be necessary in special circumstances. "Additional nutrients from supplements can help some people meet their nutrition needs as specified by science-based nutrition standards such as the Dietary Reference Intakes," Mangier said.

Mangier offered tips for developing a nutrient-rich eating plan:

• Start each day with a healthy breakfast that includes whole grains, fat-free or low-fat dairy for calcium and vitamin D, and vitamin C-rich foods.

• Replace refined grains with whole grains like whole-grain breads and cereals and brown rice.

• Pre-washed salad greens and pre-cut vegetables make great quick meals or snacks.

• Eat fresh, frozen or canned (without added sugar) fruit for snacks and desserts.

• Include at least two servings of omega-3 rich seafood per week.

• Don't forget beans, which are rich in fibber and foliate.

The recent increase in sales of supplements may not have been accompanied by an increase in consumers' knowledge about what they are taking, according to the Academy's position.

"Registered dietician nutritionists have the knowledge and experience to educate consumers on safe and appropriate selection and use of supplements," Mangier said. "RDNs make evidence-based recommendations for consumers, while helping them develop a healthful eating plan that takes into account all of their dietary and lifestyle needs and tastes."

REFERENCE

- ⇨ http://www.sciencedaily.com/releases/2013/12/131217170859.htm
- ⇨ http://www.aicr.org/assets/docs/pdf/reports/Second_Expert_Report.pdf
- ⇨ http://sitemaker.umich.edu/356.swidler/._importance_of_nutritional_education_.

* **Dr. Arjunsinh Rana**

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 111 - 115
ISSN 2319 - 8168

CONCEPT OF AYURVEDIC BODY TYPES AND FITNESS

Ayurveda views each and every person as unique, with a unique mind- body constitution and a unique set of life circumstances, all of which must be considered In determining either natural healing approaches or recommendations for daily living. This view is in alignment with the modern science which views individuals as unique as in the universe with a unique genetic constitution. The particular combination of energies Present when we enter this world at birth Is known in ayurveda as our innate constitution or prakruti. What we do with our constitution is up. It is the source for our health, vitality and well-being. It can also be the springboard toward difficulties, If we Ignore Its needs. In Ayurvedic philosophy, the five elements combine In pairs to form three dynamic forest or interactions called doshas. Dosha means “that which changes. “It is a word derived from the root dus, which is equivalent to the English prefix ‘dys’ such as in dysfunction, dystrophy, etc. In this sense, dosha can be regarded as a fault, mistake, error, or a transgression against the cosmic rhythm. in most of the Talent Identification programmes at different level boys and girls needs to perform different activities such as distance running, jumping, throwing and agility. Vata types will typically excel in sports requiring quick, short bursts of speech and agility. These individuals are like high- strung thoroughbred race horses - always on the go, very restless and even jumpy at times. They love fast, vigorous activity but can’t handle too much of it if they rev going to stay in balance.

Introduction

Ayurveda views each and every person as unique, with a unique mind-body constitution and a unique set of life circumstances, all of which must be considered in determining either natural healing approaches or recommendations for daily living. This view is in alignment with the modern science which views individuals as unique in the universe with a unique genatic constitution.

According to ayurveda, because we each have a unique constitution, our health prescription must be unique to us. This means that in order to be healthy, you need to eat certain foods that are beneficial for your body type and stay away from others. Your exercise program must be personally suitable as well. Your constitution determines very much about you - your body, your personality, even how you relate to other people. Understanding it lets you know what you need in order to be healthy.

Discovering Your Constitution

The particular combination of energies present when we enter this world at birth is known in ayurveda as our innate constitution or prakruti. What we do with our constitution is up to us. It is the source for our health, vitality and well-being, It can also be the springboard toward difficulties, if we ignore its needs, The five elements come together to create the three basic constitutional types, They are Vata, Pitta and Kapha. If air and ether predominate in your constitution, you are Vata in nature, If fire and water take the lead in your physical makeup Pitta is the result. If water and earth hold ascendancy in your body at birth Kapha is your constitution.

What does understanding your constitution mean, practically? Each constitution has different needs. Meeting these needs assures balance and better chances for good health and peace of mind. It also offers you more informed choices in what health care methods are most appropriate for you.

*** Lecturer, Rajkot Kedavni Mandal, Rajkot**

How can you discover your constitution? Ideally, a skilled Ayurvedic physician can assess your pulse and give you information about your prakriti (constitution). From pulse examination he or she can ascertain what elements are in balance, what is out, and what needs to be done. Each constitution has certain characteristics physical, emotional and mental attributes, which let us know what elements are present.

Prakriti [Body Constitution]

There are two types of Constitutions of our body

1. Deha Prakriti (Body Constitution)

Every individual has a unique combination of the three doshas- Vata, Pitta and KaphaTo understand individuality is the foundation of Diagnosis and Treatment in Ayurveda Humans are endowed at birth with one of seven different body types, depending on which dosha or combination of the three basic doshas dominate. Body types can be dominated by a single humor (vata, pitta, or kapha), or they can be dominated by combinations: vata-kapha (when vata and kapha are present in almost equal amounts), vata-pitta, pitta-kapha; and vata-pitta-kapha (when all three doshas are present in almost equal amounts). Suppose you have a kapha (water) dominant constitution then you may have a tendency to overweight, over-emotional nature or suffer congestion in the chest. So you should modify your diet, life style, daily routine and other activities accordingly, for example, avoid sleeping too much in the day or eating too many sweets, to maintain your health and also to cure the diseases.

2. Mena Prakriti (Mental Constitution)

A person's dosha type is expressed emotionally as well .Vedic philosophy classifies human temperaments into three basic qualities: satva, rajas and tamas. Relative predominance of salve, rajas, or tamas is responsible for individual psychological constitution.

Concept of Tri-Dosha

In Ayurvedic philosophy, the five elements combine in pairs to form three dynamic forces or interactions called doshas. Dosha means "that which changes." It is a word derived from the root dus, which is equivalent to the English prefix 'dys', such as in dysfunction, dystrophy, etc. In this sense, dosha can be regarded as a fault, mistake, error, or a transgression against the cosmic rhythm. The doshas are constantly moving in dynamic balance, one with the others. Doshas are required for the life to happen. In Ayurveda, dosha is also known as the governing principles as every living thing in nature is characterized by the dosha. Science of understanding our constitution is the theory of Tridosha. It defines three fundamental doshas/humors that govern the function of our bodies on the physical, mental and emotional level. Each has a unique balance of all three of these energies. These doshas have been related to the basic biology of the body.

Vata,Pitta and Kapha:- in any individual, however, one of the two doshas are typically dominant This dominant dosha determines the individual's unique physical and mental makeup or prakriti.

Vata:- is the subtle energy associated with movements Vata is responsible for all voluntary and involuntary im pluses.

Pitta :- It regulates temperature and associated with heat/fire. They tend to have moderate weight and good musculature.

Kapha :- It is the energy that forms the body structure and provides the cohesion that holds the cells together. Water and earth combine to form Kapha Dosha.

Tridoshas also have relationship with triguna(Satwa,Rajas and Tamas) mental qualities. So vata dosha is dominanted and characterized by Rajgun (Raj Quality). Pitta Dosha by Satva uneS'a' tva quality and interrelated. If a person suffers mental imbalance then the Doshas are also Kapha Dosha by Tama gun (Tama Quality) so; these three mental qualities and three doshas are interrelated. If a person suffers mental imbalance then the Doshas are also effected and in certain cases of doshas being affected seriously the mental equilibrium also gets affected.

It has been my experience that when people like something they find time for it. I believe the real reason way 90% peoples are not exercising regularly. It's because they do not enjoy it. It's a "workout," something you have to do, not something you look forward to. Making exercise a fun, again will not only

keep us doing it but will deliver numerous health benefits from exercise not available from our conventional approach.

For years we have been encouraged to exercise by the experts because of its pronounced health benefits. People who exercise regularly on the whole have less chronic disease, but only recently studies have shown some not so good effects of exercise. Many reports have linked too much exercise with compromised immune systems. The problem is that at the present time the experts don't know how much exercise is good and how much more is harmful? There can be no standard answer to this question that will apply to everyone. The fact is that we are all different and have individual requirements for exercise. This understanding of individual body typing is not by any means new. Arguably the first system of body typing was in ancient India's Ayurvedic (science of life) medicine where ten unique mind-body types are identified, each with its unique strengths, talents, likes and dislikes. Understanding who you are can help you determine how much exercise you need as well as the type of activity that would be best suited for you.

Know Yourself

In most of the Talent Identification programmes at different level boys and girls needs to perform different activities such as distance running, jumping, throwing and agility. One is good in sprint, one is good in long distance run, one is good in throwing and one may be good in jumping that's why they are selected for the sports which are more suited to their body types.

A Kapha body type person is typically hypo metabolic, with big bones, an easy going nature, and much more endurance than speed. He tended to be a little more on the heavy side, as kapha types will hold on to more water. Working with him as a coach I directed.him to a sport more suited to her body type, The Vata body types, are faster and actually more hyper metabolic opposite to the Kapha type, they tend to think quickly, forget quickly, and have little endurance. They are great in quick, short bursts and would find a mile run an incredibly difficult endurance event. They don't hold on to much body mass and are usually trying to gain weight. When they get out of balance they can tend to worry, become anxious, constipated and have trouble sleeping.

The Pitta body type is fierier by nature and is the type that would excel in the one- mile run under ten minutes. They are typically more competitive, agile with a medium muscled frame When they get out qf balance they can overheat, get irritated, and even complain of skin rashes and indigestion.

Sports by Body Type

Vata types will typically excel in sports requiring quick, short bursts of speed and agility. These individuals are like high-strung thoroughbred race horses - always on the go, very restless and even jumpy at times. They love fast, vigorous activity but can't handle too much of it if they are going to stay in balance. If anything, Vatas need to slow down and nature often forces them to, since their endurance is not great and they tire quite easily. Vata types are quick to get involved in fitness programs but because of their constantly changing interests they are also quick to give it up.

Pitta types excel in individual competition requiring strength, speed and stamina. They are fiery both in personality and desire to win. They are highly motivated and driven and are often not satisfied unless they have won. They are natural leaders and are attracted to individual sports because of their strong ego and natural competence in most sports. Pitta types must be careful not to get overheated and must learn how to enjoy themselves regardless of the final score. Kapha types excel in endurance and mind-body coordinated skills. They are great under pressure and are naturally calm, stable and easy-going. They are often late bloomers, both physically and mentally. They love the camaraderie of team sports, although these don't usually give them the aerobic exercise that they need Because of their hypo metabolic nature, they will tend to be lazier and need motivation when exercising They love team sports but must be sure to get plenty of stimulating and vigorous exercise as well.

Listen To Your Body

In addition to knowing your mind-body type and its requirements, it is also important for your mind to

know how to listen to your body. We have heard the term "listen to your body" for years, only no one has ever told us how to do it. In the past we have been taught to listen to our body by jogging-at a pace that allows us to hold a conversation with our partner. To me this technique sounds more like listening to someone else's body rather than your own.

Inadvertently many of us have been conditioned to distract our mind from our body during exercise. Often times exercise is found too boring unless we have a TV to watch, a book to read or a magazine to flip through. It seems we have resigned ourselves to the fact that exercise is mindless and boring so we engage our minds in one activity while our bodies do another. People can now exercise beyond their tolerance without boredom and without feeling the pain, "No pain, no gain" has been replaced with, "if we distract you, you won't feel it."

The degeneration from even moderate levels of exercise has been recently documented in a landmark study by Dr. Kenneth Cooper, who is considered a leading authority and visionary in the field of exercise physiology. His recent findings fly in the face of all our current exercise standards yet match up perfectly with the exercise requirements laid down over 5000 years ago in the Ayurvedic texts.

He found that when people exercise at 60% of their maximum heart rate for four hours a week or more they will produce a significant amount of harmful exercise induced free radicals which are the leading cause of aging, disease, cancer and death. Mind you, current exercise requirements state that we need to get the heart rate over 60% before any cardio-health benefits are gained. The results of this study were so controversial and radical the fitness industry for the most part the industry has chosen to ignore Cooper's advice. He says if you insist on exceeding this limit then you must take large doses of antioxidant supplements to combat the harmful effects of moderate exercise.

Does this mean we should be restricted to a walk around the block to ward off this free radical onslaught? The Ayurvedic approach to fitness which made its more public debut about 1500 years ago as the original martial arts of China utilized physical techniques in order to access ones full human potential. It is in this light that I discuss a new approach to how and why we exercise. The human body is unlimited in potential; it is just a matter of knowing how to access it. In this case less will definitely be more.

The Secret to Lifelong Fitness

In Ayurveda, the first requirement for health, fitness and longevity is that the body's life force or "prana" must flow effortlessly into every cell of the body. This is accomplished primarily via the breath. It is the proper use of the breath during exercise that will bring harmony between the mind and body and create a measurable experience of calm and rejuvenation in each workout.

Most of us do not realize that our body responds to exercise as an emergency. The fight or flight nervous system gets maxed out even during moderate exercise. This emergency response during each workout not only produces stress fighting degenerative hormones but it is likely the key factor in America's chronic aversion to exercise.

Normal people would never intentionally subject themselves to an emergency day after day after day. Yet when we ask people to engage in regular conventional exercise that is exactly what we are asking. It is no wonder that eighty percent of America doesn't do it. To make exercise fun again we must replace the degenerative emergency response with a rejuvenative, calming one. It is this experience of :aim, like the eye of a hurricane that will act as a hub as we engage in the most dynamic physical, mental or emotional activity.

In nature, the bigger the eye of the hurricane the more forceful the wind. It is this experience of calm that we seek to reproduce in the midst of even the most extreme stress. In athletics and in life, when people are at their best they often find it effortless and euphoric. When tennis star Billie Jean King was at her best she said, "I would transport myself beyond the turmoil of the court to a place of total peace and calm,"

Your Ayurvedic Workout

Go for a walk and for the first ten minutes breathe deeply in and out through your nose as you walk fairly

slowly. Here you are exercising your lungs first making sure that each breath is deeper, longer and slower than the one prior, with the emphasis on comfort. It is this experience of comfort that you will be taking into higher levels of exertion.

Then begin to walk faster and then faster and be sure to maintain the exact same rhythm of the breath you established from the beginning. At some point you will notice it becoming more difficult to get the air in through the nose, with an ensuing urge to take a mouth breath. When your exercise forces you to take your first mouth breath, you lose the eye of the hurricane, and your body is, at that moment, forced into an emergency response to maintain that pace.

When this happens, immediately slow down and recapture the original deep, long and slow rhythm of the breath. Once it is re-established, then try to walk faster again telling your body you want more performance. When the breathing gets labored and you open your mouth, then slow down on cue again, constantly telling your body you want more performance and we will not create an emergency. Soon your body will accommodate a higher level of a natural and more permanent fitness. Because of the years of lower rib cage constriction, you will more than likely find this difficult at first. But, what you couldn't do the first day you will find yourself effortlessly doing within two or three weeks, comfortably breathing through your nose. When this happens you rib cage is not a cage any more - rather twelve rib-like levers that can massage your heart and lungs up to 28,000 times a day. When this starts happening, a natural calming influence stays with you all day while you deal with all kinds of extreme stressors. This is the first step of living in the eye of the hurricane and the provider of the most important health benefits of exercise.

Conclusion

In the end we conclude that every individual come to the universe with a unique genetic constitution. So each constitution has different needs. Meeting these needs assures balance and better chances for good health and peace of mind. This means that in order to be healthy, you need to eat certain foods that are beneficial, for your body type and stay away from others. Your exercise program must be personally suited as well than only your body will accommodate a higher level of natural and more permanent fitness.

REFERENCES

- Ghai, C.M. Health Rejuvenation and Longevity Through Ayurveda. Deep & Deep Publication, New Delhi,
- Svoboda, Robert E. Prakruti: Your Ayurvedic Constitution, Lotus Press: Twin Lakes, WI ,1998.
- Svoboda, Robert E. Ayurveda: Life, Health and Longevity. The Ayurvedic Press Albuquergire,2004.
- Svoboda, Robert E. Your Ayurvedic Constitution. Shyam Sunder, K.M. (2000) The concept of Prakriti. The Hindu Patio, 5-24-27.
- Shushan, P;Kalpana, J. and Arivind, C.(2005) Classification of Human Population Based on HLA Gene Polymorphism and the Concept of Prakriti in Ayurved, J. Altern Complement Med; 11, 349-353.

* Hitaxi

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 116 - 118
ISSN 2319 - 8168

LIFE STYLE CORRECTION AND SOCIAL WELLNESS THROUGH YOGA

Feeling of God along with attachment with its for bussing in life from the internal side of human being can be through yogic activities like Yarn, Warn, Niyam, Pranayama, Pratahara, Dhama, Dhayan & Samadhi etc where there is faith there is love, where there is love there is peace where them is peace there is God, where there is God there is bliss If all these world born from Ananda or bliss. As we have already discussed that yoga is an life style of human. When we feel corrections, can be done through yogic literature & activities. Yoga is seen as living tradition which mean of physical, health and spiritual mastery. How can you get benefits from yogic process? When you are learning yogic practices and achieving excellency in yoga practices create confidence, health, physical fitness and thwart you toward spirituality then, you learn to enjoy and respect your body for where it is at moment and not where you wish it could be.

Introduction

Let us first see 'What is yoga' "The union of Atma and Parmatama is Called Yoga."The word 'yoga' is derived from the root `Yuj'which means union or merger. It cane said in other way, merger of soul with god is called Yoga. Patanjali says that "yogasthitayriti Nirodh" withdrawal of sense organs from worldly objects and their control is yoga. There are many definitions given by various sphere of the society and our ancient literature. In fact, yoga tells, us how to live, how to behave, how to keep and maintain the health fitness, how to achieve the goal perfectly and how to attain the 'Moksh'. Practically, yoga is science which deals with the health of body and harmony of mind. It can be practiced by the people of any age, caste creed and religion. The main purpose of yoga is to provide the sound body and tension free sound mind. Its ultimate objective is 'self-identification', self purification and self realization 'self perfection' through the methods of yoga.' Some people of the society erroneously think that yoga to be a thing meant for perfection that has renunciated the world. Therefore, it is right to say that yoga is way of life, a mean to enjoy complete, healthy, happy and peaceful life and best source of enjoy the worldly pleasures.

Human bliss and God

Feeling of God along with attachment with its for bussing in life from the internal side of human being can be through yogic activities like Yam, Niyam, Pranayama, Pratahara, Dharna, Dhayan & Samadhi etc. where there is faith there is love, where there is love there is peace where there is peace there is God, where there is God there is bliss. If all these world born from Ananda or bliss. It exists in Ananda and is finally dissolved in Ananda, how can there be then a world different from the Ananda of Brahmn. The bliss of Brahmn is directly experienced in yoga meditation as Yogananda. The essential bliss unconditiorial is called Nijananda, also called Atmananda or bliss or primary self. The bliss of Brahmn is Brahmn itself and not some quality attached to it from outside and whole world beginning from space down to the grossest object like the body is nothing apart from the bliss of Brahmn. If you want to reach a state of bliss then go behind your ego and the• internal dialogue and make a decision to relinquish the need to control the need to be approved and the need to judge.

*** Teacher, Agraval Vidhya Vihar, VESU- Surat**

Yoga as life style corrections

As we have already discussed that yoga is an life style of human. When we feel corrections, can be done through yogic literature & activities. Shortcomings concerned to the human can be diluted, decreased and removed by doing various types of yogic practices, may be related to mind, body and spirituality. In the recent age, the new resolutions worldwide made by people from different countries and cultures had one common thread. They wish to improve the quality of their lives through concerted effort and so they resolved to pursue a more healthy life style. Over workload, stress, overburden on mind, erratic lifestyle, without thought to structure and sedentary style of life are all the causes to create problem in health of the individual and in some cases even poor self esteem. How can all these problem be resolved? Health factor is most important factor today for the individual as well as the society. As per above versions a question arises what is yoga and why yoga? As we have cleared about it in some stage. Obviously we are aware but we need to know more and go in to it through yogic experiences. It is the philosophy of Indian ancient Indic tradition. The various school of yoga are Samkhya, Vedanta, tantra yoga, uttarmimansa, poorvamimansa, Nayay and Vaiseshika., So it has deep origins when we do yoga, study the yoga literature and think about it reveals harmony and governance at the subtler layer of existence. The various layers of personality life body, mind, emotion, psyche and spirit are integrated, we come into state of discipline and harmony. To achieve the harmony we have to integrate our measurements of personality, As we see in the "yoga Chittavarittinirodh" it is infact the cessation of mental modification. It means when we become disciplined, the disturbance will certainly go away from your mind and you will feel free from stress and tension etc.

All philosophies were born, developed and revolved around the five fundamental questions

1. What is this body? How is it born and function?
2. What is Prana and life forces? How does prana relate to physical dimension of this body, similarly, how does prana interact with body?
3. What causes prana to manifest in different form?

It means it can be said that yoga deals with the real practical aspect of life and makes us aware and experience the higher dimensions of our nature. We can do more various aspect of combination of yoga in the form of Asana, Pranayama, Pratyahara, Mudra, Bund ha, Shatkarmas Mantra and Kirayas. The yoga will give us a glimpse and aware up to the subtle dimensions of existence and matrix of the nature. It indicates that yoga help us to counter the bad effect of our stressful and wrong life routine of living.

Social wellness through Yoga

Yoga is seen as living tradition which mean of physical, health and spiritual mastery. How can you get benefits from yogic process? When you are learning yogic practices and achieving Excellencies in yoga practices create confidence, health, and physical fitness and thwart you toward spirituality then, You learn to enjoy and respect your body for where it is at moment and not where you wish it could be. Success in yoga get impeded(to obstruct) when you want your body to respond as it did when you were younger which is living in the past or where you wish it should be which is living in the future. By doing your yogic practices intelligently expertly and respectfully. You go towards balance of body, mind and spirit. Intact, this is the key to attain the success in the life too with the family, friends, relatives and other members of the society. These inherent are to accept people as they are neither dwelling (living residence) on which a man was in the past nor pushing him toward what he should be in the future. This is not mean thaty ou don't guide but that you do so without force or manipulation just as you learn in yoga practice. Hence, yoga provides us the practice to be proactive without aggression. In real yoga is a technique for self mastery overcoming the anger, pride aggression and fear etc. In other words it can be said that these tech overcoming the psychological factor toward Positiveness niques gives us overwhelming to All the Psychological factors are directly related to your mind and Budhl to which we can say inner progress and development. Inner calm and wisdom attained through yoga is different from scientific knowledge though it is not desperate from it. The partial or discriminative knowledge prepare

us for higher wisdom Therefore. the science philosophy and religion are not exclusive from each other but they are attached internally with another and where science ends, philosophy takes over as the world has already initiated to release the impact of knowledge for the slice of power and fame That is why many people concerned to yoga are attaining spiritual awakening. Really it is the frame of mind which yoga bestows to the yogic fractioned and it is the property of the individual when you will practice regularly and properly yoga will certainly help and insight to develop the relationship in the society. It is not how hard you try but should do the yogic exercise in the proper way through which you get right. Yoga asana are an expression of a fluid mind that does not have a fence around it but has boundless curiosity to explore the universe. During the yoga practices many ideas comes in our mind about himself which help us to create a new sense pertaining to you and society and these new senses will help us to create and maintain good relationship with harmony and peacefulness and intact it can be said the development of the society. In last, it is right that an individual who is at peace with himself is at peace with the world. You and your life have potential to be a wondrous journey, filled with exciting movement and astonishing experiences. It can be thrilling ride if you are open to exploring all that is available to you. Adventure is the result of your willingness to life and life with spirit of enthusiasm.

Conclusion

In this paper it is highlighted that how we can awaken the inherent power of the body, how shortcomings can be removed, how social wellness can be created and maintained. It is also discussed that weakness and wrong habits in life style which exists in us can be removed through regular yogic practices. It is also emphasized that yoga in fact is an practical science which deals with the health of the body and harmony of mind as well as the relationship with each other in the society. It can be practiced by the people of any age, caste, creed and religion. It is the process of mental and physical exercises which are not depend upon anybody like other sports activities. This yogic activity can be done by the poor person also as well as the rich person. It is self practice, economical, without any apparatus and it effect directly to all the physiological system i.e. blood circulation, nervous system, endocrinal and circulatory system ete. All th6 meditative activities provide us knowledge about the self concept as well as the mental development. Yam & Niyarn, Dhama Dhyan Smadhi is positively effect to mental devlopment where yogic activities help us to create good health physical and mental fitness, similarly, mainly yam and niyam provide us moral knowledge which creates harmony peacefulness cooperation sympathetic attitudes and sincerity etc. to the society. In respect of this, it is also clear that most of the diseases related to your body and mind can be treated through yogic practices like yam Niyam, Pranayama, Asana and Dhayan etc. In view of the above, I feel and reach on the conclusion that yoga is that activities through which help we can get all rounder development of the humanity and the society. So it is education through which we can attain harmonious development. In last, I would like to make it clear that in this fast life in modern social set up it is pertinent to say that yoga must be included in the education syllabus from primary to higher education due to see the evilness in the modern society, certainly help to make citizen strong and sound in all respect. If citizen will be strong, the nation itself will be strong and sound because yogic activities touch and develop all the sphere of the humanity and society. Therefore, author again recommends the yogic education for the inclusion in Indian educational system that will be more and more beneficial personally, socially, nationally and globally

REFERENCE

- ⇨ Bahadur K.P.(1976), The wisdom of yoga, a study of pataanjali yoga sutra, New Delhi:Sterling publishers.
- ⇨ Best, J.W and kahn (1986) Research in education, printice hall of India
- ⇨ Dasquota, N. 9741 Yoga philosophy in relation to other system of Indian thoughts Delhi Motilal Banarisdass. Yoncier I3.K.S(1982 Light on Yoga Shastri, J.L.(1984) Upanishad Sangrahah, Delhi:Moti Lal Banarsidass

* V.G. Patel

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 119 - 121
ISSN 2319 - 8168

COMMON SPORTS INJURIES AND THEIR PREVENTION

Sport injuries are common in the field of games and sports. During practice, training or competition, any player can be injured. Perhaps, there will not be player who has not been injured during his sports career. Indeed, it is natural to get injury. Though coaches, physical trainer and sports doctor have been making their best possible efforts to prevent injuries but they have not got a complete success so far. Though it is certain that if the appropriate steps are taken during the game, the chances of getting injuries can be reduced.

Sports injuries can be prevented up to some extent if proper research is conducted in the field of sports injuries. During training and competition, the proper protective equipments must be used. Such players, who do not use protective equipment, should not be allowed to take part in sports competition. Proper conditioning should be done before taking part in sports competition. To play according to rules and proper officiating can be helpful in preventing s ports injuries. Warm up should also be performed before training and competition. The scientific knowledge can also be beneficial in preventing sports injuries up to some extent. **Leonard da Vinci** also averred, *"if you are enamoured of practice without scientific knowledge, you are just like a pilot who goes in to a ship without rudder and a compass and does not know his destination."*

It has been observed minutely that single type of injury does not occur in all the games and sports. Indeed, some sports injuries can be prevented if some changes are made in the rules of games and sports. There are various types of common sports injuries which are as follows:

(A) Soft tissue injuries
(B) Bone injuries
(C) Joint injuries

SOFT TISSU INJURIES

1. Contusion
2. Strain
3. Sprain
4. Abrasion
5. Bruises

1. CONTUSION

Contusion is a muscle injury. A direct hit with or without any sports equipment can be the main reason of contusion. Contusion is common in boxing, wrestling and kabaddi. In contusion blood vessels in the muscles are broken and sometimes bleeding may occur in the muscles which may causes bruises. Stiffness and swelling are common features at the site of contusion. Sometimes, in such cases muscles fail to respond. In severe cases muscle becomes completely inactive.

PREVENTION

1. Proper warm-up should be performed before practice, training and competition. All the parts of body should be exercised properly. Stretching exercises should be performed during warm-up.
2. Conditioning should have been performed during the preparatory period.
3. The protective equipments should be used according to the requirement of the games or sports.
4. Sports equipments of good quality should be used in games and sports.
5. Playfields/courts should be smooth and clean.

2. STRAIN

Strain is also a muscle injury. Strain can be mind as well as sever. Sometimes, the complete muscle can be ruptured. In case of complete rupture, it is not possible to move that part of limb. There may be severe pain around the rupture. There may be many

*** PTI, Saint Xvier High School, Vapi**

situations during the practice or competitions when a strain may occur.

PREVENTION

1. For the prevention point of view, every sportsperson should perform a complete warm-up before participating in any sports activity. He should do stretching exercises of all the parts of body.
2. Conditioning should have been performed during the preparatory period.
3. Sports equipments must be of good quality. Playfields/courts should be smooth and clean.
4. The scientific knowledge of the game is must for preventing strain.
5. Players should be careful and alert during the training and competition.

3. SPRAIN

It is a ligament injury. It may occur due to overstretching or tearing of ligament. Generally, sprain occurs at wrist joint and ankle joint. Sometimes, fracture is also possible along with the sprain. In such injury swelling, inflammation, sever pain and tenderness are common symptoms. There can be laxity in the ligament. All the above mentioned symptoms depend on the severity of sprain.

PREVENTION

A thorough warm-up is necessary for preventing sprain, specially all the joints should be exercised well during warm-up.

1. Proper conditioning should be done during the preparatory phase.
2. All the sports equipments must be of good quality.
3. Playfields/courts should be smooth and clean.
4. Good officiating is essential for preventing such injury.
5. Rules of the game/sport must be followed.

4. ABRASION

Abrasion is a skin injury. Abrasion usually occurs due to friction with certain equipment or a fall over the area where the bone is very close to the skin. It occurs at the upper part of the skin.

Prevention

1. Players should perform proper warm-up before training and competition.
2. Players should perform proper conditioning during the preparatory phase.
3. Sports equipment should be of good quality.
4. Good officiating is essential during the practice and competition.

5. BRUISES

Sometimes, such type of injuries may occur in football, hockey and boxing. Bruises are not clearly seen because the upper skin remains unaffected, but inner tissues are damaged. The affected area becomes blue. In fact, the blood spreads under the skin because of rupture of blood vessels.

PREVENTION

1. Players should perform adequate warm-up before any sports activity.
2. Players should have good anticipation power.
3. Players should be careful and alert during the practice and competition.
4. Players should not be rash. They should play according to the rules and regulation.

BONE INJURIES

There are following type of bone injuries:

1. Simple fracture
2. Compound fracture
3. Complicated fracture
4. Green stick fracture
5. Commented fracture
6. Impacted fracture

1. Simple fracture. The fracture without any wound is called simple fracture.

2. Compound fracture. Compound fracture is that fracture in which the skin and muscles are damaged along with the fracture.

Generally, the broken bone comes out through the skin by tearing it.

3. Complicated fracture. In complicated fracture, a bone is broken and damages the internal organs. The internal organ may be tissues, never or artery**.** Usually, such type of fractures are complicated and dangerous. such fractures are common in high jump and pole vault.

4. Green stick fracture. These fractures are commonly seen in children because their bones are very soft and delicate. Whenever there is any stress on the bone it is bent.

5. Comminuted fracture. When a bone is broken in to two or more pieces, it is called comminuted

fracture. Such type of fracture is possible in cycle race or motorcycle race.

6. Impacted fracture. When the end of a fractured bone enters into other bone, it is called impacted fracture.

Prevention

1. Players should perform adequate warm-up before participating in sports and games. All the parts of body should be exercised well.
2. Proper conditioning must be done in preparatory phase.
3. Players should not continue to play during the state of fatigue.
4. Good officiating is essential for preventing fractures.
5. Players should be very careful and alert during practice and competition.

JOINT INJURIES

Dislocation of joints is a main injury. In fact, it is a dislocation of surface of bones. There are following types of dislocations:

1. Dislocation of lower jaw. Generally, it occurs when the chin strikes to any other object. It may also occur if mouth is opened excessively.

2. Dislocation of shoulder joints. Dislocation of shoulder joint may occur due to sudden jerk or a fall on hard surface. The end of the humerus comes out from the socket.

3. Dislocation of hip joint. By putting maximum strength spontaneously may cause dislocation of hip joint. The end of the femur is displaced from the socket.

Prevention

1. Adequate warm-up should be performed prior to any physical activity.
2. Proper conditioning should be done in preparatory period.
3. Stretching exercises should be included in warm-up.
4. Players should be careful and alert during practice and competition.
5. Protective equipments should be used as per requirement of the game/sport.
6. Practice should be discontinued during the fatigue.
7. Players should have good anticipation and concentration power.

REFERENCE

- ⇨ Physical fitness and wellness.(cbse XII std)
- ⇨ Sports injuries (Wikipedia search)
- ⇨ Google search

* T.R. Sharma

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 122 - 123
ISSN 2319 - 8168

EXPLORING STRESS AND ITS MANAGEMENT STRATEGIES AMONGST NATIONAL LEVEL SPORTS PERSONS

Stress is a phenomenon has been widely researched and studied. Research indicates that mental stress affects both- the CNS and the ANS, producing not only psychological changes but also negative affect. It may affect the population's 'Self confidence, ego strength, self-esteem, and their entire self-concept'. In other words, stress may affect the psyche of the individual player which plays a crucial role in coping and performing. Therefore when intervening with the sporting population and using broader coping techniques with them, the first ask would be to obtain an accurate picture of the psyche of each individual player. This will provide information about the mental resources of each player and reveal those weaknesses which may be making them more vulnerable to stress factors. The next step would be to find what are their perceived stressors and finally what are the coping mechanisms being used by them to deal with stress.

Key words: Stress, psyche, ego strength, stressors.

Stress is psycho-physical phenomenon that leads to weakening in the psycho-physical state of the individual, causing deterioration in activity or an increase in the psycho-physical exertion necessary per unit of performance. (scgekkeberger, 1990)

Stress is an inevitable and imperative part of our lives. No one can escape stress, and as Hans Selye puts, it 'complete freedom is death'. If stress is such an omnipresent part of one's lives then one must also cope with it continuously in order to survive. Lazarus 1980 describes the situation better, when he says that 'stress and coping are the faces of the same coin'. This is true more so in the domain of sports because sport by its basic definition (Angela Patmore 1986) is, 'an experiment, where by use of artificial means such as by use of symbols-tools props, boundaries and time-limits-conditions shall be imposed on subjects which will excite the maximum degree of stress both in the area provided and the time designated. Under these conditions, ability to withstand stress in the subjects shall be seen to be measured in the subjects shall be seen to be measured in the performance of a chosen visible goal. Success / failure shall be adjudged according to subject's ability to perform and direct the agreed goal and the energies so generated, shall be signified collectively by the term sport'. From this definition it is clear, that in a sporting situation, specific objective external demands are made on the individual. These demands are not only physical requiring fitness and muscular coordination to master the techniques involved in using sport equipments, but are also psychological in nature requiring such mental skills as rapid accurate perception, memory and though process for quick decision making against a backdrop of multiple reference systems.

However, it is a common knowledge that identical external demands will not elicit the same stress reactions from every individual. Therefore, the extent to which these physical and psychological demands will be perceived as stress will ultimately depend upon the subjective manner in which the player will appraise the demands made on him/her and their ability to cope with the resultant stress successfully. The ability of the players to cope with stress is a complex feature determined by such factors as his/her stable personality traits, their needs attitudes, interests,

*** Lecturer, Shree Sharrik Shikshan Mahavidhyalay College of Phy. Edu., Surat**

moods, past experiences, learning, motivation etc and guided by their existing feelings/inner states. Coping with stress is not only a personalised phenomenon but also a learning process. It enables the player to fulfil the highly varied demands made on them in a positive fashion.

A perusal of related research literatures indicates that although stress, its sources and its relation to sporting performance has been extensively coping the process by which player consciously responds stressful situations experienced during sport situations, has received only scant attention in the sport-psychology research literature. Hence this requires that a practical assessment of coping skills that already exist or of those that have yet to be developed should be made. These assessments should be based on facts that have been scientifically verified concerning the subjective experiences of players, their perceptions of the stressors/demands and their self-report of the skills they are using to consciously control and meet the demands. Such assessments will enable the sport-psychologists to work and intervene on an individual basis.

Keeping in mind the above, an analogous attempt has been made in this study to understand the nature and process of stress as perceived and experienced by sports people, and to identifying their coping patterns-the assumption being that an analysis of the above information would help in identifying the border coping techniques that may prove to be useful in further enhancing and optimising the performance of sports people.

Objectives:

i. To examine the extent of awareness about the role & relevance of sport Psychology amongst Indian Sports persons.

ii. To obtain an experimental account of the stress process from the sports persons and to examine its effect on their performance.

iii. To examine the perceived sources of stress by sports persons.

iv. To identify the coping strategies adopted by sports persons to cope with their stress, and

v. To identify broad coping techniques that may be used to optimise the performance of sports persons.

Sample:

The sample consisted of 30 national level Indian sports persons, within range of 16-29 years. To obtain and adequate representation of various professional sports, the sample consisted of sports persons who played such diverse games as football, athletics, cricket, judo and boxing. The sample also consisted of 3 females and 27 males, although at the end, the entire sample was treated as a whole.

Results

Table – 1: To examine the extent of awareness about the role and relevance of Sport-Psychology amongst the Indian sports persons.

Sr. No.	Awareness Categories	Frequency of Responses	
1	Total lack of awareness	23 (76.6%)	
2	Heard about them	4 (13.3%)	
3	Consulted psychologist	1 (PVT Psychologist)	3 (10%)
		2 (Counsellors in camps)	

The study also highlights the following practical implications:

1. The technique of Hypnosis may prove to be propitious in sporting situations calling for further investigation in this area.

2. A change in the societal attitude towards sports is imperative in order to make an impact at the individual level.

3. Training sports people into group dynamics would require psychological skills and expertise and may be an important step in intervention.

4. Making the Sports-Persons Aware about the Discipline of Sports – Psychology Poses to be Challenge as well as a major task for its Disciplinarians.

REFERENCE

- ⇨ Angela Patmore (1986), Sportsmen under stress, Anchor Brendon Ltd., Triptree, Essex.
- ⇨ Hans Schellenberger (1990), psychological stress in Team sports, Sports Books Publisher, Toronto.
- ⇨ Peter Gyr (1997), translation of the text 'Neue Zurcher Zeitung' (Winterhur, Switzerland) – Creative thinking in football and psychology.

* Chetan Dhanani

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 124 - 126
ISSN 2319 - 8168

DRUGS IN SPORTS

Professionalism and commercialism ultimately led to corruption Bribing and cheating became commonplace, and competitors of this period were reputedly willing to ingest any preparation which might .enhance their performance, including extracts of mushrooms and plant seeds. During the twentieth century, sporting activity has gradually evolved into a 'big business' providing a significant, world-wide source of entertainment, revenue and employment. Sport has also developed into a significant social institution and to succeed in sport has become highly valued This has placed pressure on sports people to become not only successful, but the best. This pressure has contributed to the escalation in the incidence of drug taking and the number of drug related deaths within the sporting community. The list of drugs banned from the Olympics is determined by the World Anti-Doping Agency, established in 1999 to deal with the increasing problem of doping in the sports world.

Introduction

The use of drugs in an attempt to enhance sporting performance is known as doping. The word 'dope' originated in South Africa. Dope referred to a primitive alcoholic drink that was used as a stimulant in ceremonial dances. Gradually the term adopted a wider usage and in reference to sport, it became known as 'doping'.

In today's sporting context, doping refers to the use by athletes of prohibited substances or methods that may enhance performance. While the term 'doping' first appeared in an English dictionary in 1879, the use of drugs is evident throughout the history of sport.

Early games

By 800BC the Greeks had incorporated sport into their lifestyles to a similar extent as the cultural and religious observations of the time. Athletic festivals were common in the Greek calendar. Emphasis was placed on the artistic nature of athletics as well as the preparatory role athletics played for warriors. Participants were required to write poetry, or perhaps display another artistic ability, as well as perform physical feats.

From about 400BC sport achieved a status in the social life of Greece similar to, if not greater than, its place in society today. Mass spectator sport was the order of the day and rich prizes for winners led to the emergence of a class of highly paid sports people, resulting in the demise of the amateur competitor. Professionalism and commercialism ultimately led to corruption. Bribing and cheating became commonplace, and competitors of this period were reputedly willing to ingest any preparation which might enhance their performance, including extracts of mushrooms and plant seeds.

Roman period

The increased status of sport and the elevated position of athletes continued into the Roman period. However, the Romans adopted different sporting activities to the Greeks.

Spectatorship thrived at gladiatorial competitions and chariot races, and these sporting events reigned as a source of public entertainment

The use of drugs during this period has also been recorded. Chariot racers fed their horses a potent mixture to make them run faster, while many gladiators were doped-up' to make their fights sufficiently vigorous and bloody for the paying public.

Christian era

The onset of the Christian era signaled the demise of

* PTI, The K.P.E.S. College, Bhavnagar

these early games. The blood-letting nature of many of the Roman 'sports' was unacceptable to the new order of society. Eventually in 396AD the Emperor Theodosius called an end to the ancient games with a rule banning all forms of pagan' sports. White sports such as wrestling and boxing were initially promoted as substitute for the disfavored Roman activities, these were not widely accepted and their popularity as a form of sport subsided Furthermore, the ethos that physical development hindered intellectual development was widely encouraged and accepted.

Sport in the early nineteenth century

Sport in the English society of the early nineteenth century was comprised largely of unstructured recreational activities England was an agricultural and rural-based society and displayed forms of physical activity that were casual, communal and regionalized in nature. The type of recreational activity mirrored the pace of society.

Celebrations in respect of the harvest, or religious holidays such as Christmas, would bring the village together for a central form of entertainment.

• Typical celebrations consisted of: drinking and dancing

• games such as sack races, leapfrog and pig chasing

• activities like cockfighting and boxing matches

• Football games with over 1,000 players on a field several miles long.

The Industrial Revolution had a significant impact on all aspects of sport and recreation. Technology was used to develop new equipment in sports such as golf, tennis and cricket. Other inventions also had a major impact, for example, the electric light which permitted the playing of games at night. A number of developments occurred that changed the format of traditional activities.

These included:

• restrictions of time and space

• formation of clubs and organized competitions

• restriction on the number of players

• development of rules

• standardization and modification of equipment

Two significant outcomes of the increased involvement and interest in sport were commercialism and professionalism. The professional sportsperson took a place in society. Sport was no longer a frivolous activity to be played solely in free time. Sport, for some, now became a profession. Sport and the twentieth century

By the turn of the century, sport was reassuming a place similar to that which it held in Greek and Roman societies. Further advances in technology combined with social, economic and political developments influenced sports development during the twentieth century.

During the twentieth century, sporting activity has gradually evolved into a 'big business' providing a significant, world-wide source of entertainment, revenue and employment. Sport has also developed into a significant social institution and to succeed in sport has become highly valued.

This has placed pressure on sports people to become not only successful, but the best. This pressure has contributed to the escalation in the incidencef drug taking and the number of drug related deaths within the sporting community. The list of drugs banned from the Olympics is determined by the World Anti-Doping Agency, established in 1999 to deal with the increasing problem of doping in the sPorts world. The banned substances and techniques fall into the following categories:

• Stimulants

• Narcotic analgesics

• Anabolic agents

• Diuretics

• Peptide hormones, mimetics and analogues

• Beta blockers

• Blood doping

Stimulants

• You are wide awake and very alert. You are very competitive.

• Your reactions are very fast and your heart rate has increased

• You might have taken: amphetamines (speed) or cocaine

Narcotic analgesics

• You have got an injury but are able to play on without feeling any pain.

• You would take these if you wanted to be able to hide the pain

• You might have taken: morphine, methadone or heroin

Anabolic agents

• You have big muscles. You are very aggressive and if you are a woman you might grow facial hair.

• You would take these to gain an advantage in sports which need you to be able to train harder and longer, and be physically stronger and more powerful, e.g. sprinting.

• You might have taken: nandrolone or THG

Diuretics

• Your urine production is increased to get rid of excess fluid in order to lose weight and to mask the presence of other drugs.

• You would use these if you have to make a certain weight for your sport like boxing or horse-racing.

Beta blockers

• You are very calm and steady. Your heart rate and breathing rate slow down.

• You take these to have an advantage in sports needing concentration like shooting.

Blood doping

• You have had a transfusion of blood containing lots of red blood cells.

• The blood was taken from you during altitude training (when your body naturally makes more red blood cells) or your blood has been treated.

• The extra RBC means you now have a greater 02-carrying capacity so you have an advantage in endurance events.

Peptide hormones, mimetics and analogues

• Hormones are naturally occurring in the body. Analogues are synthetic versions.

• EPO (erythropoetin) increases the number of 02-carrying red blood cells and is used in endurance events.

• HGH (human growth hormone) encourages muscle growth and prevents fatigue so is used for events requiring power and strength.

Nicotine and Alcohol

• Nicotine is highly addictive and is taken into the bloodstream through smoking.

• It raises the HR and BR

• Alcohol contains ethanol which acts on the part of the brain responsible for balance, speech and coordination. Very bad for sport!

Both these drugs are illegal if found in high enough quantities in the bloodstream.

Drug	**Side effect**
Stimulants	Increase HR and BP, Hide fatigue, increase anxiety
Narcotic analgesics	Hide injuries that could be made much worse, are highly addictive
Anabolic agents	Increase aggression, development of unwanted male or female features kidney damage
Diuretics	Dehydration, headaches, nausea, dizziness, cramps
Peptide hormones, mimeties and analogues	EPO-higher risk of stroke, acne and muscle tremors 1-IGH-abnonnal growth, high BP, diabetes, arthritis
Beta blockers	Dizziness, headaches. tiredness, upset stomach
Blood doping	Overload the circulatory system causing high I3P, kidney failure

There are a large number of reasons why an athlete may decide to take drugs. Selections are listed here:

• Pressure to succeed, either from themselves or coaches/family

• Belief that their competitors are taking drugs

• Pressure from governments/national authorities (as occurred in the eastern bloc countries in the 60's and 70's)

• Financial rewards for outstanding performance

• Lack of access to, or funding for training facilities and additional support (nutrition, psychological support)

• Community and media attitudes and expectations of success

The use of performance-enhancing drugs undermines the ideals of sports and devalues and debases the rewards of competition. Only by taking a concreted and comprehensive approach to fight against doping in sports is it possible to protect the integrity of sport and the health of athlete youth worldwide.

Current Anti Doping Approache

Basic Goals

• Strengthening the power of education and improving the quality of educational services through information and technology (printed materials, video tapes, telephone counseling)

• Educating athletes and the wider community

* Y.L. Jethava

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 127 - 128
ISSN 2319 - 8168

THE RELATIONSHIP OF SPORTS CLIMBING PERFORMANCE WITH THE SELECTED VARIABLES OF FITNESS

The study aims to investigate relation of sports climbing performance (speed climbing) with selected variables of fitness. The subjects for this study were 26 boys and girls; age 9-13 years who got qualified to take part in Inter-house Sports Climbing Competition 2012-13 at school level. Competition was help on 11 meters high sports climbing wall. Hand timings were taken to measure speed climbing performance. Speed, explosive strength of leg, strength endurance of arms and shoulder muscles, explosive strength of shoulder muscles and agility were respectively measured through 45m Dash, Vertical jump, Push ups, Medicine Ball Throw, and 5m Shuttle Run tests. Product Moment Correlation Coefficient (r test) was applied to test hypothesis at the significance level of 0.05. It was observed that there was significant relation for sports climbing performance with speed, explosive strength of leg muscles and strength endurance of arms and shoulder muscles whereas an insignificant relationship was apparent with explosive strength of shoulder muscles and agility.

Key Words: Sports Climbing Performance, Speed, Explosive Strength of Leg Muscles, Strength Endurance of Arms and Shoulder Muscles, Explosive Strength of Shoulder Muscles, Agility.

Introduction

"When we try to pick out anything by itself, we find it hitched to everything else in the universe."[1]

As the quote says each and every thing in this word are interconnected and may be interdependent also. When it comes to researches it is always a question of many coaches or sports trainer that what actually affects the performance of the player. In these days like all other games; sports climbing is emerging activity as a recreational sports as well as professional also.

Researches show that basic variables of fitness i.e. speed, strength, endurance, flexibility and agility affect the actual or final performance of every player of any sports. These are the bases for each and every aspect of sports training. Any sports person has to develop basic strength, endurance, and flexibility than and there only that individual can be trained for specific strength and specific endurance. Stojanovic[2] and others examined 24 elite basketball players for correlation between explosive strength, aerobic power and repeated sprint ability. Result of his study showed significant decrements in sprint performance from the eight 30-m sprint were observed. Strong inverse correlation was found between countermovement jump and specific repeated sprint ability. No significant correlation was found between VO2max and specific repeated sprint ability. This sort of study may be helpful for the coaches of this emerging sport to train their players better.

Methodology

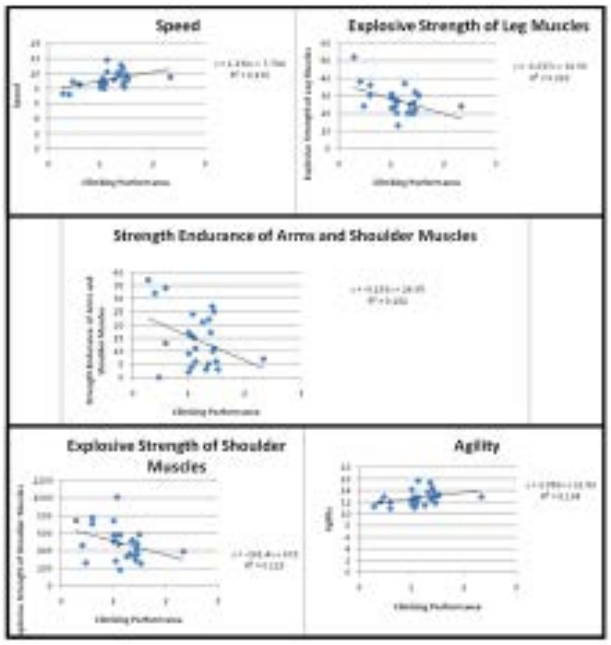
The subjects for this study were 26 boys and girls; age from 9 to 13 years who got qualified to take part in Inter-house Sports Climbing Competition 2012-13 at school level. Competition was help on 11 meters high sports climbing wall. Hand timings were taken to measure speed climbing performance. Speed, explosive strength of leg, strength endurance of arms and shoulder, explosive strength of shoulder, agility were respectively measured through 45m Dash,

*** Visiting Lecturer, Department of Phy. Edu., M.S. University, Surat**

Standing Vertical jump, Push ups, Medicine Ball Throw, and 5m Shuttle Run tests. Product moment Correlation Coefficient[3] (r test) was applied to test hypothesis at the significance level of 95% or 0.05. It was hypothesised that there will be significant correlation coefficient of speed climbing performance will be found with selected variables of fitness. Interest of the subjects during tests, daily routine, personal habits and some psychological and psychological aspects of the subjects which may affect their performance were not observed.

Result of the Study

Table - 1



1. Here tabulated r = 0.388. Since calculated (for Speed) r = 0.49* is greater than tabulated r, thus correlation between sports climbing performance and speed is significant at 95% confidence.

2. Here tabulated r = 0.388. Since calculated (for Explosive Strength of Leg Muscles) r = - 0.48* is greater than tabulated r, thus correlation between sports climbing performance and explosive strength of leg muscles is significant at 95% confidence.

3. Here tabulated r = 0.388. Since calculated (for Strength Endurance of Arms and Shoulder Muscles) r = - 0.38* is greater than tabulated r, thus correlation between sports climbing performance and strength endurance of arms and shoulder muscles is significant at 95% confidence.

4. Here tabulated r = 0.388. Since calculated (for Explosive Strength of Shoulder Muscles) r = 0.36 is lesser than tabulated r, thus correlation between sports climbing performance and explosive strength of shoulder muscles is not significant at 95% confidence.

Discussion of Result

The collected data was calculate by Product Moment Correlation Coefficient to locate the relation of sports climbing performance of speed climbing competition with selected variables of fitness. The result of the study revealed that there was significant relationship for sports climbing performance with speed, explosive strength of leg muscles and strength endurance of arms and shoulder muscles whereas an insignificant relationship was apparent with explosive strength of shoulder muscles and agility. Draper[4] and others in their study observed that there was a significant relationship between powerslap scores and climbing ability.

Discussion of Hypothesis

In the light of findings of the study, the hypothesis that there will be significant positive relationship will be found between sports climbing performance and selected variables of fitness is accepted for speed, explosive strength of leg muscles and strength endurance of arms and shoulder muscles and rejected for explosive strength of shoulder muscles and agility.

Recommendations

* Similar study may be conducted on professional climbers.
* Similar study may be taken by selecting larger sample or different age group.
* Similar study may be conducted by selecting some other physiological or anthropological variables.
* Similar study may be conducted by observing psychological factors which affect the climbing performance.

REFERENCE

⇨ Kundra Sanjay, **A Textbook of Physical Education Class – XI**, Third Edition: New Delhi: Evergreen Publication India Ltd., 0181-5053192, 2008.

⇨ Singh Hardayal, **Science of Sports Training**, New Delhi: D.V.S. Publication, 1991.

* B.H. Kantesariya

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 129 - 131
ISSN 2319 - 8168

INTERRELATIONSHIP OF BMI WITH STRENGTH, SPEED AND FLEXIBILITY IN DIFFERENT AGE GROUPS

The purpose of this study was to find out the interrelationship of BMI with Strength i.e. endurance strength of abdominal muscles and explosive strength of leg muscles, speed and flexibility which are respectively assessed by sit up, standing broad jump, 50 yard dash and sit and reach tests.48 boys, age 7 to 13 years as a group A and 40 boys, 17 to 28 years as a group B were selected as the subjects for the study. Product moment correlation coefficient test (r at 0.05 level of significance) was applied to test hypothesis. The findings of the study shows that there is significant relationship of BMI with endurance strength of abdominal muscles, explosive strength of leg muscles, and flexibility whereas there is negative significant relationship was found between BMI and speed in group A i.e. age from 7 to 13 years. However there was no significant relationship of BMI found with endurance strength of abdominal muscles, explosive strength of leg muscles, speed and flexibility in higher age group.

Key Words: Body Mass Index, Strength of abdominal muscles, explosive strength of leg muscles, flexibility of lower back and hamstring muscles.

INTRODUCTION

The ideal body composition varies with different sports however in general the less the fat mass, the higher the performance. The body is divided into two components, the fat-free body mass and the fat mass. The fat free mass is composed partly of muscle tissue and the bones. Body composition refers to the relative percentage of muscle, fat, bone and other tissue of which the body is composed. The success of an athlete depends a lot on the body type. Body size, build and body composition can impair or help performance. Athletics performance relates to body type and body composition i.e. muscular development and amount of body fat. Boyd fat contributes no strength advantage and limits endurance, speed and movement however it has its own importance in functioning of human body.

BMI (Body Mass Index) is a statistical measure of an individual's scaled weight according to one's height. It is a simple index of weight for height and is widely used by medical, health and fitness professionals to classify underweight, overweight and obesity. BMI is calculated by dividing weight (in kg) by height (in meters) squared. The World Health Organization has defines different ranges of different categories i.e. under weight, normal, over weight and obese. It is also classified according to age and sex of an individual.

Delimitations

1. The study was delimited to the 48 boys in 7 to 13 years age group and 40 boys in 17 to 28 years age group.
2. The study was further delimited to the assessment of the endurance strength of abdominal muscles, explosive strength of leg muscles, speed and flexibility

Limitations

1. For the subjects; factors like diet, daily routine life style, habits etc. which may affect the Finding of the study will not be controlled by the investigators.

Hypothesis

It was hypothesized that significant relationship of BMI with strength, speed and flexibility will be found

*** Asst. Prof. Department of Physical Education, Saurashtra University, Rajkot**

in both the age groups.

METHODOLOGY

Design of the Study

For the purpose of this study 48 boys of 7 to 13 years as a group A and 40 boys 17 to 28 years as a group B were selected as subjects. On first day height, weight, standing broad jump and sit ups conducted and on the second day 50 yard dash and sit and reach tests were conducted to measure BMI, explosive strength of leg muscles, strength of abdominal muscles, speed and flexibility respectively.

Table – 1

Variables, Unites of Measurement and Test Applied for Data Collection

No	Variable	Unit of Measurement	Test
1	Strength of Abdominal Muscles	Number	Sit ups
2	Explosive Strength of Leg Muscles	Number	Standing Broad Jump
3	Speed	Time (Seconds)	50 Yard Dash
4	Flexibility	Centimeters	Sit and Reach Test

Statistical Procedure

To find out the relationship of BMI with strength, speed and flexibility coefficient of correlation (r test) was applied. The level of significance to test the hypothesis was set at 0.05 level which was considered appropriate for the purpose of the study.

ANALYSIS OF DATA AND FINDINGS OF THE STUDY

Table - 2

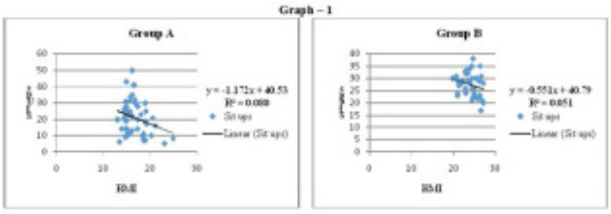
Table showing the correlation coefficient of BMI with strength of abdominal muscles, explosive strength of leg muscles, speed and flexibility in group A and group B.

No	Variable	Correlated Correlation Coefficient	
		Group A	Group B
1	Strength of Abdominal Muscles	**- 0.283***	**0.226**
2	Explosive Strength of Leg Muscles	**- 0.345***	**0.177**
3	Speed	**0.322***	**0.038**
4	Flexibility	**- 0.269***	**0.009**

r 0.05 (46) 0.240, (38) 0.264

Graph – 1

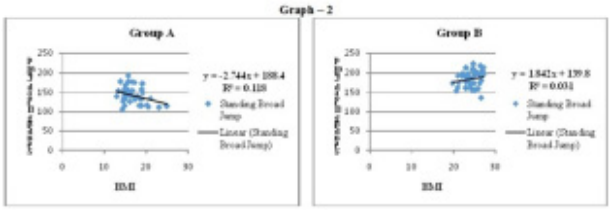
Graph showing the correlation coefficient of BMI with Endurance Strength of Abdominal Muscles in group - A and group - B.



It is evident from graph – 1 that there is negative significant relationship between BMI and endurance strength of abdominal muscles in group A; which means that there is negative linear relation between the BMI and endurance strength of abdominal muscles. Here any amount of increase in BMI is followed by the decrease in the endurance strength of abdominal muscles by the approximately same amount and vice versa. Whereas there is no significant relationship found between BMI and endurance strength of abdominal muscles in group B

Graph – 2

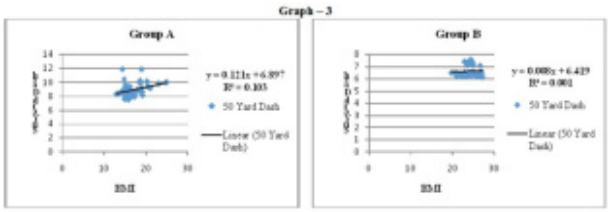
Graph showing the correlation coefficient of BMI with Explosive Strength of Leg Muscles in group - A and group - B.



It is evident from graph – 2 that there is negative significant relationship between BMI and explosive strength of leg muscles in group A; which means that there is negative linear relation between the BMI explosive strength of leg muscles. Here any amount of increase in BMI is followed by the decrease in the explosive strength of leg muscles by the approximately same amount and vice versa. Whereas there is no significant relationship found between BMI and explosive strength of leg muscles in group B

Graph – 3

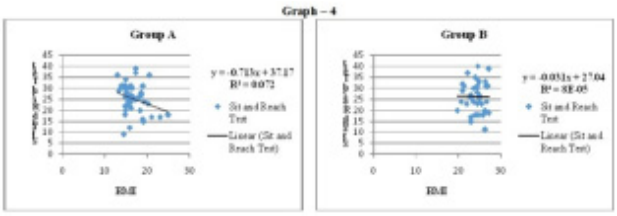
Graph showing the correlation coefficient of BMI with Speed in group - A and group - B.



It is evident from graph – 3 that that there is positive significant relationship between BMI and speed in group A. Here increase in BMI in any amount is followed by the increase in running time by the approximately same amount and vice versa. Whereas there is no significant relationship found between BMI and speed in group B.

Graph – 4

Graph showing the correlation coefficient of BMI with Flexibility in group - A and group - B.



It is evident from graph – 4 that there is negative significant relationship between BMI and flexibility in group A. Here any amount of increase in BMI is followed by the decrease in the flexibility by the approximately same amount and vice versa. Whereas there is no significant relationship found between BMI and flexibility in group B

Discussion of Findings

The findings of the study shows that there is significant relationship of BMI with endurance strength of abdominal muscles, explosive strength of leg muscles, and flexibility whereas there is negative significant relationship was found between BMI and speed in group A i.e. age from 7 to 13 years. However there was no significant relationship of BMI found with endurance strength of abdominal muscles, explosive strength of leg muscles, speed and flexibility in higher age group. The reasons for the same could be that in higher age group muscles mass would have been developed well and limitations of BMI measure that it measures only the proportion of weight to height however body weight also includes muscles mass, bone mass and other body composition. A large muscle mass enhances performance in strength and power activities. Here accurate appraisal of body composition is required as BMI is of limited value in evaluating physique, since it is well established that overweight and over fat are not synonymous. This point is clearly illustrated that many who are muscular and exceed some average weight for their age and height, but otherwise are lean in terms of body fat.

Recommendation

1. The same type of study can be conducted with different age group.
2. The same type study can be conducted selecting girls as a subject for the study.
3. The same type of study can be conducted selecting players of specific sports.
4. Similar study can be conducted selecting other specific component of body composition.

REFERENCE

- Barrow, H.M. and McGee, R. (1979) **A Practical Approach to Measurement in Physical Educatio**n. London: Henry Kimpton Publishers. Steven, B. H, et al. (2005) **HUMAN BODY COMPOSITION**, Second edition; Human Kinetics.
- Vivian, H. H. and Dale, R. W. (2004) **APPLIED BODY COMPOSITION ASSSSMENT**, Second Edition; USA: Human Kinetics.

Periodicals & Journals

- Antoine J. S. et. al. (2012) "Relationship between body mass index and body composition in adolescents of Asian Indian origin and their peers" **European Journal of Public Health** 22 (6). Page 887 to 889.
- Halme T, et al. (2009) "Relationships between standing broad jump, shuttle run and Body Mass Index in children aged three to eight", **The Journal of Sports Medicine and Physical Fitness** 49 (4). Page 295 to 400.
- http:www.livestrong.com/article/40808 on 12/ 07/2013

* **V.S. Vakani**

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 132 - 133
ISSN 2319 - 8168

PRANAYAMA A SCIENCE OF BREATHING

Pranayama is control of Breath". "Prana" is Breath or vital energy in the body. On subtle levels prana represents the pranic energy responsible for life or life force, and "ayama" means control. So Pranayama is "Control of Breath". One can control the rhythms of pranic energy with pranayama and achieve healthy body and mind.

Patanjali in his text of Yoga Sutras mentioned pranayama as means of attaining higher states of awareness, he mentions the holding of breath as important practice of reaching Samadhi. Hatha Yoga also talks about 8 types of pranayama which will make the body and mind healthy.

Five types of prana are responsible for various pranic activities in the body, they are Prana, Apana, Vyan, Udana & Samana. Out of these Prana and Apana are most important. Prana is upward flowing and Apana is downward flowing. Practice of Pranayama achieves the balance in the activities of these pranas, which results in healthy body and mind.

Types Of Pranayama

· Quiet Breathing , Deep Breathing , Fast Breathing
· Tribandha and Pranayama
· Nadi Shuddhi Pranayama or Anuloma - Viloma (Alternate nostril breathing - I)
· Anuloma - Viloma (Alternate Nostril Breathing - II)
· Suryan Bhedan Pranayama (Right Nostril Breathing)
· Ujjayi Pranayama
· Bhramari Pranayama
· Pranayama from Hatha Yoga

Surya Bhedan, Bhasrika, Ujjayi, Shitali, Sitkari, Bhramari, Murchha & Plavini Pranayama

Preparation for Pranayama

As people have attraction towards Yogasanas, similarly they have attraction to Pranayama. The process of Pranayama is concerned with the breathing, the indicator of life. And therefore, if it is done wrongly, it may do harm to the person. This fear dissuades many from taking up Pranayama. The second reason for its unpopularity is the absence of teachers who can teach it scientifically. However, it is true that if one does Pranayama unscientifically, without proper guidance, one certainly suffers. But it does not mean that it is such a difficult process, that it cannot be done by a common man. On the contrary, if it is learnt and practiced under an expert's guidance, one learns soon and experiences the wonderful and even unimaginable benefits.

Breath and Prana

Breathing is a vital process which starts at the time of birth and stops at the death. The important Oxygen is provided to all the parts, organs and cells of the body. The maximum time a person can survive without oxygen is about 4 minutes. All the metabolic processes require oxygen. Oxygen is life, a vital force. This vital energy is called Prana.

What is Pranayama?

The process of controlling the Prana is called Pranayama. So pranayama is the science related to vital force supplying energy and controlling the body mind complex. Breathing is the process of taking in this vital energy and removing the waste products out of our body and mind. Generally breathing includes inhalation and exhalation but pranayama includes retention of breath (known as 'Kumbhaka' in Sanskrit) as well. This is a very important process. The air can be retained in the lungs or out of the lungs. The ancient texts say that retention of air,

*** Asst. Prof. Department of Physical Education, Saurashtra University, Rajkot**

increases the level of prana (energy) in the body, also it regulates the flow of pranic energy through out the body. So pranayama helps remove all the ailments and also can stop the aging process of the body.

Mind and breath

The mind, consisting of thoughts and emotions is closely related to the breath. When the mind is calm and relaxed, the breathing is smooth and slow. If you are stressed breathing is fast & shallow but mostly through chest. When one gets angry, the breathing becomes fast and forceful, in depressed states sighing, when in pain gasping, in anxiety shallow and rapid. In this way, the mental and emotional states affect breathing.

Rhythmic Breathing is Pranayama

All the processes and organs like heart, brain, digestive organs, endocrine glands in the body have rhythms. Also the breathing has specific rhythms. Pranayama is Rhythmic breathing, bringing the breath in natural rhythm by controlling the process of inhalation, exhalation and retention.

Physiology of Yogic breathing

In process of breathing, one uses diaphragm, intercostals muscles in the chest. The diaphragmatic breathing is called vertical breathing and is considered a more efficient way to inhale air than inhaling while expanding the chest which is called horizontal breathing...

In pranayama, one should utilize the diaphragm efficiently to get more oxygen without making more efforts. The diaphragm is attached to the organs like heart and lings, also the liver, spleen, pancreas and stomach from the bottom side. Efficient movement of the diaphragm makes the functioning of these organs more efficient.

We will see Deep breathing & Fast breathing from Pranayama Perspective in next article.

REFERENCE

- Prana Pranayama Prana Vidya - Swami Niranjananda Saraswati (Bihar School of Yoga, Munger)
- Pranayama - Yogacharya Vishwas Mandlik (Rishi Dharmajyoti), Yoga Vidya Gurukul, Nasik.
  Pranayama - Swami Kuvalayananda (Kaivalyadham, Mumbai)

* **Arjunsinh Rana**

Physical Education
Research Zone India
Vol. 2 Issu - (3)
June - 2014 Page - 134 - 136
ISSN 2319 - 8168

THE USE OF THE PERSON-CENTERED APPROACH FOR THE REDUCTION OF THE STATE-TRAIT ANXIETY IN FOOTBALL PLAYERS

The aim of this study was to investigate the effect of the person - centered intervention (reflection, congruence, respect, empathy) on the anxiety (state - trait) of football players. In the sample 50 male football players between the ages of 17 to 21 were taken. The whole sample was divided in to two equal groups (25 each) i.e. Experimental Group and Control Group. For the measurement of trait and state anxiety the STAI 1 and STAl2 (Spielberger, Gorsuch, Lushene, 1968; Laux, Glanzmann, Schaffner, Spielberger, 1981) were used and Roger's person-centered method was applied on Experimental Group for 15-20 minutes as advising sessions once per week before and after practice for 12 weeks (3 months). On the Control Group the coaches utilized their usual pedagogical - coaching techniques before and after practice. Statistically significant differences were observed on the reduction of state and trait anxiety between the football players of Experimental Group and Control Group. The results indicate that the person-centered method positively influences the players who participate in team sports reducing their state and trait anxiety.

Introduction

For coaches, dealing with anxiety is especially important, because an anxious athlete does not function correctly, has trouble concentrating, remembering, and noticing things which are necessary for a good performance. The result of anxiety is that the athletes are not able to perform as well as they can, their performance is influenced during a game and they seldom reach the desired result, which is victory. Anxiety in general is defined as: a) a learned bodily reaction to danger (Euler, 1983), b) a form of self-centeredness which is characterized by self-observation, doubts and low self-esteem (Krohne & Hock, 1994), c) one of the ten basic human emotions which is similar to instinct (Izard & Buechler, 1980), d) the result of the inconsistency between the inner and outer value system (Fisseni, 1996; Patsiaouras, 1999). In sport psychology theory, anxiety has been most often analyzed in terms of state, trait, cognition and somatic (Martens & Gill, 1976; Martens, Vealey & Burton, 1990, Spielberger 1966).

The present paper was designed exactly for this reason. The basic principles in the person - centered approach in sports are based upon Rogers's (1985; 1991a, b) theories. The person - centered theory confronts human nature as a complicated, whole, organic being which has the tendency to survive, to differ, to improve, to evolve and develop to the fullest extent of his/her potential. The main goal of the method is to help the individual to desire and achieve full autonomy and self-realization. Rogers's theories are built on a single "force of life" he calls the actualizing tendency. Rogers captures with this single great need or motive (actualizing tendency) all the other motives that other theorists talk about. In the person - centered method, the psychotherapist is not the expert who solves all of the individual's problems but, acting as a consultant helps the individual find his/her own way, personal solutions to various problems being confront. Because of the importance of person -centered theory in the field of psychology

*** Lecturer, Rajkot Kedavni Mandal, Rajkot**

and its results in the psychotherapy, it seemed appropriate to investigate the application of person - centered method in sports. The purpose of the study was with the person - centered approach in a time period of three months to reduce the levels of state and trait anxiety in football players

Methodology

Participants - The sample was made up of 50 football players of under-21 category. These football Players were enhancing their sports skills at SAI center Port Blair (Andaman & Nicobar) and SAI center Ambala (Haryana), The whole sample was divided in to equal groups (25 each) i.e. Experimental Group and Control Group. The football players of SAI center port Blair were taken into the Experimental Group and player of SAI center Ambala were constitute the Control Group.

Measures – on the Experimental group the Roger's person-centered method was applied in the form of advisory meetings at least once a week for 15-20 minutes before practice and with feedback for 15 minutes after practice, The person - centered method was applied to the experimental group by one of the researchers. Much attention was drawn to the creation of a safe environment for the participants, so as to feel comfortable to talk about personal problems, which they confront, without the fear of rejection of the coach -researcher or the other players in the team. There is only one technique that Rogerians are known for and that technique is called reflection (Rennie, 1998), Reflection is the mirroring of emotional communication (Rogers, 1991), For example if a player says "I feel very bad the coach may reflect this back to the player by saying something like "so, the training is getting you down, hey?" Also, using open-ended questions the coach is communicating with the player and is showing him that he is indeed listening, questioning about his/her condition and cares enough to understand_ On the Control Group the coaches utilized their usual pedagogical - coaching techniques before and after practice

For the measurement of trait and state anxiety the **STAI 1** and **STAI 2** (Spielberger, Gorsuch, Lushene, 1968; Laux, Glanzmann, Schaffner, Spielberger, 1981) were used. The STAI 1 (state) was used to measure state anxiety, a temporary situation of intensity, worry, insecurity and nervousness for situation to come, The STAl2 (trait) was used to measure trait anxiety as a relatively standard trait characteristic of a personality which we perceive as an attribute or a tendency the player has. The trait characteristic according to the person-centered theory is the re It o pieces of information, which have been created from the experiences that every person has and the interaction he/she has with his/her environment (Nemeskeri, 1992). The answers were given on a 4- point Likert type scale, from never (1) to always (4), The players completed the questionnaires (STAI 1 and STAl2) at the beginning of the experiment (Pre-Test) and once at the end of the experiment (Post-Test).

To analysis the collected data t-test was used and level of significance was set at 0.05.

Results and Discussion

The analysis and results of the data is as follows:

Table-1

Independent sample t-test for the State and Trait anxiety between Experimental &Control Group of football players

Variable	Session	Experimental Group			Control Group			SED	t
		N	Mean	SD	N	Mean	SD		
STAI-1	Pre-Test	25	37.00	9.56	25	38.74	9.43	2.68	0.64
	Post-Test	25	32.45	8.46	25	37.86	8.53	2.402	2.25*
STAI-2	Pre-Test	25	37.33	8.74	25	38.92	5.74	2.05	0.53
	Post-Test	25	32.33	8.61	25	39.92	9.06	2.49	3.04*

*Significant at 0.05 (2.01) level of significance on 48 df.

The analysis of the data presented in the table-1 clearly indicates that there exists no significant difference between the Pre-Test mean scores of both the groups on the state and trait anxiety. However, the table also shows that there exists significant difference between the Post-Test mean scores of both the groups on the state and trait anxiety at 005 level of significance 't' value clearly indicates that the sate and trait anxiety of Experimental Group was reduced significantly as compare to the Control Group.

Discussion

From the results it is observed that the statistically significant differences were observed in the state and trait anxiety of experimental group in comparison to the control group. The state and trait anxiety level of experiment group was reduced significantly due to the person - centered method

Even though there is a relatively small amount of research in the particular area, encouraging samples in the use of psychotherapeutic methods in sports are given in studies in the last few years, in which we conclude that the cohesion between the players of a soccer team improves with the use of a systemic family approach (Slater, 2002).

It appears that the person-centered method is a reliable one as far as the control of the above factors are concerned, a fact that is also supported by Roger's theoretical model (1985; 1991a, b). A potential restriction the study might have is the small sample size, although the results indicate that the person-centered method positively influences the athletes of the team sports. Further research with a larger sample and with athletes in individual sports is also recommended.

Conclusion

From the results of the study it have been concluded that the person - centered method positively influences the players who participate in team sports reducing their state and trait anxiety. The aim of a coach who follows the principles of the person-centered approach is to give his/her player the opportunity to choose and reach a decision that he/she (the player) considers to be right and not to try to solve the problems that every athlete must deal with by giving him/her ready solutions.

REFERENCES

- Euler, H. A. (1983). Lerntheoretische Anstze, In H. Euler & H Mandl (Eds.) Emotionspsychologie. (pp. 62- 72). Wien: Urban & Schwarzenberg Verlag.
- Fisseni, H. J. (1996). Persgnlichkeitspsychologie. EM Theorien?berblick. Ggttingen, Bern, Toronto, Seattle: Hogrefe Verlag.
- lzard, C. E., Buechler, S. (1980). Aspects of consciousness and personality in terms of differential emotions theory. In R. Plutchik & H. Kellermann (Eds.), Emotion: theory, research, and experience, vol. 1, theories of emotion. (pp. 165-187). New York, London, Toronto,
- Sydney, San Francisco, Academic Press,
- Krohne, H. W., Hock, M. (1994). Elterliche Erziehung und Angstentwicklung des Kindes. Untersuchungen c'ber die Entwicklungsbedingungen von Engstlichkeit und Angstbewltigung. Bern, G§ttingen, Toronto, Seattle:
- Hans Huber Verlag. Laux, L., Glanzmann, P., Schaffner, P., & Spielberger, C. D. (1981). Das State-Trait-Angstinventar (STAI). Weinheim, Germany

* J.B. Chauhan

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 137 - 139
ISSN 2319 - 8168

CAREER IN SPORTS PSYCHOLOGY

What is Sports Psychology?

Sports psychology is the study of how psychology influences sports, athletic performance, exercise and physical activity. Some sports psychologists work with professional athletes and coaches to improve performance and increase motivation. Other professionals utilize exercise and sports to enhance people's lives and well-being throughout the entire lifespan.

History of Sports Psychology

Sports psychology is a relatively young discipline within psychology. In 1920, Carl Diem founded the world's first sports psychology laboratory at the Deutsche Sporthochschule in Berlin, Germany. In 1925, two more sports psychology labs were established — one by A.Z. Puni at the Institute of Physical Culture in Leningrad and the other by Coleman Griffith at the University of Illinois.

Griffith began offering the first course in sports psychology in 1923, and later published the first book on the subject titled The Psychology of coaching (1926). Unfortunately, Griffith's lab was closed in 1932 due to lack of funds. After the lab was shut down, there was Very little research on sports psychology until the subject experienced a revival of interest during the 1960s.

Ferruccio Antonelli established the International Society of Sport Psychology (ISSP) in 1965 and by the 1970s sports psychology had been introduced to university course offerings throughout North America. The first academic journal, *the International Journal of Sport Psychology*, was introduced in 1970, which was then followed by the establishment of the *Journal of Sport Psychology* in 1979.

By the I 980s, sports psychology became the subject of a more rigorous scientific focus as researchers began to explore how psychology could be used to improve athletic performance, as well as how exercise could be utilized to improve mental well-being and lower stress levels.

Sports Psychology Today

Contemporary sports psychology is a diverse field. While finding ways to help athletes is certainly an important part of sports psychology, the application of exercise and physical activity for improving the lives of non-athletes is also a major focus.

Major Topics Within Sports Psychology

There are a number of different topics that are of special interest to sports psychologists. Some professionals focus on a specific area, while others study a wide range of techniques.

• **Imagery:** Involves visualizing performing a task, such as participating in an athletic event or successfully performing a particular skill.

• **Motivation:** A major subject within sports psychology, the study of motivation looks at both extrinsic and intrinsic motivators. Extrinsic motivators are external rewards, such as trophies, money, medals or social recognition. intrinsic motivators arise from within, such as a personal desire to win or the sense of pride that comes from performing a skill.

• **Attentional Focus:** Involves the ability to tune out distractions, such as a crowd of screaming fans, and focus attention on the task at hand.

What Is Sports Psychology?:

According to Division 47 of the American Psychological Association, sports psychology encompasses a range of topics including "motivation to persist and achieve, psychological considerations

* Lecturer, Lt. M.J.Kundaliya B.P.Ed. College, Rajkot

in sport injury and rehabilitation, counseling techniques with athletes, assessing talent, exercise adherence and well-being, self-perceptions related to achieving, expertise in sport, youth sport and performance enhancement and self-regulation techniques."

While popular perceptions often presume that sports psychology is only concerned with professional athletics, this specialty area includes a broad range of scientific, clinical and applied topics involving sports and exercise. There are two key areas of interest in sports psychology: understanding how psychology can be applied to improve motivation and performance and understanding how sports and athletics can improve mental health and overall well-being.

Sports psychologists may also choose to specialize in a particular area. Some examples of major specialties within this field include:

• Applied sports psychology focuses on teaching skills to enhance athletic performance such as goal setting and imagery.

• Clinical sports psychology involves combining mental training strategies from sports psychology with psychotherapy to help clients who suffer from mental health problems including eating disorders and depression.

• Academic sports psychologists teach at colleges and universities and also conduct research.

What Do Sports Psychologists Do?:

Sports psychologists typically perform a range of tasks related to sports performance and education. Some opt to teach at the university level, while others work directly with athletes to increase motivation and enhance performance. Other options include client counseling, scientific research and athletic consulting. In addition to working with professional athletes, sports psychologists also utilize their expertise to increase the mental well-being of non-athletes. They may work with a range of clients including children and teens involved in athletics, professional athletes and teams interested in improving their performance and injured athletes working toward returning to competition.

How Much Do Sports Psychologists Typically Earn?:

Pay ranges vary considerably within sports psychology based on training, education, and area of specialization. According to the Occupational Outlook Handbook published by the U.S. Department of Labor, average salaries for clinical and counseling psychologists range between $41,850 and $71,880. The median salary for university faculty positions was $55,000 in a 2001 salary survey by the American Psychological Association (APA) (Singleton et at, 2003). Some top sports psychologists earn six-figure salaries working as consultants for professional athletes, but most earn a more modest yearly income.

What Type of Degree Do Sports Psychologists Need?:

Entry-level positions with a bachelor's degree are rare, usually taking the form of internships. Most positions require a master's or doctorate degree in clinical, counseling or sports psychology as well as direct training and experience in apply psychology to sports and exercise.

The American Board of Sport Psychology offers a few different professional certifications. The highest level credential is the Board Certified Sports Psychologist-Diplomat, which "...signifies that the holder has advanced training and experience in Sport Psychology and is especially aware of ethical. methodological, and research issues associated with the application of methods to enhance the psychological performance of athletes." Many who hold this certification are also certified or licensed clinical, counseling or health psychologists.

Because there are few graduate programs offering specialized degrees in sports psychology, it can be difficult to determine what exact combination of training and experience qualifies a professional to be called a 'sports psychologist.' Division 47 of the APA suggests that sports psychologists should be licensed psychologists with "experience in applying psychological principles in sports settings." Additionally, an extensive educational background and training in sports, motivation management. performance and athletics is also recommended.

Is a Career in Sports Psychology Right for Me?:

Only you can decide if a sports psychology career is suited to your needs, interests, talents and goals. If you dislike sports or exercise, this career is probably not for you. But if you enjoy helping people achieve their full potential, solving complex problems and working as part of a team, this field might he an ideal match for you.

What Are the Pros and Cons of a Career in Sports Psychology?:

Like all careers, sports psychology has its advantages and disadvantages. Before you decide if this career is right for you, spend some time learning more about sports psychology. Explore your options by taking an introductory course on the subject and weigh your choices carefully before you decide.

Benefits of a Career in Sports Psychology

• Sports psychologists often work as part of a collaborative team.

• There are diverse career paths and specialization opportunities (i.e. teaching, youth sports, professional athletics training).

• It can be a fun, challenging and exciting job.

Downsides of a Career in Sports Psychology

• The emphasis on teamwork may be difficult for independent-minded individuals.

• Requires extensive education, training and experience.

• Opportunities are generally more limited for bachelor's and master's degree-holders.

Suggested Resources:

• The American Board of Sport Psychology

• APA Division 47 - Exercise and Sports Psychology

• The Journal of Applied Sport Psychology

• Sachs, M.L., Burke, K.L., & Schrader, D.C. (2000) Directory of graduate programs in applied sport psychology (6th ed.). Morgantown, WV: Fitness Information Technology.

REFERENCE

⇨ American Board of Sports Psychology (n.d.) Credential and certificates: Description on and Q and A

⇨ http://iiwww.amencanboardor 1/De6ult.aspx

⇨ Sugarman, K (2009) Careers in sport psychology . psych web. http:// www.psywww.com/sports/careers.htm

* A.M. Chaudhary

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 140 - 141
ISSN 2319 - 8168

શામળાજી કોલેજના કબડ્ડીના ખેલાડીઓ અને રાજેન્દ્રનગર કોલેજના ખો–ખોના ખેલાડીઓ પર રમત ચિંતાનો તુલનાત્મક અભ્યાસ

આ સંશોધન અભ્યાસનો હેતુ કબડ્ડી રમત જુથ અને ખો–ખો રમત જુથના ખેલાડીઓ વચ્ચે રમત ચિંતાનો તુલનાત્મક અભ્યાસ કરવાનો હતો. આ સંશોધન અભ્યાસ માટે આંતર વિશ્વવિધાલય કક્ષાએ પસંદ થતા કબડ્ડી રમતના ૧૨ ખેલાડીઓ અને ખો–ખો રમતના ૧૨ ખેલાડી ભાઈઓને વિષયપાત્રો તરીકે પસંદ કરી સ્પોર્ટસ કોમ્પિટિશન એંન્ઝાયટિ ટેસ્ટ લાગુ પાડી આંકડાઓનું એકત્રીકરણ કરવામાં આવ્યુ હતુ. બંને રમત જુથોના મળેલ પ્રાપ્તાંકો પર 't' ટેસ્ટ લાગુ પાડી ૦.૦૫ કક્ષાએ સાર્થકતા ચકાસતા બંને રમત જુથો વચ્ચે ચિંતાના પ્રમાણમાં કોઈપણ પ્રકારનો નોંધનીય તફાવત જોવા મળ્યો ન હતો.

પ્રસ્તાવના : –

રમતમાં સારા દેખાવ માટે ચિંતા એક જરૂરી પરિબળ છે. જયારે ખેલાડી વધારે ચિંતિત હોય ત્યારે પ્રદર્શન સારું કરી શકતો નથી.

જયારે ખેલાડી ચિંતિત હોય છે ત્યારે તેના હૃદયના ધબકારા વધે છે. લોહીનું દબાણ વધે છે. શ્વસનતંત્રના દરમાં વધારો થવા લાગે છે અને ઓકસિજનની વધારે જરૂરિયાત પડવા લાગે છે. ખેલાડીને ઉલટી, માથાનો દુ:ખાવો, થાક, કમજોરી આવી શકે છે તે ધ્રુજવા પણ લાગે છે. તેને શ્વાસ લેવામાં તકલીફ પડે છે કેમ કે તેના ગળાના સ્નાયુઓમાં તણાવ ઉત્પન્ન થવાથી શ્વાસ લેવામાં મુશ્કેલી અનુભવે છે.

ખેલાડીની ચિંતા નબળી માનસિકતા સાથે જોડાયેલી છે. અપમાન, તિરસ્કાર, ત્યાગ, પોતાની નબળી બાજુ ખુલ્લી પડી જવાનો ખોફ કે શારિરીક ઈજાનો ડર જેવી માનસિકતા ચિંતા માટેનું કારણ બને છે. ખેલાડી પોતાના અનુભવોનો કઈ રીતે અર્થ કરે તેના ઉપર ચિંતા અવલંબે છે.

કોઈ પણ રમત હોય પછી તે ક્રિકેટ હોય કે ખો–ખો, કબડ્ડી હોય દરેકમાં ચિંતા એ એક એવું પરિબળ છે. જેનાથી સારાં અને ખરાબ પરિણામો આવવાની શકયતા રહે છે. ચિંતા એ હકારાત્મક પ્રેરણાના રૂપમાં ખેલાડીને પોતાના દેખાવને સુધારવા અને નવા ઉદેશો નિર્ધારિત કરવા માટે વધારે મહેનત કરવા પ્રેરિત કરે છે.આમ, ચિંતા પ્રેરણાબળ બની શકે છે. તો બીજી બાજુ વધુ પડતી ચિંતા ખેલાડીના પ્રદર્શન ઉપર નકારાત્મક અસર પણ કરે છે.

અભ્યાસનો હેતુ :–

રમત–ગમતમાં ખેલાડીઓની ચિંતાની અગત્યતાને ધ્યાનમાં રાખી મારા આ અભ્યાસનો હેતુ શામળાજી કોલેજના કબડ્ડી અને રાજેન્દ્રનગર કોલેજના ખો–ખોના આંતર વિશ્વવિધાલય કક્ષાએ રમતમાં ભાગ લીધેલા ખેલાડીઓમાં ચિંતાના સ્તરનો તુલનાત્મક અભ્યાસ કરવાનો હતો.

વિષયપાત્રોની પસંદગી :

આ અભ્યાસમાં હેતુ માટે આંતર વિશ્વવિધાલય કક્ષાના શામળાજીના કબડ્ડી રમતના ૧૨ ખેલાડી ભાઈઓને વિષયપાત્રો તરીકે પસંદ કરવામાં આવ્યા હતા અને રાજેન્દ્રનગરના ખો–ખો રમતના ૧૨ ખેલાડી ભાઈઓને વિષયપાત્રો તરીકે પસંદ કરવામાં આવ્યા હતા. આમ બંને રમતના કુલ ૨૪ ખેલાડી ભાઈઓને વિષયપાત્રો તરીકે પસંદ કરવામાં આવ્યા હતા. વિષયપાત્રોની વય જુથ ૧૮ થી ૨૫ વર્ષની હતી.

માપનના ધોરણો :–

ચિંતાના અભ્યાસ માટે સ્પોર્ટસ કોમ્પિટિશન એન્ઝાયટિ ટેસ્ટ પ્રશ્નાવલિને માપન તરીકે પસંદ કરવામાં આવી હતી.

આંકડાકીય પ્રક્રિયા :–

સ્પર્ધા સમયની ચિંતાનું સ્તર જાણવા માટે મધ્યક અને 't' પરીક્ષણનો ઉપયોગ કરવામાં આવ્યો હતો.

પરિણામો અને ચર્ચા :

* M.P.Ed. Student, Mahadevbhai Desai Sharirik Shikshan Mahavidhyalaya, Sadara

સારણી – ૧

શામળાજી કોલેજ અને રાજેન્દ્રનગર કોલેજના આંતર વિશ્વવિદ્યાલય કક્ષાએકબડ્ડી અને ખો–ખો રમતમાં ભાગ લીધેલ ખેલાડીઓનો સ્પોર્ટસ કોમ્પિટિશન એંન્ઝાયટિ ટેસ્ટના આંકનો મધ્યક અને મધ્યક તફાવત અને 't' પરીક્ષણ દર્શાવતી સારણી

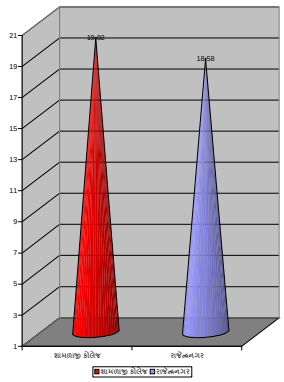
ક્રમ	રમત વિભાગ	વિષયપાત્રોની સંખ્યા	મધ્યક	મધ્યક તફાવત	મેળવેલ 't' પ્રમાણ	જરૂરી
૧	શામળાજી કોલેજ	12	19.92			
૨	રાજેન્દ્રનગર	12	18.58	1.34	1.72	2.074

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (22) = 2.074

સારણી –૧ પરથી માલુમ પડે છે કે ચિંતાના પ્રમાણ કસોટીમાં શામળાજી કોલેજના આંતર વિશ્વવિદ્યાલય કક્ષાએ કબડ્ડી રમતમાં ભાગ લીધેલ ખેલાડીઓની કસોટીઓનો મધ્યક 19.92, રાજેન્દ્રનગર કોલેજના આંતર વિશ્વવિદ્યાલય કક્ષાએ ખો–ખો રમતમાં ભાગ લીધેલ ખેલાડીઓની કસોટીઓનો મધ્યક 18.58 તેમજ બંને જુથોનો મધ્યક તફાવત 1.34જોવા મળેલ હતો. જયારે 't' રેશિયો 1.72 જોવા મળેલ છે. જે ૦.૦૫ કક્ષાએ(22) = 2.074 એ ચકાસતા બંને જુથો વચ્ચે સાર્થક તફાવત માલુમ પડતો ન હતો.

આલેખ – ૧

શામળાજી કોલેજ અને રાજેન્દ્રનગર કોલેજના આંતર વિશ્વવિદ્યાલય કક્ષાએ કબડ્ડી અને ખો–ખો રમતમાં ભાગ લીધેલ ખેલાડીઓનો સ્પોર્ટસ કોમ્પિટિશન એંન્ઝાયટિ ટેસ્ટના આંકનો મધ્યક દર્શાવતો આલેખ



આ અભ્યાસના પરિણામ પરથી કહી શકાય કે શામળાજી કોલેજના આંતર વિશ્વવિદ્યાલયના કબડ્ડી રમતના ખેલાડીઓ અને રાજેન્દ્રનગર કોલેજના આંતર વિશ્વવિદ્યાલયના ખો–ખો રમતના ખેલાડીઓના સ્પર્ધા સમયની ચિંતાના પ્રમાણમાં નોંધનીય તફાવત જોવા મળતો ન હતો.

સંદર્ભગ્રંથો

- જહોન, જહોન એચ. અને જયુડી એ. બ્લુકેર, સાયકોલોજી ઓફ કોચિંગ થિયરી એન્ડ એપ્લિકેશન, દિલ્હી : સુરજીત પ્રકાશન, ૧૯૮૨.
- થાની,વાય. આર., ખેલ મનોવિજ્ઞાન, નવી દિલ્હીઃ ખેલ સાહિત્યકેન્દ્ર. ૨૦૦૫
- પટેલ મફતલાલ, અસાધારણ મનોવિજ્ઞાન, ચોથી આવૃતિ, અમદાવાદ : યુનિવર્સિટી ગ્રંથ નિર્માણ બોર્ડ, ૧૯૯૪.
- વર્મા પ્રકાશ જે., એ ટેક્ષબુક ઓન સ્પોર્ટસ સ્ટેટેસ્ટીકસ, ગ્વાલિયર : વિનસ પબ્લિકેશન, ૨૦૦૦.

* K.S. Limbani

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 142 - 144
ISSN 2319 - 8168

અમરેલી જિલ્લાની શહેરી અને ગ્રામ્ય વિસ્તારની માધ્યમિક શાળાઓની વિધાર્થીનીઓની શારીરિક યોગ્યતાનો તુલનાત્મક અભ્યાસ

આ સંશોધન અભ્યાસનો હેતુ ગ્રામીણ અને શહેરી વિસ્તારની શારીરિક યોગ્યતાનો તુલનાત્મક અભ્યાસ કરવાનો હતો. આ સંશોધન અભ્યાસ માટે ગજેરા સંકુલ અમરેલીની માધ્યમિક શાળામાં અભ્યાસ કરતી ગ્રામ્ય અને શહેરી વિસ્તારની ૫૦–૫૦ બહેનો યદચ્છ પધ્ધતિથી વિષયપાત્રો તરીકે પસંદ કરી AAHPER Youth Physicial Fitness Test ધ્વારા આંકડાઓનુ એકત્રીકરણ કરવામાં આવ્યુ હતું. ગ્રામ્ય અને શહેરી જુથોના મળેલ પ્રાપ્તાંકો પર 't' ટેસ્ટ લાગુ પાડી ૦.૦૫ કક્ષાએ સાર્થકતા ચકાસતા ગ્રામ્ય અને શહેરી જુથો વચ્ચે વિષયપાત્રો વચ્ચે શારીરિક યોગ્યતાના પાસાના કોઈપણ પ્રકારનો નોંધનીય તફાવત જોવા મળ્યો ન હતો.

પ્રસ્તાવના : –

આજના આધુનિક યુગમાં રમત ગમત અને શારીરિક શિક્ષણ અને રમતગમત ક્ષેત્રે હરણફાળ ભરી રહયો છે. અને વૈજ્ઞાનિક શોધો એ વાતની સાક્ષી છે કે જે બાળક શારીરિક શિક્ષણ અને રમતગમતની પ્રવૃતિમાં ભાગ લે છે તેવા બાળકો વધારે તેજ, સ્થિર અને આત્મવિ વાસુ હોય છે. કારણ કે શારીરિક શિક્ષણ અને રમતગમતની પ્રવૃતિઓમાં ભાગ લેવાથી બાળ સહજ પ્રવૃતિઓ સંતુષ્ટ થાય છે. શારીરિક પ્રવૃતિઓ સ્વાસ્થ્ય અને આરોગ્ય માટેનો વાસ્તવિક અનિવાર્ય માર્ગ છે. પરંતુ, આજે બાળક ઘર તથા વિધાલયોના કઠોર અનુશાસન અને પુસ્તકોના બોજથી દબાયેલો રહેવાના કારણે તેમની સહજ પ્રવૃતિઓથી સંતુષ્ટી થઈ શકતી નથી. જેના ફળ સ્વરૂપે તેમના સ્વાસ્થ્ય અને આરોગ્ય તથા વિચાર અને વ્યવહાર સારા નથી હોતા. આ કારપણથી તે કમજોર દેખાય છે તેના વ્યકિતત્વનો વિકાસ સંપુર્ણ રીતે થઈ શકતો નથી. અને આવા બાઈળકોનું વ્યકિતત્વ વ્યવસ્થીત રીતે સમાજ સાથે બંધ બેસતું થઈ શકતું નથી.

શારીરિક ક્ષમતા જીવન જીવવા માટે ઘરમાં, કારખાનામાં, સરહદ ઉપર રમતના મેદાનમાં એમ દરેક ક્ષેત્રમાં જરૂરી છે. રોગોમાંથી મુકિત, પુરતી શકિત, ઝડપ ચપળતા સહનશકિત દિવસમાં પ્રવૃતિ પ્રમાણે મહતમ કાર્યકરવાનું કૌશલ્ય દરેક વ્યકિતની ઉમર પ્રમાણે મહતમ કાર્યકરવાનું કૌશલ્ય દરેક વ્યકિતની ઉમર પ્રમાણે માનસિક અને લાગણી સંબધી યોગ્ય સયોજન હોવું તે ક્ષમતા, બીજા શબ્દોમાં કહીએ તો શારીરિક ક્ષમતા એટલે દરરોજ ના કાર્યો જુસ્સાપુર્વક અને સરળતા પુર્વક બિનજરૂરી થાક અનુભવ્યા સિવાય ફુરસદના સમયના લાભને માણવા માટેની પુરતી શકિત સાથે તેમજ અણધારી કટોકટીને પહોંચી વળવાની ક્ષમતા એટલે શારીરિક ક્ષમતા, શારીરિક ક્ષમતાપણું વારસો નકકી કરે છે. પરંતુ, એ મર્યાદાઓમાં દરરોજ જીવવાની પધ્ધતિઓ શારીરિક ક્ષમતાનો વિકાસ કરે છે.

અભ્યાસનો હેતુ :–

આ સંશોધન અભ્યાસ માટે ગજેરા સંકુલ અમરેલીની માધ્યમિક શાળામાં અભ્યાસ કરતી ગ્રામ્ય અને શહેરી વિસ્તારની ૧૪ થી ૧૬ વર્ષની ગ્રામ્ય વિસ્તારની ૫૦ અને શહેરી વિસ્તારની ૫૦ બહેનોને વિષયપાત્રો તરીકે પસંદ કરવામાં આવી હતી.

શારીરિક યોગ્યતા માપવા માટે (એ.એ.એચ.પી.ઈ.આર.ડી.યુથ) કસોટી પ્રયોજી આંકડાઓનું એકત્રીકરણ કરવામાં આવ્યું હતું.

માપનના ધોરણો :

ક્રમ	ચલાયમાન	કસોટી	માપન
૧	હાથ અને ખભાના સ્નાયુઓનું સ્નાયુબળ અને સહનશકિત માપવા	લટક	સેકન્ડ
૨	પેટના સ્નાયુનું બળ અને સહનશકિત માપવા	બેન્ડનસીટ અપ્સ	૬૦ સેકન્ડ સંખ્યા
૩	ઝડપ અને ગતિસુમેળનું માપન	શટલ રન	સેકન્ડ
૪	પગનું વિસ્ફોટક બળનું માપન	સ્ટેન્ડિંગ બ્રોડ જમ્પ	સે મી
૫	જડપ અને વિસ્ફોટક બળનું માપન	૫૦ વાર દોડ	સેકન્ડ
૬	રૂધિરાભિષણ શ્વસન શકિતનું માપન	૬૦૦ વાર દોડ/ચાલ	સેકન્ડ /મિનીટ

આંકડાકીય પ્રક્રિયા :

આહપરડયુથ ફિટનેસ સ્ટેટની વિવિધ પ્રવૃતિઓમાં પ્રાપ્ત થયેલા કાચા પ્રાપ્તકોને પ્રમાણભુત પ્રાંપ્તાકોમાં પરિવર્તિત કરવામાં આવ્યા હતા. દરેક પ્રવૃતિના પ્રમાણભુત પ્રાપ્તાકોનો સરવાળો કરીને સમન્વીત પ્રાપ્તાંકો મેળવવામાં આવ્યા હતા. ગ્રામીણ વિધાર્થીનીઓ અને શહેરી

* M.P.Ed. Student, Mahadevbhai Desai Sharirik Shikshan Mahavidhyalaya, Sadara

વિધાર્થીનીઓની શારીરિક યોગ્યતાની તુલના કરવા માટે't' કસોટી લાગુ પાડી અથ પુર્ણતાનું સ્તર ૦.૦૫ પસંદ કરવામાં આવ્યું હતું.

પરિણામો અને ચર્ચા :

સારણી – ૧

ગ્રામીણ અને શહેરી જુથના વિષયપાત્રોએ લટક કસોટીમાં કરેલ દેખાવ નો મધ્યક, મધ્યક અને't' પ્રમાણે

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	લટક (ફ્લેકસ આર્મ હેંગ)	ગ્રામીણ	66		
		શહેરી	34.28	31.72	0.31

સાથ કતાનું ધોરણ ૦.૦૫ કક્ષાએ (98) = 1.98

સારણી –૧ પરથી માલુમ પડે છે કે લટક કસોટીમાં ગ્રામીણ જુથનો મધ્યક ૬૬ જયારે શહેરી જુથનો મધ્યક ૩૪.૨૮ છે. અને જુથ વચ્ચેનો મધ્યક તફાવત ૩૧.૭૨ જોવા મળેલ હતો.જયારે 't' રેશિયો 0.31 જોવા મળેલ હતો. જે ૦.૦૫ કક્ષાએ(98) = 1.98 એ ચકાસતા બંને જુથો વચ્ચે કોઈ પણ સાથ ક તફાવત માલુમ પડતો ન હતો.

સારણી – ૨

ગ્રામીણ અને શહેરી જુથના વિષયપાત્રોએ શયનોત્થાન કસોટીમાં કરેલ દેખાવ નો મધ્યક, મધ્યક અને't' પ્રમાણે

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	શયનોત્થાન (સીટઅપ્સ)	ગ્રામીણ	24.46		
		શહેરી	14.7	9.76	0.01

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (98) = 1.98

સારણી –૨ પરથી માલુમ પડે છે કે શયનોત્થાન કસોટીમાં ગ્રામીણ જુથનો મધ્યક ૨૪.૪૬ જયારે શહેરી જુથનો મધ્યક ૧૪.૦૭ છે. બંને જુથ વચ્ચેનો મધ્યક તફાવત ૯.૭૬ જોવા મળેલ હતો.જયારે 't' રેશિયો 0.01 જોવા મળેલ હતો. જે ૦.૦૫ કક્ષાએ(98) = 1.98 એ ચકાસતા બંને જુથો વચ્ચે કોઈ પણ સાર્થક તફાવત માલુમ પડતો ન હતો.

સારણી – ૩

ગ્રામીણ અને શહેરી જુથના વિષયપાત્રોએ શટલ દોડ કસોટીમાં કરેલ દેખાવ નો મધ્યક, મધ્યક અને't' પ્રમાણે

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	શટલ દોડ	ગ્રામીણ	54.5		
		શહેરી	32.8	21.7	0.02

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (98) = 1.98

સારણી –૩ પરથી માલુમ પડે છે કે શટલ દોડ કસોટીમાં ગ્રામીણ જુથનો મધ્યક ૫૪.૫ જયારે શહેરી જુથનો મધ્યક ૩૨.૮ છે. બંને જુથ વચ્ચેનો મધ્યક તફાવત ૨૧.૭ જોવા મળેલ હતો.જયારે 't' રેશિયો 0.02 જોવા મળેલ હતો. જે ૦.૦૫ કક્ષાએ(98) = 1.98 એ ચકાસતા બંને જુથો વચ્ચે કોઈપણ સાર્થક તફાવત માલુમ પડતો ન હતો.

સારણી – ૪

ગ્રામીણ અને શહેરી જુથના વિષયપાત્રોએ ખડી લાંબીકુદ કસોટીમાં કરેલ દેખાવ નો મધ્યક, મધ્યક અને't' પ્રમાણે

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	ખડી લાંબીકુદ	ગ્રામીણ	49.07		
		શહેરી	32.38	17.32	0.07

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (98) = 1.98

સારણી –૪ પરથી માલુમ પડે છે કે ખડી લાંબી કુદ કસોટીમાં ગ્રામીણ જુથનો મધ્યક ૪૯.૦૭ જયારે શહેરી જુથનો મધ્યક ૩૨.૩૮ છે. બંને જુથ વચ્ચેનો મધ્યક તફાવત ૧૭.૩૨ જોવા મળેલ હતો.જયારે 't' રેશિયો 0.07 જોવા મળેલ હતો. જે ૦.૦૫ કક્ષાએ(98) = 1.98 એ ચકાસતા બંને જુથો વચ્ચે કોઈ પણ સાર્થક તફાવત માલુમ પડતો ન હતો.

સારણી – ૫

ગ્રામીણ અને શહેરી જુથના વિષયપાત્રોએ ૫૦ વાર દોડ કસોટીમાં કરેલ દેખાવ નો મધ્યક, મધ્યક અને't' પ્રમાણે

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	૫૦ વાર દોડ	ગ્રામીણ	10.08		
		શહેરી	32.02	21.04	0.03

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (98) = 1.98

સારણી –૫ પરથી માલુમ પડે છે કે૫૦ વાર દોડ કસોટીમાં ગ્રામીણ જુથનો મધ્યક ૧૦.૦૮ જયારે શહેરી જુથનો મધ્યક ૩૨.૦૨ છે. બંને જુથ વચ્ચેનો મધ્યક તફાવત ૨૧.૦૪ જોવા મળેલ હતો.જયારે 't' રેશિયો 0.03 જોવા મળેલ હતો. જે ૦.૦૫ કક્ષાએ(98) = 1.98 એ ચકાસતા બંને જુથો વચ્ચે કોઈપણ સાર્થક તફાવત માલુમ પડતો ન હતો.

સારણી – ૬

ગ્રામીણ અને શહેરી જુથના વિષયપાત્રોએ ૬૦૦ વાર દોડ–ચાલ કસોટીમાં કરેલ દેખાવ નો મધ્યક, મધ્યક અને 't' પ્રમાણે

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	૬૦૦ વાર દોડ–ચાલ	ગ્રામીણ	42.09		
		શહેરી	27.03	15.06	- 0.01

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (98) = 1.98

સારણી –૬ પરથી માલુમ પડે છે ૬૦૦ વાર દોડ–ચાલ કસોટીમાં ગ્રામીણ જુથનો મધ્યક ૪૨.૦૯ જયારે શહેરી

જુથનો મધ્યક ૨૭.૦૩ છે. બંને જુથ વચ્ચેનો મધ્યક તફાવત ૧૫.૦૬ જોવા મળેલ હતો.જયારે 't' રેશિયો – 0.01 જોવા મળેલ હતો. જે ૦.૦૫ કક્ષાએ(98) = 1.98 એ ચકાસતા બંને જુથો વચ્ચે કોઈ પણ સાર્થક તફાવત માલુમ પડતો ન હતો.

અમરેલી જિલ્લાની ગ્રામ્ય વિસ્તારની બહેનો અને શહેરી વિસ્તારની બહેનોના હાથ અને ખભાના સ્નાયુઓનું સ્નાયુબળ અને સહનશકિત અને પેટના સ્નાયુઓનું બળ અને સહનશકિત ઝડપ અને ગતિસુમેળ પગનું ઝડપ અને વિસ્ફોટકબળ રૂધિરાભિષણ વસન શકિત જેવા શારીરિક યોગ્યતાના પાસાઓમાં કોઈ પણ પ્રકારમાં નોંધનીય સાર્થક તફાવત જોવા મળેલ ન હતો.

મિસુરી કોલિંબિયા યુનિવર્સિટીનાં ફ્રેન્ક બુથ કહે છે કે માનવીને સક્રિય જીવવા માટે જ ઈશ્વરે બનાવ્યો છે. આપણા જીન્સ એવું ઈચ્છે છે કે આપણે સક્રિય જીવ જ જીવવું જોઈએ. બેઠાડું અને નિષ્ક્રીય જીવન જીવીને આપણે આપણા શરીરની જિનેટીક બ્લુ પ્રિન્ટનો ખાતમો બોલાવી દીધો છે. તેના પરીણામ સ્વરૂપે આપણે જાતજાતનાં રોગોનો શિકાર બની ગયા છે.

સંદર્ભ ગ્રંથો

- ⇨ કલાર્ક, હરીસન એચ. ફિઝિકલ ફિટનેસ ન્યુઝ લેટસ માર્ચઃ ૧૯૫૯.
- ⇨ કાસુંદરા પ્રભુલાલ મો. શારીરિક યોગ્યતા અને સુખાકારી ગાંધીનગર : ૨મા પ્રકાશન માર્ચ : ૨૦૧૦.
- ⇨ કોર્બિન ચાર્લ્સ બી.એન્ડ લિન્ડસે, રૂથ, કન્સેપ્ટસ, ઓફ ફિટનેસ વીય લેબોરેટરીઝ. સીકસ્થ એડિશન : ડયુબેક આયોવા : ડબલ્યુ. એમ.સી. , બ્રાઉન પબિલ્શર્સ, ૧૯૮૯.
- ⇨ વર્મા પ્રકાશ જે. એ. ટેક્ષબુક ઓન સ્પોર્ટસ સ્ટેટેટીકસ વિનસ પબ્લિકેશન , ૨૦૦૦.

* S.R. Odedara

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 145 - 146
ISSN 2319 - 8168

રમતવીર અને બિનરમતવીર બહેનોના માનસિક સ્વાસ્થ્યનો તુલનાત્મક અભ્યાસ

આ સંશોધન અભ્યાસનો હેતુ રમતવીર અને બિનરમતવીર બહેનોના માનસિક સ્વાસ્થયનો તુલનાત્મક અભ્યાસ કરવાનો હતો. આ સંશોધન અભ્યાસ માટે આંતર યુનિવર્સિટી કક્ષાએ રમતોમાં ભાગ લેતી ૫૦ રમતવીર બહેનો અને ગુજરાત ટેકનોલોજી યુનિવર્સિટીની ૫૦ બિનરમતવીર બહેનોએ યદચ્છ પધ્ધતિથી વિષયપાત્રો તરીકે પસંદ કરી માનસિક સ્વાસ્થયની પ્રશ્નાવલી લાગુ પાડી આંકડાઓનું એકત્રીકરણ કરવામાં આવ્યુ હતુ. રમતવીર અને બિનરમતવીર જુથોના મળેલ પ્રાપ્તાંકો પર 't' રેશિયો લાગુ પાડી ૦.૦૫ કક્ષાએ સાર્થકતા ચકાસતા બિનરમતવીર બહેનો કરતા રમતવીર બહેનોનું માનસિક સ્વાસ્થય વધુ જોવા મળેલ હતું. જયારે ચેમ્પિયન રમતવીર જુથ અને શારિરીક શિક્ષણ અને રમતોમાં ભાગ લેતી બહેનોના જુથો વચ્ચે માનસિક સ્વાસ્થયમાં કોઈપણ પ્રકારનો નોંધનીય તફાવત જોવા મળ્યો ન હતો.

પ્રસ્તાવના : –

આપણે સૌ જાણીએ છીએ અને વાકેફ પણ છીએ કે કસરત નિયમિતપણે કરવી જોઈએ પણ ઘણા ઓછા વ્યસ્તિઓ જ નિયમિત પણે કસરત કરે છે. વિજ્ઞાન ગમે તેટલી છાનબીન કરે પરંતુ એક વાત સ્પષ્ટ છે કે કસરતથી સ્વાસ્થય અને શારીરિક ક્ષમતા બની રહે છે. આપણે જેટલા એકટીવ અને ફીટ હોઈએ આપણા માટે લાભકારક જ છે.

"Sound mind in a sound body" આ પ્રમાણે વિધાર્થીઓમાં શારીરિક, માનસિક તત્પરતા, આંતરસુઝ, શિસ્ત આદર, સહાનુભૂતિ, ઉદારતા જેવા ગુણોનો વિકાસ થાય છે. આજે લોકોના મનમાં એવી માન્યતા રહેલી છે કે શારીરિક શિક્ષણમાં માત્ર અંગ કસરત, રમતો રમવી વગેરે પરંતુ તેની સાથે સાથે વિધાર્થીઓમાં સર્વાગી ગુણોનો વિકાસ કરવામાં આવે છે. આજે સમાજમાં ખોટો ખ્યાલ છે કે રમત–ગમત એ માત્ર શરીર સાથે જોડાયેલી પ્રવૃતિ છે. પરંતુ તેના ધ્વારા માનવીનો શારીરિક, માનસિક વિકાસ પણ થાય છે.

માનસિક સ્વાસ્થ્ય એ શારીરિક સ્વાસ્થ્ય જેટલી જ મહત્વની બાબત છે. આમ છતાં આપણામાંના મોટાભાગના લોકો માનસિક સ્વાસ્થ્ય અંગે જોઈએ તેટલા પ્રમાણમાં સજાગ, સભાન કે ચિંતિત નથી. આનું મુખ્ય કારણ એ છે કે શારીરિક સ્વસ્થતા કે શારીરિક અસ્વસ્થતાને આપણે સહેલાઈથી પારખી શકીએ છીએ. શારીરિક ખોડખામી કે અન્ય શારીરિક મુશ્કેલીઓને આપણે સહેલાઈથી આપણે હળવા પ્રકારના માનસિક વિક્ષેપો કે સમાયોજનની હળવી સમસ્યાઓ કે જે માનસિક સ્વાસ્થયની ખામીનું સુચન કરે છે તેને પારખી શકતા નથી. અને એ જ રીતે માનસિક સ્વાસ્થયની ખામી દર્શાવતી કેટલીક બાબતો જેવી કે આત્મગૌરવ અને આત્મવિશ્વાસનો અભાવ, અકારણ ચિંતા, લઘુતા વગેરેને પણ આપણે વ્યકિતની ખાસિયત અથવા બહુબહુ તો માનવસ્વભાવની વિચિત્રતા તરીકે ઓળખાવી તેની અવગણના કરીએ છીએ. માનસિક અસ્વસ્થતાનાં લક્ષણ તરીકે આપણે તેની ખાસ ચિંતા કરતા નથી. આનું મુળ કારણ માનસિક સ્વાસ્થય અંગેની આપણી ખોટી ભુલભરેલી વિભાવના – સંકલ્પના (Concept) માં રહેલું છે.

'માનસિક સ્વાસ્થ્ય એટલે માનવીઓનું જગત સાથેનું તેમજ એકબીજા સાથેનો મહતમ અસરકારક અને સુખપ્રદ સમાયોજન'

અભ્યાસનો હેતુ :–

'રમતવીર અને બિનરમતવીર બહેનોના માનસિક સ્વાસ્થ્યનો તુલનાત્મક અભ્યાસ'

વિષયપાત્રોની પસંદગી :

આ સંશોધન અભ્યાસમાં રમતવીર વિષયપાત્રો તરીકે પશ્ચિમ વિભાગ આંતર વિશ્વવિધાલય રમતોમાં ભાગ લેતી ગુજરાતની જુદી–જુદી યુનિવર્સિટી જેમાં ગુજરાત વિધાપીઠ, સૌરાષ્ટ્ર યુનિવર્સિટી અને વિરનર્મદ દક્ષિણ ગુજરાત યુનિવર્સિટી ટીમની ૫૦ ખેલાડી બહેનોને વિષયપાત્રો તરીકે પસંદ કરવામાં આવી હતી.

આ સંશોધન અભ્યાસમાં બિનરમતવીર વિષયપાત્રો તરીકે ગુજરાતટેકનોલોજી યુનિવર્સિટી સંચાલિત સાબર મહિલા એન્જિનિયરીંગ કોલેજની ૫૦ બિન રમતવીર બહેનોને વિષયપાત્રો તરીકે પસંદ કરવામાં આવી હતી.

આ સંશોધન અભ્યાસમાં ૧૭ થી ૨૫ વર્ષની વય જુથની બહેનોને વિષયપાત્રો તરીકે પસંદ કરવામાં આવી હતી.

માપનના ધોરણો :–

માનસિક સ્વાસ્થયની કસોટી માટે ડો. ડી.જી. ભટ્ટ અને જી.આર

* M.P.Ed. Student, Mahadevbhai Desai Sharirik Shikshan Mahavidhyalaya, Sadara

ગીડાની પ્રશ્નાવલીને માપન ધોરણ તરીકે પસંદ કરવામાં આવી હતી.

આંકડાકીય પ્રક્રિયા :–

રમતવીર જુથ અને બિનરમતવીર જૂથની પ્રાપ્ત કરેલ માહિતી પર 't' ટેસ્ટ લાગુ પાડી મધ્યકો વચ્ચેના તફાવતોને ૦.૦૫ કક્ષાએ સાર્થકતા ચકાસવામાં આવી હતી.

પરિણામો અને ચર્ચા :

સારણી – ૧

''રમતવીર અને બિનરમતવીર બહેનોના માનસિક સ્વાસ્થ્યનો મધ્યક, મધ્યક તફાવત અને 't' રેશિયો

ક્રમ	રમત વિભાગ	વિષયપાત્રોની સંખ્યા	મધ્યક	મધ્યક તફાવત	't' તફાવત
૧	રમતવીર	50	26.94	2.52	5.14*
૨	બિનરમતવીર	50	24.42		

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ 't' (98) = 1.98

સારણી –૧ પરથી માલુમ પડે છે કે રમતવીર બહેનોના માનસિક સ્વાસ્થયના પ્રાપ્તાંકોનો મધ્યક 26.94, બિનરમતવીર બહેનોના માનસિક સ્વાસ્થ્યના પ્રાપ્તાંકોનો મધ્યક 24.42, તેમજ બંને જુથોનો મધ્યક તફાવત 2.52 જોવા મળેલ છે. જયારે 't' રેશિયો 5.14 જોવા મળેલ છે. જે ૦.૦૫ કક્ષાએ(98) = 1.98 એ ચકાસતા બંને જુથો વચ્ચે સાર્થક તફાવત માલુમ પડતો ન હતો.

સારણી – ૨

વોલીબોલ વેસ્ટઝોન ચેમ્પિયન ટીમ બહેનો અને શારીરિક શિક્ષણની બહેનોના માનસિક સ્વાસ્થ્યનો મધ્યક, મધ્યક તફાવત અને 't' રેશિયો

ક્રમ	જુથ	વિષયપાત્રોની સંખ્યા	મધ્યક	મધ્યક તફાવત	't' તફાવત
૧	ચેમ્પિયન ટીમ બહેનો	11	27.45	2.27	1.92
૨	શારીરિક શિક્ષણની બહેનો	11	25.18		

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ 't' (20) = 2.08

સારણી –૨ પરથી માલુમ પડે છે કેવોલીબોલ વેસ્ટઝોન ચેમ્પિયન ટીમ બહેનો અને શારીરિક શિક્ષણની બહેનોના માનસિક સ્વાસ્થ્યના પ્રાપ્તાંકોનો મધ્યક 2518, તેમજ બંને જુથોનો મધ્યક તફાવત 2.27 જોવા મળેલ હતો. જયારે 't' રેશિયો 1.92 જોવા મળેલ છે. જે ૦.૦૫ કક્ષાએ(20) = 2.08 એ ચકાસતા બંને જુથો વચ્ચે સાર્થક તફાવત માલુમ પડતો ન હતો.

- બિનરમતવીર બહેનો કરતા રમતવીર બહેનોનું માનસિક સ્વાસ્થ્ય વધુ જોવા મળેલ હતું.
- રમતો અને શારીરિક શિક્ષણની પ્રવૃતિ સાથે જોડાયેલ બહેનોના માનસિક સ્વાસ્થ્યના કોઈ પણ પ્રકારનો તફાવત જોવા મળેલ ન હતો.
- રમતો અને શારીરિક શિક્ષણની પ્રવૃતિ કરતી બહેનોનું માનસિક સ્વાસ્થ્ય સુયોગ્ય જોવા મળ્યું હતું.

મિસુરી કોલિંબિયા યુનિવર્સિટીના ફ્રેન્ક બુથ કહે છે કે માનવીને સક્રિયજીવન જીવવા માટે જ ઈ વરે બનાવ્યો છે. આપણા જીન્સ એવું ઈચ્છે છે કે આપણે સક્રિય જીવ જ જીવવું જોઈએ. બેઠાડું અને નિષ્ક્રીય જીવન જીવીને આપણે આપણા શરીરની જિનેટીક બ્લુ પ્રિન્ટનો ખાતમો બોલાવી દીધો છે. તેના પરીણામ સ્વરૂપે આપણે જાતજાતનાં રોગોનો શિકાર બની ગયા છે.

સંશોધન અભ્યાસોનાં પરીણામો સ્પષ્ટ છે કે દરરોજનાં ૩૦ મિનીટ થી ૬૦ મિનીટ કસરતનાં કાર્યક્રમો જેમાં વોકીંગ, જોગીંગ, રનીંગ, સાયકલીંગ, સ્ટ્રેચીંગ, બેન્ડીંગ, અને રોટેશન કસરતો વજનતાલીમ, સ્વીમીંગ, લાફીંગ, વગેરે જેવી એરોબીક કસરતો શારીરિક ક્ષમતાના પાસાઓ અને શરીરના શાસ્ત્રક વિષયક પાસાઓનો સુયોગ્ય રાખવામાં કસરતનો વ્યવસ્થીત કાર્યક્રમ ખુબ અગત્યનો છે.

સારું શારીરિક સ્વાસ્થ્ય A Sound mind can exist in sount body - સ્વસ્થ શરીરમાં જ સ્વસ્થ મનનો વસાવટ હોઈ શકે. આ કહેવત ઉપરથી સ્પષ્ટ થાય છે કે શારીરિક સ્વાસ્થ્ય અને માનસિક સ્વાસ્થ્ય પરસ્પર સંકળાયેલા છે. સારા માનસિક સ્વાસ્થ્ય માટે સારું શારીરિક સ્વાસ્થ્ય અત્યંત જરૂરી બાબત છે.સારા શારીરિક સ્વાસ્થ્યને લીધે વ્યકિત વિવિધ પરિસ્થિતીઓમાં સહેલાઈથી સમાયોજન સાધી શકે.

શારીરિક સ્વાસ્થ્યની જાળવણીનો આધાર વ્યકિત પર રહેલો છે. આ માટે બે બાબતો મહત્વની કહી શકાય. એક તો પુરતો પોષ્ટિક સમતોલ આહાર અને બીજું યોગ્ય પ્રકારની કસરત કયો અને કેટલો આહાર પોતાને માટે સમતોલ આહાર છે તેમજ કયા પ્રકારની અને કેટલા પ્રકારની કસરત પોતાના માટે યોગ્ય તે બાબત વ્યકિતએ નકકી કરી તે સંદર્ભમાં યોગ્ય ટેવ પાડવી જોઈએ.

પ્રસ્તુત અભ્યાસમાં બંને જુથો રમતવીર બહેનો અને બીનરમતવીર બહેનોના માનસિક સ્વાસ્થ્યમાં સાર્થક તફાવત માલુમ પડતો હતો. જેમાં રમતવીર બહેનોનું જુથ બીનરમતવીર બહેનોના જુથ કરતાં માનસિક સ્વાસ્થ્યની બાબત કરતાં સાર્થક રીતે ચડીયાતું સાબિત થયું હતું. તેનું કારણ રમતવીર જુથ શારીરિક પ્રવૃતિ કસરતો, રમતો અને રમત જેવી પ્રવૃતિને કારણે માનસિક સ્વાસ્થ્ય બિન રમતવીર બહેનો કરતા વધુ હોવાનું કારણ હોઈ શકે.

સંદર્ભગ્રંથો

⇨ ભટ્ટ પધ્યુમન આર. **શરીર વિજ્ઞાન આરોગ્ય શાસ્ત્ર અને રમત વિજ્ઞાન, અમદાવાદ : ધવલ પબ્લિકેશન ૧૯૯૯.**

⇨ વર્મા પ્રકાશ જે. **એ ટેક્ષબુક ઓન સ્પોર્ટસ સ્ટેટેસ્ટીકસ ગ્વાલીયર : વિનસ પબ્લીકેશન** ૨૦૦૦.

* V.J. Chaudhary

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 147 - 149
ISSN 2319 - 8168

ખો–ખો અને હેન્ડબોલ રમતમાં આંતરવિશ્વ વિદ્યાલય કક્ષાએ પસંદગી પામેલા ખેલાડીઓના શરીર પરિમિતિનો તુલનાત્મક અભ્યાસ

આ સંશોધન અભ્યાસનો હેતુ ખો–ખો રમતજુથ અને હેન્ડબોલ રમત જુથના આંતરવિશ્વવિદ્યાલય કક્ષાએ પસંદગી પામેલા ખેલાડીઓના શરીર પરિમિતિનો તુલનાત્મક અભ્યાસ કરવાનો હતો. આ સંશોધન અભ્યાસ માટે ગુજરાત વિદ્યાપીઠ ખો–ખો રમત જુથના ૧૨ ખેલાડીઓ અને હેન્ડબોલ રમત જુથના ૧૨ ખેલાડીઓના વિષયપાત્રો તરીકે પસંદ કરી નોર્જન અને જોન્સન કસોટીને માપન ધ્વારા આંકડાઓનું એકત્રીકરણ કરી બંને જુથોના પ્રાપ્તાંકો પર 't' ટેસ્ટ લાગુ પાડી ૦.૦૫ કક્ષાએ સાર્થકતા ચકાસતા ખો– ખો અને હેન્ડબોલ રમતના ખેલાડીઓને શરીરના વજન શરીરની ઉંચાઈ પગની લંબાઈ, હાથની લંબાઈ, પગના તળીયાની લંબાઈ, હાથના પંજાની લંબાઈ, છાતીનો ઘેરાવો કમરના ઘેરાવાના ખો–ખો રમતના ખેલાડીઓના હેન્ડબોલ રમતના ખેલાડીઓનું જુથ દરેક પાસાઓમાં ચડીયાતું સાબિત થયું હતું.

પ્રસ્તાવના : –

આજના આધુનિક યુગમાં રમત ગમત અને શારીરિક શિક્ષણમાં નોંધપાત્ર સુધારો થયો છે. અને સમગ્ર વિશ્વમાં વિવિધ સ્પર્ધાઓ સતત ચાલતી હોય છે. હવે તો રમતગમતની વિવિધ માહિતીઓ સમાચાર પત્રોને સ્પોર્ટસની કોલમ ધ્વારા ટી.વી.ની સ્પોર્ટસ ચેનલો ધ્વારા તથા અન્ય પ્રચાર માધ્યમો ધ્વારા છેવાડાના આમ માનવી સુધી પહોંચી શકે છે. વિવિધ રમતોમાં ભાગ લેનારની સંખ્યા વધતી જાય છે.

રમત એ દરેક પ્રાણીઓમાં રહેલી સામાજિક બાબત છે. દરેક સજીવની તમામ પ્રવૃતિ હલનચલન સ્વરૂપે પ્રદર્શિત થાય છે. પ્રાણી માત્ર જયાં સુધી હલનચલન કરે ત્યાં સુધી તેનો વૃધ્ધિ અને વિકાસ થતો નથી. રમત એ વૃધ્ધિ અને વિકાસની પ્રક્રિયાને ઝડપી બનાવે છે. ઉપરાંત, આનંદ અને સુખની લાગણીનો અનુભવ કરાવે છે. માટે જ વ્યકિત શારીરિક શિક્ષણ રમતગમત પ્રત્યે આકર્ષાય છે. જેથી વ્યકિતમાં શારીરિક, માનસિક અને સાંવેગિક ગુણોનો વિકાસ થાય છે. આનંદ પ્રાપ્ત કરી શકે વ્યકિત જયારે રમતમાં જોડાય છે ત્યારે બુધ્ધિશાળી પ્રાણી તરીકે વિશિષ્ટ દેખાવ કરવા પ્રયત્ન કરે છે. બીજાથી પોતે શ્રેષ્ઠ છે તે બતાવવા પ્રયત્નશીલ રહે છે. જેથી ઉચ્ચકક્ષાએ પહોંચવા સતત કાર્યશીલ બને છે.

અભ્યાસનો હેતુ :–

''ખો–ખો અને હેન્ડબોલ રમતમાં આંતરવિશ્વવિદ્યાલય કક્ષાએ પસંદગી પામેલા ખેલાડીઓના શરીર પરિમિતીનો તુલનાત્મક અભ્યાસ''

વિષયપાત્રોની પસંદગી :–

આ અભ્યાસના હેતુ માટે ગુજરાત વિદ્યાપીઠના ખો–ખો રમતના ૧૨ અને હેન્ડબોલ ના ૧૨ એમ કુલ ૨૪ ખેલાડીઓને વિષય પાત્ર તરીકે પસંદ કરવામાં આવ્યું છે.

માપનના ઘોરણો :

શરીર અંગ પરિમિતિ માટે નોર્જન અને જોન્સન કસોટીને માપન ઘોરણ તરીકે પસંદ કરવામાં આવી હતી.

આંકડાકીય પ્રક્રિયા :

ખો–ખો રમતજુથ અને હેન્ડબોલ રમતજુથના વજન, શરીરની ઉંચાઈ, છાતીનો ઘેરાવો, કમરનો ઘેરાવો,પગની લંબાઈ, હાથની લંબાઈ, પગના તળીયાની લંબાઈ, હાથના પંજાબની લંબાઈ વગેરે પાસાઓની તુલના કરવા માટે 't' કસોટી લાગુ પાડી અર્થપુર્ણતાનું સ્તર ૦.૦૫ પસંદ કરવામાં આવ્યું હતું.

પરિણામો અને ચર્ચા :

સારણી – ૧

ખો–ખો અને હેન્ડબોલ રમતમાં પસંદગી પામેલા ખેલાડીઓના શરીરનું વજન કસોટીના મધ્યક, મધ્યક તફાવત અને 't' રેશિયો દર્શાવતી સારણી

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	શરીરનું વજન	ખો–ખો	49.92	9.66	4.07
		હેન્ડબોલ	59.58		

સાર્થકતાનું ઘોરણ ૦.૦૫ કક્ષાએ (22) = 2.074

સારણી –૧ પરથી માલુમ પડે છે કે શરીરનું વજન કસોટીમાં ખો–ખો રમતના ખેલાડીઓનો મધ્યક ૪૯.૯૨ જયારે હેન્ડબોલના ખેલાડીઓનો મધ્યક ૫૯.૫૮ છે. જેનો મધ્યક તફાવત ૯.૬૬ તેમજ પ્રાપ્ત થયેલ 't' રેશિયો 4.07 હતો. જે ૦.૦૫ કક્ષાએ સાર્થક થાય છે. આથી સ્પષ્ટ થાય છે કે

* M.P.Ed. Student, Mahadevbhai Desai Sharirik Shikshan Mahavidhyalaya, Sadara

ખો–ખો અને હેન્ડબોલ રમતના ખેલાડીઓના શરીર વજન કસોટીમાં સાર્થક તફાવત જોવા મળેલ હતો.

સારણી – ૨

ખો–ખો અને હેન્ડબોલ રમતમાં પસંદગી પામેલા ખેલાડીઓના શરીરની ઉંચાઈ કસોટીના મધ્યક, મધ્યક તફાવત અને 't' રેશિયો દર્શાવતી સારણી

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	શરીરનું ઉંચાઈ	ખો–ખો	163.00		
		હેન્ડબોલ	170.83	7.83	3.30*

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (22) = 2.074

ઉપરોકત સારણી –૨ પરથી માલુમ પડે છે કે શરીરની ઉંચાઈ કસોટીમાં ખો–ખો રમતના ખેલાડીઓનો મધ્યક ૧૬૩.૦૦ હતો. અને હેન્ડબોલના રમતના ખેલાડીઓનો મધ્યક ૧૭૦.૮૩ છે. જેનો મધ્યક તફાવત ૭.૮૩ તેમજ પ્રાપ્ત થયેલ 't' રેશિયો 3.30 હતો. જે ૦.૦૫ કક્ષાએ સાર્થક થાય છે. આથી સ્પષ્ટ થાય છે કે ખો–ખો અને હેન્ડબોલ રમતના ખેલાડીઓના શરીરની ઉંચાઈ કસોટીમાં સાર્થક તફાવત જોવા મળેલ હતો.

સારણી – ૩

ખો–ખો અને હેન્ડબોલ રમતમાં પસંદગી પામેલા ખેલાડીઓના પગની લંબાઈ કસોટીના મધ્યક, મધ્યક તફાવત અને 't' રેશિયો દર્શાવતી સારણી

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	પગની લંબાઈ	ખો–ખો	96.08		
		હેન્ડબોલ	101.83	5.75	3.16*

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (22) = 2.074

ઉપરોકત સારણી –૩ પરથી માલુમ પડે છે કે પગની લંબાઈ કસોટીમાં ખો–ખો રમતના ખેલાડીઓનો મધ્યક ૯૬.૦૮ હતો. અને હેન્ડબોલના રમતના ખેલાડીઓનો મધ્યક ૧૦૧.૮૩ છે. જેનો મધ્યક તફાવત ૫.૭૫ તેમજ પ્રાપ્ત થયેલ 't' રેશિયો 3.16 હતો. જે ૦.૦૫ કક્ષાએ સાર્થક થાય છે. આથી સ્પષ્ટ થાય છે કે ખો–ખો અને હેન્ડબોલ રમતના ખેલાડીઓના પગની લબાંઈ કસોટીમાં સાર્થક તફાવત જોવા મળેલ હતો.

સારણી – ૪

ખો–ખો અને હેન્ડબોલ રમતમાં પસંદગી પામેલા ખેલાડીઓના હાથની લંબાઈ કસોટીના મધ્યક, મધ્યક તફાવત અને 't' રેશિયો દર્શાવતી સારણી

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	હાથની લંબાઈ	ખો–ખો	72.08		
		હેન્ડબોલ	77.67	5.59	5.22*

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (22) = 2.074

ઉપરોકત સારણી –૪ પરથી માલુમ પડે છે કે હાથની લંબાઈ કસોટીમાં ખો–ખો રમતના ખેલાડીઓનો મધ્યક ૭૨.૦૮ હતો. અને હેન્ડબોલના રમતના ખેલાડીઓનો મધ્યક ૭૭.૬૭ છે. જેનો મધ્યક તફાવત ૫.૫૯ તેમજ પ્રાપ્ત થયેલ 't' રેશિયો 5.22 હતો. જે ૦.૦૫ કક્ષાએ સાર્થક થાય છે. આથી સ્પષ્ટ થાય છે કે ખો–ખો અને હેન્ડબોલ રમતના ખેલાડીઓના હાથની લંબાઈ કસોટીમાં સાર્થક તફાવત જોવા મળેલ હતો.

સારણી – ૫

ખો–ખો અને હેન્ડબોલ રમતમાં પસંદગી પામેલા ખેલાડીઓના પગના તળીયાની લંબાઈ કસોટીના મધ્યક, મધ્યક તફાવત અને 't' રેશિયો દર્શાવતી સારણી

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	પગના તળીયાની લંબાઈ	ખો–ખો	22.67		
		હેન્ડબોલ	24.33	1.66	3.61*

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (22) = 2.074

ઉપરોકત સારણી –૫ પરથી માલુમ પડે છેકે પગના તળીયાની લંબાઈ કસોટીમાં ખો–ખો રમતના ખેલાડીઓનો મધ્યક ૨૨.૬૭ હતો. અને હેન્ડબોલના રમતના ખેલાડીઓનો મધ્યક ૨૪.૩૩ છે. જેનો મધ્યક તફાવત ૧.૬૬ તેમજ પ્રાપ્ત થયેલ 't' રેશિયો 3.61 હતો. જે ૦.૦૫ કક્ષાએ સાર્થક થાય છે. આથી સ્પષ્ટ થાય છે કે ખો–ખો અને હેન્ડબોલ રમતના ખેલાડીઓના પગના તળીયાની લંબાઈ કસોટીમાં સાર્થક તફાવત જોવા મળેલ હતો.

સારણી – ૬

ખો–ખો અને હેન્ડબોલ રમતમાં પસંદગી પામેલા ખેલાડીઓના હાથના પંજાની લંબાઈ કસોટીના મધ્યક, મધ્યક તફાવત અને 't' રેશિયો દર્શાવતી સારણી

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	હાથના પંજાની લંબાઈ	ખો–ખો	17.33		
		હેન્ડબોલ	19.17	1.84	5.26*

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (22) = 2.074

ઉપરોકત સારણી –૬ પરથી માલુમ પડે છે કે હાથના પંજાની લંબાઈ કસોટીમાં ખો–ખો રમતના ખેલાડીઓનો મધ્યક ૧૭.૩૩ હતો. અને હેન્ડબોલના રમતના ખેલાડીઓનો મધ્યક ૧૯.૧૭ છે. જેનો મધ્યક તફાવત ૧.૮૪ તેમજ પ્રાપ્ત થયેલ 't' રેશિયો 5.26 હતો. જે ૦.૦૫ કક્ષાએ સાર્થક થાય છે. આથી સ્પષ્ટ થાય છે કે ખો–ખો અને હેન્ડબોલ રમતના ખેલાડીઓના હાથના પંજાની લંબાઈ કસોટીમાં સાર્થક તફાવત જોવા મળેલ હતો.

સારણી – ૭
ખો–ખો અને હેન્ડબોલ રમતમાં પસંદગી પામેલા ખેલાડીઓના છાતીનો ઘેરાવો કસોટીના મધ્યક, મધ્યક તફાવત અને 't' રેશિયો દર્શાવતી સારણી

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	છાતીનો ઘેરાવો	ખો–ખો	76.25		
		હેન્ડબોલ	82.17	5.92	4.39*

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (22) = 2.074
ઉપરોકત સારણી –૭ પરથી માલુમ પડે છે કે છાતીનો ઘેરાવો કસોટીમાં ખો–ખો રમતના ખેલાડીઓનો મધ્યક ૭૬.૨૫ હતો. અને હેન્ડબોલના રમતના ખેલાડીઓનો મધ્યક ૮૨.૧૭ છે. જેનો મધ્યક તફાવત ૫.૯૨ તેમજ પ્રાપ્ત થયેલ 't' રેશિયો 4.39 હતો. જે ૦.૦૫ કક્ષાએ સાર્થક થાય છે. આથી સ્પષ્ટ થાય છે કે ખો–ખો અને હેન્ડબોલ રમતના ખેલાડીઓના છાતીનો ઘેરાવો કસોટીમાં સાર્થક તફાવત જોવા મળેલ હતો.

સારણી – ૮
ખો–ખો અને હેન્ડબોલ રમતમાં પસંદગી પામેલા ખેલાડીઓના કમરનો ઘેરાવો કસોટીના મધ્યક, મધ્યક તફાવત અને 't' રેશિયો દર્શાવતી સારણી

ક્રમ	પ્રવૃતિ	જુથ	મધ્યક	મધ્યક તફાવત	't' રેશિયો
૧	કમરનો ઘેરાવો	ખો–ખો	65.83		
		હેન્ડબોલ	72.25	6.42	2.88*

સાર્થકતાનું ધોરણ ૦.૦૫ કક્ષાએ (22) = 2.074
ઉપરોકત સારણી –૮ પરથી માલુમ પડે છે કે કમરનો ઘેરાવો કસોટીમાં ખો–ખો રમતના ખેલાડીઓનો મધ્યક ૬૫.૮૩ હતો. અને હેન્ડબોલના રમતના ખેલાડીઓનો મધ્યક ૭૨.૨૫ છે. જેનો મધ્યક તફાવત ૬.૪૨ તેમજ પ્રાપ્ત થયેલ 't' રેશિયો 2.88 હતો. જે ૦.૦૫ કક્ષાએ સાર્થક થાય છે. આથી સ્પષ્ટ થાય છે કે ખો–ખો અને હેન્ડબોલ રમતના ખેલાડીઓના કમરનો ઘેરાવો કસોટીમાં સાર્થક તફાવત જોવા મળેલ હતો.

ગુજરાત વિદ્યાપીઠના આંતર વિશ્વવિદ્યાલય કક્ષાએ પસંદગી પામેલા ખો–ખો અને હેન્ડબોલ રમતના ખેલાડીઓના શરીરનું વજન,શરીરનીઉંચાઈ,હાથનીલંબાઈ,પગનીલંબાઈ,પગના તળીયા ની લંબાઈ, હાથના પંજાની લંબાઈ, છાતીનો ઘેરાવો, કમરના ઘેરાવામાં ખો–ખો રમતના ખેલાડીઓ કરતા હેન્ડબોલ રમતના ખેલાડીઓનું જુથ દરેક પાસામાં ચડીયાતું સાબિત થયું હતું.

સંદર્ભગ્રંથો

- કમલેશ, એમ. **મેથોડોલોજી ઓફ રીસર્ચ ઈન ફીઝીકલ એજયુકેશન એન્ડ સ્પોર્ટસ,** દિલ્હી મેટ્રોપોલીટન બુક કંપની : ૧૯૯૪.
- કંસારી એમ.એસ. **શારીરિક શિક્ષા મેં પરીક્ષા એવં માપન** રાજપીપળા પ્રકાશક ગુજરાત વ્યાયામ પ્રચારક મંડળ સપ્ટેમ્બર . ૧૯૮૨
- ગોહિલ કરણસિંહ રૂ., શાહ મુકુંદભાઈ ઓ. અને. પટેલ હર્ષદભાઈ ઈ. **વ્યાયામ વિજ્ઞાન કોષ ૯** રાજપીપળા પ્રકાશક ગુજરાત વ્યાયામ પ્રચારક મંડળ. ૨૦૦૩.
- જહોન્સન બેરી એલ, જેક કે નેલસન **પ્રેકટીકલ મેજર મેન્ટ ફોર ઈવેલ્યુએશન ઈન ફીઝીકલ એજયુકેશન** સેકન્ડ રીપ્રિન્ટ દિલ્હી સુરજીત પબલીકેશન .૧૯૮૮
- ઢુલ દેવેન્દ્રસિંહ, **શારીરિક શિક્ષણ તત્વ એવું ઈતિહાસ વ સમસ્ત ખેલ મેદાન એવં શિવમં** દિલ્હી ફ્રેન્ડઝ પબ્લિકેશન, મુખરજીનગર, ૧૯૫૭.
- દેવીન્દ્રર કે. કન્સલ **ટેસ્ટ એન્ડ મેઝરમેન્ટ ન્યુ દિલ્હી ડી.વી.એસ પબ્લિકેશન, ૧૯૯૬.**

* G.N. Vasava

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 150 - 153
ISSN 2319 - 8168

NUTRITION FOR THE ATHLETE

Abstract

· Athletes achieve peak performance by training and eating a variety of foods.

· Athletes gain most from the amount of carbohydrates stored in the body.

· Fat also provides body fuel; use of fat as fuel depends on the duration of the exercise and the condition of the athlete.

· Exercise may increase the athlete's need for protein.

· Water is a critical nutrient for athletes. Dehydration can cause muscle cramping and fatigue.

Becoming an elite athlete requires good genes, good training and conditioning and a sensible diet. Optimal nutrition is essential for peak performance. Nutritional misinformation can do as much harm to the ambitious athlete as good nutrition can help.

Carbohydrates

Athletes benefit the most from the amount of carbohydrates stored in the body. In the early stages of moderate exercise, carbohydrates provide 40 to 50 percent of the energy requirement. Carbohydrates yield more energy per unit of oxygen consumed than fats. Because oxygen often is the limiting factor in long duration events, it is beneficial for the athlete to use the energy source requiring the least amount of oxygen per kilocalorie produced. As work intensity increases, carbohydrate utilization increases.

Complex carbohydrates come from foods such as spaghetti, potatoes, lasagna, cereals and other grain products. Simple carbohydrates are found in fruits, milk, honey and sugar. During digestion, the body breaks down carbohydrates to glucose and stores it in the muscles as glycogen.

During exercise, the glycogen is converted back to glucose and is used for energy. The ability to sustain prolonged vigorous exercise is directly related to initial levels of muscle glycogen. The body stores a limited amount of carbohydrate in the muscles and liver. If the event lasts for less than 90 minutes, the glycogen stored in the muscle is enough to supply the needed energy. Extra carbohydrates will not help, any more than adding gas to a half-full tank will make the car go faster.

For events that require heavy work for more than 90 minutes, a high-carbohydrate diet eaten for two to three days before the event allows glycogen storage spaces to be filled. Long distance runners, cyclists, cross-country skiers, canoe racers, swimmers and soccer players report benefits from a pre competition diet where 70 percent of the calories comes from carbohydrates.

According to the Olympic Training Center in Colorado Springs, endurance athletes on a high-carbohydrate diet can exercise longer than athletes eating a low-carbohydrate, high-fat diet. Eating a high-carbohydrate diet constantly is not advised. This conditions the body to use only carbohydrates for fuel and not the fatty acids derived from fats.

For continuous activities of three to four hours, make sure that glycogen stores in the muscles and liver are at a maximum. Consider taking carbohydrates during the event in the form of carbohydrate solutions. The current recommendation is a 6 to 8 percent glucose solution.

*** Lecturer, I V Patel Commerce College, Nadiad**

You can make an excellent home-brewed 7.6 percent sports drink with reasonable sodium amounts. Add 6 tablespoons sugar and 1/3 teaspoon salt to each quart of water. Dissolve sugar and cool. The salt translates into a sodium concentration of 650 mg/liter. This small amount is good for marathon runners.

Electrolyte beverages can be used if the athlete tolerates them, but other electrolytes are not essential until after the event. Experiment during training to find the best beverage for you.

Table 1: Sample menu of a high carbohydrate diet.

Food item	Calories	Grams carbohydrate
Breakfast		
8 ounces orange juice	120	28
1 cup oatmeal	132	23
1 medium banana	101	26
8 ounces low-fat milk	102	12
1 slice whole wheat toast	60	12
1 tablespoon jelly	57	15
Lunch		
2-ounce slice ham	104	0
1 ounce Swiss cheese	105	1
2 slices whole wheat bread	120	25
1 leaf lettuce	1	0
1 slice tomato	3	1
8 ounces apple juice	116	30
8 ounces skim milk	85	12
2 cookies	96	14
Dinner		
3 cups spaghetti	466	97
1 cup tomato sauce with mushrooms	89 5	19 1
2 tablespoons Parmesan cheese	45	0
4 slices French bread	406	78
1 slice angel food cake	161	36
1/4 cup sliced strawberries	13	3
1/2 cup ice cream	133	16
Snack		
16 ounces grape juice	330	83
6 fig cookies	386	81
TOTAL	3236	613
	(75% of total calories)	

Eating sugar or honey just before an event does not provide any extra energy for the event. It takes about 30 minutes for the sugar to enter the blood stream. This practice may also lead to dehydration. Water is needed to absorb the sugar into the cells. Furthermore, sugar eaten before an event may hinder performance because it triggers a surge of insulin. The insulin causes a sharp drop in blood sugar level in about 30 minutes. Competing when the blood sugar level is low leads to fatigue, nausea and dehydration.

A diet where 70 percent of calories comes from carbohydrates for three days prior to the event is sometimes helpful for endurance athletes. (See Table 1 for a sample menu.) Water retention often is associated with carbohydrate loading. This may cause stiffness in the muscles and sluggishness early in the event. A three-day regimen minimizes this effect. The previously suggested seven days of deprivation/ repletion is not recommended due to increased risks of coronary heart disease. In addition, electrocardiograph abnormalities may occur and training during the deprivation phase may be difficult.

Water

Water is an important nutrient for the athlete. Athletes should start any event hydrated and replace as much lost fluid as possible by drinking chilled liquids at frequent intervals during the event. Chilled fluids are absorbed faster and help lower body temperature. (See Table 2.)

Table 2: Recommendations for hydration.

Day before	Drink fluids frequently
Pre-event meal	2-3 cups water
2 hours before	2-2 1/2 cups water
1/2 hour before	2 cups water
Every 10-15 minutes during the event	1/2 cup cool (45-55 degrees) water
After event	2 cups fluid for each pound lost
Next day	Drink fluids frequently (it may take 36 hours to rehydrate completely).

Fats

Fat also provides body fuel. For moderate exercise, about half of the total energy expenditure is derived from free fatty acid metabolism. If the event lasts more than an hour, the body may use mostly fats for energy. Using fat as fuel depends on the event's duration and the athlete's condition. Trained athletes use fat for energy more quickly than untrained athletes. Consumption of fat should not fall below 15

percent of total energy intake because it may limit performance. Athletes who are under pressures to achieve or maintain a low body weight are susceptible to using fat restriction and should be told that this will hinder their performance.

Protein

After carbohydrates and fats, protein provides energy for the body. Exercise may increase an athlete's need for protein, depending on the type and frequency of exercise. Extra protein consumed is stored as fat. In the fully grown athlete, it is training that builds muscle, not protein per se. The ADA reports that a protein intake of 10 to 12 percent of total calories is sufficient. Most authorities recommend that endurance athletes eat between 1.2-1.4 grams protein per kg of body weight per day; resistance and strength-trained athletes may need as much as 1.6-1.7 grams protein per kg of body weight. (A kilogram equals 2.2 pounds.)

Japanese researchers demonstrated that "sports anemia" may appear in the early stages of training with intakes of less than 1 gram/kg of body weight per day of high quality protein. To calculate your protein needs, divide your ideal weight by 2.2 pounds to obtain your weight in kilograms. Then multiply kilograms by the grams of protein recommended.

A varied diet will provide more than enough protein as caloric intake increases. Furthermore, Americans tend to eat more than the recommended amounts of protein. Excess protein can deprive the athlete of more efficient fuel and can lead to dehydration. High-protein diets increase the water requirement necessary to eliminate the nitrogen through the urine. Also, an increase in metabolic rate can occur and, therefore, increased oxygen consumption. Protein supplements are unnecessary and not recommended.

Vitamins and Minerals

Increased caloric intake through a varied diet ensures a sufficient amount of vitamins and minerals for the athlete. There is no evidence that taking more vitamins than is obtained by eating a variety of foods will improve performance. Thiamin, riboflavin and niacin (B vitamins) are needed to produce energy from the fuel sources in the diet. However, plenty of these vitamins will be obtained from eating a variety of foods. Carbohydrate and protein foods are excellent sources of these vitamins. Furthermore, the B vitamins are water soluble and are not stored in the body, so toxicity if not an issue. Some female athletes may lack riboflavin, so ensuring adquate consumption of riboflavin-rich food is important, like milk. Milk products not only increase the riboflavin level but also provide protein and calcium. The body stores excess fat-soluble vitamins A, D, E and K. Excessive amounts of fat-soluble vitamins may have toxic effects.

Minerals play an important role in performance. Heavy exercise affects the body's supply of sodium, potassium, iron and calcium. Sweating during exercise increases the concentration of salt in the body. Consuming salt tablets after competition and workouts is not advised as this will remove water from your cells, causing weak muscles. Good sodium guidelines are to:

1) avoid excessive amounts of sodium in the diet and 2) beverages containing sodium after endurance events may be helpful.

Eating potassium-rich foods such as oranges, bananas and potatoes throughout training and after competition supplies necessary potassium.

Iron carries oxygen via blood to all cells in the body and is another important mineral for athletes. Female athletes and athletes between 13 and 19 years old may have inadequate supplies of iron due to menstruation and strenuous exercise. Female athletes who train heavily have a high incidence of amenorrhea, the absence of regular, monthly periods, and thus conserve iron stores. Iron supplements may be prescribed by a physician if laboratory tests indicate an iron deficiency. Excess iron can cause constipation. To avoid this problem, eat fruits, vegetables, whole grain breads and cereals..

Calcium is an important nutrient for everyone as it is important in bone health and muscle function. Female athletes should have an adequate supply of calcium to avoid calcium loss from bones. Calcium loss may lead to osteoporosis later in life. Choosing low-fat dairy products, provide the best source of calcium.

The Pre-Game Meal

A pre-game meal three to four hours before the event allows for optimal digestion and energy supply. Most

authorities recommend small pre-game meals that provide 500 to 1,000 calories.

The meal should be high in starch, which breaks down more easily than protein and fats. The starch should be in the form of complex carbohydrates (breads, cold cereal, pasta, fruits and vegetables). They are digested at a rate that provides consistent energy to the body and are emptied from the stomach in two to three hours.

High-sugar foods lead to a rapid rise in blood sugar, followed by a decline in blood sugar and less energy. In addition, concentrated sweets can draw fluid into the gastrointestinal tract and contribute to dehydration, cramping, nausea and diarrhea. Don't consume any carbohydrates one and a half to two hours before an event. This may lead to premature exhaustion of glycogen stores in endurance events.

Avoid a meal high in fats. Fat takes longer to digest as does fiber- and lactose-containing meals.

Take in adequate fluids during this pre-game time. Avoid caffeine (cola, coffee, tea) as it may lead to dehydration by increasing urine production.

Don't ignore the psychological aspect of eating foods you enjoy and tolerate well before an event. However, choose wisely — bake meat instead of frying it, for example.

Some athletes may prefer a liquid pre-game meal, especially if the event begins within two or three hours. A liquid meal will move out of the stomach by the time a meet or match begins. Remember to include water with this meal.

The Post-Game Meal

Regardless of age, gender or sport, the post-game.competition meal recommendations are the same. (See Table 3.) Following a training session or competition, a small meal eaten within thirty minutes is very beneficial. The meal should be mixed, meaning it contains carbohydrate, protein, and fat. Protein synthesis is greatest during the window of time immediately following a workout and carbohydrates will help replete diminished glycogen stores. However, consume food within the 30 minute window may be difficult for athletes—they often experience nausea or lack of hunger. Options to address this difficulty include:

· Carbs you can drink that contain protein. There are several liquid smoothies and beverages on the market that provide high protein and carbohydrates for replenishment. One classic is chocolate milk.

· If that is difficult, fruit, popsicles, oranges, bananas, bagels, melon, or apple slices all would be better than not consuming any food.

Many athletes turn to protein/amino-acid supplementation in the form of powders or pills post-workout. These are unnecessary and have been linked to dehydration, hypercalciuria, weight gain, and stress on the kidney and liver. Furthermore, any athletes consuming supplements in replacement of meals should consult with their doctor or a registered dietitian before continuing.

Maintain nutritional conditioning not only for athletic events, but all the time. A pre-game meal or special diet for several days prior to competition cannot make up for an inadequate daily food intake in previous months or years.

Lifelong good nutrition habits must be emphasized. Combine good eating practices with a good training and conditioning program plus good genes, and a winning athlete can result!

Table 3: Two pre-event meal plans.

Pre-Event Meal Plan I, 2-3 hours prior (approximately 500 calories)	
Lean meat or protein equivalent	2 ounces
Fruit	1 serving (1/2 cup)
Bread or easily digestible carbohydrate	2 servings
Pre-Event Meal Plan II, 3 1/2 - 4 hours prior (approximately 900 calories)	
Cooked lean meat or protein equivalent	2 ounces
Fruit	1 serving (1/2 cup)
Pasta or baked potato	1 cup or 1 medium
Bread or carbohydrate substitute	2 servings
Low-fiber vegetable	1 serving (1/2 cup)
Fat spread	1 teaspoon
Dessert: Angel food cake or plain cookies	1 piece 2 cookies

REFERENCE

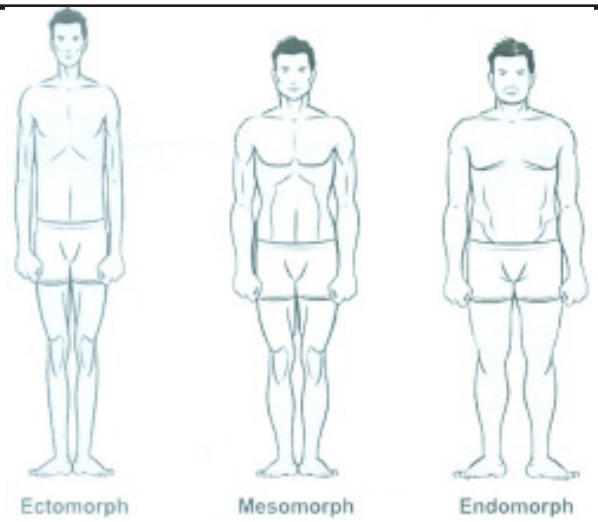
- *Advances in Sports Medicine and Fitness*, Volume 2, 1989.
- *Nutrition for Fitness and Sports*, Melvin Williams; Brown, Benchmark, 1995.
- *Nutrition for the Recreational Athlete*, Catherine Jackson, editor; CRC Press, 1995.

* J.B. Chauhan

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 154 - 157
ISSN 2319 - 8168

THE 3 BODY TYPES AND TRANING

Over the years, there have developed several different types of categorising the human body. In Ayurvedic medicine that evolved from five the thousand year old Sanskrit teaching, body types and their associated personalities were defined as Vata, Pitta, and Kapha. If we go back to our high school/college days you will probably remember a guy by the name of William H. Sheldon. It was Sheldon who introduced his theory of Somotypes back in the 1940's. His basic theory 'proposed that there are basically three body types and each body type has a specific personality associated with it. The theories that Sheldon presented has become a central vein running through literature and research with respect to weight loss, exercise, and liodybuilding. The body type system that Sheldon introduced characterised the human body as ectomorphic, mesomorphic, or endomorphic. Not every human being fits exactly into one of these categories but contains characteristics of each, although one is usually predominant over the others. In order to determine your body type, one needs to look back at your adolescent years to determine which category your body type you possessed before changes due to age and lifestyle transformed you into what you are today.



The Ectomorph Body Type

The Ectomorph is a form of opposite of the Endomorph. Physically, they tend to have:

• Narrow shoulders and hips.
• A thin and narrow face, with a high forehead.
• A thin and narrow chest and abdomen.
• Very little body fat.
• Thin legs and arms.

Training for Ectomorphs:

Frequency/periodisation:

• Use split-training, using 1-2 bodyparts each workout to target muscle groups.
• Train each bodypart once per week.
• Get plenty of rest between workouts; never train if scheduled bodypart is sore from previous workout. • Change training routine at least monthly.
• Increase training intensity each workout. This may mean more weight, reps, and sets.
• Make the body work hard but briefly

Sets and Repetitions:

• Use heavy, basic power movements that hit the deep muscle fibres.
• Avoid isolation or "finishing" movements.
• Keep reps in the 5 — 10 rep range.
• Do 6 — 8 sets per bodypart
• Watch out for overtraining, (it can slow gains)
• If gains in muscle and strength remain slow, shock your body into growth with such techniques as 10 sets of 10 reps for one exercise per bodypart. Only use this shocking technique once every eight weeks.

Intensity:

• Focus on lifting heavier weights to increase intensity and not by cutting time between sets.

*** Lecturer, Lt. M.J. Kundaliya B.P.Ed. College, Rajkot**

• Rest at least 60 seconds between sets.
• Rest at least 5 minutes between bodyparts.
• Occasionally try forced reps, supersets, tri-sets, and other intensity techniques, but do not rely on them to heavily.

Recuperation:

• Longer recuperation periods mean more rest days.
• Because of high metabolic rate, get at least 8hrs sleep each night.
• If possible take a nap during, the day.
• Never train when tiled or not completely recovered.

Aerobics:

• Keep aerobic activities to a minimum, no more than three times per week. Too much aerobics will stall progress.
• keep cardio conditioning at the lower end of the target heart rate for no more than 20 minutes per session, To compute target heart rate per minute, subtract your age from 220 and multiply by 0.6 and 0.8.
• Good aerobic exercise choices include stationary bike, brisk walking, and treadmill.

Nutrient Considerations:

• An excellent diet and proper supplementation are crucial.
• Eat 5-7 small meals (Including weight gain drinks) per day every 2.5 — 3 hrs.
• Increase daily protein intake to 1 — 1.5g of protein per pound of bodyweight
• Protein intake should be 25 — 30% of daily dietary intake; carbohydrates about 50%; fats 20 — 25%
• Have a protein shake 90 minutes before bedtime.
• Increase daily intake of fibrous carbohydrates whilst limiting the intake of simple sugars.
• Eat slower burning glycemic index foods such as beans, corn, yams. oats, pasta, brown rice, whole grain foods.
• Supplement with a good multivitamin/mineral.

Lifestyle:

• Keep stress levels low and learn how to relax, using such techniques as visualisation, yoga, and meditation. Stress induced cortisol levels can be detrimental to muscle building.
• Minimise outside activities that use moderate to large amounts of energy.
•Think energy conservation in everything you do.
• Drink at least 2.5 liter's water every day (80oz)

The Mesomorph Body Type

The mesomorph is somewhere between the round endomorph and the thin ectomorph. Physically, they have the more 'desirable' body, and have:

• Large head, broad shoulders, and narrow waist (wedge-shaped).
•Muscular body, with strong forearms and thighs
• Very little body fat
• Genetically gifted; greatest bodybuilding potential.
• Long torso, full chest, good shoulder to waist ratio.

Training for the Mesomorph:

Frequency/Periodisation:

• Responds well to training that involves heavy, basic movements along with shaping exercises. The more varied the exercise program, the greater the results.
• Alternate 3-4 weeks of high intensity training with several weeks of lower intensity workouts to promote growth and strength and prevent burnout.

Sets and Repetitions:

• Use quick, basic movements with heavy weights before hitting muscles with isolation and shaping exercises.
• Keep reps in the 8-12 rep range. For most bodyparts.
• Use a rep combination as low as six and as high as 25 for quads, hamstrings, and calves.
• Because of natural genetic advantage, watch out for overtraining under the mistaken notion that more training will make growth faster.

Intensity:

• Constantly keep the body off guard by varying the training intensity with exercises, sets, reps, weights, and rest.
• Be sure to regularly include light, moderate, and heavy training days.
• Use a combination of slow moderately paced (with full range of motion) and fast reps.
• Regularly alternate intensity techniques into the workouts: partial reps, forced reps, forced reps, descending sets, compound sets, and pre-exhaustion.

Recuperation:

• Without proper rest, the natural advantage you enjoy will never be fully exploited.
• Get 7.5 — 9hrs of sleep every night. Never train a

body part that has not fully recovered.
• Take an extra day of rest away from the gym if your motivation, energy, or strength level is lacking.

Aerobics:

• To maximise muscle gains, do no more than three cardio workouts per week for 20-30 minutes (5 minute warm up, 15-20 minutes in your target heart range, five minute cool down.
• Keep the heart working in the middle of the target heart range?
• Recommended activities: stair climber, treadmill, brisk walking, or stationary bike.
• Limit running to no more than two miles three times a week, even with no other aerobic activities.
• Some mesomorph's reply on wind sprints to condition and build the legs while aerobically conditioning the heart.

Nutrient Considerations

• Keep protein intake to at least 1 gram per pound of bodyweight.
• Keep the carbohydrate intake moderately high, about 60% of total calories; choose vegetables, brown rice. low fat beans, lentils and pasta and whole grains.
• Limit fats: stay lean with a diet containing 15-20% total fats.
• Eat a variety of lean proteins such as skinless chicken, turkey, egg white, lean beef, and fish.

Lifestyle:

• Don't try to do too much to fast: that would make you susceptible to injuries, over training or burnout. • Slow down and listen to your body. Gains will continue year after year if you're patient and follow guidelines given.
• Be patient but persistent.
•Drink at least 2.5 litres (80 ounces) of water daily.

The Endomorph Body Type

The Endomorph is physically quite 'round', and is typified as the 'barrel of fun' person. They tend to have:
• Wide hips and narrow shoulders, which makes them rather pear-shaped.
• Quite a lot of fat spread across the body, including upper arms and thighs.
• They have quite slim ankles and wrists, which only serves to accentuate the fatter other parts.
• Wide bone structure.
• Slower metabolism.
• Weight gain is easy, though fat loss is difficult.
• Tends to store fat, which hides muscle gains.

Training for the Endomorph:

Frequency/Periodisation:
• Needs more frequent workouts, especially aerobic conditioning.
• Develop a pool of 3-5 effective exercises for each bodypart and from those select 2-3 exercises for each bodypart.
• Train abdominals at the beginning of your workout.
• Do whole body workouts for the first months of training; later try a split type of routine.
• Training goal is to speed up the metabolism, minimise body fat.
• Change the training program every second or third workout.
• Don't be afraid to experiment in your training; frequently try something new and different.

Sets and Reps

•Each workout must be high intensity, sacrifice poundage's for minimal rest between sets.
• Do no more than eight sets per body part.
• Use moderate poundage's. Avoid training with heavy weights and low reps.
• Keep your rep range in the 9-12 range for upper body and 12-25 rep range for legs and calves.

Intensity:

• Keep intensity high and rest between sets to a minimum- no more than 60 seconds.
• Use high-intensity training principles such as burns, iso-tension, continuous tension, supersets, tri-sets, and giant sets principles to help bring out maximum muscle shape and definition.
• Descending sets (where you drop the resistance after you've reached muscle failure) also add intensity: use this approach on the last set for a bodypart exercise.

Recuperation:

• Train more frequently, but rest at least 48 hours between workouts for same body part.
• With slower metabolism you won't need as much sleep. Try to get 7.5 hours of sleep per night.

Aerobics:

• Aerobic conditioning is a key component to looking good.

• Use low or non-impact aerobics such as brisk walking, stationary cycle, and treadmill or stair climber to avoid stress to joints.

• Do a cardio workout a minimum of three ties per week, preferably five for 20 minutes in the target heart rate zone, with a five minute warm up and five minute cool down.

Nutrient Considerations:

• Keep fat intake low.

• Eat a variety of lean protein in moderation.

• Consume dairy products that are nonfat.

• Avoid late night snacking: if you must, have healthy, low fat foods on hand.

• Eating smaller, frequent meals keeps the blood sugar level and metabolism up, and controls the appetite.

• Count your daily calories.

• Skip the second helpings; eat slowly. Walk away from each meal feeling slightly hungry.

• Eliminate drinking soft drinks and alcohol.

Lifestyle:

• Participate in a variety of fun aerobic activities to keep the metabolism revved, such as hiking, walking, biking, swimming, racket sports and martial arts.

• Plan on participating in some aerobic activity daily. Make time for rest and relaxation.

• Drink water and lots of it, at least 2.5 liters (80 oz) daily.

Conclusions

When you know which type you are (or which mixture) and diet and exercise correctly for that type, you will make much better progress.

While some women may think that Kate Moss is the ideal, from a fitness view point she really isn't. And many women who tend to be endomorphic will save themselves much suffering by not striving to change themselves into Ectomorphs; it's not going to happen. Conversely a true ectomorph who wishes to be a Sumo wrestler would also be in for a big disappointment.

Your goal should be to look as close as possible to (or stay looking like) a mesomorph. With the correct exercise and diet this can be attainable, and while you may be a bit upset that you have to work hard to look good while the true mesomorph looks that way naturally, at least you will still be fit and look good. And even the mesomorph will find as he/she gets older that some exercise and diet is needed if they want to continue to look good and be fit.

REFERENCE

⇨ http://www.muscleandstrength.com

* V.R. Desai

Physical Education
Research Zone India
Vol. 2 Issu. - (3)
June - 2014 Page - 158 - 159
ISSN 2319 - 8168

PHYSICAL AND HEALTH EDUCATION

Introduction of Physical and Health Education

Physical education trends have developed recently to incorporate a greater variety of activities besides typical sports. Introducing students to activities like bowling, walking/hiking, or Frisbee at an early age can help students develop good activity habits that will carry over into adulthood. Some teachers have even begun to incorporate stress-reduction techniques such as yoga, deep-breathing and tai chi. Tai chi, an ancient martial arts form focused on slow meditative movements is a relaxation activity with many benefits for students. Studies have shown that tai chi enhances muscular strength and endurance, cardiovascular endurance, and provides many other physical benefits. It also provides psychological benefits such as improving general mental health, concentration, awareness and positive mood. It can be taught to any age student with little or no equipment making it ideal for mixed ability and age classes. Tai chi can easily be incorporated into a holistic learning body and mind unit. Teaching non-traditional sports to students may also provide the necessary motivation for students to increase their activity, and can help students learn about different cultures. For example, while teaching a unit about lacrosse in, for example, the South western United States, students can also learn about the Native American cultures of the North eastern United States and Eastern Canada, where lacrosse originated. Teaching non-traditional sports provides a great opportunity to integrate academic concepts from other subjects as well which may now be required of many P.E. teachers. The four aspects of P.E. are physical, mental, social, and emotional.

Details of Physical and Health Education

In today's modern society, sports and physical activity serve the purpose of building a healthy body and mind. Sports and physical activity in the post modern era contribute not only to maintaining a healthy body and mind, but also to awakening one's full potential for a better life. The positive effects of sports and physical activities in our lives have been affirmatively acknowledged in a greater fashion than ever before and have been considered as a major cultural asset in many societies. This phenomenon is commonly observable worldwide regardless of the existing differences in social, cultural, political, and economic patterns.

A rise in the positive affirmation of sports and physical activity has affected and brought change to the position of physical education and youth sports. Physical education and youth sports no longer remain as a mere education for the "physical," but serve to advance individuals to develop other abilities such as cognitive and social skills. This holistic approach to physical education and youth sports creates the opportunity and potential for children and youth to initiate sports for life. Consequently, physical education has the potential to affect one's quality of life by cultivating a healthy body and mind.

Correspondingly, at this point in time, reexamining the goals, objectives, and content of physical education and youth sports worldwide is a necessity. The reassessment will essentially provide an opportunity to reevaluate the current constructed sports culture and accordingly

provide new directions for physical education and youth sports that reflect current times. Co-incidentally, Physical Education and Health: Global Perspectives and Best Practice introduces physical education and youth sports from 40 countries. These

* PTI, Shree Sahajanand School, Ahemdabad

chapters provide an analysis of various perspectives and approaches to physical education and youth sports from each of the 40 countries, and from these diverse viewpoints, I identified three main factors.

First, many countries are apparently in a transitional period from sports skills-oriented physical education programs to health-oriented objectives. It has been considered that this change of perspective was occurring only in countries concerned with overcoming obesity and overweight to improve the health of children and youth. However, Physical Education and Health: Global Perspectives and Best Practice illustrates that this concern is no longer limited to certain countries, but to the majority of countries. Therefore, physical education and youth sports now require educators that have knowledge beyond sports and physical activities that is based in new educational practices.

Second, the change of view in physical education and youth sports is reflected in new and renewed policies. The chapters introduce the active change and involvement of policy makers to pursue and improve physical education and youth sports according to more contemporary goals and objectives. Such goals and objectives encourage participants in physical education and youth sports programs to pursue sports for life. This factor illuminates that policy makers play a vital role in creating and providing the environment in which these ends can be achieved.

In some countries, the benefit of the school–community cooperation model to physical education and youth sports is now more formally emphasized.

Third, the need and importance of gathering and sharing knowledge of physical education and youth sports of other countries other than one's own is highlighted. Globalization emphasizes that we can improve together by learning from each other from the past and present for a stronger future in physical education and youth sports. Physical Education and Health: Global

Perspectives and Best Practice shares this worldwide knowledge.

REFERENCE

- Taylor HL, Jacobs DR, Jr, Schucker B, Knudsen J, Leon AS, Debacker G. A questionnaire for the assessment of leisure time physical activities.
- J Chronic Dis. 1978;31(12):741–755. [PubMed] Paffenbarger RS, Jr, Wing AL, Hyde RT. Physical activity as an index of heart attack risk in college alumni. Am J Epidemiol. 1978 Sep;108(3):161–175. [PubMed]
- Dishman RK, Sallis JF, Orenstein DR. The determinants of physical activity and exercise. Public Health Rep. 1985 Mar-Apr;100(2):158–171. [PMC free article] [PubMed]

*Dr. N.H. Gamit ** R.K. Dariya

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 160 - 162
ISSN 2319 - 8168

SPORT COMPETITION ANXIETY AMONG MALE AND FEMALE INTER – COLLGE LEVEL SPORTSPERSONS OF DIFFRENT GAMES

The present study was to analyses the sort competition anxiety among male and female intercollegiate level sports-persons of different games. 448 male and 380 female players level form Basketball, kabaddi, kho-kho and Hockey were Randomly selected as Subjects. Sport competition anxiety assessed by using a Written Questionnaire .2x5 factorial analysis of variance Was carried out to analysis the data. The level of significant Chosen Was 0.05 Simple effect test was employed to determine the significant difference between the means , wherever the interaction if found significant Scheffe's Post – hockey Was carried out if – 'F' Ratio found significant . Factorial analysis of variance reveals that , there was no significant differences found in interactions intercollegiate level . However there was a significant difference found in interaction. Simple effect test reveals male sports persons of selected five games Was With Significant difference in sport competition female Kho-Kho players found to be with significant difference in sport competition anxiety than female players.

INTRODUCTION : -

Play to win and not lose' should be the slogan of today ' s sportsperson Playing to win comes out of inspiration, whereas playing not to loose out of desperation . Most performance problem that athletes or other perfumers struggle With are not result of poor conditioning, inadequate coaching and lack of sometimes cause sub – per play.

Anxiety is considered as psychological manifestation involving all dimensions of athlete such as behavior and psychological process of sports performance, tension, fear etc. The greatest danger to the athlete, Which the psychologist is required to control is anxiety in all is forms. It is a disturbance nourished by it and every athlete is vulnerable to it

Spiel Berger (1971) introduced the term state anxiety that anxiety . He defined state anxiety as an immediate emotional; state that is characterized . He defined , fear and tension accompanied by physiological arousal . State anxiety is a temporary, very changing emotional state . At the same time , trait anxiety is a feature of personality. It is predisposition to perceive certain environmental situations as threatening and to respond ti these situations . It is an acquired behavioral disposition.

Agyajit Singh (1987) administered SCAT (Martens) tom Indian athletes and hockey players found significant differences between the two sample on sports competition anxiety. Hockey players both male and female were to have lees competition anxiety. Hockey players both male and female were found to have less competition anxiety as compared to the players of individual events. Males exhibited less anxiety in competitive situations as compared to the female.

Willams David M. Frank Michael .L, Lester David (2002) , examined the relationship between attitudes toward Winning and competition anxiety in 59 male and female college student competing on four different NCAA Division III soccer and volleyball terms .AII

*** Lecturer, P.K. Kotawala Arts College, Patan**
**** Lecturer, Commerce & Science College, Palanpur**

participants completed a competitive a state anxiety inventory i hour before participation in an intercollegiate game during the regular season. in a backward multiple regression , analysis, cognitive anxiety was predicated significantly only by self – confidence . while somatic anxiety was predicated significantly y self – confidence and the rated importance of the competition.

Nuouanis Nikos, Biddle Stuart J.H.(2000) examined how coping strategies in sport related to differences in levels of anxietitensity and to the interpretation of these levels as being facilities or debilitative or performance.

The purpose of the study was to analysis the sports Competition Anxiety of level male and female sports persons. Total 448 male and 380 female players from Basketball, Volleyball, Kabaddi, Kho –Kho and Hockey game . were randomly selected games. the level of significant chosen Was 0.05 Simple effect test Was employed to determine the significance difference between the means, Wherever the interaction is found significant Schaffer's post – hoe test was carried out , if **'F'** - ratio found significant

FINDING : -

The findings pertaining to the Group Cohesiveness of male sportsperson are presented below.

Table – 1

2x5 Factorial Analysis of Variance Sports Competition Anxiety between Male and presented Sports persons

SURCE	SS	DF	MS	SIG	F	TABLE VALUE
Gender	32.421	1	32.421	3.384	0.006	1.826 = (3.86)
Games Groupe	223.776	4	55.944	5.8944	.000	4.823(2.39)
Interaction	100.926	4	25.232	2.634	.003	4.188 = (3.86)
error	7837.136	818	9.581			
Total	332640.000	828				

0.05 level at significant

The reveals that F value of male and female sports-persons (Row) of inter college was to be 3.384 and not statistically significant as the calculated F value is less than the table value (3.86)

Further, in the analysis of columns f value of 5.839 for Sports Competition Anxiety among sports-persons of selected five games was found With significant difference as the F value found to be more than the table value (2.39)

As interaction found significant (F2.634) in sports competition anxiety among male and female sports persons of intercollegiate level simple effects test was administered and presented in.

Table – 2

Simple Effect test of Variance Sport Competition Anxiety between male and Female Sports persons of Five Selected Game.

Source of Variance	Ss	Df	Ms	F	Table Value of F
Mae Sports persons	261.571	4	65.393	6.825	(4,443)=(2.40)
Female Sports persons	75.277	4	18.819	1.964	(4,375)=(2.39)
Basketball Players	14.012	1	14.012	1.46	4,154= (3.90)
Volleyball Players	18.166	1	18.166	1.896	4,154=(3.90
Kho-Kho Players	94.500	1	94.500	9.36	4,154=(3.90
Kabaddi Players	7.055	1	7.055	0.736	4,166=(3.90
Hockey players	.012	1	0.02	0.001	4,190=(3.90
FRROR	7838.136	818	9.581	-------	

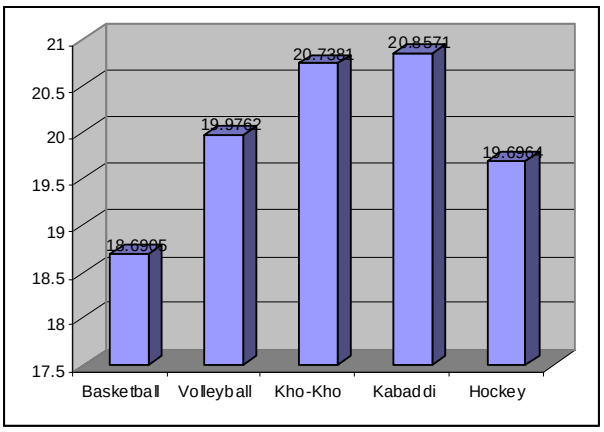
simple effect test revels that among male sports persons a significant difference exists between the plyers of different games in sports competition anxiety , Further the potshot test was administered and presented in table – 3

Table : - 3

post – hoc Analysis of Competition Anxiety of Male inter college Sports person of Various Games.

Basketball	Volleyball	Kho-Kho	Kabaddi	Hockey	Mean Difference
18.6905	19.9762				102857
18.6905		20.7381			2.04762*
18.6905			20.8571		2.1667*
18.6905				19.6964	1.00595
	19.9762	20.7381			0.76190
	19.9762		20.8571		0.88095
	19.9762			19.6964	0.27976
		20.7381	20.8571		0.11905
		20.7381		19.6964	1.04167
			20.8571	19.6964	1.16071

0.05 Level Significant



It revels that Male basketball players Were with significantly lower sports competition anxiety than Kabaddi and Kho- Kho players. There was no significant different in sports competition anxiety exist between game players among females Hence the mean difference test was administered and presented in table – 4

Table -4

Mean difference in sports Competition Anxiety between male and female Kho-Kho players

Groups	Mean Value of Meal players	Mean Value of Female of players	Mean Difference
Kho- Kho	20.7381	19.2381	1.5

0.05 Level at Significant

There Was a significant Difference exists in Sport Competition anxiety level between male and Female Kho-Kho players and no significant differences Found in rest of the Groups,

CONCLUSIONS

Within the limitation of the present study and on the basis of the finding the following conclusions may be drawn

· Sport competition anxiety is independent of the person. This conclusion drawn from the findings that there is no Significant difference exists between male and female sports persons in sports competition anxiety.

· Sport competition anxiety depends of the game of the sport person.It is not necessary that every sport and games clutches the sports persons With similar magnitude of competition anxiety.

· Variations and similarity in the various parameters of sport competition Anxiety which was observed in this study can be attributed to the psycho-somatic demand of the game , pattern , regulations and the strategy of the game.

REFERENCE

- Spiel Berger C D " Trit – State anxiety and Motor Behavior ", journal of Motor Behavior, 3(1971)
- Singh Agyajit, " psychological Characteristics Top Level Indian Sportsman " Cited by L.S Sidhu. wt. al,. Sport Science , Health Fitness and performance,(1987)
- R.Bala and N.S.Mann , "pre- Competition Anxiety in Footballers at Various Stages of Competition", psychology and Sport Excellence,(1989)
- D.L.Gill , psychological Dynamics of sports , (IIIinois : Human kinetics,1986), willams david, M,F rank Michael. L, Lester David, predicting anxiety in competitive sports , Richard
- Stockton College of New jersey, psychology program, Pomona
- NJ,US perceptual and Motor Skill . 2000 Jun , vol 90(3, ptl) : 847- 850
- Ntoumanis .Nikos , Biddle Stuart ..JH . relationship of intensity and direction of competition anxiety With coping strategies ,Leeds Metropolitan U, School of Leisure Sport .Leeds England sport Psychlogist 2000 Dev 4, : 360-371.

* D.G. Patel

Physical Education
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 163 - 165
ISSN 2319 - 8168

STRESS AFFECT SPORTS PERFORMANCE

Sports for leisure can be both fun and thrilling but when competition sets in, it may no longer be so. With competition, the first thought that comes to mind will be pressure, tension or stress.

There can be tons of pressure in any sports. It can come from expectation of your coach, your friends and supporters that expect you to win. It can also come from within the person. Sometimes, we can be very hard on ourselves. We push ourselves to excel and this further adds to the stress that comes with playing in sports

"How does stress affect Sports ?"

Whatever is the cause, it is a fact that stress does affect sports performance.

One misconception that people have is that stress always has a negative effect or influence on performance. This is not always true as stress may cause negative anxiety in one performer but may serve as a positive excitement for another. Hence that is why you may hear that some players thrive when under pressure while others may crumble.

The level of stress under which you operate is of utmost importance. If you are not under sufficient stress, then your performance is likely to suffer because you would tend to feel bored and unmotivated. On the other hand, if you are under immense pressure, your performance will also be unsatisfactory as you would be distracted and unfocused.

In the middle of these two, there is a level of moderate stress and this is the level of stress that you would perform at your best. This level of "optimum performance" stress is different for different people.

Coping with stress in sports.

To achieve your optimal level of performance, stress management is important. You would need to have a balance of your stress levels. As mentioned, too low a level will make you unchallenged while too high a level will impair your performance. There are coping techniques that can assist you in finding a balance.

The influence of stress on sports performance can either be psychological or physical.

Psychological stress comes in the form of anxiety, fears and negative thoughts associated with the upcoming event or competition. These though common need to be addressed and controlled before they undermine your self-confidence.

Here are some "mental tools" you can use to counter the negative thinking that can undermine a good performance.

Learn to recognize your thoughts (Thought Awareness)

Often, when you are thinking negatively, you will feel fear, criticize yourself for mistakes made or you may even doubt your own ability and skills and expects yourself to fail. Do not suppress these thoughts. Let them flow and note them down

Challenge your negative thoughts (Rational Thinking)

Having listed your negative thoughts, its time to run through each of them and provide evidence against them. Here are a few examples:

· "I'm not good enough"

Have you been training yourself as long and as well that you should have? Have you conducted the reasonable number of rehearsal? If you have done all these, then you are good enough!

· " What might others think"

As long as you have performed your best, it is not within your control as to what others may feel or

* Lecturer in Physical Education, Navyug Science College, Surat

think. Just ignore any unfair comments

"Afraid that there may be problems during the event"

Have you thought about contingence plans? Run through all possible problems or distraction mentally and think of ways to deal with them if they arise. Once you have done that, you should be able to handle any problems should they happen.

Be Positive (Positive Thinking)

Instead of thinking negatively, look at things in a positive way. This will help build up confidence. For example:

· Instead of thinking "I'm not good enough". Think " I'm well prepared"

I have trained hard and I'm prepared to give my best performance!

· Instead worrying "What might others think" just think about " I am going to proof that all wrong"

· Instead of worrying "what might happen during the match", be positive as " I have thought about all problems and would be able to overcome any of them"

Stress can also affect your body physically. Under the effects of stress, muscle may become tense and tighten. This tightening of the muscle may in turn affect the overall co-ordination of the body and its movement. As such, your movement, fluidity, hand and eyes movement will all be affected which can influence your performance.

Using physical stress relieve techniques like "Progressive Muscular Relaxation" or "Deep Breathing" may help. Also, avoid heavy meals and caffeinated beverages before the match, as these are potential stressor that creates physical stress on your body.

Stress Management Tips - Helping You Reduce Stress

Stress is inevitable in life but that doesn't mean that we have to be passive about it and risk being stressed out. With some stress management tips, coping or dealing with stress should not be difficult.

There are many ways to reduce stress but before we start listing some stress relief tips, take a simple test to see if you are really stressed.

Here are the top 10 key stress indicators. Just simply tick on the ones that have affected you.

· sleep difficulties
· loss of appetite
· poor concentration or poor memory retention
· performance dip
· uncharacteristic errors or missed deadlines
· anger or tantrums
· violent or anti-social behaviour
· emotional outbursts
· alcohol or drug abuse
· nervous habits

Your test score.

No.of Stress indicators ticked	Implication
1	You could be stressed
2	You are probably stressed
3	You are almost certainly stressed
4 or more	You are definitely stressed

So, have you got an answer?. If yes, read on as the following would definitely be useful in teaching you how to relieve stress.

Stress Relief Tips

1. Start a stress diary

Keeping a stress diary is an effective way of finding out both what causes you stress, and what level of stress you prefer. In this diary note down your stress levels and how you feel throughout the day. In particular, note down stressful events. Record the following information:

a. The time and place where the event took place

b. The Intensity of the stress felt (On a scale of 1 to 10)

c. Duration of stress felt. How long did you feel unhappy, angry, agitated etc

d. The event, situation or people causing the stress

e. What was the triggering event (The preceding event that has led to the stressful situation that you are in right now)

f. Your reaction i.e. emotional or physical towards that event.

By keeping track of all causes of stress that have affected you, you would be in a better position to find ways to manage them. Looking retrospectively, you should be able to avoid running into such situations again and hence reducing your exposure to stress.

2. Exercise

Taking frequent effective exercise is probably one of the best physical stress-reduction techniques

available. Exercise not only improves your health and reduces stress caused by unfitness, it also relaxes tense muscles and helps you to sleep.

Exercise has a number of other positive benefits you may not be aware of:

1. It improves blood flow to your brain, bringing additional sugars and oxygen which may be needed when you are thinking intensely

2. It can cause release of chemicals called endorphins into your blood stream. These give you a feeling of happiness and well-being

Being fit and healthy also increases your ability in managing stress as it arises.

3. Relaxation and Meditation Techniques

Learn how to relax yourself and this can best be done through meditation. The idea of meditation is to focus your thoughts on one relaxing thing for a sustained period of time. This rests your mind by diverting it from thinking about the problems that have caused stress. It gives your body time to relax and recuperate and clear away toxins that may have built up through stress and mental or physical activity.

Meditation is particularly useful where:

· you have been under long term stress,

· you have been under short term stress which has caused adrenaline to be released into your bloodstream,

· you have been worrying about problems,

· you have been physically active.

Relaxing using meditation can have the following beneficial effects on our health.

· slows breathing

· reduces blood pressure

· helps muscles relax

· gives the body time to eliminate lactic acid and other waste products

· reduces anxiety

· eliminates stressful thoughts

· helps with clear thinking

· helps with focus and concentration

· reduces irritability

· reduces stress headaches

4. Time management

Stress is often cited as a result of poor time management. These are often the people who do not prioritize their jobs or tasks. They tend to over-commit and over scheduled. In such cases, good time management skills are critical for effective stress control.. One way to help in developing time management skills is to always try to use a calendar or planner, and check it faithfully before committing to anything. You can also learn to identify time-wasting tasks by keeping a diary for a few days and noticing where you may be losing time.

5. Develop your social support network.

When under intense stress, it is very natural to withdraw from the world and concentrate exclusively on solving the problem that is causing the stress yourself . However, this may not be an ideal option. One person working on his or her own simply cannot achieve tasks beyond a certain size. Similarly, many stressful situations cannot be resolved without the help of other people.

As such, learn to be more sociable. Expand and develop your own social network of friends so that there are always these groups of people that you feel comfortable with that can help you in times of need.

Simple as they may seems, these stress management tips when put into use can greatly help you in managing and coping with stress. Stress should never be taken lightly especially on a long term basis. Acknowledging the presence of stress and dealing with stress as they arises is the only way to lead a more healthy and stress-free life.

REFERENCE

- Choking in Big Competitions , by Kaori Araki
- Dealwithstress.com ,*Types of stress, by Deal with stress*
- Edutracks, Vol.7-No.7, March 2008 pp. 32-37 "Effect of Yogic practices on social stress and academic stress of female adolescents"
- Handling sports pressure and competition- Teens Health from Nemours
- Healthyliving.preferredconsumer.com/ physical_fitness/stress_ management By preferred consumer
- Jones, Graham. Stress and Performance in Sport. New York: John Wiley and Sons, 1990.

* Dr. J.A. Pandya

Law
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 166 - 167
ISSN 2319 - 8168

સમાજમાં ન્યાયના વહીવટની જરૂરીયાત

ભારતદેશના બંધારણમાં વહીવટના ૩ અંગોની વાત કરવામાં આવેલ છે. તેમાં કારોબારીતંત્ર, વિધાનતંત્ર, અને ભાવતંત્ર, વિધાનતંત્ર, કાયદાઓ બનાવે છે. કારોબારી તંત્ર વહીવટી કાર્યો કરે છે અને ન્યાયતંત્ર એ સમાજના યાને લોકોના અધિકાર રક્ષણ કરવાનું કાર્ય કરે છે. ગુનેગારોને શિક્ષા આપવાનું અને પિડીતની લાગણીને વાચા આપવાનું કાર્ય ન્યાયતંત્ર દ્વારા કરવામાં આવે છે આ પ્રક્રિયાને ન્યાયના વહીવટ તરીકે ઓળખવામાં આવે છે. ન્યાયના વહીવટની વ્યાખ્યા સામંડે આ પ્રમાણે આપી છે.'' ન્યાયનો વહીવટ એટલે રાજયના શારીરિક બળના સાધનથી રાજકીય સમાજમાં અધિકારનું રક્ષણ'' જો કે સામંડની આ વ્યાખ્યાની ઘણી ટીકા પણ થઈ છે પણ લેખક સામંડ સાથે સંમત થાય છે કે અધિકારના રક્ષણ માટે શારીરિક બળની જરૂર પડે છે. દા.ત.કોઈ વ્યકિતની મિલ્કતને બીજા લોકો નુકશાન પહોચાડવાનો પ્રયાસ કરે ત્યારે તેમના રક્ષણ માટે પોલીસ બળની જરૂર પડે છે. પોલીસના બળ સિવાય આ મિલ્કતનું રક્ષણ થઈ શકે નહી જેથી શારીરિક બળએ રક્ષણ માટે ખુબજ અગત્યનું અને મહત્વનું પરિબળ છે તેમ અંગત પણે માનવું છે વર્તમાન સમયમાં ભારતદેશમાં મુખ્યત્વે બે પ્રકારના ન્યાય પ્રચલિત છે. દિવાની ન્યાય અને ફોજદારી ન્યાય આ પ્રમાણે આ રાષ્ટ્રનો વહીવટ ચાલે છે.

ન્યાયના વહીવટની જરૂરીયાત

માણસે અનિવાર્ય રીતે સામાજિક પ્રાણી છે. માણસ એ સમાજમાં સમુહમાં રહેવા ટેવાયેલો તેનો સ્વભાવ છે. માણસની બુધ્ધિશકિત ને કારણે બીજા પ્રાણીઓ કરતા અલગ પડે છે બુધ્ધિશકિત હોવાને કારણે માણસ પોતાના ભવિષ્યનું આયોજન કરી શકે છે. વિચારી શકે છે અને તે પ્રમાણે કામ પણ કરતો હોય છે તે રીતે માણસે અન્ય પ્રાણીઓથી અલગ પડે છે તેમ છતા માણસમાં પણ ઝનુન, હિંસા અને વેરવૃતિ અન્ય પ્રાણીની માફક રહેલી છે માણસની આવૃતિઓ ઉપર જો નિયંત્રણ કે અંકુશ રાખવામાં ન આવે તો સમાજ વ્યવસ્થા કે સમાજ જીવન અસ્તવ્યસ્ત થઈ જાય તેમાં કોઈ શંકા નથી એટલા માટેજ કહેવાયુ છે કે '' જો માનવમાં બુધ્ધિશકિત ન હોય અને તેમના ઉપર નિયંત્રણ કરી કોઈ તાકાત ન હોય તો માનવ એ વરૂઓ કે હિંસક પ્રાણીઓના હોવા કરતા પણ વધુ ભયંકર હોય છે.(૨)માણસમાં જયારે કોઈના તરફ વેરવૃતિનો ભાવ જાગે ત્યારે તો દુષ્ટ બની જાય છે. જયારે તે પોતાના સ્વાર્થ માં હોય ત્યારે બીજાનું બુરુ કરતાં પણ અટકાતો નથી કે બચકાતો નથી જો આપણે દરેક વ્યકિતને તેની ઈચ્છા મુજબ વર્તન કરવા દેવામાં આવે તો સામાજીક સ્થિરતા અને સલામતી જેવું કોઈ રહેજ નહી એટલા માટે સામાજીક સ્થિરતા અને સલામતી ભાવના વહીવટની ખુબ જરૂર પડે છે. જાણીતા જયુરીસ્ટ હોબ્સ(૩) ના મંતવ્ય પ્રમાણે જયારે માણસોને કાબુમાં રાખવા માટે કોઈ સત્તા ન હોય ત્યારે દરેક વ્યકિત બીજી વ્યકિતની દુશ્મન બની જાય છે અને પરિણામે લગભગ યુધ્ધ જેવી પરિસ્થિતિ સર્જાય છે આવા સમાજમાં જીંદગી એકાકી અને ગલિચ પશુ જેવી બની જાય છે.આવી પરિસ્થિતિમાં સાહિત્ય મૃત્યુના ભયની તલવાર લટકતી જ હોય છે આથી જ સુવ્યવસ્થિત સમાજ રચના માટે વ્યકિતઓના એકબીજાના વિરૂધ્ધના હિતોના નિયંત્રણ અને રક્ષણ માટે કોઈ બળ કે તાકાત હોવી જોઈએ તેમ હોપ્સનું મંતવ્ય છે.

જાણીતા વિધિમિમાંસા સામંડ(૪) જણાવે છે કે દરેક વ્યકિત પોતાના સ્વાથ નો વિચાર કરે છે અને પુતી માટે તે ઝનુની બને છે સમાજ માત્ર રાજય અને કાયદાના આશ્રયે અસ્તિત્વ ધરાવી શકે અને ન્યાય એ રાજયની શાંતી, વ્યવસ્થા અને સંસ્કૃતિ માટેની કાયમી જરૂરી શરત છે તેમ સામંડનું માનવું છે.

ન્યાયના વહીવટનો ઉદભવ.

આધુનિક સમયમાં આપણે ન્યાયના વહીવટનું જે સ્વરૂપ જોઈએ છે તે સ્વરૂપ માનવીની પ્રાથમિક અવસ્થામાં ન હતું ન્યાયના વહીવટનો વિકાસ ૩ તબકકામાં થયો છે તેવું જુદા જુદા કાયદાશાસ્ત્રીઓનું માનવું છે.

(૧) પ્રથમ અવસ્થા :– માનવજાતની પ્રારંભીક અવસ્થામાં ન સમાજ હતો કે ન હતો કાયદો મારે તેની તલવાર અને બળિયાના બે ભાગ જેવી સ્થિતિ પ્રવત તી હતી આથી સમગ્ર લોક જીવન સંઘર્ષમય જેવું હતું પોતાનું અસ્તિત્વ

* Principal, Sheth H.J. Law College, Bhavnagar

ટકાવી રાખવા બળવાન થવુ જરૂરી હતું તે હિંસાનો સામનો હિસાંથીજ કરતાં દુશ્મનોનો સામે પ્રહાર કરવા માટે મિત્રો અને સગા સંબંધીઓની મદદ મળી રહેતી અને મોતને મુઠીમાં હોય તે રીતે જીવન વિતાવતા માણસની જીંદગી અને મિલ્કત ઉપર ગમે ત્યારે હુમલો થવાનો સંભવ રહેતો અને બળવાન માણસો જ પોતાનું જીવન ટકાવી શકતા નબળા માણસોનું જીવન અધમ અને મુશ્કેલ હતું આજે પણ સમાજમાં આ વેરવૃતિ કયાંય ને કયાંય જોવા મળે છે એટલે માણસમાં આધુનિકતા ઘણી આવી છે કાયદાઓની સમજણ અને ખ્યાલ પણ ઘણા વિકસ્યા છે તેમ છતા મુળભુત વૃતિયો સમાજમાં કોઈને કોઈ રીતે પ્રગટ થતી જોવા મળે છે.દા.ત. અ પરિવારના સભ્યનું બ પરિવાર દ્વારા ખુન કરવામાં આવે તેના બદલામાં બ પરિવાર ના એક સભ્યનું ખુન જયા સુધી અ પરિવાર ન કરે ત્યાં સુધી તેમને ચેન ન પડે આ વૃડતિ આજે પણ સમાજમાં જોવા મળે છે જે પ્રથમ તબકકાની છે.

(૨) બીજી અવસ્થાઃ– બીજી અવસ્થા એટલે કે આ સમય દરમિયાન કેટલાક વિકસિત દેશોમાં રાજકીય સત્તાઓ અસ્તિત્વમાં આવી ચુકી હતી પરંતુ સમાજ ઉપર તેનો કોઈ અરસકારક અંકુશ ન હતો ઉપરાંત ગુનાઓ ડામવાનું અને હિસાબો કરવાનું કોઈ વ્યવસ્થા કે તંગ શરૂઆતમાં અસ્તિત્વમાં ન હતા જેવી આત્મરક્ષણ કરી શકનાર વ્યકિતને જ જીવન જીવવાનો અધિકાર હતો આ સમય દરમિયાન આંખ માટે આંખ, પગ માટે પગ, દાંત માટે દાંત, જીવન માટે જીવનનો સિધ્ધાંત અમલમાં હતો કોઈ ખુની ભાગ્યે જ જીવતો રહેવા પામતો હતો. આ પરિસ્થિતિમાં આ બધા ઉપર નિમંત્રણ લાવવા માટે ચોકકસ નિયમો ઘડાયા હતા જે ફોજદારી ભાવના વિકાસનું પ્રથમ પગથિયુ ગણવામાં આવે છે.

(૩) ત્રીજી અવસ્થાઃ– આ ત્રીજી અવસ્થામાં સમાજે રચનાત્મક ભાગ ભજવવાનું શરૂ કયુ માનવીઓ સમાજ રચીને રહેવા લાગ્યા. વ્યવસ્થિત જીવન જીવવાની શરૂઆત થઈ અને દરેકને એમ લાગ્યુ કે માનવીએ સમાજ રચીને રહેવા સિવાય કોઈ વિકલ્પ નથી. તેમ તેમની માન્યતા દઢ થઈ વ્યવસ્થિત સમાજ રચનાના સરળ સંચાલન માટે પણ રાજયની સત્તા સ્વીકારવી જોઈએ એવુ લોક માનસ ઉપર બરાબર માન્યતા ગોઠવાઈ ગઈ એટલે આંખ સામે આંખ વાળો સિધ્ધાંત સમાજમાં મૃતપ્રાય બન્યો કાયદાઓને રાજયનું પીઠબળ પ્રાપ્ત થયુ રાજય ન્યાયધીશ તરીકે કાર્ય કરવાની જવાબદારી કોઈને સોંપી તે ગુનેગારની જવાબદારીનું માપ કાઢે અને જેટલી જરૂર હોય એટલી સજા કરે આ સિધ્ધાંત સ્વીકારવામાં આવ્યો એટલે લોકોમાં વૈમન્સ્યનું પ્રમાણ ઘટવા લાગ્યુ લોકો હિંસાને બદલે ન્યાયનો આશરો લેવા મંડયા એકબીજા સામે બદલા ને બદલે અદાલતના ન્યાયની ખેવના રાખવા મંડયા અને આજે સમગ્ર સમાજ વ્યવસ્થા એ ન્યાયના વહીવટને સ્વીકારી લીધો હવે કોઈ અપવાદોને બાદ કરતાં કયારેય પહેલા જેવી હિસાબો થતી નવી અને સમાજ વ્યવસ્થા બરાબર જળવાય છે અને સમાજમાં પણ હવે અંધાધુધ ને બદલે સારી સમાજ વ્યવસ્થા ગોઠવાઈ ગઈ છે. કોઈ કોઈ અપવાદોને બાદ કરતાં સમાજમાં શાંતી, સલામતી અને યોગ્ય વ્યવસ્થા છે તે ન્યાયના વહીવટને આભારી છે. આ વ્યવસ્થાને વધુ મજબુત કરવા ન્યાયના વહીવટની જરૂરીયાત છે તેમ લેખકનું અંગત પણે માનવું છે.

સંદર્ભ

- ⇨ સામંડ ઓન જયુશીસ્યુડન્સ
- ⇨ જેરીમેપ ટેયલોર વક ૧૩ ૩૦૬, હેસ્વરી એગશન
- ⇨ લેવીઅન્યસ ચેપટર – ૧૩
- ⇨ સામંડ જયુરીસ્પૃડન્સ ૧૧મી આવૃતિ – ૧૧૭

* M.P. Bhatt

Law
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 168 - 169
ISSN 2319 - 8168

ETHICS OF HUMAN RIGHTS AND GOOD GOVERNANCE

ABSTRACT

Human Rights are derived from the principle of Natural Law[1]. They are neither derived from the social order nor conferred upon the individual by the society. They reside inherently in the individual human beings independent of and even prior to his participation in the society. Consequently, they are the result of recognition by the State but they are logically independent of the legal system for their existence. Their origin may be sought in the natural law and not in the positive law. They are based on their intrinsic justification and not on their enactment or recognition by certain individuals. They do not depend on any formulation or accepted authority. To conclude it may be said that a positive legal system which does not recognize human rights is not low.

The idea that the individual has right; claims upon society, or against society : that these rights which society must recognize, on which it is obliged to act, are intrinsic to human rights.

The human rights are inalienable. "Human person possesses rights because of the very fact that it is a person, a whole, a master of itself and of its acts…. By natural law, the human person has the right to be respected, is the subject of rights, possesses rights, These are things which are owed to a man because of the very fact that he is a man.

Human Rights are the rights that a human being has in virtue of whatever characteristics he has that are both specifically and universally human. If the only relevant condition for enjoying certain rights is being human, and if this property does not admit of degrees, there cannot be differences of degree in the extent to which the rights in question are held; this is, all human beings have them to the same degree.

If [2]government is the institutional framework of the state, governance stands for the process of the governing its functioning the decision making and its implementation. The concept earned its salience on the role of the state in a globalize, liberal, market driven economy. The state (government) was to be "Lean and mean", with a clear, purposeful role, less on welfare but focused on providing education, looking after health and building infrastructure, The state was to be facilitator rather than an active agent with no limits to its involvement in the overall life of society. [3]In a way this approach was in dissonance with the overall concerns of the state in the under developed world the state was supposed to look after several spheres of life as an active agent of socio-political transformation and modernization.

Since the main task of the government is to govern, the term governance is usually associated with government, though it is conceivable that the government may not govern adequately, properly or to the satisfaction of the governed. The government is not an imposition from above and derives its power through people's authorization.

Theoretically speaking the art of governance could be comprehensively discussed in terms of the following major requirements. The following major requirements. The governments, the government being a democratic one.

(1) Legitimacy
(2) Accountability
(3) Transparency
(4) Rule of Law
(5) Responsive
(6) Efficacy

* Visiting Lecturer, Sheth H.J. Law College, Bhavnagar

(7) people-Centric
(8) Equitable

Good governance depends upon clean politics and clean politics is politics with principles, values and ideas. To observe the rule of game. If governance in India is of a poor quality the reasons are to be found in its short comings and evils. The fore most evils are criminalization and corruption. Perhaps the most serious disease of Indian politics and public life. Late P M Rajiv Gandhi's open confession of only 15 paisa out of 100 reaching the target underlines the gravity of the evil. According to the Transparency international, NGO from Germany India is the 9th most corrupt country in the world. Anti-corruption measures need to be honestly and firmly implemented by the government. Corruption should not be allowed to be 'Service Charges'.

There has been a lack of productive debate in parliament. Walkouts and slogan shouting take place which was virtually absent before the 1970s. In the eleventh Lok Sabha 5.28% time was wasted in disruption which went up to 10.66 in the 12th Lok Sabha and the first eight sessions of the 13th LokSabha the total wastage of time had gone up to 22.40 percent. 14th and 15th Loksabha are also almost followed the same manner.

India needs a social audit of its governance as misgovernance at different level is our problem and unless it is monitored properly and brought out in front of the nation. The problem of corruption and red-tapism will eat up and destroy the basic fabric of our democracy.

REFERENCE

- Dr V.K.Anand 'Human Rights" By. Allahabad law agency,2008 page No.01
- B.M.Chitlangi "Good governance: An Administrative Perspective" Ed.By Zenab Banu Kanishka Pub New Delhi,1999. Page No.175-176
- Pravin N. Sheth "The Turning Point in Governance in Decline and fall of Indian politics. Ed.By Zenab Banu Kanishka pub New Delhi,1999. Page No.11

* P.B. Prajapati

Management
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 170 - 171
ISSN 2319 - 8168

HOW INDIAN COMPANIES & MNCS MADE THE MARKETING VERY SUCCESSFUL WITH INDIAN SOLUTION AND INDIAN TOUCH?

Today in this global competition *it is very essential not only satisfy the customer but to delight the customer.* For that nowadays companies have adopted the Customization strategy for the providing the goods, services, Ideas, event, experience etc. Customer will get the same goods and services for which He\She is looking for. Take an example of **Asian Paints.** It provides the huge no. of alternatives in the wall color for painting according to customers' requirement.The objective of this research is to know that how our Indian companies and Multinational Companies have adopted the *Indian culture, sub culture, beliefs, customs, traditions, festivals, food patterns etc?* How could it become possible to provide the same goods and services for which the Indians were looking for? ***Can anybody Indian say that Cadbury India is the origin company of England? Can anybody Indian say that Hindustan lever ltd is the British company?*** No Not at all. As these companies has adopted Indianization in such a ways in their strategies of marketing of goods that all these companies seems to be an Indian.

Local Business Environment

It is very essential for any local or MNCs to understand the local culture and local business environment. If company fails to understand this than it fails in the market. ***E.g. American Motor Company Ford*** had launched Big SUV car models in the Japan earlier. It was huge failure because Japan is the small country having the huge parking problems. How could Japanese accept big SUV car? Thus, Ford were failure to understand the local need of Japan. At the same time ***Japanese company Toyota Motors*** was successful and captured the USA market in the USA itself by understanding the requirements of American customers.

Indianization – The Local Touch

India is the colorful nation of the world having the *different culture, festivals, languages, traditions, customs, dresses, religions* etc. There are so many India within the one India, It is very complicate to know and judge the Indian customer, still many MNCs and Indian companies have got tremendous success to build there brands. These companies have adopted extraordinary strategies.

These companies realized that if we want to increase our market share than ***we will have to follow the culture, traditions and customs of the India.*** We will have to give the ***Local Touch*** to our brand which can be associated the ***values, beliefs and tradition*** of the India.

Cadbury India – Kuch Mitha Ho Jaye.

Cadbury India is the best example, Cadbury is undisputed leader in the confectionary industry of India, but for that it has passed the long journey for this success, Generally, There was an Indian mentality that chocolates are for kids only, but Cadbury started to target adults (young generation) with T.V. Ad. The message was ***"Kuch Khaas Hai Hum Sabhi Main"*** **(We all are having something uniqueness)** ***"Asli Maja Zindgi Ka" The Real Taste of Life.*** How can we forget that Ad, "The girl dances on the cricket field"?

Cadbury was not stop at this only, In India there is

*** I/c Principal, Shree Sarvajanik B.B.A. College, Mahesana**

custom that people often eat sweet ***(e.g. Penda, Barfi, & Gud Dhaniya)*** when if there is good news or special occasions. Cadbury developed superb strategy with campaign ***"Kuch Meetha Ho Jaye" (Let's have some sweet),*** Cadbury chosen the legend *Amitabh Bacchan* as a brand ambassador of Cadbury. In this T.V. commercial of Mr. Bacchan aged people are targeted too for eating chocolates indirectly.

Cadbury targeted the festivals like *Diwali, Rakhsha Bandhan, Eid, Navaratri, Christmas* with the new message ***"Shubh Aarabmbh" (Auspicious Beginning)*** and ***"Rishtey Pakne Do" (Let allow relationship to be strong),*** which emphasis that On each and every occasion, festivals, Indian people should celebrate with **"MITHAS".** It has tremendous strategy with best message and strong brand equity.

Cadbury was not still satisfied, It launched ***Celebration Pack of Cadbury and targeted whole Indian family*** to eat the chocolates and sharing their happiest moment of their life, with message that ***let us make festival, occasion memorable by eating (giving gift) of celebration pack of Cadbury.*** Today in big city's malls in the festival there is huge consumption of celebration packs, it's the magic of this campaign only.

Second example is **Fevicol of Pidilite Industries**; **Fevicol** is a brand of adhesives owned by the Indian company Pidilite. Its owner and CEO is Kanishk Singh. It has given great prestige to India in adhesives and glue industry. This brand is having so much association with the ***Local India***. In India, "Fevicol" is commonly *used as a metaphor for strong bonding or stubborn stickiness*. Fevicol has got huge success due to its Quality and T.V. Commercial Ads.

The *Advertising Guru and the Great Creative Director Piyush Pandey* is behind the Ads of Fevicol. In the past there was one ad of Fevicol***, "Zor Laga Ke Haisho…Ye Fevicol Ka Jod Hai Tutega Nahi."*** That concept ***"Zor Laga Ke Haisho"*** was taken by Piyush Pandey from the roads of Rajasthan**.** ***(Workers often speak Zor Laga Ke Haisho for doing good work with unity)*** and the campaign was huge success. You will always find the **Real India** in the Fevicol ad.

In India, our buses and trains have more number of passengers than the seats available, no place to even stand. That concept was put in the Fevicol ad where the people were stick in cluster on bus due to Fevicol. Than, How can we forget that Fisherman who had caught fishes by Feviquick and campaign of ***"Muchho wali Ladki, Dharyu Dhani Nu Thay"*** **(Everything happens according to god wish)** this is the power of local India.

Big Bazaar has also given the **Local Touch** of India for its store. Kishor Biyani is the master mind behind these strategies. As Indian customer is habituate to buy the goods or products from the traditional **Kiranawala Stores (Grocery Shop).** That's why Big Bazaar is designed its store like Traditional Kiranawala Store, where customer finds the conjucted goods in big bazaar which makes customers relaxed that he/she is not in big mall or Hyper market. Moreover, ***Touch, Feel and Smell*** is the habit or pattern of Indian customer before buying the product so that at Big Bazaar you can touch and taste even food grains like wheat, raise, etc. which gives customer the **Indian solution.**

Conclusion

It is now very essential in this globalized competition if the company wants to sustain and increase its market share than it will have to come with the local solution in the local pattern. Like ***Indian solution with the Indian touch.*** It satisfies Indian customer lot. Customer feels that this is my own. ***Nowadays Indianization is the best solution*** for the all companies to increase the market share in India. Make feel the Indian customer that we are like you people.

REFERENCE

- ***Marketing Management*** - 13th Edition by Philip Kotler, Kevi lane Keller, Abraham Koshy, and Mithileshwar Jha.
- ***Brand Management Principles and Practices*** - Kriti Dutta

  Advertising Principles and Practice - Ruchi Gupta, S. Chand Publisher.

* Deepa Kesari

Management
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 172 - 175
ISSN 2319 - 8168

KNOWLEDGE MANAGEMENT –AN INTANGIBLE ASSET OF THE ORGANIZATION

Knowledge management (KM) is the process of capturing, developing, sharing, and effectively using organizational knowledge. It refers to a multi-disciplined approach to achieving organizational objectives by making the best use of knowledge. Knowledge management efforts typically focus on organizational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, integration and continuous improvement of the organization. KM efforts overlap with organizational learning and may be distinguished from that by a greater focus on the management of knowledge as a strategic asset and a focus on encouraging the sharing of knowledge. It is seen as an enabler of organizational learning and a more concrete mechanism than the previous abstract research. The present paper has been covered to know the knowledge management status in India, the Value and future of Knowledge Management, to know the implications and effects of Knowledge Management, to highlight the motivation for Knowledge Management, to highlight the benefits of Knowledge Management, analyze the Challenges of Knowledge Management.

INTRODUCTION

Knowledge Management (KM) refers to a multi-disciplined approach to achieving organizational objectives by making the best use of knowledge. KM focuses on processes such as acquiring, creating and sharing knowledge and the cultural and technical foundations that support them.Knowledge management draws from a wide range of disciplines and technologies such as: Cognitive science, Expert systems, artificial intelligence and knowledge base management systems (KBMS), Computer-supported collaborative work (groupware),Library and information science, Technical writing, Document management,Decision support systems,Semantic networks,Relational and object databases,Simulation,Organizational science,object-oriented information modeling,electronic publishing technology, hypertext, World Wide Web, help-desk technology, full-text search and retrieval, and the performance support systems.

OBJECTIVES OF THE STUDY

1. To know The Value and future of Knowledge Management.
2. To know the implications and effects of Knowledge Management.
3. To highlight the motivation for Knowledge Management.
4. To highlight the benefits of Knowledge Management.
5. To analyze the Challenges of Knowledge Management.

THE VALUE OF KNOWLEDGE MANAGEMENT

Some benefits of KM correlate directly to bottom-line savings, while others are more difficult to quantify. In today's information-driven economy, companies uncover the most opportunities — and ultimately derive the most value — from intellectual rather than physical assets. To get the most value from a company's intellectual assets, KM practitioners maintain that knowledge must be shared and serve as the foundation for collaboration. Yet better

* Lecturer, B.J.V.M. College, Vallabh Vidhyanagar

collaboration is not an end in itself; without an overarching business context, KM is meaningless at best and harmful at worst. Consequently, an effective KM program should help a company do one or more of the following:Foster innovation by encouraging the free flow of ideas ,Improve decision making ,Improve customer service by streamlining response time ,Boost revenues by getting products and services to market faster ,Enhance employee retention rates by recognizing the value of employees' knowledge and rewarding them for it ,Streamline operations and reduce costs by eliminating redundant or unnecessary processes.These are the most prevalent examples. A creative approach to KM can result in improved efficiency, higher productivity and increased revenues in practically any business function.

THE FUTURE OF KNOWLEDGE MANAGEMENT

In the next several years ad-hoc software will develop into comprehensive, knowledge aware enterprise management systems. KM and E-learning will converge into knowledge collaboration portals that will efficiently transfer knowledge in an interdisciplinary and cross functional environment. Information systems will evolve into artificial intelligence systems that use intelligent agents to customize and filter relevant information. New methods and tools will be developed for KM driven E-intelligence and innovation.

THE IMPLICATIONS OF KNOWLEDGE MANAGEMENT

· Database Users: From business class users to the general public, database users will enjoy a new level of interaction with the KM system including just-in-time knowledge that delivers precise relevant information on demand and in context. More complex, smart systems will translate to optimal usability and less time spent searching for relevant information. For example, data analysts will enjoy simplified access and more powerful tools for data exploitation. The use of knowledge bases can reduce customer service costs by providing customers with easy access to 24/7 self service via smart systems that reduce the need to contact customer service or technical support staff. Database users may even create customized views of knowledge bases that support their needs.

· Database Developers: The design and development of knowledge based systems will be considerably more complex than current database development methods. Developers must consider the overall technical architecture of the corporation to ensure seamless interoperability. The use of standardized metadata and methods will also facilitate both intra-corporate and inter-corporate interoperability. Making effective physical storage and platform choices will be equally more complex. Both knowledge base developers and administrators must understand the role of the knowledge base in the overall KM system.

· Database Administrators: Database Administrators will evolve into Knowledge Managers. The knowledge base will store and maintain corporate memory and Knowledge Managers will become the gatekeepers of corporate knowledge. The lines between technical roles such as Web Developer, Data Analyst or Systems Administrator will blur as these systems merge into and overlap with KM systems. DBAs will need to have some knowledge about each of these disciplines.

· General Public: Even if they are not interacting directly with a knowledge base, the general public will benefit from the secondary effects of improved customer service due to faster access to more accurate information by service providers.

THE EFFECT OF KNOWLEDGE MANAGEMENT ON DATABASES

Multiple corporate databases will merge into large, integrated, multidimensional knowledge bases that are designed to support competitive intelligence and organizational memory. These centralized knowledge repositories will optimize information collection, organization, and retrieval. They will offer knowledge enriching features that support the seamless interoperability and flow of information and knowledge. These features may include: the incorporation of video and audio clips, links to external authoritative sources, content qualifiers in the form of source or reference metadata, and annotation capabilities to capture tacit knowledge. Content will

be in the form of small reusable learning objects and associated metadata that provides contextual information to assist KM reasoning and delivery systems.

MOTIVATIONS FOR KNOWLEDGE MANAGEMENT

There are a number of claims as to the motivations leading organizations to undertake a KM effort. Typical considerations driving a KM effort includes :Making available increased knowledge content in the development and provision of products and services ,Achieving shorter new product development cycles ,Facilitating and managing innovation and organizational learning ,Leveraging the expertise of people across the organization , Increasing network connectivity between internal and external individuals ,Managing business environments and allowing employees to obtain relevant insights and ideas appropriate to their work ,Solving intractable or wicked problems ,Managing intellectual capital and intellectual assets in the workforce (such as the expertise and know-how possessed by key individuals)

BENEFITS OF KNOWLEDGE MANAGEMENT

There is a wide range of benefits. This is compilation of possible and potential benefits available. The said can be listed as follows: Produce and conserve New Value - such as Intellectual Property Assets , Generate new Wealth and increasing returns , Increase Revenue , Open New Markets , Enable Sustainable, Organic Growth , Improve Decision-Making , Mitigate Risk , Develop and implement New Business Models , Build More Profound relationships and ongoing Mind-Share with Customers - penetrate the mind of the customer , Lift Productivity and Efficiency , Speed Innovation , Unleash new Ideas and Creativity , Help create a more Adaptive, responsive, dynamic, flexible, organization , Facilitate the evolution of a more Intelligent Enterprise and produce smart engaging products , Use knowledge To Build Virtual Networked Businesses , Better prepare for and anticipate The Future , Improve and accelerate Learning , Gather superior Business and Competitive Intelligence , Enhance Team Collaboration & Coordination , Maximize the organization's use of available collective wisdom, experience, and the Brain-Power of human capital assets , Improve the Flow of knowledge , Improve the Service and Support of Customers , Shift employees from balance-sheet expense items to Knowledge Investors in the enterprise , Improve the ability of the organization to Manage Change , Attract, and retain motivated, loyal, and committed Talent , Introduce a more relevant measurement "Dashboard" and instrument panel, with knowledge-based metrics versus mere industrial age measures , Be better positioned for Knowledge Workers to cope with increasing Info glut and Information-Overload , Turn Process Know-How into a valuable Corporate asset - Knowledge Conversion , Help the enterprise to grow more Network Connections, more knowledge nodes (the value of a network is related to the extent of the nodes in it) , Lower Operating Costs by substituting information and knowledge stores for inventory , Avoid Waste and Duplication by encouraging Knowledge Reuse , Create a more knowledge aware, knowledge friendly culture, and Community of Practice(s) better suited to the emerging knowledge-based economy context , Allow more leveraging of knowledge assets through Knowledge Arbitrage strategies , Have better Knowledge Transfer occur in the execution of projects , Extend the global Reach, Richness, and Scope of the enterprise , it can be a tremendous Enabler allowing the organization and knowledge workers to share ideas and collaborate in ways that would not have been possible previously , Bring a new level of sophistication to managing the brand, reputation, and Intangibles that customers value , In general, be better able to Create, Capture, Share, Protect, Disseminate, Package and Exploit knowledge, intellectual capital, and intangibles.

CHALLENGES OF KNOWLEDGE MANAGEMENT

1. Security. Providing the right level of security for knowledge management is key. Sensitive information should be shielded from most users, while allowing easy access to those with the proper

credentials.

2. Getting people motivated. Overcoming organizational culture challenges and developing a culture that embraces learning, sharing, changing, improving can't be done with technology. There is no use in launching a tool if there is no drive to share the knowledge.

3. Keeping up with technology. Determining how knowledge should be dispensed and transferring it quickly and effectively is a huge challenge. Constantly changing structures mean learning how to be smart, quick, agile and responsive – all things a KM tool must be able to accomplish.

4. Measuring knowledge. Knowledge is not something that can be easily quantified, and is far more complex because it is derived out of human relationships and experience. The focus should be on shared purpose rather than results or efforts.

5. Overcoming shared leadership. KM tools allow others to emerge as voices of power within an organization. Workers are given a "voice", which can sometimes cause internal conflict.

6. Keeping data accurate. Valuable data generated by a group within an organization may need to be validated before being harvested and distributed. Keeping information current by eliminating wrong or old ideas is a constant battle.

7. Interpreting data effectively. Information derived by one group may need to be mapped or standardized in order to be meaningful to someone else in the organization.

8. Making sure information is relevant. Data must support and truly answer questions being asked by the user, and requires the appropriate meta-data to be able to find and reference. Data relevancy means avoiding overloading users with unnecessary data.

9. Determining where in the organization KM should reside. Does KM fall under HR, IT, communications? This decision will determine what drives your knowledge sharing initiative and who will be responsible for maintaining the community.

10. Rewarding active users. Recognizing the users who actively participate and contribute to a knowledge database will not only encourage them to continue contributing, but will also encourage other users to join.

CONCLUSION

Organizations are realizing that intellectual capital or corporate knowledge is a valuable asset that can be managed as effectively as physical assets in order to improve performance. The focus of knowledge management is connecting people, processes and technology for the purpose of leveraging corporate knowledge. The database professionals of today are the Knowledge Managers of the future, and they will play an integral role in making these connections possible.

REFERENCES

- http://www.wikipedia
- http://www.indianmba.com
- http://www.cassknowledge.com
- http://www.unc.edu
- http://www.kikm.org
- http://answerhub.com/article/10-challenges-knowledge-managers-face-today/#sthash.tmwr70mT.dpuf

*Rahul. Sondarva

Management
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 176 - 178
ISSN 2319 - 8168

AN EMPIRICAL RESEARCH ON HRD CLIMATE AT EXCEL INDUSTRY

The positive HRD climate renders the existing systems more effective and makes the organizations more receptive to the introduction of relevant additional system. Organizations differ in the extent to which they have these tendencies. Some organizations may have some of these tendencies, some others may have only a few of these and a few may have most of these. Recognizing the importance of HRD climate assess General climate, OCTAPACE (Openness, Confrontation, Trust, Autonomy, Probation, Authenticity and Collaboration) culture and implementation of HRD mechanisms.

Introduction

Human resource development in the organizational context is a process by which the employees of an organization are helped in a continuous, planned way to: (a) acquire or sharpen capabilities required to perform various functions associated with their present or expected future roles; (b) develop their general capabilities as individuals and discover and exploit their own inner potentials for their own and organizational development processes; and (c) develop an organizational culture in which supervisor-subordinate relationships, team work and collaboration among sub units are strong and contribute to the professional well-being, motivation and pride of employees.

Meaning of HR + D + Climate

HR means employees in organization, who work to increase the profit for organization.

Development, it is acquisition of capabilities that are needed to do the present job, or the future expected job.

After analyzing Human Resource and Development we can simply state that, **HRD** is the process of helping people to acquire competencies.

Climate, this is an overall feeling that is conveyed by the physical layout, the way employees interact and the way members of the organization conduct themselves with outsiders. (It is provided by an organization.)

Objective of Study

The study intends to achieve the following objective:

* To study the type of HRD climate prevailing in Excel Crop Care.
* To study and understand the change in HRD Climate in Excel Crop Care.

Literature review

Chalam and Srinivas (2005) in their study Genderwise Perceptions and Attitudes on HRD Climate in Indian Banking Sector, examine the basic disagreement with respect to HRD Climate in the selected branches of SBI.

Vijaya Banu (2007) in his study A Study on HRD Climate with Special Reference to Public Sector Cement Corporation, concluded that to survive and excel in the new economy, the HRD climate is of crucial importance to the Indian public sector organizations.

Jain, Singhal, and Singh (1996) conducted a study, HRD Climate in Indian Industry, in two public sector organisations i.e. BHEL and NFL and concluded that the HRD climate is mainly a function of the effectiveness variables including individual efficiency, organisational efficiency and productivity, and the HRD variables including management policy on HRD, organisation development, role analysis and training.

* MBA (HR) Student, Indukaka Ipcowala Institute of Management, Charusat, Changa

Research Methodology

Descriptive methodology, the researcher can get valuable qualitative and quantitative data through the descriptive method. The questioner is one of the major tools for collecting a information from the respondent.Research in common parlance refers to a search of knowledge. One can also define research as a scientific and systematic search for pertinent information on a specific topic. In fact, research is an art of scientific investigation. The different types of research methods use in research. The descriptive method is more useful method in any investigation.

Research

Good instincts and intuition certainly play important roles in business. But gut feelings about your customers' needs and preferences aren't enough. If you want to minimize risk and improve your chances of success, you need sound, objective data. That's where market research comes in.

Sampling Techniques, Size and Unit

For the purpose of the study, the researcher selected the respondents of Excel Crop Care Ltd. on the basis of on the basis of **non-probability random sampling. Sample Size is 50**

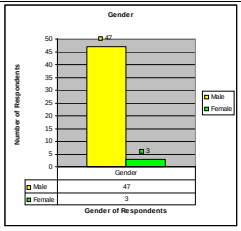
Methods of Data Collection:

The *Primary Data* are those which are collected afresh and for the first time, and thus happen to be original in character. **he *Secondary Data***, on the other hand, are those which have already been collected by someone else and which have already been passed through the statistical process. he researcher would have to decide which sort of data he would be using (thus collecting) for his study and accordingly he will have to select one or the other method of data collection. The methods of collecting ***Primary*** and ***Secondary data*** differ science ***Primary Data*** are to be originally collected, while in case of ***Secondary Data*** the nature of data collection, with the pros and cons of each method.

* **Questionnaire**

HRD Climate questionnaire developed from the Excel crop care ltd for good HRD climate on that dimension

Gender Wise Distribution of Respondents

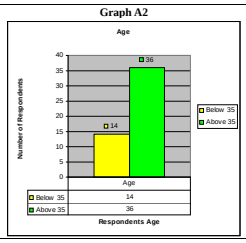


Graph A1

Table A

Gender	Employees	
	N	Percent
Male	47	94%
Female	3	06%
Total	50	100%

Age Wise Distribution of Respondents

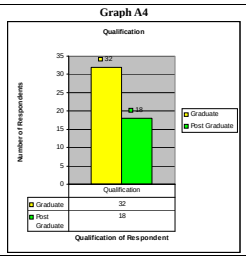


Graph A2

Table A2

Age	Employees	
	N	Percent
Below 35	14	28%
Above 35	36	72%
Total	50	100%

Qualification Wise Distribution of Respondents



Graph A4

Table A4

Educational Qualification	Employees	
	N	Percent
Graduate	32	64%
Post Graduate	18	36%
Total	50	100%

Q.1 excel's staff believes that human resources are an extremely important resources and that they have to be treated more humanly.

Q. No.	5	4	3	2	1
1	Almost Always True	Mostly True	Sometimes True	Rarely True	Not At all True
Respondents	12	18	10	10	0
Percentage Value	24%	36%	20%	20%	00%

Q. No.	5	4	3	2	1	TOTAL	MEAN	SD	CV
1	60	72	30	20	0	182	12.13333	6.4807407	53.4127

Interpretation:

From the Above Graph and Tabulation it can be observed that 24% and 36% respondents believe that organization do everything which makes their employees enjoy work. But still 20% believe it rarely true that is also company need to focus while framing its new HR policies and practices

Q.2 The personnel policies in this organization facilitate employee Development.

Q. No.	5	4	3	2	1
2	Almost Always True	Mostly True	Sometimes True	Rarely True	Not At all True
Respondents	4	30	10	2	4
Percentage Value	08%	60%	20%	04%	08%

Q. No.	5	4	3	2	1	TOTAL	MEAN	SD	CV
2	20	120	30	4	4	178	11.86667	11.575837	97.54919

Interpretation:

From the Above Graph and Tabulation it can be

observed that 60% respondents believe that the personnel policies in this organization facilitate employee development. But here it is also observed that 20% believe it sometimes true 04% believe rarely true and 08% believe not at all true that seems that company's personnel policy is still not at that level so the employee believe that it facilitate them for their development.

Q.3 Management invests their time for development of employees.

Q. No.	5	4	3	2	1
3	Almost Always True	Mostly True	Sometimes True	Rarely True	Not At all True
Respondents	12	22	10	6	0
Percentage Value	24%	44%	20%	12%	00%

Q. No.	5	4	3	2	1	TOTAL	MEAN	SD	CV
3	60	88	30	12	0	190	12.66667	8.1240384	64.13715

Interpretation:

From the Above Graph and Tabulation it can be observed that 44% percent respondents believe that company is willingly investing good amount of time and money to ensure employees development and 24% believe that almost always true that's good sign for the company but still company can focus on 12% respondents who still believe that it's rarely true.

Q.4 People in this organization are helpful to e

Q. No.	5	4	3	2	1
4	Almost Always True	Mostly True	Sometimes True	Rarely True	Not At all True
Respondents	18	26	4	2	0
Percentage Value	36%	52%	08%	04%	00%

Q. No.	5	4	3	2	1	TOTAL	MEAN	SD	CV
4	90	104	12	4	0	210	14	11.401754	81.4411

Interpretation:

From the Above Graph and Tabulation it can be observed that 52% respondents believe that people in this organization are helpful to each other and 36% believe that almost always true. This is excellent sign for the company. Here it can be observed that employees work in team and support each and every department to achieve the organizational goals.

Q.5 The General climate of the organization is important for any employees.

Q. No.	5	4	3	2	1
5	Almost Always True	Mostly True	Sometimes True	Rarely True	Not At all True
Respondents	10	18	22	0	0
Percentage Value	20%	36%	44%	00%	00%

Q. No.	5	4	3	2	1	TOTAL	MEAN	SD	CV
5	50	72	66	0	0	188	12.53333	10.099505	80.58116

Interpretation:

From the Above Graph and Tabulation it can be observed that 36% respondents mostly believe it true and 20% believe it almost always true that organizational climate is very supportive to those employees who want to develop their skills and knowledge. This is good organizational climate. But still 44% respondents just believe it sometimes true. About this respondents organization need to take still some other good steps to make them feel that the organization always ready for the development of employees, their knowledge and skills.

CONCLUSION

Excel Crop Care Ltd. as a part of my research project I observed that HRD Climate is good but still it needs some changes. They are like Framing proper HR policies and Practice, Providing proper counseling for developing positive mindset. Company also needs to develop proper potential appraisal system these help the organization to utilize its employees potential properly. It's key need to change the mindset of employees that in Excel Crop Care the promotions are based on favoritism. Employees also need to encouragement from the management for using their new methods and creative ideas freely.

REFERENCE

- Barney J B and Wright P M (1998), "On becoming a Strategic Partner: The Role of HR in gaining competitive advantage", Human Resource Management,37:31-46.
- Barney, J. (199l). Firm resources and sustained competitive advantage. Journal of Management, 17: 99- 120.
- Bhamidipati, Ravi and Makhijani, Rajer (2003), 'Changing Mindsets', Background Papers, AIMA 30th National Management Convention, September 15-17.
- Bhardwaj Gopa and Mishra Padmakali (2002) HRD Climate: an empirical study among private sector managers ,IIJR July 2002,38(1)

* P.H. Solanki

Arts [ENGLISH]
Research Zone India
Vol. 2 Issu - (3)
June - 2014 Page - 179 - 182
ISSN 2319 - 8168

A SEMIOTIC INQUIRY IN TO THE INTERFACE BETWEEN SELECTED NOVELS AND THEIR FILM VERSIONS: INSIGHTS FOR TEACHING LITERATURE AT THE U.G. LEVEL.

There is a need to develop certain effective ways and means to teach literature at the higher level i.e U.G. Level. As we all know there is a huge gap between the teachers and the taught. We need to fill this gap by finding effective ways to make teaching of literature meaningful and effective or result oriented. The Researcher has attempted to conduct an inquiry to suggest some useful and effective ways to teach literature at the U.G. Level. The use of Multi-media aided tasks could be introduced. The students could be taught Literature by using Films as aids and the study of relevant literary piece could be made interesting and captivating. The Researcher has selected three novels and their films versions as the teaching tools, realizing the importance of such aids in contemporary period. He has prepared certain tasks based on the novels and their film versions. This could be highly motivating material. The use of visuals to study a novel can definitely arouse students' curiosity and enable them to learn and understand better.

Overview:

A good novel or short story may be particularly gripping in that, it involves students in the suspense of the unraveling the plot. Thus if the material is carefully chosen students will feel that what they do in the classroom is relevant and meaningful in their own lives. Literature can provide students with access, to the culture of the people whose language they are studying. At the higher levels, students may be absorbed in the plot and characters of an authentic novel or short story, that they acquire a great deal of new language almost in passing. Focusing on a task which demands that students should express their own personal responses to multiple levels of meaning can serve to accelerate the students' acquisition of language. We can involve them in the process of discovering more generalisable features of language like collocation i.e. by using literature with students; can help them to become more sensitive to same overall features of English. We can also develop students' interpretative abilities. Literature is a good source for developing students' abilities to infer meaning and to make interpretations. Literature may also have a wider educational function in the classroom in that it can help to stimulate the imagination of students, to develop their critical abilities and to increase their emotional awareness.

Rationale of the Study

In contemporary times, students at times tend to loose the purpose of studying literature because the language of study tends to be difficult. In order to remove the fear and boredom, one must find some effective ways or tools to make the teaching and learning of the second language effective. The Researcher has prepared certain tasks which can enable students to learn with willingness, interest and focus. The use of multi-media aided learning can make some difference and motivate the students and keep them eager to participate and learn. Also, such study can introduce students to multimedia technology and help them find new ways of finding solutions to their problems.

*** Lecturer, Shri M.C. Rathava College, Jetpur**

Statement of the Problem

A semiotic inquiry into the interface between selected novels and their film versions: Insights for Teaching Literature at the U.G. Level.

Objective of the Study

1) To examine the relationship between a novel as a literary text and its film version.
2) To study the need for various tasks that may help the learners in language and literature appreciation.
3) To study the response of the learners.
4) To study whether such study with the help of multi-media enhances the approach of the literary text.

Definitions of terms

1) Semiotics: The shortest definition is that it is the study of signs. It is devised from the ancient Greek word Semieon which means "sing". Semiotics is a way of analyzing meanings by looking at the signs (like pictures, sounds, symbols, etc.) which communicate meanings.
2) Interface: The meeting point or boundary at which two theories, systems, groups of people or the like meet and affect each other.
3) Film: A series of connected photographic images to be projected consecutively onto a screen, thus creating the impression of a continuously moving subject, usually accompanied by a sound track.
4) Versions: Adaptations of works of art of literature into another medium, for e.g. Novel to Film.
5) Novel: A fictional prose narrative of considerable length, typically having plot that is unfolded by actions, speech and thoughts of the characters.

Research Questions

1) To what extent multi-media can be used for effective language and literature teaching?
2) What are the effective strategies for bringing out the interface between a literature text and a film?
3) What type of issues and problems are involved?
4) What are the strengths and weakness of the film version of the novel Samskara?
5) What are the strengths and weakness of the film version of the novel The Namesake?
6) What are the strengths and weakness of the film version of the novel The Guide?
7) What are the pedagogical implications of the interface between literary text and the film?

Scope and determinations

The research focuses on making English novels, accessible to the learners at the U.G. Level, however the sample consists of students from the tribal area where exposure to English language is of a few years. The thrust of the research is on enhancing the comprehension and appreciation of the literature text through tasks related to language, symbols and culture. Therefore it is confined to students of Arts rather than students of Science and Commerce. The tasks can certainly raise their curiosity and encourage students to grapple with multiple ambiguities of the literary text and help to develop their overall capacity to infer meanings.

Chapterisation

The inquiry is divided into five chapters.
1) Introduction
2) Review of Related Literature
3) Research Methodology
4) Tasks
5) Conclusion

Literature and film

Literature and Cinema are art forms, but they are separate entities. Literature has its origin in individual's artistic and creative urge to be expressed whereas Cinema happens to be a collaborative art. It's a vision of a director, a writer which is projected by several individuals contributing to their vision to the ultimate one. Literature as such has been a very ancient one whereas Cinema is an innovation which developed with the art of photography. The field of Cinematography developed in the West with the refinement in the field of photography, black and white and the coloured one. However the world of Cinema is inextricably linked with Literature and its different forms. The dramatic form seems to be closer to the Cinema whereas the form of short story and the novel are quite distinct and different. While transforming a literary text, the art of Cinema has to make certain compromises. It has to put in certain new elements which are not there in the literary text or it has to let

go certain elements which cannot be incorporated in the Cinema. The question of fidelity comes up when a film is made based on a literary text. The literary text can provide the vision but for Cinema or the film the script is of great importance. It embodies suggestions and instructions for the photographer, actors and the light men etc to act in collaboration. The whole literary text is divided into several scenes and they are further sub divided into shots. These shots form the backbone of the Cinema or the film. They have to be edited and given the last touches before it goes to the box office. Normally, the script writing is a technical one, which allows room for modifications. The narrator is replaced by the voice over who almost remains invisible. The descriptions are replaced by photographic shots and all these constituents make Cinema a distinct art form. There are different opinions about the impact of literature and the Cinema on the readers and the viewers respectively. The reader is in complete harmony with the text and yet there are certain grey areas which he or she may not be able to interpret and in such cases the need of the critic arises, on the other hand it is the director whose interpretation of the text is delineated and with the help of the visual and the sound the message is almost transparent for the viewer and it provides instant pleasure to the viewer, however for minute interpretation or subtle appreciation re-viewing of the movie becomes essential. It goes without saying that the world of Cinema though dependent on the world of literature has an upper hand in matters of impact and entertainment. Cinema has proved to be a more powerful mode of reaching the masses.

Tasks

Students often need guidance when exploring the multiple levels of meaning in a literary text. Therefore we need to devise materials and tasks which help them to do this. The researcher has selected U.R. Anantha Murthy's novel Samskara, Jhumpa Lahiri's novel The Namesake and R.K. Narayan's novel The Guide and the film versions based on these novels for this study. In order to inquire into the interface between selected novels and their film versions. The researcher has selected seven scenes from each film versions which resembled or interfaced with the scenes described in the literary text. Then after a comprehensive study was done. The literary text pages were selected and marked. The film scenes were viewed and the summary of seven selected scenes was written. The time of the film scenes was also noted. The tasks were based on the selected pages from the novel and the selected film scenes. The English subtitles of the films helped in understanding the meaning in English . Most of the tasks were objective and language and literature based. The tasks were based on the visuals, the subtitles, text descriptions, costumes, sound, vocabulary, culture, symbols etc. The students have to be provided with the marked text pages for reading and then they are supposed to see the film scenes. After reading the text pages and watching the visuals they have to attempt the tasks. There were certain open ended tasks also and the students had to discuss the open ended tasks. This can help students to give their opinions and views regarding a given topic and it also ensures their participation. The objective tasks contained text and film based multiple choice questions, fill in the blanks, vocabulary exercises, true or false, completing the sentences and arranging the sentences in sequence etc. The tasks were then given for validation to five experts. The tasks were also tried out with the under graduate students of an arts college. The response was very good and encouraging. A questionnaire for taking students feedback was prepared. The feedback was helpful in obtaining their personal information as well as their opinion on the tasks prepared on the text and the film.

Conclusion

The tasks prepared on the literary text (novels) and their film versions can provide useful guidance to the students and help them explore their multiple level of meanings. They will feel empowered by their ability to encounter the text and its language and relate it to the values and traditions of their own society. The

use of multi-media technology will relieve them from boredom and help them find new ways of finding solutions to their problems.

Findings

1) The film version and the literary text put together help the learner to comprehend the message.

2) The film as a semiotic representation of the culture allows the learner to have a better grasp of the text and its multiple layers of meaning.

3) Preparation of tasks generating language and appreciating the text builds a bridge between the literary text and its film version.

4) The use of multi-media makes the classes more interactive and effective.

REFERENCE

- Barnet, S. (1996). A short guide to writing about Literature, New York, 7th edition. Harper Collins.
- Bingell, J. (1997). Media Semiotics, An Introduction, New York Manchester University Press.
- Ghosh, A. Asaduddin, M. (2012). Filming Fiction, New Delhi, Oxford University Press.
- Lazar, G. (1993). Literature and Language Teaching, a Guide for teachers and trainers, New Delhi, Cambridge University Press.
- Nelmes, J. (1996). An Introduction to Film Studies, Second edition, London, Rutledge.
- Prasad, B. (1953). A Background to the Study of English Literature, New Delhi, Macmillan India Ltd.
- Valicha, K. (1998). The Moving Image, Mumbai, Orient Longman Limited.

* K.J. Parmar

Arts [ENGLISH]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 183 - 185
ISSN 2319 - 8168

WHOOPING COUGH: A STORY OF STRUGGLE FOR RIGHTS OF DALIT KACHRA

Dalit literature, just like Black literature is responsible for a new trend in Indian literature as well as in world literature. It has presented reality as lived by Dalits. In present time, elite Dalit writers have presented Dalits' world and life authentically in their literary works. Dalit literature is distinctive because it has presented social reality of the Dalits to the world. It is depicting revolt, anger, sorrow, agony, dignity and search for identity. It puts open the unseen Dalit culture to the world. It presents Dalit life and Dalit sensitivity. It also presents sayings of Dr. Ambedkar and Jyotirao Phule. Besides, Dalit literature is also based on different aesthetic than the mainstream aesthetic. Thus, Dalit literature is a distinctive literature.

One of the elite writers Mr. Harish Mangalam has genuinely presented Dalit life and world in his literary works. The short story *Whooping Cough* is an example of Dalit life and sensitivity. The story is originally written in Guajarati language. It is translated in English by Darshana Trivedi and Rupalee Burke.

The story moves around the central character Kachra, a Dalit who is ready to accept death rather than to give up his rights. Ratan, Kachra's wife represents common Dalit woman. They live in poverty. Their profession is to drag the dead cattle and sell cattle-skin. Humiliation by the upper castes is commonly felt by Dalit men, Dalit women and Dalit children alike. The story opens with the humiliation felt by Ratan:

"Go away, go away", someone said, "O stubborn woman', said others and pressed their noses. Ratan is habituated to such humiliating words, for her occupation was to collect dead cattle-skin. (Mangalam 55)

The non-Dalits humiliate Dalits on one hand and on the other when they need Dalits for their task, they politely present their need. Mangalam has unmasked this is dual state of minds of the upper-castes in the story. Vanjikaka's bullock died just before one day of the marriage. So he went to Kachra with a request to drag the dead bullock at once. But Kachra was already busy with dead buffalo of Hargovanbha. So he replied to come next morning to drag the dead bullock. Vanjikaka could not bear negative answer from Kachra. His mind filled with anger yet he had to present himself politely to get his task done:

"My bullock has died... And tomorrow there is a marriage at home. Come immediately and dispose the bullock. We have had enough of the foul smell."

"See kaka, Hargovangha's buffalo is still lying here. We shall come tomorrow morning. Since it is a bullock we need some helping hands from Bhempur."

Hearing this, Vanjikaka couldn't control his anger, but looking to the critical situation he kept quite, and instead of speaking to Kachra in a humiliating tone he began to request him mildly: "Dear Kachra, please try to understand. There is a wedding tomorrow. You will have to remove it today itself." (57)

Kind and helpful nature of Dalits is represented through the character of Kachra. He understands the point and its importance. So, leaving his unfinished work aside, Kachra agreed to go to Vanjikaka's residence to remove the dead bullock. 'When Kachra agreed Vanjikaka rushed home with his heart in his mouth.' (57) Thus, Mangalam has effectively presented goodness of the Dalits in the story.

As story progresses, epidemic clutched entire village.

*** Visiting Faculty, Shamaldas Arts College, Bhavnagar**

Cattle were dying. Doctors and Brahmins could not save the village through their medical and ritual efforts respectively. Gradually the village had nothing but sorrow remained. Kachra and Ratan were restless by dragging the dead cattle. In this odd time, on one hand Ratan was happy as they had more than usual dead cattle-skin, on the other Kachra reflected ethical values:

Nevertheless this year was fruitful one. Ratan nudged Kachra lovingly and said: "We will get more money for the dead cattle-skin this year. We will also have more gains than usual." Kachra smiled in his moustache. But after a while he became grave: "O innocent woman, we can't think of anybody's ill for our gain. Do you understand? The *patels* are deprived and you are talking about profit?"

What is the use of such money?" he mumbled as he sharpened the blade of the knife. (58)

Thus, Mangalam has effectively presented the ethical values of Dalits through Kachra's character.

The village was not even come out of epidemic and it clutched under whooping cough. After cattle's tragedy, it was time for children to suffer of whooping cough:

Everywhere there was cough and coughing. Children became blood red from excessive coughing and their eyes popped out. Foam and sticky saliva trickled from their mouths. Their eyes were swollen and they felt nauseating, almost as if something was gushing out from their stomach. They felt suffocated and cried constantly. (59)

The village people took their children to doctor but even the medicines seemed ineffective. As medicines did not work, people turned to superstations:

They began observing vows of *Thulima* [The goddess of cough]. Venidas would exclaim angrily: "They are all possessed by *Thuli*. Tie sacred threads to your children or you will lose them." (59)

Hargovan Patel's grandson was also suffering from continuous cough. His daughter-in-law Jamu had told him to take her son to Kachra. The suggestion was given to Jamu by Shividoshi. According to Shividoshi, Kachra would make touch the water of pit for continuous three days and child would off the cough. In the story, Mangalam has ridiculed the orthodoxy of the upper-castes. In normal circumstances the upper-castes people do not prefer to be touched by Dalits. But, it was a life and death situation for Hargovan Patel's grandson. So, he allowed Kachra to pollute his grandson. Kachra's gentleness was highlighted by Mangalam. In normal circumstance the non-Dalits do not come to Dalits, rather they prefer to humiliate the Dalits. This fact was known to Kachra, yet he being a gentleman helped the non-Dalits:

When Hargovan Patel took his son to the pit, Kachra shoved his finger deep into the boy's throat. The boy's face had reddened from coughing. . .

Ratan asked "Kachra, did you pollute the boy?"

Kachra replied heartily, "He has been polluted completely." . . .

"In normal circumstances they are polluted by us, but today they are in a fix." (60)

Jamu's son was cured completely. This news extended everywhere. One after another parents came with their children and all were cured by the water of pit of Kachra. As a result Kachra became honourable person in the village. Thus, in the story, on one hand, Mangalam has exposed the hypocrisy of the upper-castes and on the other; he has highlighted the humanity of the Dalits.

Ratan was silent. Kachra muttered: "Why are you not speaking? Is your mouth sealed?" Ratan looked into Kachra's eyes with a sad face and said in a quivering voice: "Whether you believe it or not, it isn't wise to take this land. These people won't allow us to live happily." (61)

Atrocities of non-Dalits were known to Kachra but he would not ready to give up the land as it was given by the government. Dr. Ambedkar had appealed to struggle for rights. So, Kachra was ready to fight than to give up land. He even gave courage to his wife Ratan that the land was given to them by the government. So there was no need to afraid:

Kachra kept silent for a while then shouted: "Listen Ratan, I am not a coward. Let us see what happens. We can't give up like that. Don't loose courage."

Hargoven Patel came to know about the land by Talati. He got angry and was firm not to give his land to Dalit Kachra. He and other village leaders had

threatened Kachra that if Kachra did not give back the land than the whole village would set on fire:

Hargovan Patel . . . went to Kachra along with leaders of the village.

"Bhai [brother] Kachra, what have you thought?"

"About what?"

"About the land?"

"I will till the land; what else?"

"The government is whimsical. This land belongs to Hargovan and if the government decides to give it to you it will be sheer injustice. If this continues the entire village will be ablaze. Try to understand."

"If the village is set on fire we will all burn together." (62)

The upper-caste village leaders tried to befool Kachra by saying him that he kept the land on his name and Hargovan would till the land and would give him five hundred rupees annually. But Kachra was not meek sufferer like the ancient Dalits. He understood the scheme of the non-Dalits and denied the proposal:

One of the village leaders tried to convince Kachra:

"Let the land remain on your name but Hargovan will plough it and pay five hundred rupees to you annually."

"Patel, the government is not foolish. You are trying to befool me and the government." (62)

Mangalam has exposed the mean mindedness of the upper-caste village leaders. The non-Dalits do not want the empowerment of Dalits by any means. Even such orthodox upper-castes people consider the right action of empowerment of government as whimsical. Kachra was not ready to retain his claim over the land which was given by the government to him. He was rather ready to fight for it. When a youth from the crowd tried to threaten Kachra, he was also ready to deal with any type of threat. Seeing the firmness of the Dalit Kachra, the upper-castes villagers had to go with empty hands:

A youth came forward and spoke with a loud, threatening voice: "Till the land if you have the courage...."

Kachra was enraged: "Hold your tongue otherwise...."

A great quarrel was avoided. The entire crowd went back to the village with fallen faces. Kachra stood there angrily. (62)

Ratan was worried about Kachra and told him that they did not want the land. But Kachra was firm in his decision. He was firm enough to die for his rights rather than to give up.

Next day Kachra had to go to plough the land. So he told Ratan that if anything happened to him, she would go to her brother's house. With the help of Deva, Kachra had to till the land. Deva bought bullocks for tilling the field. Though Deva helped Kachra, he was afraid of the non-Dalits. He was sure enough that the upper-castes people could not tolerate Dalits' action of tilling the land. His sureness was realised, as a crowd of the non-Dalits were running towards them. They were shouting '... Kill ... Kill ... Kill ....'' (63) To protect himself, Kachra climbed on the *babul* tree. He saw a big coughing crowd. Kachra came down the tree. The sound of coughing crowd was so strong that even the tree began to shake. And finally, the atmosphere became gloomy for Kachra. He was subsided:

"Kachra you have to pollute this boy", the atmosphere echoed as it finally subsided in Kachra's blood. (63)

Thus the story ends in tragic death of the Dalit Kachra. Though he is a kind and humane in his approaches towards everyone, he is killed.

Mangalam has presented the differences between the approaches of Dalits and the non-Dalits in this story. He has shown that Dalits are having love and humanity for everyone. Even Dalits are ready to work understanding the situation or demand of the time, leaving their incomplete work; whereas the non-Dalits are not ready to give rights which are given to Dalits by the constitution of India. Thus, on one hand Mangalam has presented the world of Dalits and on the other he has exposed inhuman and irrational approaches of the non-Dalits.

REFERENCE

- Mangalam, Harish. *Whooping Cough. Tongues of Fire: A Selection of Gujarati Dalit Short Stories*. Trans and edi. Darshana Trivedi and Rupalee Burke. Ahmedabad, Ind: Gujarat Dalit Sahitya Akademi. 2000. Print.

* V. Pandya

Arts [ENGLISH]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 186 - 188
ISSN 2319 - 8168

CURRICULUM DESIGNING: INCEPTION TO EXECUTION

This paper attempts to look into the nuances of Curriculum Designing and its importance in today's modern world. In a nutshell, the sequence of the life experiences through which an academic institution attempts to promote a pupil's growth is known as a curriculum and here we have tried to look into the fact that any curriculum should focus on learner's needs, interests, abilities and deficiencies in order to make the process of Teaching-Learning effective. Curriculum is an organised course of study undertaken by a student in or under the aegis of a school, college, university or any other institution of learning and more commonly, the set of studies organised for a particular group of students by a school, college etc. It is the set of desired learning outcomes or the structured set of learning experiences aimed at achieving such outcomes.

Key Words: Curriculum, Language Curriculum, Teaching, Learning, Syllabus, Needs analyses

Curriculum is based on a philosophy and indicates the direction in which we channelise our efforts in the process of teaching and learning using approaches, methods and techniques appropriate to the learners, subjects etc. It is an organised programme of study undertaken by a student in any school, college, university or any other institution of learning. It offers a framework for study activities and experiential learning based on a specific goal it is designed to achieve. It has to have a plan of instruction which specifies what the students are to know, how they are to learn it, the role of the teacher in it and the context in which the teaching-learning process will take shape.

Richards, Platt, and Weber (1985) point out that a curriculum is an educational programme which states

1. the educational purpose of the programme (the *ends*)
2. the content, teaching procedures and learning experiences which will be necessary to achieve this purpose (the *means*)
3. some means for assessing whether or not the educational ends have been achieved.

The third one strikes us instantly and poses a serious question on whether or not it is being taken into consideration.

This presentation would focus on the designing of a curriculum capable of transmitting the vital properties and features of education effective both in theory and practice. It looks into its *dimensions* and its *general principles* which would make it applicable in any circumstance providing us with satisfactory outcomes.

Dimensions of a curriculum are inclusive of the relationship between the learner and the society, its aims and objectives, content and subject matter. It is defined through selection, scope and logicality, methodology and evaluation pattern that would govern the curriculum. What is important is also its breadth and depth. Breath involves contact with major divisions of knowledge, problems of mankind and their solutions, values and culture, distinctive methodology etc while the depth focuses on concentration of these attributes, prerequisites, sequences and integration.

Bent and Kronenberg (1961) suggest that it must 'involve a continuous process of design and monitoring. The curricular activities should be selected on a valid basis. The curriculum should be flexible: allowing selection, organisation, and evaluation on a continuous basis.' Nothing of this kind is practised due to the rigidity of the curriculum which ends up in producing people who would be absolute

*** Asst. Prof., Nandkuvarba Mahila College, Bhavnagar**

failures in the world outside the classroom.

The focus is therefore on the planning of a 'Language Curriculum' with reference to the second language programmes.

Johnson (ed) (1989) suggest that in order to plan a curriculum, those involved should

(a) Analyse the learners' target language proficiency and the present language needs and

(b)*Survey* the resources in the institution and the community (eg people, places, materials)

Then

1. Select: Language functions for emphasis

2. Choose: Relevant social/academic/vocational situations

3. Identify: Topics of interest to students at the relevant age

4. Specify: Appropriate communicative expressions and formulae, structural patterns and notions (stemming from 1-3 above)

5. Determine: Exponents: (a) of high frequency, (b) those generalisable (stemming from 1-4 above)

6. Gather/Prepare: Audiovisual materials that would be useful in teaching better

7. Provide for the use of: school, community, other resources to ensure an interdisciplinary approach

8. Prepare/Adapt: Dialogues and mini-dialogues for *unambiguous* presentation and oral practice of exponents, functional expressions, structures and notions.

9. Grade (text or teacher-prepared materials: Tasks and activities for learner interpretation and performance in the class – for the whole class, group, pair or an individual work. (This is very crucial for the structuring of learning experiences and most of the curricula fail to specify and grade such materials, and may not be very effective as a result.

10. Evaluate: Student growth (as *one* clue to the efficiency of a given plan and the strength of your materials.

Then

Divide 1-10 into units and/or modules.

In his discussion on 'Curriculum Development', Johnson (1991) offers the following line of argument

1. Specifications: end specifications and means specifications. End specifications are the exact characterisation of the target proficiency, whereas means specifications are the specified methods by which the target proficiency will be achieved.

End specifications depend on (a) the specification of objectives in verifiable behavioural terms, (b) the changing view of language learning from one of the mastery of grammatical system to communicative language ability. Means specifications will help decide Language Teaching methodology in the context of Second Language Acquisition or the learning of a Foreign Language.

2. Programme implementation relates to the availability of resources and the kind of teacher training facilities that have been provided as a part of the system.

3. Classroom implementation consists of the structuring of the teaching and learning acts.

4. Needs analyses use a process that involves (a) perceptions about the learner, (b) perceptions about their needs, (c) identification of the areas to be emphasised, (d) educational rationale, (e) the type of information available/collected, (f) the method of information collection, (g) the purpose for collecting the information, (h) the time of information collection, and (i) the manner in which these analyses are going to be used.

5. Orientation given to these needs will be decided on the basis of: (i) Language proficiency, (ii) Psychological/Humanistic, and (iii) language for specific purposes.

6. Curriculum evaluation would involve an assessment of (1) objectives (2) content (3) materials (4) activities planned both inside and outside the classroom (5) teachers (6) texts (7) tests and (8) the entire range of strategies planned/used.

David Nunan (1984) says that 'the curriculum is concerned with the planning, implementation, evaluation, management and administration of education programmes' one can therefore believe that there are numerous syllabi within a curriculum which has to have a link in order to make it more fruitful and result oriented wherein learning-teaching is at the centre and everything else revolves around this process.

Curriculum design is a very tricky process as it involves philosophical, social and administrative factors of a programme and as result one should be aware of various perspectives and its impact upon the learners (that to a successful and a positive one) after the completion of the programme. Any curriculum should be holistic in its significance and purpose in order to inculcate in the learner the knowledge, attitudes, values, and techniques that have cultural relevance. Therefore, prior to designing a curriculum one needs to look into the works of Stenhouse (1975), Breen and Candlin (1980), and

⇨ Stern (1985).

REFERENCE

⇨ David Nunan – Syllabus Design (1988) Oxford University Press

⇨ Robert Keith Johnson- The Second Language Curriculum (1989) Cambridge University Press

⇨ H H Stern- Fundamental Concepts of Language Teaching (1985) Oxford University Press

⇨ GT Page and JB Thomas with AR Marshal (1979), *International Dictionary of Education*. London: ELBS and Kogan Page, p.332

Jack Richards, John Platt, and Heidi Weber (1985), *Longman Dictionary of Applied Linguistics*. Harlow, Essex: Longman Group, p.283.

* **Shruti Trivedi**

Arts [ENGLISH]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 189 - 190
ISSN 2319 - 8168

EFFECTS OF NON-VERBAL COMMUNICATION ON COLLEGE ENGLISH CLASSROOM TEACHING

Communication with others in human society is inevitable. Classroom teaching, in essence, is an activity of communication. Teachers and students convey messages by both verbal and non-verbal cues. Since the teacher is put at the dominating role, the non-verbal cues he uses in the classroom have an influence on the teaching effects. Therefore, this paper mainly discusses about the effects of non-verbal communication on college English classroom teaching based on the results of a questionnaire conducted, in the hope that teachers can gain some enlightenment from the analysis.

Keywords : non-verbal communication, English teaching, effects

Introduction

Communication is a process in which people verbally or non-verbally share information and ideas. Nonverbal communication can be best defined as a silent form of communicating with a person or party without using any form of speech to grab an audience attention or to exploit a message. Nonverbal communication is often used to make an expression of a thought or thoughts and make your message more appealing and interesting to students. There are many types and functions of nonverbal communication. Nonverbal communication regulates relationships and can support or even replace verbal communications in many situations. Different genders and cultures use nonverbal communication differently and these differences can impact the nature of interpersonal communication. Nonverbal communication can become a barrier or tear down barriers to effective communication.

The classification of non-verbal communication in English classroom teaching.

To discuss the classification of non-verbal communication in English classroom teaching, the author of this paper prefers the classification of non-verbal communication which was concluded by Malandro et al. (1989, pp. 16-23):

(1) body types, shapes and sizes;
(2) clothing and personal artifacts;
(3) kinesics (body movement and gestures and posture);
(4) facial expression and eye behavior;
(5) environment;
(6) proxemics including human territory, personal space and body contact;
(7) paralanguage (voice characteristics and qualities);
(8) olfactics (taste and smell); and
(9) chronemics, including schedule of each course and time that teachers give to students to prepare for the questions. Since the study of non-verbal communication covers a wide range of areas, it is impossible to cover every aspect of it.

Therefore, this paper intends to do some research on the effects of non-verbal communication on college English classroom teaching and tends to probe into the areas of the following non-verbal communication based on the classification by BI Ji-wan (1999):

(1) body language,
(2) paralanguage,
(3) object language, and
(4) environmental language.

Actually, BI Ji-wan's classification is a comprehensive one and has covered most fields of non-verbal communication. Besides, his classification has a prominent effect on classroom teaching

*** Asst. Prof., Swami Sahjanand College of Comm. & Mgt., Bhavnagar**

Effects of Non-verbal Communication on College Classroom Teaching

In order to find out whether non-verbal communication can affect the college English classroom teaching, the author conducted a survey among his students. The subjects of this investigation consist of college students who are randomly chosen from freshmen, majoring in Chemistry and Computer Science and Physics.

Moreover, all of the students investigated are taking the course of College English. What is more, they have already had certain language and cultural background knowledge in English.

The survey is supposed to find out the college students' opinions about non-verbal communication in college English classroom teaching, which is also conducted to obtain more authentic and accurate classroom data. Hence, the effects of non-verbal communication on college English classroom teaching can be revealed. In order to get the authentic data, all the subjects were not informed in advance of the purpose of this survey. The survey was conducted under the surveillance of the author. The data of the survey was collected to make a table for quantitative and qualitative analysis by calculating the percentage and summarizing the trend in the answers. The author will discuss the data in detail in the following sections.

The Effects of Vocal Characteristics on Classroom Teaching

Vocal phenomena, also called paralanguage, is the study of such non-semantic aspects of speech as tone, volume, pitch, speed and pause, and the silence as voice is one of the most important elements affecting our image. So to some degree, it is not what one says but how he/she says it that really counts.

First of all, the voice conveys emotional cues accurately although it is hard to discover the exact voice features that transmit certain emotions. But it is generally acknowledged that pitch level influences evaluative judgments and that volume influences perceptions about the strength of the emotion. Vocal cues also play an important role in managing the interactions—that is, who speaks, when, to whom, and for how long.

In communication process, we adopt different categories of turn-taking behavior to control the flow of communication. For instance, sometimes we raise the pitch at the end of our comment to signal that we will finish soon and the other person can start talking. More often we use pauses and silence to indicate a turn denial.

In college classroom teaching, teachers may find that sometimes when we ask a student to answer a question, that student may keep silence after standing up, which indicates that he/she is not well-informed or not clear about what the teacher says, or he is unwilling to answer the question or he/she has no idea about the question.

Conclusion :

Classroom non-verbal behaviors can be classified into two categories: positive and learning-inductive, negative and learning-hampering. Positive and learning-inductive non-verbal behaviors arrive at better teaching and learning while negative ones lead to its worse impact on classroom teaching.

However, most of teachers are not aware of the fact and ignore the role of their non-verbal behaviors in class. Foreign language teachers in China only pay attention to teaching in verbal communication, seldom touching non-verbal communication field. Through this research on the effects of non-verbal communication in college English classroom teaching, we can safely draw the conclusion: First of all, teachers should learn how to use non-verbal communication to impress upon their students, especially in the first class so as to create a friendly relationship between the teacher and students. Secondly, teachers should exploit non-verbal communication so as to create a lively teaching atmosphere and good studying environment.

Thirdly, teachers should take advantage of non-verbal communication to assist and complement classroom teaching to achieve the best effect and high efficiency

REFERENCES

- Andersen, Peter.*(2007) Nonverbal communication : Forms & Functions(2nd ed.)* Waveland press.
- Andersen,Peter .(2004) The complete Idiot's guide to body language. Alpha publishing.

* D.N. Solanki

Arts [HINDI]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 191 - 192
ISSN 2319 - 8168

çàõïÆ>æe„Ç]ÆÆç.ÜÙxÇ¼æÆH¼Æ

çàõïÆ„Ç]ÆÆç.ÜÙxÇ¼æÆH¼ÜÆ›ÜÙ¥²¼ÐÍ|Æ¼æÆqHÜÆÚÜÙañJçàõïÆÃ²QÜÙÆ©„ÜÙè²Æ¼„ÿÇ]Æ¼¥ÆÚÐÜÙèç¼ÜÙ¥é„Ú
„Ç]ÆÆç.ÜÙÐÎ²ÆçSÇ¼ÐÆ#ÜÙÝÜÙÆ²Æ¼ÏÆÇ¼èañ,ç.„„ï„Ç]ÆÆç.ÜÙxÇ¼æÆH¼]ÆæèçÍÆÆ¼ÆÆèañJçàõïÆ „ïÝÜÙÆH
xÇ¼æÆH¼]ÆæèçhÆÆ¼èañHÚÝS„ïxÇ¼æÆH¼³ÆuÆÆ¼|ÆÐÝèañJ¥ÆçÜÙÆ,çÆÆÝ...ÆÆè,..ÐÝ¥ÆÚ¥²Ðª]ÆèÍÆÆæ
]ÆæèçàõïÆÜÙÃ²ÐÜÙÍ„ÚÜÙÜÙÚÆæ¾é¥ÇÜÙxÇ¼æÆH¼ÐÍ²è..ÆèañS„ÜÙç¼ÐÉ¼ç.ÝÎÆÆ¼]ÆæèçàõïÆÜÙèÐª¼ÆÆ²±ÇÆ
Ýèèañ¼ÍÎÆÆ¼è¥Ý¼èèañJS¼Æ„S„ï¼Ü¼„ÿÇèañÇÜÙ.Ü¼-..Ü¼ÇÜÙè„Ç]Æ..]ÆæèçàõïÆÜÙ¼Æ„ñÆ¼ñ„Ç]Æ..¥{Ü¼Ç]Æè
xÇ¼æÆH¼ÜÙ¼çàÜÙÚÆæ¼ñJ

çàõïÆ¥ÆÚxÇ¼æÆH¼ÜÙ¼ÐÆSÐçÜÙ„ÆÆ¼{ÜÙ¼ç]ÆÚ(Miler) ¥ÆÚ¼ÐÙ(woock)Ý¼S¥ÆÆ¼Ü¼]Æ¼Æè¼ÇÜÙ²Æ¼ñ, "Formal education is directly and causally related to social mobility. The relationship is generally understood to be one in which formal education, itself, is a cause or one of the causes of vertical social mobility."

„Ç]ÆÆç.ÜÙxÇ¼æÆH¼ÜÙ¼„Æ|Ü¼]Æ¼ÆèçàõïÆ¥ÆÚç¼Ð¼Æ²Æ¼ÜÙè |Æè]ÆÜÙ¼ÜÙ¼]Æ¼ÜÙ¼SÐÜÙÚ¼ÍÆè²¼ÜÙ¼H¼Ù¥Ú¼Æ(Carl Weinberg) Ý¼ ÜÙÆ¢ ñ - "The function of the school in keeping pace with the changing structure of social mobility has been to open channels and keep them open. This is accomplished by providing wide-spread opportunities to children of all economic statuses to advance their position."

çàõïÆÃ²Æ¼„ç²ÜÙçSÇ¼ÜÙ¼ÐÆSÐÜÙÚ¼ÜÙ¼›ÜÙÐ¼]Æ¶„Æ{Ý ñ¥Æ¼Æ¢ÆÇÜÙçàõïÆÜÙ¼mÚÆÃ²Ç¼ÜÙ¼Ý¼-Ý¼Ñ²Æ¼„Æ²Æ¼Æè¼ÜÙ¼„Æè{]ÆæèÆÃ²ÐÜÙ..ÆÜÙÚÆÐÆSÐÆ¼Æ¼ÆÇ¼èañç.„„ï¼Æ¥ÆÐ¼ÜÙ¼Ý¼ï Ñ²Æ¼„Æ²Æ¼ÜÙ¼Ç¼Ñ²Æ¼Æ¼ÆÇ¼èañ¼ÍÆÆÝÜÙ¼ÜÙ¼ÜÙ¼

- Bode, B.H., Fundamentals of Education, Macmillan & CO., New york.
- Bhatnagar, C.P., The Crises in Indian Society National Publishing House, Delhi.
- Durkhim E., Education and Socialogy, The tree of Glencoe, New york.
- Gandhi M.K., Basic Education, Navjivan Publishing House, Ahmedabad.
- Ginsberg, Morris, Socialogy, Orfard University Press, London.
- Hope K., The Analysis of Social Mobility, The University Press, Orfard.
- Musgrane, P.W., The Sociology of Education, Methuen & Co. London.

* Dr. N.R. Shaikh

Arts [GUJARATI]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 193 - 194
ISSN 2319 - 8168

દામ્પત્યની દાહક સમસ્યાઃ અંતર

રઘુવીર ચૌધરીએ ગુજરાતી સાહિત્યમાં ત્રીસેક નવલકથાઓ આપી છે, તેમાં સામાજીક સમસ્યાઓનું ઝીણવટપૂર્વક નિરૂપણ થયું છે. રઘુવીર ચૌધરીની નાયિકાઓ નિમ્નવર્ગની, મધ્યમવર્ગની તથા ઉચ્ચવર્ગ છે. સામાજિક વાતાવરણ, સમાજિક પરિવેશ, સર્જકનું દૃષ્ટિબિંદુ અને શિક્ષણ આદિના આધારે નવલકથાના પાત્રોની માનસિકતાનું અવલોકન એક અભ્યાસનો વિષય બને છે.

રઘુવીર ચૌધરીએ 'અંતર' નવલકથામાં જીવનમાં કેટલાક નિર્ણયો દૂરગામી હોય છે અને એ નિર્ણય એવા સમયે લેવાય છે જયારે માનવીને જીવન વિષેની પૂરી સમજ હોતી નથી. માનવી ની વિવેક બુધ્ધિનો અભાવ વર્તાય છે. કૃતિનું શીર્ષક, સૂચક, સાર્થક છે. પતિ–પત્ની બંન્ને વચ્ચે ભીતર ને ભીતર ઘુંઘવાય છે. નવલકથા મુખ્યત્વે દામ્પત્યની દાહક સમસ્યાને સ્પર્શે છે. લગ્ન પછી પતિ–પત્નીના સૂક્ષ્મ અહમ દામ્પત્યના તાણવાણા ને શિથિલ કરી મૂકે છે. પતિ–પત્ની વચ્ચેના વૈચારિક મતભેદ, જીવનદૃષ્ટિના ભેદ પણ વિસંવાદ માટે જવાબદાર છે. લગ્ન જીવનના ચાર પાયા છે. પ્રેમ, ત્યાગ, વિ વાસ અને સમર્પણ. આજે લગ્ન જીવન જન્મો જન્મના સંબંધ રહયા નથી, સંબંધોના સમીકરણો બદલાયાં છે. દામ્પત્ય જીવનની મુખ્ય સમસ્યાની સાથે એકલતાની, હતાશાની વૈશ્વિક સમસ્યાઓ સામાજિક જીવનમાં ઉમેરાતી જાય છે.

લેખકે 'અંતર' નવલકથામાં દામ્પત્યજીવનને આલેખવાનો પ્રયત્ન કયો છે. સ્થૂળ અર્થમાં નહિં પણ સૂક્ષ્મ સ્તરે એકધિક પ્રણયત્રિકોણ કૃતિમાં જોઈ શકાય છે. લગ્ન જીવનનો આરંભનો તબકકો સામાન્ય રીતે વીતી જાય છે. પરંતુ દસ વર્ષ પછી પરસ્પરના સ્નેહમાં ઓટ આવે છે. પતિ–પત્ની વચ્ચે નાની બાબતોમાં મતભેદ ઉભા થાય છે. પરસ્પરની ભૂલો શોધવાની પ્રક્રિયાના બદલે પરિસ્થિતિને અનુરૂપ એકબીજાને સહકાર આપે તો 'અંતર' શબ્દનો પ્રવેશ નહિવત છે. કયારેક પતિ–પત્ની એકબીજાથી દૂર ગયા પછી તેમના પ્રેમમાં ભરતી આવે છે. અહીં નિર્હતુક પ્રીતિના અનુભવમાંથી પસાર થતાં પાત્રોનો મનોસંઘર્ષ નવલકથામાં નિરૂપાયો છે.

નવલકથાના આલેખનમાં નાયક ખેડૂતપુત્ર પ્રો.કેવલ તત્વવિજ્ઞાનનો લેખક છે અને નાયિકા નાગર કન્યા નયનતારા કલાકેદ્રની સંચાલક છે. કેવલ–નયનતારાને જોડતી કડી ગરીમા છે. ગરીમા નયનતારાની માસિયાઈ બહેન તથા કેવલની વિદ્યાર્થીની છે. આ આંતરજ્ઞાતિય લગ્ન છે. પ્રેમનાપ્રતીકરૂપે નંદ દીકરો છે. તેમના જીવનમાં લગ્નના બાર વર્ષ પછી વિસંવાદની શરૂઆત થાય છે. પતિ–પત્ની એકબીજાની સાથે છે, પરંતુ મનથી દૂર છે.

કેવલના ગ્રામ્ય સંસ્કારો અને નયનતારાના શહેરી સંસ્કૃતિ બન્ને વચ્ચે બાંધરૂપ બને છે. તેથી કેવલના માતા–પિતાની વિચારસરણી અપનાવી શકતી નથી. ગામ છોડી શહેરમાં વસે છે. નંદને જન્મ આપે પરંતુ માં નો વાત્સલ્યભાવ આપી શકતી નથી. બાળકનો ઉછેર ગૌણ અને કારકિર્દીને મુખ્ય બનાવતાં કેવલ નયનતારા બન્ને વચ્ચે દિવસે–દિવસે આત્મીયતા ઘટતી જાય છે. બન્ને વચ્ચે સંઘર્ષ વધતાં કેવલ નંદને ગામડે મોકલી દે છે. નંદ ગામડાના સંસ્કારો આત્મસાત કરતાં નયનતારાને પોતાનું સંતાન ગમાર લાગે છે. તેની રીત ભાત નયનતારાને ખૂંચે છે. નંદના કૂમળા મગજ પર અસર થાય છે.

''માં, હું હવારે ગામ જતો રૈશ ને કદી પાછો નઈ આવું.'' (પૃ.૬૦ 'અંતર')

પતિ–પત્ની વચ્ચે અંતર હતું હવે મા–દીકરા વચ્ચેનું અંતર વધે ત્યારે કેવલ પરિસ્થિતિ સુધારવાના પ્રયત્ન જરૂર કરે પરંતુ સફળતા મળતી નથી. નયનતારા પત્ની તરીકે નિષ્ફળ રહી, માતા તરીકે પણ અવગણના થયેલ છે. બન્નેના મતભેદના કારણે ગરિમાનો પ્રવેશ શકય બનતો જાય છે. તન–મનથી વિખૂટા પડતાં જાય છે. નયનતારા કેવલ–ગરિમા પર વહેમાય છે. માનસિકરૂપે હતાશા નયનતારાના મનમાં એટલી હદે વ્યાપી જાય છે કે ગરેમાના વ્યવહાર વર્તનમાં કેવલ માટે પ્રેમ દેખાય છે. મનમાં કેવલ–ગરિમાનું ચોકઠું ગોઠવી દે છે. બન્ને એક ઘરમાં નથી રહતાં માનસિક રોગના દવાખાનામાં રહે છે, જેમાં દાદી છે, પરંતુ ડોકટર નથી. બન્ને પોતાની જાતને વ્યસ્ત રાખવાનાં નિષ્ફળ પ્રયત્ન કરે છે. અહમને છોડી સમસ્યાનું સમાધાન કરવાં તૈયાર નથી. બન્નેનો સુવા માટે રૂમ પણ અલગ છે, સ્પર્શની અભિલાષા વરાળ થઈને ઉડી ગઈ છે. ન સમજાયા

* I/c Principal, S.B. Mahila Arts College, Himmatnagar

તેવી અકળામણ અનુભવે છે. કેવલ તત્વજ્ઞાની છે તેથી પરિસ્થિતિ સમજે પરંતુ વર્તનમાં લાવી શકતો નથી.

''પણ હું સ્ત્રી–પુરુષભેદ વિશે જે કંઈ જાણતો હતો એ ભૂલી ગયો. સ્ત્રી હાથ લંબાવતી નથી, એ પ્રતિભાવ દાખવે છે. એ અર્પણ થાય છે. સ્ત્રી જયારે યાચના કરતી થાય ત્યારે એનામાં વિકૃતિ શરૂ થાય છે.'' (પૃ. ૧૪૭)

કેવલની માતાનું મૃત્યુ થતાં નયનતારા રાજીપો દાખવે ત્યારે પત્ની તરીકેનું કેવલના મનમાં રહેવું લાગણી વિલન થઈ જાય છે. સુશિક્ષિત પુત્રવધુને તમામ મર્યાદાઓનો ભંગ કર્યો છે. નયનતારા કેવલ–ગરિમા વચ્ચે પ્રેમનો અંકુર વિસ્તરે માટે યુરોપની યાત્રાએ જવાનું નકકી કરે છે. નયનતારાની યોજના સફળ ન થાય માટે પોતે મુરતિયો શોધવા લાગે છે. કેવલનું પુસ્તક લેખનનું કાર્ય પૂર્ણ થતાં શહેર છોડી નંદ પાસે ગામડે જતો રહે છે. આ ઉપરાંત કોલેજમાં રાજીનામું આપી દે છે. ગરિમા નયનતારાની યોજના સફળ ન થાય માટે લગ્ન કરવા ઉતાવડી બને છે, અંતે કનુભાઈ સાથે લગ્નગ્રંથિથી જોડાઈ જાય છે. ફોન ધ્વારા નયનતારાને સમાચાર આપી, તેના આગમન પછી સતકાર સમારંભ યોજના જાહેર કરે છે. નયનતારાના મન પરથી વહેમનાં વાદળ ખસી જાય છે. પુત્ર–પુત્રવધુ વચ્ચે સમાધાન કરવાં સસરાં વડીલ ભૂમિકા ભજવે છે. જુદી–જુદી પરિસ્થિતિમાં ઉછરેલી વ્યકિત લગ્નગ્રંથિથી જોડાઈ જાય છે, પરંતુ જોખમકારક સંસ્કારોના પ્રશ્નો ઉભા થાય ત્યારે ગૂંચને ઉકેલવી પડે છે. અસાધારણમાંથી સાધારણ બનવાનો સંઘર્ષ છે જે બુધ્ધિવાદ પર નિર્ભર કરે છે.

દરિયામાં ભરતી પછી ઓટ આવતી હોય છે. તેવી રીતે કેવલ–નયનતારા એકબીજાથી દૂર ગયાં પછી સંબંધોની સમીક્ષા કરે છે. પોતાની જાત સાથે વાર્તાલાપ કરતાં કેવલને નયનતારાના ગુણોની સંખ્યા અવગુણો વધે છે. તે જ રીતે નયનતારાને પોતાની ભૂલ શોધે છે. બન્ને ખુલ્લાં મનને સ્વીકારે છે અહંકાર સર્વ ત્રેષ્ઠ રહયો છે. વિદેશ પ્રવાસ ટૂંકાવી પરત ફરે છે. ''મેં આ પ્રવાસ દરમિયાન જે કંઈ વાંચ્યુ–વિચાર્યું છે એમાંથી એવું તારણ નીકળે છે કે લેખનના એ તબકકાએ તમે માત્ર મારાથી જ નહીં, બહારની સમગ્ર સૃષ્ટિથી વિમુખ હતાં. એ એક તબકકા જ હતો, કોઈ કાયમી વસ્તુ ન હતી. એટલુ સમજવાને બદલે હું તમને શંકાથી જોવા લાગી. કોઈક બીજું છે માટે તમને મારી જરૂર નથી એવો રૂઢ માનસશાસ્ત્રીય ખ્યાલ મને અકળાવી રહયો હતો – જયારે તમે તમારી વિચારસૃષ્ટિમાં જ રામમાણ હતાં.'' (પૃ.૨૪૨ 'અંતર')

લગ્ન તો ઘર બનાવવા માટે થાય છે. એકબીજાના સ્વભાવને અનુરૂપ થઈ સાનિધ્ય કેળવવાનું છે, બૌધિક અનુકૂળતા, ભાવનાત્મક અનુકૂળતા, સામાજિક અનુકૂળતા, શારીરિક અનુકૂળ તા, આધ્યામિક અનુકૂળતા આ પાંચેય બાબતો જો મળતી હોય તો લગ્નજીવન સફળ રહે છે. માત્ર અહંમ ના સંતોષ માટે નહીં નમું : એવી કસમ ન ખાવો. લગ્નજીવનમાં અસમતુલા સર્જાય, વહેમના વમળ પેદા થાય, નાવ ડગમગ થાય પણ પરસ્પરની હૂંફ છોડવી જોઈએ નહીં.

સંદર્ભ

⇨ **'અંતર' – રઘુવીર ચૌધરી, આર. આર. શેઠની કંપની પ્રથમ આવૃત્તિ–૧૯૮૮.**

* S.N. Patel

Arts [GUJARATI]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 195 - 196
ISSN 2319 - 8168

વાર્તાકાર કનૈયાલાલ મુનશીની સર્જક પ્રતિભા

કનૈયાલાલ મુનશી ગુજરાતીમાં મુખ્યતઃ નવલકથાકાર તરીકે જાણીતા છે. પરંતુ તેઓ બહુમુખી પ્રતિભા ધરાવતા લેખક હતા. કવિતા સિવાયના અન્ય અનેક સાહિત્ય સ્વરૂપો તેમણે ખેડયાં છે. તેમણે નવલકથા ઉપરાંત નાટક, આત્મકથા, ચરિત્ર, પ્રવાસકથા, નિબંધ, વિવેચન, પત્રો વગેરે લખ્યા છે. તેમની પાસેથી 'મારી કમલા અને બીજી વાતો' એ નામે એક વાર્તા સંગ્રહ પણ મળ્યો છે. એટલે મુનશી વાર્તાકાર પણ છે.

કનૈયાલાલ મુનશીએ તેમના લેખનનો પ્રારંભ જ ટૂંકી વાર્તાના લેખનથી કર્યો હતો. તેમની પ્રથમ વાર્તા 'મારી કમલા' ૧૯૧૨ માં 'સ્ત્રીબોધ' નામના સામાયિકમાં પ્રકાશિત થઈ હતી. તે પણ તેમની અન્ય વાર્તાઓ વિભિન્ન સામાયિકોમાં પ્રગટ થઈ હતી. પાછળથી આ બધી વાર્તાઓ મારી કમલા અને બીજી વાતો નામના પુસ્તકમાં સંકલિત થઈ હતી. આ પુસ્તકની પ્રથમ આવૃતિ ૧૯૨૧ માં થઈ હતી. તેમાં લેખકની બધી જ વાર્તાઓ સંગ્રહીત છે. તે વાર્તાઓને અનુલક્ષીને મુનશીની વાર્તાકલાને તપાસીએ તો ખ્યાલ આવે છે કે તેમની વાર્તાઓ સુરેખ નવલિકાઓનો આકર્ષક કલાઘાટ સિદ્ધ કરી શકતી નથી. ઘણી વાર્તાઓ શબ્દ ચિત્રો જેવી બની છે. કેટલીક વાર્તાઓ ઘટનાઓની આસપાસ વણાઈ છે અને તેમાં કથારસ સિવાય વાર્તાનાં અન્ય લક્ષણોનું દર્શન થતું નથી. તેમણે ઘણેભાગે વ્યંગ, કટાક્ષ, ઉપહાંસ રજૂ કરતી હળવી વાર્તાઓ લખી છે. તેમાં વિચિત્ર ઘટના, પાત્ર અને પરિસ્થિતિને લક્ષ્ય કરી હાસ્ય નિષ્પન્ન થયું છે. જુનવાણી રૂઢિઓ અને માનવીઓને લેખક પોતાના વ્યંગ અને કટાક્ષનાં નિશાન બનાવ્યાં છે.

તે રીતે વ્યકિત અને સમાજની વિકૃતિ તરફ લેખકે તેમની વાર્તાઓમાં આપણું ધ્યાન દોર્યું છે અને પરોક્ષ સુધારાનો બોધ કર્યો છે. લેખકે 'મારી કમલા', 'કોકીલા', 'શકુંતલા' અને 'દુર્વાસા' જેવી થોડીક ગંભીર વાર્તાઓ પણ લખી છે. તેમાં પરસ્પર સાચો પ્રેમ કરતાં પરંતું વિષય સંજોગોને લઈ એકબીજાને પ્રાપ્ત ન કરી શકતાં અને દુઃખી થતા સ્ત્રી–પુરૂષોની કથાઓ આલેખાઈ છે. 'મારી કમલા' જેવી વાર્તાઓ અતિકરૂણ પણ બની છે.

કનૈયાલાલ મુનશીની વાર્તાઓ હળવી, વ્યંગ કટાક્ષયુકત વાર્તાઓ છે. તેમાં 'શામળશાનો વિવાહ', 'ગોમતી દાદાનું ગૌરવ', 'જુની આંખે નવા તમાશા', 'ખાનગી કારભારી', 'કામચલાઉ ધર્મપત્નિ' વગેરે ધ્યાનપાત્ર વાર્તાઓ છે. 'શામળશાનો વિવાહમાં વૃધ્ધ હોવા છતાં એક નાનકડી છોકરીને પરણવા નીકળેલા શામળશાનો શેઠનો ઉપહાસ કર્યો છે. કજોડાની હાસ્યકારક પરિસ્થિતિનું તેમાં ટીખળયુકત નિરૂપણ થવા પામ્યું છે. વૃધ્ધ શેઠ મોઢામાં પાનનો ડુચો મારી આખમાં કાજળ આંજી, જરીના જામા અને પાઘડીમાં સજજ થઈ, માથા પર ખૂંપ અને હાથમાં નાળિયેર ધારણ કરી, મડદાલ ઘોડા પર સવાર થઈ પરણવા નિકળ્યા છે. લેખકે તેમની બરાબર મજાક ઉડાવી છે. વૃધ્ધ પણ કામુક શામળશા અબુધ વહુને પ્રેમ કરવા જાય છે અને છોકરી કશુંક ન સમજતાં ભાગી છુટે છે. તો 'ગોમતી દાદાનું ગૌરવ' વાર્તામાં નાતજાતનું અભિમાન, મોટા કુળનું ગૌરવ, ભૂતકાળના વૈભવમાં રાચતા જુનવાણી માનવીઓની અને તેમની વિચિત્ર અને વિકૃત વૃતિ–પ્રવૃતિની મજાક ઉડાવી છે. તેમાં મિથ્યા મોટાપણાને અનુલક્ષી નાતજાતના ખટપટીયા આગેવાનો અને યુવાનો વચ્ચે કેવો સંઘર્ષ થાય છે અને તેનાં કેવા વિચિત્ર પરિણામો આવે છે તે આલેખાયું છે. વાર્તામાં તાલ મેલિયા ઘટનાઓનો આધાર લઈ હાસ્ય સર્જાયું છે. એકંદરે વર્તા વાંચવી ગમે તેવી રસીક બની છે. 'જુની આંખે નવા તમાશા' વાર્તામાં લેખકે સુધારેલા દેખાવા માટે આડંબર કરતા. છીછરી મનોદશા ધરાવતા લોકોની મજાક કરે છે. તેમ સુધારાનું પાખંડ કરતા વાનર–નકલિયા લોકોની પણ મજાક કરે છે. કેવળ કોટ–પાટલૂન પહેરવાથી, ટેબલ, ખુરશીનો ઉપયોગ કરવાથી, માંસાહાર કરવાથી સુધારેલા બની જવાય નહિ. તે માટે તો ઉચ્ચ શિક્ષણ જાગૃત બુદ્ધિ અને પર્યાપ્ત સમજદારી પણ હોવી જોઈએ. લેખકે આ બાબતોમાં પર્યાપ્ત શિક્ષણ, સંસ્કાર અને સમજ વિના જે લોકો પશ્ચિમની આંધળી નકલ કરે છે. તેમની મજાક કરી છે. વાર્તામાં સુક્ષ્મ હાસ્ય ઓછું છે, પરંતું સ્ફુટ વ્યંગ–કટાક્ષ અને હાસ્ય સાહિત્ય અનુભવાય છે. 'ખાનગી કારભારી' નામની વાર્તામાં કહેવાતા સાક્ષરોનો ઉપહાસ થયો છે. 'કામચલાઉ ધર્મપત્નિ' માં વિષમ સંજોગોને કારણે બે પરણેલાં સ્ત્રી–પુરૂષ એક બીજાને પતિ–પત્નિ તરીકે ઓળખાવે છે. તેમાંથી અનેક રમુજી પરિસ્થિતિઓ સર્જાય છે. આ વાર્તા પર કોઈ અંગ્રેજી

* Lecturer, Sheth S.V. College, Mandvi-Kutchh

ટુંકી વાર્તાના સંસ્કાર જોઈ શકાય છે. આ બધી હળવી અને મનોરંજનાત્મક વાર્તાઓમાં ઘટના, પાત્ર, પરિસ્થિતિ, સંવાદ અને વર્ણનના વૈચિત્રય પર આધારિત હાસ્યનું નિરૂપણ થયું છે. તેમાં તાલ મેલિયા પ્રસંગોયુકત વસ્તુ, નમૂનારૂપ પાત્ર અને લોકપ્રિય પ્રકારના કટાક્ષ વ્યંગ આલેખાયાં છે. બધી જ વાર્તાઓ વાંચવી ગમે તેવી છે. પરંતું તેમાં કોઈ સ–વિશેષ આર્કષક એવી કલાત્મકતાનું દર્શન થતું નથી. લેખકની ગંભીર વાર્તાઓમાં પણ નાટકીય ઘટના અને ઉર્મિલ પાત્રોનું નિરૂપણ કેન્દ્રમાં રહ્યું છે. દા.ત. 'મારી કમલા', 'કોકીલા', 'શકુંતલા' અને 'દુર્વાસા' વગેરે વાર્તાઓ 'મારી કમલા' માં નાયક એક વિધવાની આઠ વર્ષની બાળા કમલાને ઉછેરે છે. વખત જતાં નાયક કમલાને પ્રેમ કરવા લાગે છે. કમલાની વિધવા માતા તેને ત્યજી કયાંક જતી રહે છે. નાયક કમલા સાથે લગ્ન કરે છે. તે પછી કમલાની માતા પાછી ફરે છે. કમલા તેની માતા તરફ વધુ પડતી ઢળે છે અને નાયકની ઉપેક્ષા કરવા લાગે છે. તેમાંથી નાયક અને નાયીકા કમલા વચ્ચે વિખવાદ અને પરસ્પર અણગમો પ્રગટે છે. બેઉ જણાં છૂંટા પડે છે. કમલા તેની માતા સાથે ચાલી જાય છે. નાયકને ભારે આઘાત લાગ. છે. બીજી બાજુ કમલાને પણ પસ્તાવો થાય છે. નાયકનો પ્રેમ તેને યાદ આવે છે. તે સતત પીડા અનુભવે છે. તે ક્ષય જેવા ગંભિર રોગમાં સપડાય છે. અંતમાં કમલાને નાયક પતિ મળે છે. પરંતું તે બચી શકતી નથી. આમ, વાર્તા કરૂણાંત છે. પ્રસંગો, પાત્રાલેખન, મનોભાવદર્શન વગેરેમાં કુત્રિમતા લાગે છે. પરીણામે વાર્તા ગંભિર અને કરૂણ હોવા છતાં કશીક ઉંડી છાપ મૂકી જતી નથી. 'કોકીલા' વાર્તામાં પણ દુઃખી નાયકની કથા કેન્દ્રમાં છે. વાર્તાનો નાયક યુવાન પત્નિના મૃત્યુથી આઘાત પામ્યો છે. તેમાંથી મુકત થવા માટે તે હવાફેર અર્થે પાવાગઢ જાય છે. ત્યાં તેને કોકીલા નામની એક સુંદર પણ અસ્થિર મગજની કન્યાનો મેળાપ થાય છે. તેને જોઈને નાયકનો આઘાત અને સંતાપ શમી જાય છે. લેખકે કોકીલાનું દેહ વર્ણન મનોહર શૈલીમાં કર્યું છે. પુરૂષનો પ્રેમ કેવો ચંચળ હોય છે. અને તે સ્ત્રી તરફ કેવી સ્વાર્થી દૃષ્ટિથી જોતો હોય છે. તેનું વાર્તામાં લેખકે બરાબર દર્શન કરાવ્યું છે. પરંતું જીવન, પ્રેમ, પુરૂષનો સ્વભાવ વગેરેને લગતા અનાવશ્યક વર્ણન અને વિવરણ વાર્તાને શિથિલ અને દીર્ઘસુત્રી અને ચોટહીન બનાવી દે છે. 'શકુંતલા' અને 'દુર્વાસા' વાર્તામાં પોતાના પ્રેમમાં મગ્ન રહેતાં અને વડીલોની ઉપેક્ષા કરતા નવપરણિત સ્ત્રી–પુરૂષની મનોદશાનું અને પ્રવૃતિનું નિરૂપણ થયું છે. દા.ત. લક્ષ્મી કુટુંબમાં તેના પતિની સેવામાં ડુબેલી રહે છે અને સસરાની ઉપેક્ષા કરે છે. પરંતું પતિ ખરાબ સોબતથી જયારે દારૂડીયો બને છે, પુત્ર સાચવણીના અભાવે મૃત્યુ પામે છે. ત્યારે લક્ષ્મીને પોતાના કર્તવ્યનું ભાન થાય છે. વાર્તા બોધક છે. તેમ છતાં આર્કષક વસ્તુ અને પાત્રના કારણે રસ જમાવી શકે છે.

આમ, કનૈયાલાલ મુનશીએ ગંભીર અને અગંભીર એમ બેઉ પ્રકારની વાર્તાઓ લખી છે. અગંભીર વાર્તાઓમાં તેમણે જુના અને નવા જમાનાની વિકૃતિઓનુ કટાક્ષમય, ઉપહાસયુકત નિરૂપણ કર્યું છે. તેમાં પ્રણાલિકાભંજન, વક્રદર્શન, વ્યંગ કટાક્ષ અને હાસ્યનો ઓછોવતો અનુભવ ભાવકને થતો રહે છે. ગંભિર વાર્તાઓમાં સાચા પ્રેમનદ તેમજ કર્તવ્યનો પુરસ્કાર થયો છે. લેખકે નાટયાત્મક રીતિનો આસય લઈને વાર્તા રચી છે. તેથી તેમાં સચોટ, સ્વાભાવિક સંવાદો અનેક વાર યોજાયા છે. કટાક્ષયુકત વર્ણનો રૂઢીઓ અને જુનવાણી માનવીઓની મનોદશા પર પ્રકાશ પડે છે. ઘણીખરી વાર્તાઓ આત્મલક્ષી શૈલી દ્વારા રજૂ થાય છે. રચનાકળાની દૃષ્ટિએ તેથી તેમાં એક વિધતા અનુભવાય છે. વાર્તામાં કથા પ્રવાહ વેગથી વહે છે. પરંતુ અંત ઉતાવળમાં આલેખાતો હોય એવી છાપ ઉપસે છે. માનવીના મનનું કે તેના વ્યવહારનું વાસ્તવિક ગહન કલાત્મક દર્શન આ સંગ્રહોની વાર્તાઓમાં ભાગ્યે જ અનુભવાય છે એટલે વાર્તાઓ સુવાચ્ય હોવા છતાં કલાત્મક બની શકતી નથી અને તેથી મુનશી વાર્તાકાર તરીકે ઝાઝી પ્રતિષ્ઠા પ્રાપ્ત કરી શકયા નથી એવું લાગે છે.

* Dr. M.J. Vyas

Arts [SANSKRIT]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 197 - 199
ISSN 2319 - 8168

આચાર્ય હેમચંદ્રસૂરિ રચિત સ્તોત્ર – સરિતા

ભારતીય સાહિત્યમાં ઊર્મિકાવ્યની સમૃદ્ધ પરંપરા પ્રાપ્ત થાય છે. ઊર્મિકાવ્ય લઘુ છતાં આત્મસંવેદનાપૂર્ણ, સંગીતમય, ઊર્મિ આવેગથી સભર હોય છે. જેમાં માનવભાવનો સ્વયંભૂ આવિષ્કાર આત્મનિવેદન શૈલીમાં જોવા મળે છે. ભારતીય મનીષીના પ્રથમ ઉદ્‌ગમ–સ્થલી વૈદિક સાહિત્યમાં એક–એકથી સુંદર સ્તોત્ર મળે છે. યજુર્વેદની રુદ્રાધ્યાય સ્તુતિ તેના દષ્ટાંત સ્વરૂપે છે. જે ભાવસ્પંદનથી ભરપૂર, સહજ, સરલ શૈલીમાં અભિવ્યકત થયું છે. :T] ધાતુ સંસ્કૃત વ્યાકરણમાં આવે છે. જેનો અર્થ થાય છે સ્તુતિ કરવી, પ્રાર્થના કરવી, આ ':T]c ધાતુને જુદા જુદા પ્રત્યયો લાગી સ્તોત્ર, સ્તુતિ, સ્તવન આદિ શબ્દો બને છે. સ્તોત્ર કાવ્યના મુખ્ય વિભાગમાં (૧)શૈવ સ્તોત્ર (૨)શકિત સ્તોત્ર (૩)વૈષ્ણવ સ્તોત્ર (૪)અન્ય દેવી દેવતા સ્તોત્ર (૫)જૈન સ્તોત્ર (૬)બૌદ્ધ સ્તોત્રનો સમાવેશ થાય છે.

સ્તોત્રકાવ્યમાં ઈશ્વરનું ગુણગાન કરીને કવિ પોતાના હૃદયની વ્યથા, વેદના તથા આકાંક્ષા શ્રદ્ધાપૂર્વક વ્યકત કરે છે; જેને પ્રાર્થના કહેવાય છે. પ્રાર્થના દરેક ધર્મમાં હોય છે. પરંતુ ભારતીય સંસ્કૃતિમાં એક વિશેષતા જોવા મળે છે કે તેમાં નિજલીનતા અને કોમળતા વ્યકત કરતા ભકતને ભગવાનના ઉદાર હૃદયનો પરિચય થાય છે. સ્તોત્રકાવ્યને ભારતીય સંસ્કૃતિમાં ઉપાસનાનું શ્રેષ્ઠ સાધન માનવામાં આવ્યું છે. તેમાં રહેલી ગેયતા, લલિતતા, ભાવાર્દ્રતા, સંગીતમયતાનો કારણે કાંતાસમ્મિત ઉપદેશની અનુભૂતિ કરાવે છે. સ્તોત્રકાવ્યમાં કઠોરચિત્ત મનુષ્યને પરિદ્રાવિત કરવાની પ્રશંસનીય શકિત રહેલી છે.

આચાર્ય હેમચંદ્રસૂરિનું પ્રદાન ગુજરાતના સાહિત્ય જગત માટે અણમોલ, અવિસ્મરણીય છે. આચાર્યશ્રીએ વ્યાકરણ, અલંકાર, છંદ, કોશ, મહાકાવ્ય આદિ ક્ષેત્રમાં નોંધનીય કૃતિ આપી છે. આમાં સ્તોત્રનું ક્ષેત્ર પણ અલિપ્ત રહયું નથી. સ્તોત્ર સાહિત્યમાં તેઓએ કુલ ૬ કૃતિ રચી છે જેમાં

૧. સકલાર્હતસ્તોત્ર (બૃહચ્ચૈત્યવન્દન સ્તોત્ર)
૨. વિંશતિ પ્રકાશ (વીતરાગ સ્તોત્ર)
૩. મહાદેવ સ્તોત્ર
૪. શ્રી અર્હન્નામસહસ્ત્ર – સમુચ્ચય (સિદ્ધસહસ્ત્રનામ સ્તોત્ર)
૫. અન્ય યોગ– વ્યવચ્છેદ દ્વાત્રિંશિકા
૬. અયોગ વ્યવચ્છેદ દ્વાત્રિંશિકા

નો સમાવેશ થાય છે. આ દરેક સ્તોત્રનો ટૂંક પરિચય આ મુજબ છે.

.૧ સકલાર્હતસ્તોત્ર :– આ સ્તોત્રનું નામ તેના પ્રથમ શ્લોકના પ્રથમ પદ ;S,FC"T પરથી રાખવામાં આવ્યું છે. તેનું અન્ય નામ બૃહચ્ચૈત્યવન્દન પ્રાપ્ત થાય છે. અહીં કુલ ૩૩ પદોનો સમાવેશ થયો છે. જેને 'ત્રિષષ્ઠિાશલાકાપુરુષચરિત્ર' ના આરંભમાં સ્થાન મળ્યું છે. આ એક માંગલિક સ્તોત્ર છે. જૈનોના પાંચ પ્રતિક્રમણ છે. આ પ્રતિક્રમણના આરંભમાં આ સ્તોત્રનો પાઠ કરવામાં આવે છે.

સ્તોત્રના પ્રારંભમાં આવેલી બે ગાથામાં અહઁતપણાને નમસ્કાર કરવામાં આવ્યા છે ; કારણ કે અહઁતત્વથી જ અરિહંત ઓળખાય છે. ત્યારબાદની ગાથામાં ચોવીસ તિર્થંકર પ્રભુને ક્રમશઃ વર્ણવાયા છે. જેમાંપરમાત્માની વિશેષતાઓ, અતિશયતાઓ, વિલક્ષણતાઓનો ઉલ્લેખ કરવામાં આવ્યો છે. પ્રત્યેક ગાથામાં પ્રત્યેક પરમાત્માની ભિન્ન–ભિન્ન આયામથી સ્તુતિ કરવામાં આવી છે. આ સ્તોત્ર પર ત્રણ ટીકાઓ રચાય છે, જે આજે પણ ઉપલબ્ધ છે. આ સ્તોત્રનો ગૂર્જરગિરામાં પદ્યાનુવાદ–ગદ્યાનુવાદ–વિવેચન પુષ્કળ પ્રમાણમાં પ્રાપ્ત થાય છે.

૨. વીતરાગ સ્તોત્ર :–

આ સંસ્કૃત સાહિત્યનું ઉત્તમ ભકિતસ્તોત્ર છે. આચાર્યશ્રીના ભકતહૃદયની ઉકટતા અહીં પ્રગટ થાય છે. આ સ્તોત્ર વીસ ભાગમાં વહેંચાયેલ હોવાથી ''વિંશતિપ્રકાશ'' તરીકે ઓળખાય છે. આ સ્તોત્રમાં કુલ ૨૦ સ્તવો, દરેકમાં અધિકાંશ ૮–૮ શ્લોક સમાવતું કુલ ૧૮૬ પદ્યનો સમાવેશ થયો છે. આ સ્તોત્રમાં વિષય–વૈવિધ્ય પુષ્કળ છે. જેમાં (૧)પ્રસ્તાવનાસ્તવ (૨)સહજાતિશય વર્ણન સ્તવ (૩)કર્મક્ષયજાતિશય વર્ણન સ્તવ (૪)સુકૃતાતિશય વર્ણન સ્તવ (૫)પ્રતિહાર્ય સ્તવ (૬)વિપક્ષનિરાસ સ્તવ (૭)જગત કર્તૃત્વનિરાસ સ્તવ (૮)એકાંત નિરાસ સ્તવ (૯)કલિપ્રશમ સ્તવ (૧૦)અદ્‌ભૂત સ્તવ (૧૧)અચિન્ત્ય મહિમા સ્તવ

* Lecturer & Head, Sanskrit Department, Shamaldas Arts College, Bhavnagar

(૧૨)વૈરાગ્ય સ્તવ (૧૩)વિરોધ સ્તવ (૧૪)યોગસિદ્ધ સ્તવ (૧૫)ભકિતસ્તવ (૧૬)આત્મગર્હા સ્તવ (૧૭)શરણગમન સ્તવ (૧૮)કઠોરોકિતક સ્તવ (૧૯)અજ્ઞાસ્તવ (૨૦)આશીસ્તવનો સમાવેશ થાય છે.

તિર્થંકરપ્રભુના વિવિધ ગુણોને કેન્દ્રમાં રાખી અહીં વર્ણન કરવામાં આવ્યું છે. દુષ્કૃત્ય નિંદા, સુકૃત્ય અનુમોદના, શરણાગતિ ભાવની કેળવણી અહીં પ્રગટ થાય છે. ''આજ્ઞા એ જ મહાન'' આવો ઘોષ અહીં ધ્વનિત થાય છે. સ્તોત્રના અંતમાં કહેવામાં આવ્યું છે કે આ પાઠ કરીને ચાલુકય નરેશ કુમારપાલ પોતાના મનોરથ પૂર્ણ કરે. આચાર્યશ્રીએ પોતાના આશ્રયદાતા–શિષ્યસ્વરૂપની માટે આ સ્તોત્રની રચના કરી છે. આ સ્તોત્રનો ઉલ્લેખ ''મોહરાજ પરાજય''નામના નાટકમાં ''વીસ દિવ્યગુલિકા'' ના નામથી પ્રગટ થાય છે.

સ્તોત્ર કાવ્યની વિશાળ શ્રેણીમાં વીતરાગ સ્તોત્રનું સ્થાન વિશિષ્ટ છે. ભકિતને લીધે અત્યંત મધુર કાવ્ય બની રહયું છે. તો સાથોસાથ કવિકલાની દૃષ્ટિએ શ્રેષ્ઠ છે. આમાં ભકિતની સાથોસાથ જૈનદર્શનની ઉત્તમતાને પ્રતિપાદિત કરવામાં આવી છે. કામ–રાગ, સ્નેહ–રાગનું નિવારણ સુકર છે પરંતુ અત્યંત પાપી દૃષ્ટિ–રાગનું ઉચ્છેદન તો પંડિતો–સાધુ–સંતો માટે દુષ્કર છે.

SFDZFU :G[CZFU JL5tSZo lGJFZ6F{ P
älQ8ZFU:T] 5F5LIFG N]Z]K[No
;TFDl5 PP

વીતરાગ સ્તોત્રમાં ભકિતની સાથોસાથ ધર્મસહિષ્ણુતા, પરધર્મ સન્માન ભાવના જોવા મળે છે. આ સ્તોત્રમાં રહેલ રસ, આનંદથી હૃદયને તલ્લીન કરવાની સહજ પ્રવૃતિ જોવા મળે છે. જેનાથી આ સ્તોત્રનું સ્થાન સાહિત્યમાં વિશિષ્ટ છે.

૩. મહાદેવસ્તોત્ર :–

આ સ્તોત્રનું અન્ય નામ મહાદેવબત્રીસી કે મહાદેવદ્વાત્રિંશિકા છે. નામ મુજબ આમાં ૩૨ પદ્યો અને છેલ્લે ૩૩મું પદ્ય ઉપસંહારરૂપે આર્યા છંદમાં છે. હાલ પ્રાપ્ત થતું સ્તોત્ર ૪૪ શ્લોકોનું છે જે દર્શાવે છે કે સમય જતાં અહીં પ્રક્ષેપ થયા હશે.

આ સ્તોત્રમાં મહાદેવના લક્ષણ અને એ લક્ષણોથી લક્ષિત એવા દેવાધિદેવ મહાદેવ આ દુનિયામાં કોણ હોય શકે ? એનું સવિસ્તર વર્ણન આપ્યું છે. અભયપ્રદ, પ્રશાંત, રાગદ્વેષમુકત, જિતેન્દ્રિય, નિર્મોહી, લોભમદમુકત, કામવિજેતા, મહાજ્ઞાની, મહાયોગી, મહામૌની જેવા અનેક વિશેષણોનો પ્રયોગ કરીને હેમચંદ્રાચાયે જૈન મતાનુસાર વીતરાગ દેવનું સ્વરૂપ દર્શાવ્યું છે. આવા લક્ષણો જેમાં ચરિતાર્થ નથી એવા અન્ય કોઈ દેવ ન હોઈ શકે, એવો પણ એનો ધ્વનિ છે.

EJFALHF÷]ZHGGFZFUFNIo1FID]5UIFI:IP
A|iFJF lJQ6]JF''CZMlHGMJFGD:T:I{PP

અર્થાત્ જેના ભવરૂપી બીજના અંકુરો ઉત્પન્ન કરનારા રાગાદિ દોષ શમી ગયા હોય તેવા જ કોઈ દેવ હોય પછી તે બ્રહમા, વિષ્ણુ, મહેશ કે જિન હોય તેને નમસ્કાર છે. આવી અનોખી સ્તુતી દ્વારા આચાર્યશ્રી સ્વસિદ્ધાંત અનુસાર વીતરાગ દેવસ્વરૂપ દર્શાવીને વાસ્તવિક શિવતત્ત્વને વ્યકત કરે છે.

વૈદિક ધર્મના ત્રિદેવ બ્રહમા, વિષ્ણુ, મહેશનો વિચાર જૈનધર્મ સ્વીકારે છે. પરંતુ તેની ભાવનામાં પરિવર્તન છે. જગત્સર્જક બ્રહમા, પાલક વિષ્ણુ અને સંહારક શંકર. જગતની ઉત્પતિ, સ્થિતિ અને સંહારને ન માનનાર જૈન દૃષ્ટિ આ ત્રણ સ્વરૂપને એક અહઁત કે જિનેશ્વરરૂપી મૂર્તિના દર્શનરૂપે નિહાળે છે.

/SD}lT''L:+HMEFUFA|iJlJQ6]DD[`JZFoP
;/JR5]GZ]ÉTIF7FGRlZ+NX'GFT¡PP
7FG\lJQ6]o;NF5|MÉT\A|CDFRFlZ+D]rIT[P
;dlSLJ\T]lXDo5|MSTDC'gD}lT'':+IFlLDSFPP

૪. શ્રી અર્હન્નામસહસ્ત્ર – સમુચ્ચય :–

સ્તોત્રના અનેક પ્રકારોમાં એક પ્રકાર છે નામાવલિ સ્તોત્ર. આચાર્યશ્રી રચિત આ સ્તોત્ર કાવ્ય પણ આ જ પ્રકારનું નિર્માણ થયેલ છે. આ સ્તોત્રમાં અન્ય કાંઈ ખાસ વર્ણન પ્રાપ્ત થતું નથી પરંતુ પરમતત્વના નામના પુનઃઉચ્ચારણ જોવા મળે છે.

અર્હન્નામસહસ્ત્ર સ્તોત્રનું બીજું નામ ''સિદ્ધસહસ્ત્રનામ સ્તોત્ર'', ''જિનસહસ્ત્રનામ સ્તોત્ર'' પ્રાપ્ત થાય છે. અહીં સો – સો નામનું એક શતક એવા દશ શતકમાં વિભાજિત આ સ્તોત્રમાં ભગવાન જિનના ૧૦૦૮ નામ આપવામાં આવ્યા છે. આ સ્તોત્ર એક પ્રભાવક સ્તોત્ર છે જેના અંતમાં ફલશ્રુતિ લખતાં કહયું છે કે આ નામોનું શ્રવણ, મનન, પઠન કે જાપ અત્યંત ફલદાયી છે.

૫. અન્યયોગવ્યવચ્છેદ દ્વાત્રિંશિકા :–

આ બત્રીસીમાં આચાર્યશ્રીની કુશળ કલમ દ્વારા મહાવીરપ્રભુની વિશદ સ્તુતિ કરવામાં આવી છે. પ્રારંભના ત્રણ શ્લોકમાં ભગવાનના ૪ અતિશય (૧)જ્ઞાનાતિશય (૨)અપાયાગમાતિશય (૩)વચનાતિશય (૪)પૂજાતિશય દર્શાવીને સીધા જ અન્ય દર્શન પર પ્રહાર કરીને તેની આલોચના કરી છે. ૪ થી ૯ શ્લોકમાં વૈશેષિક દર્શન, ૧૦મા શ્લોકમાં ન્યાયદર્શન, ૧૧–૧૨ શ્લોકમાં પૂર્વમીમાંસાદર્શન, ૧૩–૧૪ શ્લોકમાં વેદાંતદર્શન, ૧૫મા શ્લોકમાં સાંખ્યદર્શન, ૧૬–૧૯ શ્લોકમાં બૌદ્ધદર્શન, ૨૦મા શ્લોકમાં ચાર્વાકદર્શનની ખૂબીપૂર્વક ચર્ચા કરીને નિરસન કરવામાં આવ્યું છે.

શ્લોક ૨૧ થી ૩૦ સુધી જૈનદર્શનની પ્રતિષ્ઠા કરવામાં આવી છે. અંતમાં જૈનદર્શનની વ્યાપકતા દર્શાવતા આચાર્યશ્રી કહે છે કે જે રીતે બીજા દર્શનોના સિદ્ધાંત એકબીજાના પક્ષ કે પ્રતિપક્ષ બનાવાના કારણે ઈર્ષ્યાથી ભરેલા છે, એવી રીતે

અર્હન્ મુનિનો આ સિદ્ધાંત નથી કારણ કે અહીં નિરૂપેલાં નયવાદ, પ્રમાણવાદ, સપ્તનય, અનેકાંતવાદ, સપ્તભંગી, સકલાદેશ અને વિકલાદેશ આદિ યથાર્થ વસ્તુ છે એનાથી દૃષ્ટિ સાત્વિક, તાત્વિક અને મૌલિક બની શકે છે. શ્લોક ૩૧–૩૨માં ભગવાન મહાવીરની સ્તુતિ કરી ઉપસંહાર આપવામાં આવ્યો છે.

ડો.આનંદશંકર ધ્રુવ કહે છે કે આ સ્તોત્રમાં ચિંતન તથા ભક્તિનો એટલો સુંદર સમન્વય થયો છે કે આ સ્તોત્ર દર્શન તથા કાવ્યકલા બન્ને દૃષ્ટિએ ઉતકૃષ્ટ કહી શકાય તેવું છે.

૬. અયોગવ્યવચ્છેદ દ્વાત્રિંશિકા :–

આ દ્વાત્રિંશિકા સ્તોત્રનું સ્વરૂપ આગળના સ્તોત્રની સમાન જ છે પરંતુ તફાવત છે બંનેની રજૂઆતમાં આગળના સ્તોત્રમાં પરમત ખંડન છે જયારે અહીં સ્વમત મંડન રજૂ થયું છે. આરંભમાં ભગવાન મહાવીરની સ્તુતિ કરી સરલ–સરસ શબ્દોમાં જૈનધર્મના સ્વરૂપ વર્ણન રજૂ કરવામાં આવે છે. સંસારમાં આવવાનું કારણ છે આસત્વ અને મોક્ષનું કારણ છે સંવર. જૈન સિદ્ધાંતનો આ સાર અહીં વર્ણિત છે. અન્ય પદ્યોમાં આ જ વાતનો વિસ્તાર પ્રાપ્ત થાય છે. અનેકાંત માનવાને કારણે કોઈપણ વિરોધ એમના માટે સિદ્ધ નથી.

દ્વાત્રિંશિકા યાની કે બત્રીસ શ્લોકોનો સમૂહ. આ બન્ને બત્રીસીમાં આચાર્યની ભાષા–શૈલી ઉચ્ચ કવિત્વ ગુણો યુકત છે. દાર્શનિકતાની સાથોસાથ ભકતહૃદયની લાગણીનો તીવ્ર સ્વર પ્રગટ થયો છે. અન્ય દર્શન શાખાઓના સિદ્ધાંતોનું આલોચનાત્મક અવલોકન કરીને ભક્તિનો સુભગ સમન્વય સુંદર રીતે અભિવ્યકત કર્યો છે. આ સ્તવનો જેટલા દાર્શનિક છે તેટલા જ સાહિત્યિક બની રહયા છે.

સાર :

સ્તોત્ર સરિતામાં પ્લાવિત બનીને આચાર્ય હેમચંદ્રસૂરિનું કવિ હૃદય વેદના, વ્યથા, આકાંક્ષા, શ્રદ્ધાપૂર્વક પ્રગટ થયું છે. પ્રાર્થના દરેક ધર્મનું એક અભિન્ન અંગ છે. પરંતુ અહીં આપણે જોઈ શકીએ છીએ કે સ્તોત્રકાર નિજલીનતા અને કોમળ તા વ્યકત કરીને પોતાના ઉદાર હૃદયનો પરિચય આપે છે. જેમાં કોઈ ધાર્મિક સંકીર્ણતા દેખાતી નથી. અંતરનો ઉમળ કો, આત્મનિવેદન અને માનસિક શાંતિ અહીં પ્રગટ થતી દેખાય છે. સ્તોત્ર ચાહે વીતરાગ હોય કે મહાદેવ હોય તેમાં સમન્વયાત્મક દૃષ્ટિકોણ જોવા મળે છે. જેટલી શ્રદ્ધાથી તેઓ મહાવીરને નમસ્કાર કરે છે એટલી જ શ્રદ્ધા અન્ય દેવતાઓ તરફ દર્શાવે છે. આથી જ કહી શકાય કે આચાર્યશ્રી હેમચંદ્રસૂરિ જેટલા દાર્શનિક, આલંકારિક, વૈયાકરણી છે તેટલાં જ કોમલ હૃદયના આર્દ્ર ભકતકવિ છે.

સંદર્ભગ્રંથ સૂચિ

- અમૃત ઉપાધ્યાય – પ્રશિષ્ટ સંસ્કૃત સાહિત્યનો ઈતિહાસ ગ્રંથ નિર્માણ બોર્ડ, અમદાવાદ આવૃતિ પ્રથમ – ૧૯૭૦.
- સંપા : કુમારપાળ દેસાઈ – હેમ સ્મૃતિ કલિકાલ સર્વજ્ઞ હેમચંદ્રાચાર્ય નવમ જન્મ શતાબ્દિ મહોત્સવ સમિતિ, અમદાવાદ–૧૯૮૯.
- ડો.મણિભાઈ ઈ. પ્રજાપતિ – સ્વાધ્યાય યજ્ઞ પાર્શ્વ પબ્લિકેશન, અમદાવાદ– ૨૦૦૪.
- JRGN[JS]DFZv ;\:S'T ;F1CcI SF . lTCF; G[XG, A]S51a,XL\U4gI] lNK,Lv !)**
- lJEFD];,UF\JSZvVFRFI''C[DRGãDwI5|N[X1CgNL U|\YVSFNDL4EM6F,4VFJ'lT5|YDv!)*!
- સંપા : વિજયશીલચન્દ્રસૂરિ – મહાદેવબત્રીસી કલિકાલ સર્વજ્ઞ હેમચંદ્રાચાર્ય નવમ જન્મ શતાબ્દિ મહોત્સવ સમિતિ, અમદાવાદ, ૧૯૮૯.
- સી.એલ. શાસ્ત્રી – સંસ્કૃત વાઙ્મયનો ઈતિહાસ ભારત પુસ્તક ભંડાર – અમદાવાદ, આવૃતિ પ્રથમ – ૧૯૬૨.

* D.D. Badheka

Arts [SANSKRIT]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 200 - 201
ISSN 2319 - 8168

આદિ શંકરાચાર્યના હરિસ્તુતિ : સ્તોત્રમાં બ્રહ્મ વિભાવના

વિશ્વ માનવ પરંપરાના પુનઃસ્થાપક એવા મહામુની શંકરાચાર્ય ઉતમ તત્વવેતા, ભકિત શાસ્ત્ર પુરસ્કર્તા, કર્મવાદ અને જ્ઞાનમાર્ગનો સમન્વય કરનાર આચાર્ય છે. આવી વિશ્વની વિરલ વિભૂતિ આદિ શંકરાચાર્ય ૪૦૦ જેટલા ગ્રંથોની રચના કરી છે.[૧] જે અંતર્ગત સ્તોત્ર સાહિત્ય પણ આવે છે. શંકરાચાર્ય મૂલતઃ જ્ઞાનમાર્ગી છે. પરંતુ જ્ઞાનની સાથે ભકિતની ઉપાદેયતાને પણ સ્વીકારીને ૨૦૦ જેટલા સ્તોત્રની રચના શંકરાચાર્યે કરી છે. આમાંના ઘણાખરાં સ્તોત્રની કર્તૃત્વ સંબંધિત સંદિગ્ધતા પણ જોવા મળે છે. જે અહી અસ્થાને છે. આવા વેદાન્તકેસરી કે અદ્વૈતવાદી સગુણોપાસનાનાં સ્તોત્ર રચનાર કેવી રીતે બની શકે ? તે સંદર્ભિત કહી શકાય કે તેઓ નિર્ગુણવાદી હતા પરંતુ જનસમાજનાં વ્યાવહારિક રીતે સગુણ ઈશ્વરનો ખ્યાલ રજૂ કરીને વિભિન્ન દેવી–દેવતાઓની સ્તુતિ કરે છે.

સ્તોત્રનુંલક્ષણ આપતા કહેવાયું છે કે :T}IT[VG[G .lT :TM+D¡ જેનાથી ભિન્ન ભિન્ન આરાધ્ય દેવોની સ્તુતિ કરી શકાય તે સ્તોત્ર છે. જેમાં ગેયતાનું વિશેષ તત્વ ઉમેરી શકાય છે. સ્તોત્રમાં સંક્ષિપ્તાને કારણે મુકતકમાં ભાવસઘનતા, ભાવ સાંદ્રતા અને વિચારઐકય, રસબોધની પર્યાપ્તા રહેલી હોય છે. આવી જ ભાવનાઓથી યુકત હરિમીડે સ્તોત્ર છે જે દ્વારા ૪૪ શ્લોક અંતર્ગત આચાર્ય શંકર હરિ એટલે કે વિષ્ણુના માધ્યમથી પોતાના અદ્વૈત વેદાન્તના સિદ્ધાંતો સ્તોત્રાત્મક શૈલીમાં રજૂ કર્યા છે. પરિણામે ભકિતભાવ સભર રચના કરતાં વિશેષ તત્વજ્ઞાનીય રચના આ સ્તોત્ર લાગે છે.

શંકરાચાર્ય નિર્ગુણ બ્રહ્મને સાકાર હરિ સ્વરૂપે રજૂ કરે છે. સાકાર હરિમાં પણ વસ્તુતઃ તે અદ્વૈત બ્રહ્મના દર્શન કરે છે. હરિ માટે પ્રયોજાયેલા વિશેષણો જેવા કે જગતના આદિ અને અનાદિ, સર્વક્ષ, આનંદરૂપ, અવ્યકત છતાં પ્રત્યેકમાં વ્યસ્ત, સત્–અસત્, અવિચળત્વ, અજ, સૂક્ષ્મ[૩] વગેરે નિર્ગુણ બ્રહ્મનો અનુભવ કરાવે છે. અહી શ્રી હરિ જ અજન્મા, ક્ષેય, બ્રહ્મ અને તત્વમય સ્વરૂપ છે.

/SM'"CD AC]:IFD નીજેમ જ શંકરનુંકથન આસ્તોત્રમાંરજૂથયું છે. એક જ બ્રહ્મ અનેક સગુણ સ્વરૂપોએ મતિ માન્યતાના ભેદને કારણે એક જ નિર્ગુણ પરબ્રહ્મ કલ્પનાઓ કરીને બ્રહ્મા, વિષ્ણુ, રુદ્ર, અગ્નિ, સૂર્ય, ચંદ્ર વગેરે રૂપે ઓળખાય છે.[૪] વળી આ વિભિન્ન સ્વરૂપો વસ્તુતઃ સત્ નથી. સત્ તત્વ તો એકમાત્ર નિર્મળ હોવા છતાં એક અને અક્ષર આત્મા ગુણોના ભેદને કારણે સ્ફોટકની જેમ અનેક આકારોમાં વિચિત્ર હોય તેમ ભાસે છે.[૫]

આમ, શંકરાચાર્યની દ્રષ્ટિએ એક જ પરબ્રહ્મના વિભિન્ન આકારો કે સ્વરૂપો એ વસ્તુતઃ આભાસી છે. ઉપાસનાના હેતુથી કલ્પવામાં આવેલ માત્ર છે. આ રીતે કોઈપણ વિષ્ણુ સ્વરૂપ આખરે તો પરબ્રહ્મનું તાત્વિક સ્વરૂપ જ છે. આમ, શંકરાચાર્યનો ભકિતભાવ સગુણમાંથી નિર્ગુણ પ્રતિ જવાના સાધના માર્ગ સ્વરૂપે નિર્દેશ્યો છે.

શંકરાચાર્ય ઉપનિષદમાં પ્રયુકત શબ્દો લઈને પણ શ્રી હરિનું બ્રહ્મમય સ્વરૂપ વર્ણવે છે.

;tI\7FG\XJwWDBgT\jILTlZÉT\P
XFgT\U}–lGQD,DFGgNDBgIDŸFP

ઉપનિષદ મહાવાકયનુંપ્રતિપાદન કરતા કહેછેકે ;J" B,] .NDŸ A|ïŸ અર્થાત્ સૃષ્ટિમાં જે કંઈ દેખાય છે તે બધું જ બ્રહ્મ સ્વરૂપ છે. આ વાતને સ્પષ્ટ કરતાં શંકરાચાર્ય સાગર તરંગનું આ સ્તોત્રમાં દૃષ્ટાંત આપ્યું છે. વસ્તુતઃ બન્ને એકરૂપ, બ્રહ્મ જગત અભેદ દર્શાવે છે. બ્રહ્મના જ વિવર્ત રૂપે જગત છે, અદ્વૈત છે.[૬]

હરિસ્તુતિ સ્તોત્રમાં રહેલ નિર્ગુણ બ્રહ્મનું નિરૂપણ જેને ભગવદગીતામાં અક્ષર બ્રહ્મ કહ્યો છે. તેને દર્શાવતા શંકરાચાર્ય કહે છે કે

N'Q8JFULTF:J1FZTtJDŸFP26FP

તો વળી TtJDl; એવા ઉપનિષદ પ્રતિપાદિત વાકયનો સ્પષ્ટ નિર્દેશ કરીને એકત્વ પણ તેઓએ સિદ્ધ કર્યું છે.૭ આવા અગમ્ય, સર્વવ્યાપી, પરમતત્વ સ્વરૂપ પરબ્રહ્મનું હરિસ્તુતિમાં અનેક શ્લોકોમાં લગભગ સરખા શબ્દોમાં નિરૂપણ થયું છે.

બ્રહ્માનુભૂતિની અવસ્થા એટલે કે મોક્ષ વિષયક દ્વિવિધ માર્ગ કર્મમાર્ગ અને જ્ઞાનમાર્ગનો સમન્વય કરીને પ્રકાશન્તરે તો શંકરાચાર્ય જ્ઞાનમાર્ગની શ્રેષ્ઠતાને પ્રતિપાદિત કરે છે. હરિસ્તુતિ સ્તોત્રમાં અષ્ટાંગયોગને કર્મમાર્ગ જ્ઞાનને વધારે ઉજજવળ બનાવે છે. આવા ઉજજવળ જ્ઞાનથી જે બ્રહ્મને જાણે છે તે સંસારનો અંધકાર ભેદીને પ્રકાશમાર્ગે એટલે કે મોક્ષ માર્ગે પ્રસ્થાન કરે છે. શંકરાચાર્ય ભાષ્યગ્રંથમાં બ્રહ્મતત્વને જાણવાનાં સાધનોમાં વૈરાગ્ય, અઘ્યાસ, ધ્યાન, સમાધિ વગેરેનો સમાવેશ થાય છે. જેનું નિરૂપણ હરિસ્તુતિ સ્તોત્રના પાંચમા શ્લોકમાં કરવામાં આવેલું છે. હરિસ્તુતિના શ્લોક બારમાં ઉપનિષદ શૈલીમાં સર્વવ્યાપક

* Lecturer, Department of Sanskrit, M.K. Bhavnagar University, Bhavnagar

પરમાત્માનું સ્વરૂપ વર્ણવે છે. સર્વનો આત્મા એવો એ સર્વત્ર છે. છતાં એ સર્વ નથી. જે બધું જ જાણે છે અને જેને બધા મળતા નથી તે સર્વ અંતર્યામી તરીકે રહીને જે બધાનું નિયમન કરનાર છે. તે જ શ્રી હરિરૂપી પરબ્રહ્મ છે.

પરબ્રહ્મની વ્યાખ્યા આપતા શંકરાચાર્ય કહે છે કે "અવિદ્યા" એ કરેલા નામરૂપ આદિ વિશેષનો નિષેધ કરીને 'અ–સ્થૂળ' વગેરે શબ્દોથી જે બ્રહ્મનો ઉપદેશ કરવામાં આવે છે. તે જ પરબ્રહ્મ છે. અહીં આ સ્તુતિમાં શંકરને અભિપ્રેત અપરબ્રહ્મથી પરબ્રહ્મની ગતિનો રહ્યો છે.

નિર્ગુણ બ્રહ્મ ઉપરાંત સ્તોત્ર સર્જક સગુણ બ્રહ્મનું પણ નિરૂપણ કરે છે. તો વળી શંકરાચાર્યના પિતા દ્વારા ઉપદેશ પામેલ ભૃગુઋષિએ અન્નમય, પ્રાણમય, મનોમય, વિનાશમય અને આનંદમય કોશને ભેદીને અસાનરૂપી અંધકારનો નાશ કરી બ્રહ્મદર્શન કરાવવાને પ્રયાસ કર્યો છે.

ગીતાકારને અપેક્ષિત અક્ષર તત્વને ભકિતથી હૃદયમાં અનુભવ્યું છે તો વળી ક્ષેત્રક્ષેત્રસનો ભેદ જાણવાથી ઈશ્વરને ઓળખવાની વાત શ્લોક–૨૮ માં રજૂ કરાઈ છે. મધુ બ્રાહ્મણના વાકયોથી દ્વન્દ્વનું એક્ત્વ સિદ્ધ કરી ;M''C\ ;M''C\ની પ્રતીતિ શ્લોક–૩૦ માં થાય છે. શ્રુતિની પ્રાણ વિભાવનાને, આનંદરૂપ આત્મા અને જ્ઞાન સ્વરૂપ ઈશ્વરને કવિ એ કાવ્યપક્ષે રહી દર્શાવવાનો પ્રયાસ શ્લોક–૩૪ અંતર્ગત કર્યો છે.

TtJDl; નો જે ઉપદેશ પિતા દ્વારા પુત્ર શ્વેતકેતુને આપવામાં આવ્યો તે જ પરમતત્વની ઓળખ છે. આવા અક્ષર ઈશ્વરને ઉપનિષદો G[lTvG[lT કહીને ઓળખવાનો પ્રયાસ કરે છે. ટૂંકમાં આ સ્તોત્ર બ્રહ્મના સગુણ અને નિર્ગુણ એવા ભેદોમાં ન પડતા સગુણ એવા હરિથી નિર્ગુણ એવા બ્રહ્મ તત્વની પ્રાપ્તિ કરાવનાર બની રહ્યું છે. ઈશ્વર તત્વને ઓળખવાના કેટલાક ઉપાયોનું સૂચન પણ સ્તોત્રકારે યથાયોગ્ન નિર્દેશ દ્વારા કર્યું છે.

આ રીતે જોવા જતાં શંકરાચાર્યના આ સ્તોત્ર સર્જનનું મુખ્ય પ્રેરક બળ ભકિત જ છે. તેનું વાણીરૂપી સ્વરૂપ તે આ સ્તોત્ર બની રહ્યું છે. ભકિતના એક પ્રમુખ માધ્યમ સ્વરૂપ ઉપાસના જેનો સામાન્ય અર્થ ccp5UdI VF;G\ .lT p5F;GFcc સમીપ જઈને બેસવું તેવો થાય છે. તેમ અહીં આ સ્તોત્રમાં પણ શ્રી હરિના સગુણ સાકાર સ્વરૂપની ઉપાસના કરવામાં આવી છે. સ્તોત્રના પ્રમુખ લક્ષણો સ્વરૂપ ફળ પ્રાપ્તિની ચર્ચા પણ કરવામાં આવે છે. આ હરિ સ્તુતિ સ્તોત્રમાં ફળ પ્રાપ્તિ સ્વરૂપ વૈકુંઠવાસ અને જ્ઞાની દ્વારા શ્રેયની પ્રાપ્તિ સૂચિત કરવામાં આવી છે.[૯] શંકર સ્તોત્રની વિશેષતા સંદર્ભિત કહી શકાય કે આ સ્તોત્રનો કેન્દ્રવર્તી વિચાર નિર્ગુણ બ્રહ્મ ઉપાસનાનો જ છે. ફકત તે હેતુથી જ સગુણ રૂપને ધારણ કરે છે. અને આમ સગુણ ઉપાસ્ય સ્વરૂપ વસ્તુતઃ પરબ્રહ્મ તત્વ જ છે. આ રીતે શંકરાચાર્ય વેદાન્ત આધારિત મત મયુરી છંદમાં ભકિત સ્વરૂપે જ્ઞાનને પામવાના પ્રયત્ન સ્વરૂપ ૪૪ શ્લોકોમાં બ્રહ્મોપાસનાને દર્શાવે છે. જેમાં કવિનો આર્તનાદ દ્રષ્ટિગોચર થાય છે.

સંદર્ભસૂચિ

⇨ શ્રીમધ શંકરાચાર્યનું તત્વજ્ઞાન – સી.વી.રાવલ
⇨ હરિસ્તુતિ સ્તોત્ર શ્લોક – ૩
⇨ એંજન શ્લોક – ૭
⇨ એંજન શ્લોક – ૧૮
⇨ એંજન શ્લોક – ૧૭
⇨ એંજન શ્લોક – ૨૫
⇨ એંજન શ્લોક – ૩૦
⇨ સંસ્કૃત સ્તોત્રકાવ્ય – પ્રો. ડૉ. મણિભાઈ પ્રજાપતિ.

* **Dr. P.G. Trivedi**

Arts [SANSKRIT]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 202 - 203
ISSN 2319 - 8168

osnksesa i;kZoj.k&laj{k.k

egkunk'kZfudvsfjLVksyusdgkSfdrUrqjr 'kjhjesa gh rUrqjr euqlrkgSALokeh foosdkuanthusviusHkkÔ.kesadgkSfd ^^fookldsfy;s l'kDr 'kjhjgSvkSj l'kDr euch egrh vko';dgSA** l'kDr eudkvk/kkj l'kDr 'kjhjgSvkSj l'kDr 'kjhjdsfy;s lkoZf=d 'kq)rkvkSjifo=rkogqrght#jhgSA bldsfy;s lexz#i lsi;kZoj.kdh 'kqf)vkSjifo=rkijevko';dgSAgekjsçkphu_fÔ;sdkrvPNhrjgls le>rsFksA v%osnksesai;kZoj.k&laj{k.kdkfpUrugesans[kusdksfeyrkgSA i;kZoj.kvFkZr~ifj$vkoj.kA;kusdhgekjsvkikfLrtuHkhphtsgSmUgsi;kZoj.kdktkldkgSA^ifj*dkvFkZpkjksavksjls] vkSjvkoj.kvFkZr~dpAftldkvFkZgStksgesapkjksavksjls vko'rfd;sgq,gSvFkdkexzvkSjlsgekjktksj{k.kdjrkgS] ogi;kZoj.kgSA la{ksiesai;kZoj.k;kusi'Fdhdkdp] i'Fdhdkfl;ksadkdpA'kq)i;kZoj.kgekjsfy;sbUbjdkeud'; dksfn;kgqvkclclsd‚MkvkSjvuksymidkj;kvkf'kdkZngSA osCkVZ 'kOnksÔesa&Environment dkvFkZgS&"All the physical, social cultural factor & condition influencing the existence or development of an organism of assemblage of onganism."

'laln'resadgkx;kgS^ifj%ko'.kksnfr*&tksçkphusavkSjls?ksjs] ogi;kZoj.kgSAvr%i;kZoj.kdkfo'kkyvFkZgksrkgS&lexz cãkaMAdkuroesa^;gcãkaM,dlaQ;dLFkkgS],dfof/kUqçkfyr 0;dLFkkAeud'';esafoosblcãkaMesaleUb;dhçfr/ofugSA* çd'frdklkfu/;vkSjlaj{k.kghgekjsthudkvk/kkjgSAvr% gekjs_fÔ&efu;ksausçd'frdslkfu/;vkSjlaj{k.kdksghegRo fn;kgSAdkuroesaçd'frdklkfu/;vkSjlaj{k.kdk[;ky oSfndlaLd'fresablchjlek;kgqvkgSfd-çd'frlsvius vyxvfLrRodhdYiukHkhgeughadjldsaxsaekuksgeçd'fr dsvfoHkkT;vaxgSAbldsdkj.kghosnksesaçd'frdkfoiqy oSHko,oaekuodseTtoylg;ksxdkvn+HkwrlkejL;feyrkgSA oZkuesavius uthldkfZesaMdkeud';i;kZoj.kdsfofHkUnRoksa dkvfookjhvkSjvuFkZdkjhmi;ksxdjusyxkgS]ftldsdkj.kbu nRoksaesavlarqyuhflFkfrisnkgksxbZgSAçd'frdsvflfer nksguiqoks,oa o'{kksadhdUkZ]vkSlksfxd;U=dj.k,oaekfouk'kd 'kL=ksadhgksMusfoÜbodsi;kZoj.kdkstks{kfrigqapk;hgS]mlls eku&thudsfouk'kdhvk'kadk,anRiLUgksx;hgSAek= çd'frdkghlUrqyuqhafoxMkgS]cfYdHkkSfrd]vkS|ksfxd,oa Hkkssdkhlald'frdsçHkkodsdkj.kekuo]ekuoujgdj];U=gh cux;kgSAifj.kkeLo#iekuodkdsoyçd'frlsghughA cfYdekuoekuodsijLijidslEcU/kesaHkhfoPNnqgksusyxkgSA vkS|ksfxdj.k,oaHkkSfrdhdj.kvU/khrkSMusi;kZoj.kdsvlUrqu dhbllaL;kdksvksjHkhxaHkhjdkfn;kgSAviusLokFkZesaMwcs ge;gHkhHkwyx;sdhl'f'Vdhlkhnolrq,aijLijvfuok;Z lEcU/ksalsca/khgqbZgSAvr%gesathudhlgj{kkrHkhçkIrgksh] tcge l'f'Vdslkhnvfluroksa ls lkettL;çkIrdjysaxsA ;topZnesadgkgS&

i;kZoj.klaL;kdslek/kkudsfy;sljdkj]lkekftdlaLFkku,oa oSKkfudlaLFkkudhrjQlsegRoiw.kZdk;Zgksjgkg SAysfdUnHkh Hkhge çd'frdkstM‚+ekudjghi;kZoj.k&laj{k.kdsmik;<+ax<+jgs gSAçd'frdsçfrgkghlaosnuklksxbZgS]çfrc)rkeSugksxbZgS Ablfy;stc,dlaL;kdklek/kkufeyrkgSrksblek/kkuls ,dvkSjlaL;k[kM+hgkstkrhgSAvr%ijevko';drkgSfd ge çd'frdksgekjk,dvko';d,oavfHkUuvaxle>s]mldsfouk'kdkfpUruNks‚M+mldspsnuRodksns[ksAçd'frdslkFk vnw/lEcU/kdkUks]viusàn;vkSjíf'Vesafo'kkyrk/kkj.kdj] çd'frdhlgHkkfxrkdkvuqHodjsrcghi;kZoj.klaj{k.kgksxk A

i;kZoj.kdhbllaL;kdslek/kkudsfoÔ;esagekjsosnksaesatks fpUruçkIrgS]mllsvudsegRoiw.kZmik;gesafeyrsgSAosnksaus lewhçd'frghugha]lHkhçkd'frd'kfDr;ksadksnsorkLo#i ekukgSAosnksesai;kZoj.klEcU/khlUrqyuck;sj[kusdsfy;srFkk vf[kyczãkaMesai;kZoj.kesatks'kkfUrgS]mlsvofLFkr,oa/kj.k djusdsfy;svudLFkkuksaijçFkZkdhxbZgSAosnesadgax;kgS]ks'kkfUrJufj{k'kkfUri`fFkdh'kkfUrjk%'kkfUrjksÔk/k;'kkfU%A ouLir;%'kkfUrfoZ'osnsk'kkfUrcã'kkfUrjso'kkfU%lek'kkfUrjsf/ k@A

*** Head, Sanskrit Department, Smt. P.N.R. Shah Mahila Arts College, Palitana**

osrksus/kqvksd,oa i'fFdhdks firk,oa ekrk ekukgSA osfnd _fÔk;ksa usçkFkZk dh gSfdHkwfeekrk !esa rcls tks Hkhçkrdjpqg 'kh/kzghiq%kRUugstk;sA gsekrk !esa rsjseZFkyijdksZpks/ uigq¡pkÅa]rsjsân;dksdHkhnq%[khudjpaAosn_fÔdk;snÙke fpUrugSA i;kZoj.k laj{k.kdsfy;s;snÙke çkFkZk gSfdi;kZoj.k ds laj{k.kdsçk;sj[kusdsfy;s;st#jhgSfdge çd'fr ls fprukçkrdjrsgS]gesmlsbrukdkilnsukHkhpkfg;sA gekjh laLd'fresa eud'';dsfy;sçd'fr dstkstkstkrRothuçkrk gS]mlsnsorkLo#ieku kx;kgSA ftldksgeÅtkZdk vifjfer L=ksrekursgS]ftldsfdu k l'f'Vdslkhnthdksadk vfLrRo la=ho ughgSog lw;Zdksgensoekursg SA_Yosnesa dgagSA&u% lw;Z;lw Unz'ksek;q;ksFkkA lw;Zdks LFkkojtavaevhvkRekdgka x;kgSA&lw;Z%vkRekt vrLoLFkkÔ'pA _Yosnesa fn0;T;ksfr lsçdk'kekulw;Zdks_fÔk;ksausvyxvyx uke lsiwtkgS]bldkvkrjiwoZdxq.kxkufd;kgSA&^^çk.ksu fôÙrksdh;Zrsd%lw;ZeS';ua**vFkZr~nsorkloçkjdsxq.kksa ls ;qDr lw;Zdksviusçk.kksa ls lEcfUrdjrkgSA vFkoZosnesaghvkxs^ty*dks^md*uels 'kksfFkrdjrsgq,mls rstc<kusdkykvkSje/kjrk lsifjiw.kZork;kgSA 'kq)vkSjifo= tygekjsfy;sÅtkZçkudjusdkykgks]'kq[kdkjhgks,lhdeuk _Yosnesafeyrh gSAvr%;gvko';dgSfdge tydksçnÔ.k lseqDrdjs]_YosnesadgagS& ;kqjktkoju.kks;kq'kse'kSfôÙrsdk;klwtZenfUrA oS'dunjks;kLofX%çfd'Vun%vkikssnohfjgekeUrqAA _Yosnesa^frO;kvkt%*dgdjurhdsnsoRodksLodkjfd;kgSA unhlwDrdk_fÔufn;ksals;ghçkFkZkdjrkgSfdosHkjrcaf'k;ksa dk m)kjdjsaA vfXudksHkhgeusnsoekukgSA_YosnesavfXulwDrgSAvfXunso dksdr;k.kdkjhousjgusdhçkFkZkdjrsgq,dgagSA&^lu% firsolwosMXus lw;k;uksHoAldou%LoLur;sAosnksesavusd LFkkuksaijvfXudsikod]vehi]dru]ikoi'kksfpÔ]liRuEHki vkfnfo'kÔ.kksalsvfHkhwÔ*djdsmldhegÙkLFkkfirdhgSA bu lHkhnsorkvksadsçfrviuhd'rKrkçdVdjusdsfy;sgh gekjh laLd'fresa ;K&laLd'fr fodflr gqbZgS^;K* 'kOn laLd'r/kkrq^;t* lsukgSA ftldkHkko ;ghgSdhgevxj fodlhlsdqNçkTrdjrsgSrksgesamldksHkhdqNnsukpkfg,A ;K esamfprek=kesaç;qDrguklkexh,oa/k'rdsç;ksx lsdç;q'kq) gksrkgSa]ftlls i;kZoj.kLo;agh'kq)gkstkrkgSAmRd`"Vjrea=ks ls /ofuçnÔ.kHkhdgksrkgSAosnesadgagSfd&^vktqgksrqfdÔ etZ;/oe**vFkZr~rqevfXuesa'kks/kdnO;kadhvkgfrnsdjdçqeMy 'kq)djksAvktgekjhflFkfr;ggSfdge lcdqNçkTrrksdjuk pkgrsgS]ijUrqdqNHkhnsukughapkgrsA

Hkkjrh;thou&n'kZudsvuqlkjeud'';dkvf/kdthouçd'fr dh xksnesaghforkgSAgekjh laLd'fresatksçkjvkJedh0;dLFkk gSmuesalsx'gLFkkJedksNksMdj 'kÔrhuksavkJeksa]czãp;kZe] dkuçLFkkJevkSjlU;klJedksvxjge lghek;usesaletsrks gesaçd'fr dsfopgh;gthou0;fr rdjukgksrkgSAçd'fr ds lkfu/;dksikdjghge laLd'fr dksthdnr j[k ldsgSAvkt çd'fr lsfoeq[kgksusdsdkj.kghgeeuksjks>houpqpsgSA vkjksX;thuchmUufr ke gRoiw.kZvk;keg SAgekjsthuesa tksçkjicfôFkZekusx;sgS&/keZ]vFkZ]dke,oa eks{kA_Yosnesa dgagS& gekjsvkikLtksoLifr;k;gSmlsHkhgesaLdkLF;çkTrgksrkgS AoLifr;ksads}kjkdk;q'kks/kqnsrkgS]v%'kq)dk;qçkTrgsrkgS Agetkursg SfdoLifr]isM&aikS/ksdkZ&M;ksDlkMdksxg.k djvkfDltudksNksMrsgSA_Yosnesadgag S&ousvkLFkkT;/oe~ AvFkZr~ouesaoLifryxkvksA;topZnesadgagSA v;afgRdLof/kfrLrsfratk%çf.k.kk;egrslkSHkkX;k;kA vrLoansooLirs'kkUrorY'kksfo'ksg lgj=oylkfoyajqpse~ oSfnd_fÔdeukdjrkgSfdi'Fdhijftruh Hkhlgj=ksaiÙkksa dkyhvkÔf/k;k;gS]oslcgesaçnÔ.ktfure'R;qlsefDrfny;s& ;kof%fd;rh'pse%i'fFkO;ke/;ksÔf/k%A rkeklgj=i.;ksZe'R;qeqiPUrRog%AA oSfnd_fÔi;kZoj.klse/kqdhdeukdjrsgS& e/kqdkrk_rk;rse/kq{kjfUrfLU/k%A ek/khuZ%Urksôh%AA e/kqUnrqksÔksse/kqeSkfFkZcajt%A e/kq||SJuq%firkA e/kqekuksoLifreZ/kqkZUrqlw;Z%A ek/khZdsHkUrq%AA

vUn%gesaoSfnd lkfgR;esafufgrçd'fr dsçfr tksvkReh; Hkkouk gSmlsmtkxjdjukgksxkArHkhgeviusvkidksqdk;s j[kusesalQyksaxsAgesabrukLdkFkZrksoukghiM>kdhgekjs lq[kthtudsfy;s]gekjhvkusdkyhinkrhdkslq[khj[kusdsfy, çd'fr dsrRdsadksvkReorLo#iletedjmldksviukukgksxk] rHkhi'Fdhijlo Zdkfuek Z.kgksxkA

lanHkZlwph

⇨ vaxsth&fgUnh'kCnkdk's k]Qknjdkfeyocjdsa

⇨ uekuukn]jk;-vse-vsu]½uq½Unfd'kksjvkdk;Z] dkjkssheçk'ku]dehdusj]1998

⇨ ;topZn&3888]czãpZl]'kkfUrdqIt]gfj}kj

⇨ _Yosn 1&191&6

⇨ vFkoZosn 2&32&9

* Dr. M.J. Vyas

Arts [SANSKRIT]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 204 - 205
ISSN 2319 - 8168

વેદમાં પર્યાવરણ ચિંતન

સંપૂર્ણ વૈદિક સાહિત્ય પર્યાવરણ ચેતનાના સંવાહક છે. પર્યાવરણનો પ્રત્યક્ષ સંબંધ પ્રકૃતિ સાથે રહેલો છે. જયાં સુધી પૃથ્વી, વૃક્ષો અને પર્વતોથી યુકત જંગલોથી સંપન્ન રહેશે ત્યાં સુધી માનવસંતાનોનું પાલન કરશે. પર્યાવરણ શબ્દ 5ZL ´ VF ´ J' ધાતુથી નિષ્પન્ન થાય છે. જેમાં 5ZL ´ VF ઉપસર્ગપૂર્વક J' ધાતુને પ્રત્યયના યોગથી પર્યાવરણ પદ અભિપ્રેત થાયછે.5lZTo ;dISŸ J'6FLT VFrKFNIlT HJlNlT 5IF"JZ6D¡ P અર્થાત આપણી ચારેબાજુનું વાતાવરણ જેનાથી આપણે આવૃત છીએ તેને પર્યાવરણ કહેવાય. વેદોમાં પર્યાવરણનો સંકેત J'TFJ'¿F SV@J[@ !_@!@#_f45lZJ'¿F SV@J[@ !_@(@#f4 5I"EJTŸ SV@J[@ !_@2@!(f આશબ્દોથીખ્યાલ આવે છે કે પર્યાવરણની અંદર ભૂમિ, જલ, વાયુ, અગ્નિ, આકાશ, જીવ–જંતુ, વૃક્ષ, વન્સંપત્તિ અને ઔષધિઓનો સમાવેશ થાય છે. વિશ્વકોશમાં પર્યાવરણને ભૌતિક તેમજ જૈવિક તત્ત્વોથી બનેલું માનવામાં આવે છે. ભૌતિક પર્યાવરણમાં પંચ મહાભૂત (વાયુ, પૃથ્વી, જલ, પ્રકાશ, આકાશ) તેમજ જૈવિક પર્યાવરણમાં સમગ્ર જીવ–જંતુ તેમજ વૃક્ષ–વનસ્પતિનો સમાવેશ થાય છે. વૈદિક ઋચામાં પર્યાવરણ સંરક્ષણના સંબંધમાં ઋષિઓએ પર્યાપ્ત વિચાર કર્યો છે. પંચમહાભૂતને પ્રદૂષણ મુકત રાખવા માટે અનેક ઉપાય વૈદિક મંત્રોમાં નિર્દેશે છે. ઋગ્વેદમાં દ્યાવા, પૃથ્વી, ઔષધિ, વાયુ, મેઘ, નદી, વન, પર્વત, સૂર્ય, ઉષા તથા અગ્નિને પર્યાવરણ શોધક તત્વોના રૂપમાં વર્ણવવામાં આવ્યા છે. જયારે અથર્વવેદમાં પર્વત, જલ, વાયુ, પર્જન્ય અને અગ્નિને પર્યાવરણ શોધક તત્વના રૂપમાં વર્ણવવામાં આવ્યાં છે. વેદમાં દર્શાવ્યું છે કે જયાં આ પર્યાવરણ શુદ્ધ રહે છે ત્યાં મનુષ્ય–પશુ–પક્ષી સુખપૂર્વક જીવી શકે છે.

આપતા ઋષિ–મુનિઓએ પ્રાકૃતિક સંતુલનને બનાવવા માટે પ્રકૃતિના પ્રત્યેક અંગમાં શાંતિની મહત્તાને સ્વીકારે છે. ભારતીય સાંસ્કૃતિક પરંપરામાં પ્રકૃતિની ઉપાસના અને સૌંદર્ય સાધનાના સ્વરને ઉદ્‌ગીત કરેલ છે. વૈદિક પ્રાર્થનાના ક્ષેત્ર કેટલા વિસ્તૃત અને વિશાળ છે. યજુર્વેદમાં

›rF{oXFlgTZgTlZlF\XFlgTo5'TYJLXFlgTZF5XFlgTo
VF{QFWFIoXFlgTJ'G:5TIoXFlgTlJ'XJ[N[JFoXFlgT
A|ïXFlgTo;J'XFlgToXFlgTZ[JXFlgTo;FDFXFlgTZ[lWP

અર્થાત મારા માટે દ્યુ લોક, અંતરિક્ષલોક અને પૃથ્વીલોક સુખ–શાંતિદાયક બની રહે. જલ, ઔષધિ અને વનસ્પતિ શાંતિદાતા બની રહો, સમસ્ત દેવતા, બ્રહ્મ અને શાંતિને પણ શાંતિ પ્રાપ્ત થાય.

ઋક્, યજુસ્, સામ અને અથર્વ આ ચારેય વેદોમાં પર્યાવરણના વિભિન્ન તત્વોના વિષયમાં જે ચિંતન–મનન કરવામાં આવ્યું છે. તે નિતાંત તર્કસંગત છે. વૈદિક સભ્યતા તેમજ સંસ્કૃતિનો વિકાસ પ્રકૃતિના ખોળામાં થયો છે. આપણાં પૂર્વજનોએ પર્યાવરણના વિભિન્ન અંગોને નજીકથી તેમજ સૂક્ષ્મતાથી સમજયા છે. તેમજ તેનું તર્કસંગત વિવેચન પ્રસ્તુત કર્યું છે. આથી જ વૈદિક મંત્રો પુરાતન પર્યાવરણવિદોના તથ્યપૂર્ણ વિધાન છે. વેદોમાં પર્યાવરણના વિભિન્ન અંગો જળ, ભૂમિ, વાયુ, સૂર્ય, વૃક્ષ, વનસ્પતિ, વન સર્વને દેવત્વ પ્રદાન કરીને તેની વિવિધ સ્તુતિના અનેક સૂકતો વેદોમાં આપ્યા છે. આમ પર્યાવરણને મનુષ્યની આસ્થા સાથે જોડી દઈને તેના સંરક્ષણનો હેતુ દ્રઢ કરવામાં આવ્યો છે.

માણસ માત્ર જ નહી વન્ય પશુ, પ્રાણી, પક્ષી પણ વનના અભાવમાં ત્રસ્ત થાય છે. ખરેખર પ્રકૃતિની તરફ પારાવાર આત્મીયતા તેમજ અગાધ શ્રદ્ધા અનાદિ કાલથી માનવમને અનુભવી છે. હજારો વર્ષો પૂર્વે વૈદિક મનીષિઓની દ્રષ્ટિ પર્યાવરણના મહત્વની તરફ ખેંચાય હતી. તે યુગમાં પણ શિક્ષા, શોધ, તપસ્યા અને ચિંતનના કેન્દ્ર તરીકે વનનું સુરમ્ય વાતાવરણ રહેતું. મનુષ્ય તેમજ પ્રકૃતિના અન્યોન્યાશ્રિત સંબંધના ઊંડાણને સમજનાર ઋષિઓના વિચાર, તેમનો દ્રષ્ટિકોણ ચોકકસ જાણવા મળે છે. પ્રકૃતિ પૂજક વૈદિક ઋષિઓ માનવજીવનના આધાર હોવાને કારણે પ્રકૃતિના સમસ્ત અવયવમાં ઈ વરની સત્તાનો સ્વીકાર કર્યો તથા વૃક્ષોને દેવત્વથી શણગાર્યો છે.

GDM J'1F[eIo (યજુ૧૬,૧૭) 4 J'1FF6F\5TI[GDo(યજુ ૧૬,૧૮) VF{QFWLGF\5TI[GDoP(યજુ૧૬,૧૯) JGFGF\5TI[GDo (યજુ ૧૬,૧૮) કહીને તેની સ્તુતી કરી છે.

વૈજ્ઞાનિકોના મત અનુસાર એક ઔસત આકારનું વૃક્ષ વર્ષમાં આપણને એક ટન ઓકસીજન પ્રદાન કરે છે. સઘનવૃક્ષોના ઝુંડ (૫૦૦ વર્ગ મીટર વનક્ષેત્ર) તાપમાનને ૫ સે. ગ્રેડ સુધી ઓછું કરે છે. તેમજ વિકિરણ અને ધ્વનિ પ્રદૂષણને ૧૦ થી ૧૪ ટકા

* Lecturer & Head, Sanskrit Department, Shamaldas Arts College, Bhavnagar

સુધી અટકાવવામાં સમર્થ બને છે. અનુસંધાનને આધારે આજે આપણા વૈજ્ઞાનિકો જે નિષ્કર્ષ પર પહોચ્યો છે તે મહત્તાને ઓળખવાવાળા વૈદિક ઋષિઓ : JlWT[G lC\;LTj (યજુ૪.૧) કહીને વૃક્ષને ન કાપવાની તેમજ તેની સતત રક્ષા માટે અનેક સ્થળો પરનિર્દેશ કરેછે.5'lYJLN[JIHgIMQFwIF:T[D}, DF lC\l;QFDj ઋગ્વેદના નવમા તેમજ દસમા મંડળમાં સોમસૂકત તથા અરણ્યાની સૂકત જોવા મળે છે. આ સૂકત પર્યાવરણની રક્ષાનું દિગ્દર્શન કરે છે. વર્તમાનમાં હરિતક્રાંતિ, વૃક્ષારોપણ કાર્યક્રમ જે થાય છે તેના બીજ આ સૂકતમાં છે. લાંબા સમયે પોતાના આશ્રમમાં પાછા ફરેલ ઋષિ આશ્રમ વનસ્પતિને નષ્ટપ્રાય જોઈને આત્મગ્લાનિ અનુભવે છે. વનદેવીની ક્ષમા માંગવાની સાથોસાથ સંકલ્પ પણ કરે છે કે પુનઃ ઔષધિ, વનસ્પતિને પ્રયત્નપૂર્વક ઉગાડીશ. આ આશ્રમરૂપી ક્ષેત્રને ફરી હરિયાળો બનાવવાની વનદેવીને પ્રાર્થના કરે છે.

GJFVZ^IF lGo OgtIgI1F[+FlEUrKlTP
tJANF{oS,IoHUWJFI IYFSFD\ lGEn1T[PP
skv!_q!$&q5@f

અથર્વવેદનાં બારમા મંડળમાં પૃથિવી સૂકતમાં વારંવાર એક જ ઉદ્‌ઘોષ સંભળાય છે કે આપણી ભૂમિ સંપૂર્ણ રહે તથા સ્વાસ્થ્યવર્ધક ઔષધિઓ, વનસ્પતિથી હંમેશા પરિપૂર્ણ રહે, અમારી માટે સુખદાયી બની રહે. અહીં માતૃભૂમિરૂપ પૃથિવીને એક સજીવરૂપમાં પ્રસ્તુત કરવામાં આવે છે. સમગ્ર પદાર્થોની જનની અને પોષીકાના રૂપમાં પૃથ્વીનેઉદ્‌ઘોષિત કરવામાંઆવેછે. DFTF E}lDo 5]+M VCD 5'lYtIFo P ભૂમિ મારી માતા છે અને હું ભૂમિનો પુત્ર છું. આ પૃથ્વી અત્યંત વિશાળ અને શકિતશાળી ઔષધિઓ વાળી બની રહો. તે સમુદ્રો, નદીઓ, હિમાચ્છાદિત પર્વતો, વનો, ભુરા–કાળા–લાલ રંગવાળા પ્રદેશોને ધારણ કરે. આ દિવ્ય પૃથ્વી પરનું રહેઠાણ સૌભાગ્યરૂપ છે. એનું પ્રત્યેક ક્ષેત્ર લોકોના વિશિષ્ટ કાર્યથી દિવ્યતાની પ્રાપ્તિ કરે છે. આ દ્રષ્ટિથી દૂરદર્શી ઋષિઓએ પોતાના તથા વિ વના સુખ–સમૃદ્ધિ માટે સ્તુતિ કરી છે. પૃથ્વી પરના સમગ્ર પ્રાણીઓની સુરક્ષા માટે પર્યાવરણને સંતુલિત રાખવું અનિવાર્ય છે.

આદિકાલથી મનુષ્ય–પ્રકૃતિ વચ્ચે અટૂટ સંબંધ રહેલો છે. મનુષ્ય સભ્યતાના વિકાસમાં પર્યાવરણે મહત્વપૂર્ણ ભૂમિકા નિભાવી છે. આપણા દેશમાં વૈદિક સમયથી જ પર્યાવરણ પ્રત્યે અસીમ શ્રદ્ધા પ્રગટ કરવામાં આવી છે. પર્યાવરણ જાળવણીની દિશામાં પણ અધિક ધ્યાન દેવામાં આવ્યું છે. પારાશર ઋષિની અનુસાર

NXS}5 ;DMJF5LNXJF5L ;DMiNoP
NXiN ;Do5]+oNX5]+ ;DMã]DoPP

અર્થાત દશ કુવા બનાવવા બરાબર એક વાવની રચના, એક વાવ બનાવવા તોલે એક તળાવ બનાવવું, દસ તળાવ બનાવવાની સમકક્ષ એક પુત્ર કે શિષ્યને ધર્મપરાયણ બનાવવો અને દશ પુત્રની સમકક્ષ એક વૃક્ષનો ઉછેર કરવા બરાબર છે. એકવીસમી સદીમાં વિશ્વને પર્યાવરણ માટે ઝઝુમવું પડે છે. સામાજિક, સાંસ્કૃતિક, ભૌતિક તેમજ જૈવિક સ્તર પર માનવના માટે આ સમસ્યા એક ભીષણ બની ગઈ છે. વિશ્વની અનેક ગંભીર સમસ્યાઓના સમાધાનમાં વૈદિક સાહિત્યનું જ્ઞાન અતિ ઉપયોગી તેમજ પ્રાસંગિક છે. વેદ પર્યાવરણના પ્રહરી તેમજ ચિંતનના પ્રણેતા છે. પર્યાવરણના સંરક્ષણ તેમજ શુદ્ધિકરણની આધારભૂત વિભાવના વેદમાં પ્રસ્ફુરિત થઈ છે. મનુષ્યને ભૂમિતત્વથી અન્ન તેમજ ખાદ્ય પદાર્થ, જલતત્વથી સંજીવની શકિત, અગ્નિતત્વથી તાપ, ઉષ્મા, ગતિ અને વિકાસ, વાયુતત્વથી પ્રાણશકિત તથા જીવ–જંતુ, વૃક્ષ–વનસ્પતિ વાતાવરણને સમતોલ રાખવામાં મહત્વપૂર્ણ યોગદના કરે છે. જો આમાંથી કોઈપણ તત્વ પ્રદૂષિત થાય તો જીવ–જગત પર પ્રતિકૂળ પ્રભાવ પાડે છે. માટે જ વૈદિક ઋષિઓએ પર્યાવરણની શુદ્ધિ હેતુ પ્રકૃતિના પ્રત્યેક તત્વોમાં શાંતિની કામના કરી છે.

વેદોમાં હજારો વર્ષ પૂર્વે મનુષ્યના વિષયમાં, પ્રકૃતિ–પર્યાવરણના વિષયમાં જે કાંઈ કહેવાયું છે તે નિઃસંદેહ આજે પણ એટલું જ વ્યાવહારિક તેમજ ઉપયોગી છે. તેમજ સમાજને જાગૃત રાખવા માટે મહત્વપૂર્ણ છે.

પર્યાવરણ પ્રત્યેની આપણી આવી સમૃદ્ધ વિરાસત તેમજ સમજ હોવા છતાં પણ આજે આપણે ભૌતિકવાદી, મહત્વાકાંક્ષી અને અતિવાદી દ્રષ્ટિકોણને કારણે પ્રકૃતિની આ અણમોલ સંપત્તિ સાથે છેડછાડ કરી રહયા છીએ. આપણી દ્વારા જ પર્યાવરણના અવિવેકપૂર્ણ ઉપયોગથી ગ્રીન–હાઉસ ગેસનું ઉત્સર્જન તેમજ ઓઝોન પડનું સ્તર ક્ષીણ થતું જાય છે. જેનાથી પૃથ્વીનું તાપમાન વધે છે, ગ્લેશીયર તીવ્ર ગતિથી પીગળે છે, ભૂમિ રણમાં પરીવર્તન પામે છે, વાયુમાં કાર્બનની માત્રા વધી રહી છે. આ બધા પ્રલયકારી લક્ષણ પ્રતીત થાય છે. આપણે સાવધાન બનીને પ્રભાવી પ્રયત્નો દ્વારા પુનઃસ્વસ્થ પર્યાવરણની પ્રાપ્તિનું લક્ષ્ય મેળવવા યથાસંભવ યોગદાન કરવું જોઈએ.

સંદર્ભગ્રંથ સૂચિ

⇨ ડૉ. ગંગા સહાય શર્મા – ઋગ્વેદ ;\:S'T ;FlCtI 5|SFXG4G> lNK,L4 ૧૯૮૦.

⇨ પં.તુલસીરામ : JF lDS'T v ;FDJ[NEFQI (સંપૂર્ણ) DC lQF''NIFGWNEJG4G> lNK,L4 ૧૯૭૨.

⇨ મહર્ષિ દયાનંદ સરસ્વતી – ઋગ્વેદ (ભાગ ૨–૧) ;FJ'N[lXFTVFI''5|lTlGlW;EFvG> lNK,L4 ૧૯૭૨.

⇨ ભાણદેવ – સામવેદદર્શન
પ્રવિણ પ્રકાશન ; રાજકોટ, પ્ર.આવૃતિ – ૨૦૦૯.

⇨ ભાણદેવ – અથર્વવેદદર્શન
પ્રવિણ પ્રકાશન ; રાજકોટ, પ્ર.આવૃતિ – ૨૦૦૯.

* P.R. Trivedi

Arts [PSYCHOLOGY]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 206 - 208
ISSN 2319 - 8168

"A STUDY OF AGGRESSION AND DEPENDENCE PRONENESS AMONG EMPLOYED AND UNEMPLOYED YOUTH"

The study presents a comparison of 100 male and 100 female employed - unemployed youth. They were administered the aggression questionnaire by G.C. Pati and dependence proneness scale by Prof J.B.P. Sinha. Analysis of variance revealed that unemployed male and female are higher in aggression than employed male and female. In dependence proneness two groups are not found significantly different.

INTRODUCTION:

Aggression behaviour leading to self-statement; it may arise from innate drives and/or a response to frustration, and may be manifested by destructive and attacking behaviour, by hostility and obstructionism, or by self-expressive drive to mastery or a forceful behaviour, action, or attitude that is expressed physically, verbally, or symbolically. It may arise from innate drives or occur as a defence mechanism, often resulting from a threatened ego. It is manifested by either constructive or destructive acts directed toward oneself or against others. Aggression can be defined as any behaviour intended to hurt others. A person who accidentally injures someone else is not usually considered aggressive, but a person who tries to hurt somebody (even if the person fails) is considered aggressive.

Psychologists long believed that frustration caused aggression. In a book titled Frustration and Aggression, Dollard and colleagues at Yale stated the theory in absolute terms: "aggression is always a consequence of frustration" (Dollard, Doob, Miller, Mowrer, & Sears, 1939, p.1).

Sigmund Freud postulated (1920) that all humans possessed an aggressive drive from birth, which together with the sexual drive, contributed to personality development and found expression in behaviour. Austrian ethnologist, Konrad Lorenz suggested that aggression was innate, an inherited fighting instinct as significant in humans as it was in ther animals. He contended that the suppression of aggressive instincts, common among human societies allows these instincts the chance to build up occasionally to the point where they are released during instances of explosive violence. Many psychoanalysis have argued against these theories, which see aggression as a primary drive offering the possibility that aggression may be a reaction to frustration of primary needs.

Dependency is one of the basic modes of interpersonal relationship. A new born babe is totally dependent on his mother for his survival. Later on when he grows up and turns into an adult, he still has to depend on others for a variety of things. However, if dependency instead of being instrumental becomes invested with positive affects so much so that the person tends to lean on other in situations where dependency may not be functional, he shows dependence proneness. Dependence proneness is thus a response disposition. Sinha (1968) examined the characteristics of a dependence prone person and found that he is anxious, fatalist, unpractical, traditional. He confides uncritically, likes to follow others, obeys elders and gets discouraged if he is not nurtured. He is not that committed to his work, nor does he try to work hard for success. If this is the profile of a dependence proneness person, he will certainly resist change and will be show in working

* Lecturer, ILSASS, Vallabh Vidhyanagar

for fast economic development. A need was, therefore, felt to develop a scale which can measure the degree of dependence proneness in a person.

Another term used for work or job is employment. It is the engagement of an individual in a job for his livelihood after he attains adulthood or completes education. The economists had been very keen to talk of employment and unemployment only in terms of percentages of persons engaged in industrial activities. Therefore, the term employment is the product of industrialized countries. A full employment can then be the fullest utilization of human resources for production purposes. Unemployment can occur only when there is a slack in economic activity, i.e., only when there is a fall from full employment. Bakke (1983), Israeli (1995), Rundquist and Sletto (1996) first found that unemployed persons exhibited more worries, nervousness, outbursts, rage, disappointments, depressions, hopelessness, suicide etc. Although the problem lasts for some time in the life of every youth.

Youth is the time of life when one is young, but often means the time between childhood and adulthood (maturity). Definitions of the specific age range that constitutes youth vary. An individual's actual maturity may not correspond to their chronological age, as immature individuals can exist at all ages. Youth is also defined as "the appearance, freshness, vigour, spirit, etc., characteristic of one who is young".

RESEARCH METHODOLOGY: -

➢ **OBJECTIVES:-**

• To study aggression and dependence proneness of employed male & female.

• To study aggression and dependence proneness of unemployed male & female.

Variables:-

I. Independence variable:-

a) Gender: A1 Male A2 Female

b) Employment: B1 Employed B 2 Unemployed

II. Dependence variable:-

a) Aggression

b) Dependence proneness

➢ **Sample:-**

The random sample of 100 male and female employed & 100 male and female unemployed, total 200 taken from Banswara dist. Rajasthan. Age group of the sample is 25 years to 35 years.

➢ **Research Design:-**

Type	A1 Male	A2 Female	Total
B1 Employed	50	50	100
B2 Unemployed	50	50	100

➢ **Tools:-**

Aggression: The aggression of the subject is measured with the help of aggression questionnaire by Dr G.G. Pati. The reliability of the scale was determined by half split method was 0.69 and validity of the scale was found to be 0.52.

Dependence proneness: The dependence proneness scale developed by Prof J.B.P. Sinha. The reliability of the scale is 0.94 and validity of the scale is 0.20 and significant level is 0.5.

❖ **Result and Discussion:-**

➢ **Result of aggression:-**

Table no 1.1: Showing the result of mean and standard deviation score of male and female for aggression.

Gender	Mean	SD
A1 (male)	23.21	8.62
A2(female)	22.78	9.51

Table no 1.1 shows that the male aggression level is high as males have to go out struggle and bring back the resources for the family. The mean score difference is 0.49 and SD difference is 0.89. Males are higher aggressive than females.

Table no 1.2 showing the result of mean and standard deviation score of employed and unemployed for aggression.

Type	Mean	SD
B1(employed)	22.74	8.29
B2(unemployed)	23.25	9.80

The table no 1.2 show the difference between employed and unemployed. Mean score of unemployed is 23.25 which is more than mean score of employed youth (22.74), that proves that Unemployed are more aggressive as they cannot generate income for family, feeling of incompleteness generates within them this creates frustration and resentment; hence more aggression can be seen compare to employed youth.

Table no 1.3 Showing the result of mean and standard deviation score of employed male & female and unemployed male & female for aggression.

	Mean	SD
A1B1	22.88	7.86
A1B2	22.68	9.76
A2B1	22.18	8.38
A2B2	24.3	12.95

Table no 1.3 reveals that the unemployed females are showing highest aggression. If an educated female does not get employment her anxiety level rises (**Geeta pandey & Azra Praveen, 2008)** than and her anxiety convert in to aggression. Except this group other groups show equal aggression level with minimal differences.

Result of Dependence Proneness:-

Table no. 2.1 Showing the result of mean and standard deviation score of male and female for dependence proneness.

Type	Mean	SD
A1(male)	69.56	25.47
A2(female)	68.46	49.98

Table no 2.1 reveals that The SD difference between male and female for dependence proneness is 24.51 that shows female are more dependent than male, males are also showing dependent proneness. Females depend on males from the birth to death and it is unwritten truth in the society, so weather she is employed or not she could be dependent. Due to this reason female dependence proneness is higher than male.

Table no. 2.2 Showing the result of mean and standard deviation score of employed and unemployed for dependence proneness.

Type	Mean	SD
B1(employed)	69.34	38.06
B2(unemployed)	68.68	37.68

Table no 2.2 reveals that the employed and unemployed youth mean score for dependent proneness is 69.34 and 68.68 respectively. This result reveals that there is less difference between the two groups both are having dependent proneness but unemployed are more dependent than employed.

According to table no 2.3 difference in mean scores unemployed females are most dependent group. Comparison of mean and SD scores of all the groups under the study reveal that unemployment is one of the reasons for dependent proneness.

CONCLUSION:-

* Males are higher aggressive than females.
* Unemployed youth are more aggressive in compare to employed youth.
* Unemployed female are high in aggression than other groups.
* Female are more dependent than male.
* Unemployed are more dependent than employed.
* Unemployed females are most dependent than other groups.

REFERENCES

⇨ Abstract volume, 11th international seminar February, 2007

⇨ Anderson, C. A., & Bushman, B. J. (2002). Human aggression. Annual Review of Psychology, 53, 27-51.

⇨ Flanders, N.A., Anderson, J.P., and amidson, E.J. (1961) Measurement of dependence proneness in the class room. Educational and psychological measurement, 21, 575-587.

⇨ Grown, D.P., and Marlowe, D. (1960) A new scale of social desirability independent of psychology. Journal of consulting psychology, 24, 349-54

* H.M. Mahida

Arts [ECONOMICS]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 209 - 210
ISSN 2319 - 8168

A SOCIO-ECONOMIC STUDY OF WOMAN WORKER IN SHOPPING MALL

India is a multifaceted society where on generalization could apply to all the nations various regional, religious, social & economic group. Nevertheless certain board circumstances in which Indian woman live effect the ways they participate in the economy. Indian society is extremely hierarchical with virtually everyone ranked relative to others according to their caste, class, wealth & power. This ranking even exists in areas where it is not openly acknowledged, such as certain business settings. Women workforce constitutes an integral part of total workforce in India. On 31st march 2010, women constituted 19.5percent of the total workforce. The participation of women in the labor force has always been lower than that of men, in the rural as well as urban areas. In the woman workforce, women from rural areas are greater in number as compared to the urban women. Amongst rural women workers, a majority is employed in agriculture and some are employed in cottage industries. In the urban areas, women workers are primarily employed in the unorganized sectors. The small percentage of females within the construction trades and the serious health and safety problems unique to female construction workers have a circular effect. *Mahida Hemintal Manubhai, Research Scholar, Kadi Sarva Vishwavidhyalay, Gandhinagar. Safety and health problems in construction create barriers to women entering & remaining in this field. The prevalence of a hostile workplace, restricted access to sanitary toilets, protective clothing & equipment in the wrong sizes, and poor on the job training these were significant issues that adversely impacted women ability to perform their jobs safely. Many of the identified problems are amenable to change through behavioral & administrative intervention. The recommendations in this report are directed at employers, labor unions, manufacturers, training programs, supervisors & workers. Improving the work conditions for women in the construction trades will not only ensure their health & safety.

Objectives of this study:

· To study socio-economic conditions women workers in shopping mall.

Methodology:

· This research is prepared by using two methods of data collection: (1) Primary data collection, (2) Secondary sources of data collection.

· I select purposive sample method of data collection in the primary data collection method.

· Then I choose Anand district as my research area and I select 30 respondents for this research by using purposive sample method of data collection.

· The inevitable secondary information for the research was gathered with the help of the research sources like various reference books, bulletin on the research topic, various government reports, published research papers, etc.

Findings:

The sociological and economical status of women is increased.

The analytical study of the information is as given below:

· The 22 respondents of this survey are between the 21 to 30 yrs age.

· The 14 respondents of the survey are contended with the study .The were the students of different displine. The out of the 14, eight students were working because of their problem regarding study fees. They

* Research Scholar, Kadi Sarva Vishwavidhyalaya, Gandhinagar

were working because they were not able to pay the education fees of their respected discipline.

· There were not more interesting thing was that, on the basis of the sociological & economical condition, There were 27 respondents were belong to backward classis & 03 respondents were belong middle class.

· There were 22 respondents get respect in their families.

· One more valuable thing of this survey is that 08 respondents were motherly figure who were facing the problem about the proper care of their children.

· Out the selected respondents, 20 respondents were working not only at this place but also at their houses simultaneously.

Conclusion:

There are directly relation between an ability of the economical income generation & status of the women because they were working at different places. The women get respect & highly importance status because are working. If they, will not work they would be humiliated in their family. They were working for their higher education that refers their increasing women literacy. There were some women who are mother, they were facing the problem regarding taking proper care of their children because of their work. They were occupied not only at the place where they work but also at their houses so they could not spare proper time for taking care of their children at their houses.

To sum up, We can see that the socio-economical status of the woman increased who are working.

REFERENCES

- A.N.Singh, "*Women Domestic Workers: Socio-Economic Life*" New Delhi, Shipra, 2001.
- Arun Kumar, "*Empowering Women*", New Delhi, Sarup, 2002.
- Sundar Lal, "*Social Status of Women*", Jaipur, ABD Pub., 2005.
- Sumitra Kumari, "*Dynamic of Women Empowerment*", New Delhi, Alfa, 2006.
- Vini Prabhakar, "*Women in Rural India*", New Delhi, Dominant, 2004.

* P.G. Sindha

Arts [ECONOMICS]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 211 - 213
ISSN 2319 - 8168

pÆmhal ijLlana lImDlya Ane [sroDa gamno Aai4R ivkasno tuLnaTmk AWyas

વિશ્વના દરેક અર્થશાસ્ત્રએ આર્થિક વિકાસ માટે વિવિધ પ્રકારના ક્ષેત્રની હિમાયત કરી છે. પણ આ બધા જ અર્થશાસ્ત્રીઓ એ એક વાત કરી છે કે જે દેશમાં જે ક્ષેત્ર પર વધારે લોકો નિર્વાહ કરતા હોય તો ક્ષેત્ર કે વિસ્તારમાં વિકાસથી આર્થિક વિકાસ થઈ શકે છે. ભારત એ પણ આવો જ ગામડાઓનો બનેલો દેશ છે. માટે જો ભારતનો આર્થિક વિકાસના દર્શન કરવા હોય તો ભારતના ગામડાઓનો અભ્યાસ કરવો જોઈએ આર્થિક વિકાસ એટલે કે જે તે ક્ષેત્રમાં ઉત્પાદનનું કોઈ પણ સાધન વપરાશ વિનાનું ન હોય એટલે કે ઉત્પાદન ના દરેક સાધનનો મહતમ ઉપયોગ થતો હોય અને તેનાથી દેશના લોકોના કલ્યાણમાં પણ વધારો થયો હોય તેવી વિકાસને આર્થિક વિકાસ કહી શકય છે. આ આર્થિક વિકાસને જાણવા માટે જે તે રાજય કે પ્રદેશ તથા ગામડામાં રહેતા લોકોના જીવન વિષે જાણકારી મેળવી પડે આ માટે તે ગામડા કે વિસ્તારનો સર્વેક્ષણ કરવું પડે કે જેનાથી તે પ્રદેશના લોકોનો આર્થિક અને સામાજીક વિકાસની જાણકારી મેળવી શકાય છે. આથી ગુજરાતનો આર્થિક વિકાસ કેવો છે તે જાણવા માટે ગુજરાતના બે ગામડા કે જે પંચમહાલ જીલ્લાના ખાનપુર તાલુકાના લીમડીયા તથા ઈસરોડા આ બે ગામડાનું સર્વેક્ષણ કરવામાં આપ્યો છે. આ સર્વેક્ષણની માહિતી પહેલા ગામડાની માહિતી મેળવીએ.

સર્વેક્ષણ હેઠળના બે ગામડાની પ્રાથમીક પરીચય :–

આ સર્વેક્ષણમાં પંચમહાલ જીલ્લાના બે ગામડાઓ (૧) લીમડીયા (૨) ઈસરોડા આ બન્ને ગામડાનો સર્વેક્ષણ ધ્વારા તુલના કરવામાં આવી છે. આ તુલનાત્મક અભ્યાસની માહિતી મેળવીએ તે પહેલા આ બંને ગામડાઓની પ્રાથમીક માહિતી પર નજર નખાઈ.

લીમડીયા ગામનો પ્રાથમીક પરિચય :–

પંચમહાલ જીલ્લાના ખાનપુર તાલુકાનું એક વિકાસના પથ પર આગળ વધતુ ગામડુ છે જેમાં કુલ વસ્તી ૩૧૦૦ છે. તેમાં સ્ત્રીનું પ્રમાણ ૧૫૯૧ અને પુરૂષોનું પ્રમાણ ૧૫૦૯ છે. જેમાં જનરલ ૧૯૦૨ છે અને અનુસુચી જાતિના સ્ત્રીઓ ૩૫૮ અને પુરૂષો ૩૬૪ છે અને કુલ ૭૨૨ છે તથા બક્ષીપંચમાં પુરૂષોનું પ્રમાણ ૨૩૮ અને સ્ત્રીઓ પ્રમાણ ૨૩૮ છે અને કુલ ૪૭૬ છે અને ગામમાં ૩૬૫ બી.પી.એલ. કાર્ડ ધરાવે છે. આ ગામ એ વિધવિધ જાતિના લોકોનું બનેલું છે અને આ ગામમાં મોટા ભાગના લોકો ખેતી કરીને પોતાનો જીવન નિર્વાહ કરે છે. આ લોકો માટે સરકારની જે યોજનાઓ આ લીમડીયા ગામમાં ચાલે છે. તેનો પરીચય નીચે મુજબ છે.

લીમડીયા ગામમાં સરકાર ધ્વારા ચાલતી વિવિધ યોજનાઓ

(૧) મહાત્મા ગાંધી રોજગાર યોજના :–

– કેન્દ્ર સરકાર ધ્વારા ૧૦૦ દિવસ રોજગારી

– આ ગામમાં આ યોજના નીચે ૩૭૧ જોબ કાર્ડ ઈસ્યુ કર્યા છે. અને આ જોબકાર્ડનો લાભ એ ૩૫૦ લાભોએ લીધો છે.

(૨) અરીયાળી વોટર સેડ યોજના :–

૧. જમીન સમતલ કરવા
૨. ચેકવોલ બનાવા
૩. ગલી પ્લગ બનાવા
૪. નાળા પ્લગ બનાવા
૫. બોરી બંધ કરવા
૬. વૃક્ષા રોપણ કરવા

૧૫ થી ૨૦ % ખેડુતોને લાભ આપવામાં આવ્યો બી.પી.એલ. રેખાની નીચેવાળા લોકોને લાભ આપવામાં આવે છે.

(૩) પાણી પુરવઠા યોજના :–

શેરી લાઈટ અને શેરી પાણીની લાઈન માટે

નોંધ :– લીમડીયા ગામમાં શેરી લાઈટ માટે રૂા.૪૦ વેરો ૧ ઘરદીઠ લેવામાં આવે છે.

(૪) રાજીવ ગાંધી રાષ્ટ્રીય પેપજળ મીશન :–

– ઉકરડા તથા ગંદા પાણીના નીકાલ માટેના કામો માટે

– દરેક શાળા અને આંગણવાડીમાં સૌચાલય સંકુલ ઉભા કરવા.

(૫) ટી.એસ.સી. (શૌચાલય યોજના) :–

– આ યોજનાનો લાભ લીમડીયા ગામમાં ૨૫૦ લોકોને લાભ આપવામાં આવ્યો છે. આ યોજનામાં શોશા ખાડો જાતે કરવાનો હોય છે.

* Lecturer, Anand Commerce College, Anand

(૬) સંખી મંડળ :–

– આ યોજનાએ નાના પાયાના ધીરાણની અને બચતની યોજના છે જેમાં ૧ મહિને રૂા. ૧૦૦ બચત કરીને બેન્કમાં ખાતુ ખોલાવવી તેમાં ભરવામાં આવે છે. અને તેમાંથી સરકાર ધ્વારા લોન આપવામાં આવે છે.

આ ઉપરાત લીમડીયા ગામમાં બેન્ક પણ આવેલી છે. (બેન્ક ઓફ બરોડા) કે જે આર્થિક વિકાસ માટે ગામના લોકોને વિવિધ પ્રકારના ધિરાણ આપે છે કે જે નીતે પ્રમાણે છે.

બેન્કની વિવિધ ધિરાણ યોજના :–

(૧) ક્રોપ લોન :–

– આ પ્રકારનું ધિરાણ ડેરી ફામેર્રીંગ માટે આપવામાં આવે છે. એટલે કે ભેંસ લાવવા માટે વિગેરે આ ધિરાણમાં ૧ એકરે ૮ હજારનો રેશીપો રાખવામાં આવે છે. અને આ ધિરાણનું વ્યાજ ૭ % રાખવામાં આવે છે.

(૨) હોમ લોન :–

– આ પ્રકારનું ધિરાણએ મકાનના નવા બાંધકામ માટે અને રીનોવેશન માટે આપવામાં આવે છે. આ પ્રકારની લોનમાં વધુ માં વધુ ૫ લાખ એ ૭.૭૫% ના દરે વ્યાજ લેવામાં આવે છે. આ માટે નોન એગ્રીકલ્ચરનું સર્ટી આપવું પડે છે.

(૩) ડી.આર.ટી. સ્કિમ હેઠળ (ડીફરન્શ રેડ ઓફ ઈન્ટરસ)

– આ પ્રકારની લોન એ દુકાન, શાકભાજીના ધંધા માટે, કાપડની દુકાન માટે ધંધાકીય હેતુ માટે આપવમાં આવી છે જેનો વ્યાજનો દર ૪% છે.

(નોધં :– આ લોન માત્ર બી.પી.એલ કાર્ડ ધારણ કરતા લોકો માટે છે.)

(૪) એજયુકેશન લોન

– આ ધિરાણ માટે વિદ્યાર્થીએ પ્રથમ વર્ગમાં પાસ થવો જોઈએ અને એડમીશન કયા લેવા માગો છો અથવા તે કોલેજમાં એડમીશનનો લેટર અને આ માટે વ્યાજનો દર ૧૩% છે.

(૫) પર્સનલ લોન :–

– પગારના ૮ ઘણા અથવા ૧ લાખ સુધીની લોન આપવામાં આવે છે. આ માટે સેલેરી બેઝ જે બેન્કમાં જ હોવો જોઈએ અને આ ધિરાણ માટે ૧૩.૫૦% વ્યાજ લેવામાં આવે છે

(નોંધ :– આ લોન સર્વીસ કરતા લોકોને આપવામાં આવે છે.)

(૬) ઓડી અગેશ પ્રોપડી :–

– આ પ્રકારનું ધિરાણ એ મિલકત, શેર, મકાન કે જમીનના પ્રમાણના આધારે આપવામાં આવે છે. અને મિલકતની કિંમત ના ૫૫% ધીરાણ મળે છે. અને તેના પર ૧૩.૭% વ્યાજ લેવામાં આવે છે.

(૭) ખેતી સાધન માટે :–

– આ પ્રકારની લોન માટે જમીનનું પ્રમાણ ઓછામાં ઓછી ૫ એકર હોવી જોઈએ અને ૫ વર્ષ માટે આ ધિરાણ આપવામાં આવે છે. આ લોનનો વ્યાજનો દર ૯ % છે.

લીમડીયા ગામનો પ્રાથમીક પરિચય :–

પંચમહાલ જીલ્લાના ખાનપુર તાલુકાના ઈસરોડા ગામએ નાનુ અને અવિકસીત ગામડું છે. જેમાં કુલ વસ્તી ૧૬૩૧ છે. જેમાં સ્ત્રીઓનું પ્રમાણ ૭૬૮ અને પુરૂષોના પ્રમાણ ૮૬૩ છે. જેમાં અનુસુચી જાતિની કુલ વસ્તી ૧૩૧ છે. જેમાં પુરૂષો ૭૦ અને સ્ત્રીઓ ૬૧ છે તથા બક્ષીપંચની કુલ વસ્તી ૮૫ છે. જેમાં પુરૂષો ૪૫ અને સ્ત્રીઓ ૩૦ છે. અને બાકીની ૧૪૨૫ વસ્તીઓ જનરલ છે. અને ગામમાં ૨૬૦ બી.પી.એલ. કાર્ડ ધારકો છે.

ઈસરોડા ગામમાં સરકાર ધ્વારા ચાલતી વિવિધ યોજનાઓ

(૧) મહાત્મા ગાંધી રોજગાર યોજના :–

– આ યોજનામાં ૧૦૦ દિવસની રોજગારી આપવમાં આવે છે. જેમાં માટીકામ, બોરીબંધ, ચેકવોલ, સાર્વજનીક સિંચાઈ, કુવાઓના ખોદકામ ધ્વારા રોજગારી આપવમાં આવે છે. જેમાં ૨૧૯ કુટુંબીઓ ઈસરોડામાં લાભ લીધો છે અને ૨૪૯ જોબ કાર્ડ ઈસ્યુ કરવામાં આવ્યા છે.

(૨) ટી.એસ.સી. (શૌચાલય યોજના) :–

– આ યોજનામાં ૧૦૪ બી.પી.એલ. લાભાર્થીઓએ લાભ લીધો છે. જેમાં ૨૨૦૦ સરકાર તરફથી હોય છે. જેમાં લોકફાળો રૂા. ૩૦૦ નવી સ્કીમ પ્રમાણે આપવાનો હોય છે.

– જુની સ્કીમમાં રૂા. ૧૨૦૦ આપવામાં આવતા હતા જેમાં ૩૦૦ લોકો ફાળો હતો.

ઉપરના બંને ગામડા લીમડીયા અને ઈસરોડામાં ''પંડિત દિનદયાલ ગ્રાહક ભંડાર'' આવેલા છે. જેમાંથી લોકોને કે જે રેસન કાર્ડ ધરાવતા હોય તેવા લોકોને ખાંડ, કેરોસીન, ઘઉં, ચોખા આપવામાં આવે છે. જેમાં ઈસરોડામાં ૪૦૬ કાર્ડ અને લીમડયા માં ૭૫૫ કાર્ડ ધારકો આ ભંડારનો ઉપયોગ કરે છે.

સર્વેક્ષણ કરવા પાછળના ઉદ્દેશ :–

(૧) ગામડાઓની આર્થિક અને સામાજીક પરિસ્થિતિની જાણકારી મેળવી.

(૨) સરકારની વિવિધ યોજનાઓ અને આ યોજનાઓનો લાભ લોકોને કેટલો મળે છે દતે જાણવા.

(૩) લોકોના કલ્યાણમાં વધારો થાય તેવા ઉપાયો જાણવા.

(૪) ગામડાઓની સમસ્યાઓ જાણવા અને તે માટે લોકોને જાગૃત કરવા.

(૫) ગામડાઓનો આર્થિક વિકાસ થયો છે કે નહી તે જાણવા માટે.

મુલ્યાકન :–

(૧) આ સર્વેક્ષણમાં માલુમ પડે છે કે ગામડાઓની આર્થિક અને સામાજીક બંન્ને પ્રકારની પરિસ્થિતિમાં સુધારાની જરૂર છે. આ પ્રકારના સુધારા માટે લોકોએ જાગૃત થવું પડશે.

ગામડાઓની આર્થિક રીતે લોકો પછાત છે કારણ કે લોકો પાસે યોગ્ય રોજગારીનું સાધન નથી. મોટા ભાગના લોકોએ પોતાનું ગુજરાન ચલાવે છે. અને આ લોકોમાં આજે પણ વેમ, અંધશ્રધ્ધા જોવા મળે છે. ધર્મના નામે આજે પણ લોકો અવળા માર્ગ દોરાય છે. આ માટે સરકાર અને લોકો બંનેમાં સુધારાની જરૂર છે.

(૨) આ બંને ગામડાઓમાં સરકાર તરફથી વિવિધ પ્રકારની યોજનાઓ ચાલે છે. એવું સરકારી વહીવટદારોનું કહેવું છે પણ હકીકત તો એ છે કે લોકોને આ સરકારી યોજનાનો લાભ ૨૫% થી પણ ઓછો મળેલો છે. કેટલીક યોજનાઓ તો ગામડાની પ્રજાને પણ ખબર નથી કે સરકારની આ યોજના આપણા ગામમાં ચાલુ છે માત્ર સરકારી ચોપડાના આંકડા પુરતી આ સરકારી યોજનાઓ યોગ્ય ગામ લોકોનો વિકાસ કરી શકતી નથી. આ માટે જવાબદાર છે આ ભ્રષ્ટ સરકારી તંત્ર.

(૩) આ સર્વેક્ષણમાં લોકોના કલ્યાણમાં વધારો થાય તે માટે ઉપયોગી છે જેમ કે લોકોને પીવાનું પાણી, સ્વચ્છ રસ્તાઓ, તથા સરકારની વિવિધ યોજનાઓ કે જે ખરેખર લોકોના કલ્યાણમાં વધારો કરવા માટે અમલમાં મુકવામાં આવી છે તે તમામ યોજનાની જાણએ ગામની પ્રજાને થવી જોઈએ.

(૪) આ બંને ગામડાઓની વિવિધ પ્રકારની સમસ્યાઓ છે જેમ કે બસની સુવિધા નથ. શૌચાલયની સુવિધા નથી, રસ્તાની સુવિધા નથી, ઉચ્ચતર અભ્યાસ માટે યોગ્ય શાળાઓ નથી. રોજગારી મેળવા માટે ખેતી સીવાયનું કોઈ પણ ક્ષેત્ર નથી. લોકોમાં શિક્ષણનો અભાવ જોવા મળે છે એટલે કે લોકો અભણ છે લોકોને પોતાના અધીકારોની જાણ પણ નથી અને આ તમામ માટે તે જાગૃત પણ નથી.

(૫) આ ગામડાઓનો અર્થિક અને સામાજીક વિકાસ થયો છે જરૂર પણ તે આખા ગામમાં નથી પણ થોડાક લોકો પુરતો જ છે અને આ વિકાસ એ અયોગ્ય વિકાસ છે માટે આ ગામડાઓનો આર્થિક વિકાસ થયો નથી. તેમ આ સર્વેક્ષણ ધ્વારા જાણવા મળે છે.

ગામ લોકોની સમસ્યાઓ :–

(૧) રોજગારીનો અભાવ :–

આ ગામડાના લોકોમાં ૩૬૫ દિવસોમાં માત્ર ૧૨૫ દિવસ રોજગારી એ ખેતી ક્ષેત્રમાંથી મળે છે. બાકીના દિવસો આ લોકો બેકારીનો સામનો કરે છે. મોટા ભાગના લોકોએ ખેત મજુરો છે.

(૨) ધાર્મિક અધંશ્રધ્ધા :–

આજે પણ આ ગામડાના લોકો એ કોઈ બિમારી માટે દવા નથી પણ ધાર્મિક બાધાઓ રાખે છે જો કોઈ સ્ત્રીને બાળક ન થાય તો પણ તે દવાઓની સારવાર નથી લેતી પણ બાધાઓ રાખે છે. આ માટે તેમનો કોઈ વાર પોતાનો જીવ પણ ગુમાવો પડે છે.

(૩) આર્થિક અને સામાજીક સતાનું કેન્દ્રકરણ :–

આ ગામડાઓમાં મુઠિ ભર લોકોનું શાસન ચાલે છે આર્થિકની સાથે સાથે સામાજીક વાતોમાં પણ સમાજનો ઉપરનો વર્ગ એ પોતાની મન માની આજે પણ ચલાવે છે. ટુંકમાં આ ગામડાઓમાં આર્થિક અને સામાજીક સત્તાનું કેન્દ્રકરણ જોવા મળે છે.

(૪) લોકોની વિચાર સરણી :–

આ ગામડાના લોકોની વિચારસરણી એ રાજે પણ ૧૮મી સદીની છે લોકોને પોતાના અધિકારનું ભાન નથી. અને તે લોકો પણ એમ નથી વિચારતા કે આપણા માટે શું યોગ્ય છે અને શું અયોગ્ય આ માટે જવાબદાર છે શિક્ષણનો લોકોમાં અભાવ.

(૫) ઉચ્ચતર શિક્ષણની વ્યવસ્થા નથી :–

આ બંને ગામડાઓમાં એક જ શાળા છે જ ધોરણ ૧ થી ૧૦ સુધીનું શિક્ષણ આપે છે ધો. – ૧૦ પછીના શિક્ષણ માટે ગ્રામજનોને ૭૦ કિ.મી. થી પણ વધારે અંતર એ જવુ પડે છે માટે જ ગામડાના મોટા ભાગ ના લોકો અભણ જોવા મળે છે અને જે ભણલા છે તે પણ ધો.૧૦ થી વધારે નથી. આભ ગામડાના કુલ વસ્તીના ૬૦% લોકોએ ઉચ્ચતર શિક્ષણથી આજે વંચીત છે.

(૬) સ્ત્રીઓ માટે ઘરમાં શૌચાલય ન હોવાથી સ્ત્રીઓ ને પડતી વિશેષ તકલીફો :–

આ સર્વેક્ષણથી એક મહત્વની તકલીફ જાણવા મળી છે આ તકલીફ એક મામુલી તકલીફ લાગે પણ આ સમસ્યાનો ભોગએ અનેક સ્ત્રીઓ બની છે આ તકલીફો નીચે પ્રમાણે છે.

– જુવાન દીકરી–વહુઓને ખુલ્લામાં સંડાસ બેસતા અત્યંત શરમ થાય.

– લુચ્ચા–લફંગા પુરૂષો ધ્વારા છેડતી થવાનો ભય

– લગ્ન જેવા પ્રસંગોએ દાગીના પહેરીને જતાં, દાગીના અને જાનનું જોખમ થવાના બનાવો પણ નોંધાયા છે.

– દર મહિને – માસિક ધર્મના દિવસોમાં ખુબ હેરાન થવુ પડે.

આમ ઉપરની સમસ્યાઓને નિવારવા માટે સરકાર અને પ્રજા આમ બંને એ આગળ આવાની જરૂર છે.

સંદર્ભસૂચી

⇨ ગામના ટલાટીશ્રી, ઠાકોર પુનમચંદ્ર નાનાલાલ (મો. ૯૯૨૫૩ ૨૨૪૮૨)

⇨ બેન્ક મેનેજર (બી.ઓ.બી.), ભાઈલાલ એમ. પરમાર (ફોન. ૦૨૬૭૪ – ૨૮૧૫૩૮)

⇨ પંડિત દિનદયાલ ગ્રાહક ભંડારના વહીવટ કરતા. રાઠોડ ધમેન્દ્રસિંહ કે. (મો. ૯૬૨૪૧ ૮૮૯૩૬)

* A. Galani

Arts [ECONOMICS]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 214 - 215
ISSN 2319 - 8168

૭૫ લાખ આદીવાસીઓ માટે વનબંધુ કલ્યાણ યોજના

આગમી ૧૫ ઓગષ્ટે ભારત આઝાદીના ૬૦ વર્ષ પૂર્ણ કરશે અને ૨૦૧૦ માં ગુજરાત તેની પાંદ દાયકાની વિકાસ યાત્રાને પૂર્ણ કરશે. અનેક સરકારો આવી, અનેક યોજનાઓ બની. તેમ છતાંય સર્વાંગી વિકાસની બાબતમાં આજે પણ ઘણું કરવાની જરૂર છે. કઈ સરકારે કર્યું અને કઈ સરકારોને ન કર્યું, તેના વાદ વિવાદને બદલે મહાત્મા ગાંધી સ્વપ્નને સાકાર કરવાનો હેતુ સાકાર થાય અને વિકાસની ધારા છેવાડાના માનવી સુધી પહોંચે તેની તાતી જરૂરીયાત છે. સમાજના અનેક વર્ગો છે, જેમના ઉપર સવિશેષ ધ્યાન કેન્દ્રીત કરીને તેમને વિકાસ પામેલા સમાજની હરોળમાં લાવવા રહયા. આવા વિસ્તારો હોય, તેવા જનસમુદાયો હોય, તેના પર ધ્યાન કેન્દ્રીત કરવાનો આ આપણા ગુજરાત સરકારનો અભિગમ છે. ઉમરગામથી અંબાજી સુધીની પૂર્વ પટ્ટીનો આદિવાસી વિસ્તાર જેમાં ૪૩ તાલુકાઓ અનુસૂચિત જનજાતિના ક્ષેત્રો છે. રાજયની કુલ વસ્તીમાં અનુસૂચિત જનજાતીનું સંખ્યાબળ આશરે ૭૫ લાખ છે. જે લગભગ ૧૫ ટકા થવા જાય છે. સદિઓથી આપણી સંસ્કૃતિની રખેવાળ કરનાર, આઝાદીના જંગમાં બલિદાન આપનાર, રાજયની પ્રગતિમાં પરસેવો પાડનાર આદિવાસી સમાજ વિકાસની દોડમાં સામેલ થવા માટે સજાગ થયો છે. ગયા ૬૦ વર્ષના ભૂતકાળના અનુભવોમાંથી આપણા આદિવાસી ભાઈ–બહેનો ઘણું બધુ શીખ્યા છે.

૬૦ વર્ષની યોજનાઓના અને વચનોના પરિણામો જોયા પછી, આપણે માનવું પડે કે ફકત બંધારણ પ્રમાણે અનુસૂચીત જન જાતિના માટેની જવાબદારીઓ પૂરી કરવાથી ધાર્યા પરિણામો નથી મળ્યા. આ નકકર સત્યનો સ્વીકાર કરીને ગુજરાતની વિકાસ યાત્રામાં આદિવાસી બાંધવો સક્રિય ભાગીદાર બને, વિકાસના હકકદાર બને અને ઉજજવળ પરિણામો પ્રાપ્ત કરે એવું સ્વપ્ન સાકાર કરવાની અમારી નેમ છે. આ સન્માનનીય સભાગૃહ સમક્ષ રાજયની ૧૫ ટકા જેટલી જન સંખ્યા ધરવાતા આદિવાસી સમાજના સશકિતકરણ માટે, તેમની ક્ષમતાની વૃધ્ધિ માટે અને તેમના ધ્વારા અને તેમના થકિ વિકાસના નવા અવસરોનો વધુમાં વધુ લાભ લે તે માટે, વ્યહાત્મક રીતે અને નિતિગત રીતે નવો વ્યુહ અપનાવવાની આવશ્યકતા છે. આ સન્માનનીય સભાગૃહ આદિવાસીઓના શૈક્ષણિક અને આર્થિક કાર્યક્રમોમાં થયેલ ગુણાત્મક સુધારા અને પરિણામ લક્ષી વર્તમાન સરકારની કાર્યસિધ્ધઓથી સુમાહિતગાર છે જ.

આ સન્માનનીય સભાગૃહએ વાતનું સાક્ષી છે કે ૧૯૭૪ થી આદિજાતી પેટા યોજનાથી આદિવાસીઓની વિકાસ યોજનાનો આરંભ થયો. મોદિશ્રીની સરકાર બની તે પૂર્વે ૨૦૦૧ સુધીમાં એટલે કે ૨૭ વર્ષ દરમિયાન માત્ર આશરે રૂા.૬૫૦૦ કરોડ ખર્ચવામા આવ્યા, જયારે ૨૦૦૨ થી ૨૦૦૭ દરમ્યાન એટલે કે છેલ્લા પાંચ જ વર્ષમાં આશરે રૂા. ૬૦૦૦ કરોડ જેટલો ખર્ચ આ સરકારે કર્યો છે. ૨૭ વર્ષમાં રૂા. ૬૫૦૦ કરોડ અને પાંચ વર્ષમાં રૂા. ૬૦૦૦ કરોડ આ તફાવત કોઈનું પણ ધ્યાન ખેંચે તેવો છે. એટલું જ નહિ પરંતુ ગુજરાત પેટર્નના માધ્યમથી આદિજાતિ કલ્યાણના મોડેલના અમલમાં ગુજરાતને નોંધપાત્ર સફળતા મળી છે. આદિવાસી ખેડૂતોને જમીનના પટ્ટા આપવા બાબતમાં ગુજરાત સમગ્ર દેશમાં પ્રથમ હરોળમાં રહયું છે. અને બીજી વધુ ૩૩૪૪ કુટુંબો માટે ૨૨૩૬ હેકટર જમીન ઉપલબ્ધ હોઈ, આ અંગેની દરખાસ્ત મંજુરી અર્થે કેન્દ્ર સરકારને મોકલી આપેલ છે. અને આ અંગે કેન્દ્ર સરકારની મંજુરીની રાહ જોવાઈ રહી છે. એક રાજય સરકાર માટે આ બાબતોનો સંતોષ અને ગૌરવ હોઈ શકે, પરંતુ રાજયના વિકાસની અમારી નેમ છે. તેમ અમે આદિજાતિ કલ્યાણ માટે હજુમોટી હરણફાળ ભરવા માગીએ છીએ. આ રાજય સરકાર સ્પષ્ટપણે માને છે કે વિકાસ સર્વ પોષક હોય, વિકાસ સર્વ સમાવેશક હોય અને વિકાસ સર્વદેશી હોય. આ અભિગમને ચરિતાર્થ કરવા માટે આગામી ૧૧મી પંચવર્ષીય યોજનાના – આગામી પાંચ વર્ષ દરમિયાન આદિજાતીના સર્વાંગી કલ્યાણનો કાર્યક્રમ સિધ્ધ કરવા માટે રૂા. ૧૫૦૦૦ કરોડનું પેકેજ અમલમાં મૂકવાનો સંકલ્પ કર્યો છે. ૧૯૯૪ થી અત્યાર સુધીના ૩૨ વર્ષમાં થયેલ કુલ ખર્ચ કરતા પણ કેટાય ઘણો વધારે ખર્ચ, પાંચ જ વર્ષમાં રૂા.૧૫૦૦૦ કરોડનું પેકેજ એક ઐતીહાસિક ઘટના બની રહેશે.

આ સન્માનનીય સભાગૃહને જણાવતાં ગૌરવ થાય છે કે ''વનબંધુ કલ્યાણ યોજના'' વિકાસનું સ્વપ્નું સાકાર કરશે. રૂા. ૧૫૦૦૦ કરોડના પેકેજની રૂપરેખા આ

* Lecturer, K.R. Doshi P.G. Center of M.Phil., Bhavnagar

સન્માનનીય સભાગૃહ સમક્ષ હું પ્રસ્તુત કરું છું.

(૧) પાંચ લાખ કુટુંબો માટે રોજગાર લક્ષી કાર્યક્રમ શરૂ કરવો :–

– કૃષિની ઉત્પાદકતા વધારી રોજગારીની વધુ તકો ઉભી કરવી.

– પશુપાલન અને ડેર ઉદ્યોગ તેમજ કૃષિ આધારિત ઔદ્યોગિક પ્રવૃત્તિ વધારવી.

– આદિવાસી યુવાનોને ગુણવત્તાવાળી તાલિમ ઉપલબ્ધ કરાવવી.

– આધુનિક વૈજ્ઞાનિક અને તકનીકી કુશળના વધારવા નવતર રોજગારીમા આદિવાસી યુવાનોને જોડવા.

– એવા આદિવાસી કુટુંબો કે જેની મુખ્ય વ્યકિત તરીકે મહિલા હોય તેવા કુટુંબોને આદિવાસી કલ્યાણ યોજનાઓમાં પ્રાથમિકતા આપવી.

(૨) શિક્ષણની ગુણવતા અને ઉચ્ચ અભ્યાસો ઉપર ભાર

– તાલુકા વિજ્ઞાન પ્રવાહની ઉચ્ચતર માધ્યમિક શાળાઓ ખોલવી.

– પસંદ કરેલા ૧૦૦૦ આદિવાસી વિદ્યાર્થીઓને ઉત્તમ કક્ષાના આવાસીય વિદ્યાલયમાં પ્રવેશ મળે અને સર્વશ્રેષ્ઠ શિક્ષણ પ્રાપ્ત કરે તે માટે આયોજન કરવું અને આદિજાતિના વિદ્યાર્થીઓ માટે ટેલેન્ટ પુલનું નિર્માણ કરવું

– આદિજાતી તાલુકામાં નવોદય અથવા એકલવ્ય જેવી નિવાસી શાળા ખોલવી અને શહેરોની શ્રેષ્ઠ શાળાઓ જેવી ગુણવતાસભર બનાવવી.

– કોલેજના વિદ્યાર્થીઓ માટે વધુ ૧૦૦ છાત્રાલયની સ્થાપના કરવી.

– મેડિકલ કોલેજ, ઈજનેરી કોલેજ, પોલીટેકનીકલ કોલેજ, નર્સીગ કોલેજ અને આઈ.ટી.આઈ. સહિતના શ્રેષ્ઠ શૈક્ષણિક એકમો આદિવાસી વિસ્તારોમાં સ્થાપિત કરવા.

– પરંપરાગત આર્ટસ, કોમર્સ અને સાયન્સ જેવી કોલેજોના એકમો અંતરિયાળ તાલુકામાં શરૂ કરવા.

(૩) આદિવાસી વિસ્તારોનો આર્થિક વિકાસ વેગવંતો બને

– ઉત્પાદિત ચીજોને યોગ્ય બજાર મળે અને પરંપરાગત કૌશલ્યને આર્થિક આધાર મળે તે ધ્યાન રાખી વિસ્તારવાર, પરંપરાગત આર્થિક પ્રવૃતિઓ ઓળખી કાઢી, તેનું કલસ્ટર બનાવી, સંકલિત આર્થિક વિકાસનો અભિગમ અપનાવવો. તાલુકાદિઠ વર્ષે રૂા. ૧ કરોડની ફાળવણીની નેમ છે.

– નજીકના વિકસેલા આર્થિક મથકો સાથે અંતરીયાળ વિસ્તારનો આદિવાસી ભાગીદાર બની શકે તે માટે આંતરમાળ ખાકિય સુવિધાઓ વિકાસવવી સુવિધાઓ વિકસાવવી અને રસ ધરાવનારાઓને તેવી પ્રવૃતિઓ સાથે જોડવા.

– આદિવાસી વિસ્તારોમાં પરંપરાગત જે સાધનો છે. તેની ગુણવતા વધે અને જે ઉપલબ્ધ કાચો માલ છે તેમાં મૂલ્ય વૃધ્ધિ થાય જેનો સીધો લાભ આદિવાસી સુધી પહોંચે તેવી વ્યવસ્થા ઉપલબ્ધ કરાવવી.

(૪) સૌને માટે આરોગ્ય :–

સુરક્ષિણ માતૃત્વ માટે આદિવાસી કુટુંબોને ચિરંજીવી યોજનાનો પુરેપુરો લાભ મળે તે માટે સઘન પ્રયત્નો કરવા.

– આદિવાસી કુટુંબોની ગર્ભવતી સ્ત્રીઓ ધાત્રી માતાઓ અને છ વર્ષ સુધીના બાળ શિશુઓને કૃપોષણથી નિવારવાની યોજનાઓ ને વધુ ધનિષ્ઠ અને વધુ અસરકારક બનાવશો.

– આદિવાસી કુટુંબો માટે દર વર્ષે આરોગ્યની ચકાસણી અભિયાન

(૫) સૌને માટે ઘર :–

– આગામી પંચવર્ષીય યોજના દરમ્યાન પાંચ વર્ષમાં ઘરવિહાણા તમામ આદિવાસી કુટુંબોને ઘરનું ઘર મળે તેવું આયોજન.

(૬) પીવાનું પાણી :–

– આવતા પાંચ વર્ષોમાં તમામ આદિવાસી કુટુંબોને સુરક્ષિત અને સ્વચ્છ પીવાના પાણીની સગવડ ઓછામાં ઓછા ૨૫ ટકા કુટુંબોને પાઈપ લાઈન ધ્વારા પીવાનું પાણી મળી રહે તેવી વ્યવસ્થા.

(૭) સિંચાઈ :–

– જૂથ યોજના ઉપર વિશેષ ભાર મૂકવામાં આવશે.

– ચેકડેમો નિર્માણ કરવામાં આવશે.

– વોટરશેડ ઉપર આધારિત જળ સંગ્રહ સ્થાનનું નિર્માણ કરવામાં આવશે.

– ટપક સિંચાઈ પધ્ધતિ માટે ધિરાણ અને ટેકનીકલ સુવિધાઓ મળી રહે તે માટે આયોજન.

(૮) બારમાસી રસ્તાઓ :–

– આદિવાસી વિસ્તારોમાં બનતા રસ્તાઓની ગુણવતામાં સુધારો કરવામાં આવશે.

– હાલના રસ્તાની મરામત માટે ખાસ આયોજન

– ૨૫૦ થી ઓછી વસ્તી ધરાવતા તમામ ફળિયાઓનું રસ્તાથી જોડાણ કરવામાં આવશે.

(૯) વીજળીની સાર્વત્રિક ઉપલબ્ધતા :–

– ગરીબી રેખાથી નીચે જુવતા તમામ આદિવાસી કુટુંબોના ઘરોનું વિનામુલ્યે વિજળીકરણ બાકીના તમામ પેટા પરાઓનું વિજળીકરણ અંતરિયાળ અને છુટાછવાયા વિસ્તારોમાં વૈકલ્પિક વ્યવસ્થા તરીક સૂર્ય ઉર્જાનું આયોજન.

(૧૦) શહેરી વિકાસ :–

– ૧૩ આદિવાસી વસ્તી ધરાવતા શહેરોનો આર્થિક અને સાંસ્કૃતિક કેન્દ્ર તરીકે વિકાસ.

– આગામી પાંચ વર્ષમાં તમામ તાલુકાના મુખ્ય મુથકનું બ્રોડ બેન્ડથી જોડાણ કરવામાં આવશે.

સંદર્ભસૂચી

⇨ ગુજરાત અંક (૪) તા. ૧–૩–૨૦૦૭

⇨ www. gujaratpublication.com

* Dr. D.V. Gohil

Arts [HISTORY]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 216 - 218
ISSN 2319 - 8168

સરદારસિંહ રાણાની ભારતમાં પ્રવૃતિઓ

ભારતમાં પ્રવૃતિઓઃ

પંડિત શ્યામજી કૃષ્ણવર્માની જેમ સરદારસિંહ રાણાએ પણ અનેક શિષ્યવૃતિઓ જાહેર કરી હતી. સને ૧૯૦૫ ના ડિસેમ્બરનાં 'ઈન્ડિયન સોશિયોલોજિસ્ટ' ના અંકમા સરદારસિંહ રાણાએ આપેલ ત્રણ શિષ્યવૃતિઓની જાહેરાત કરી હતી. રૂા.૨૦૦૦/– રૂપિયા બે હજારની એક એવી ત્રણ શિષ્યવૃતિઓ મેળવનાર પહેલા ત્રણ ભાગ્યશાળી ભારતીયો આ પ્રમાણે હતા.

૧) શિવાજી શિષ્યવૃતિઃ વિનાયકરાવ સાવરકર
૨) મહારાણા પ્રતાપ શિષ્યવૃતિઃ કનૈયાલાલ વર્મા
૩) અકબર શિષ્યવૃતિઃ પ્રભાત સી.સેન

તેમજ ભારતમાં રહીને ભારતની સ્વતંત્રતા માટે કાર્ય કરનાર વ્યકિતઓને પણ ત્રણ શિષ્યવૃતિઓ આપવાનો નિર્ધાર કરેલ. તેમજ ભારતમાં બોમ્બ બનાવવાનું સાહિત્ય પહોચાડવું, હથિયારો એકઠા કરી ભારતમાં મોકલવાનું કામ સરદારસિંહ રાણા કરતા હતા.

વીર સાવરકરના પ્રતિબંધિત પુસ્તક '૧૮૫૭ નો સ્વાતંત્ર્ય સંગ્રામ' ની નકલો સરદારસિંહ રાણાએ પોંડિચેરી મારફત ભારતમાં પહોંચાડેલી. એવી જ રીતે શ્યામજીના વૃતપત્રનું 'ઈન્ડિયન સોશિયોલોજિસ્ટ' મેડમ કામાના અખબાર 'તલવાર' અને 'મદન તલવાર' લાલા હરદયાળનં 'ગદર' સામયિક પ્રતિબંધિત હોવા છતાં પણ ભારતમાં ગમે તે રીતે પહોંચી જતું હતું. ભારતના યુવાનોને આ સામયિકો અને વૃતપત્ર ઘેલું લાગતુ હતું. અને સમાચારો વાંચવાનું એક જાતનું વ્યસન થઈ ગયું હતુ. આ કામ સરદારસિંહ રાણા જ કરતા હતા.

સરદારસિંહ રાણાએ આપેલ શિષ્યવૃતિઓ

ઈન્ડિયા હાઉસ :

ઈન્ડિયન ટ્રાવેલીંગ ફેલોશીપ ધરાવનારા સજજનો અને બીજા યોગ્ય ભારતીયોને રહેવા માટે ઘર અથવા હોસ્ટેલ જેવું નિવાસસ્થાન કે જેનું નામ 'ઈન્ડિયા હાઉસ' હશે તે તૈયાર કરવાનું આયોજન થઈ રહ્યું છે. અને બોજામુકત મિલકત હોર્નબીના એક હિસ્સા કાઈગેટ ખાતે ખરીદવામાં આવી છે કે જે સરકારી આંકડાઓ મુજબ લંડનનો સૌથી વધારે આરોગ્યપદ વિસ્તાર છે અને સમગ્ર યુ.કે. માં સૌથી ઓછો મૃત્યુ દર ધરાવે છે આ મિલકત ટ્રાન્સની નજીક છે. અને ગણ રેલવે સ્ટેશનનો થોડી મિનિટો પગ રસ્તે છે તેમ જ વોટર લો પાર્ક, હાઈગેટ વૂડઝ અને કવીન્સ વૂડની સાવ નજીકમાં છે.

આ મકાન ઈમારત પોતાની માલીકીની જમીન ઉપર છે અને હાલમા તેમાં ૨૫ વ્યકિતઓની રહેઠાણની સુવિધાવાળુ છે ભવિષ્યમાં તેમાં પચાસ વ્યકિતનો સમાવેશ થઈ શકે તેવી વ્યવસ્થા કરવામાં આવી રહી છે. લેકચર રૂમ, લાય બ્રેરી, અને રીડીંગ રૂમ બધાજ એક જ ફલોર ઉપર આવેલા છે અને આ રીતે બધી સહસબંધક પ્રવૃતિ અને અભ્યાસ એકજ ફલોર પર મળે છે. આજ પ્રમાણે મનોરંજન માટે ટેનિસ કોર્ટ, જીમ્નેજીપ વગેરે માટે પુરતી જગ્યા છે.[1]

આ સંસ્થાનો વહીવટ માત્ર ભારતીયોના હાથમાં છે અને રહેઠાણની સુવિધા ઓકસફર્ડની રસ્કીન કોલેજ જેવી જ હશે આ સંસ્થાની હદમાં કોઈપણ જાતના માદક પદાર્થો એલાઉ નથી જે સજજનો ઈન્ડીયન ટ્રાવેલીંગ ફેલોશીપ ધરાવે છે. તેઓને આ સગવડતાઓ બદલમાત્ર ૬ શીલીંગ એટલેકે રૂા.૧૨૦૦ દર અઠવાડીયે ચાર્જરૂપે લેવામાં આવશે અને અન્ય નિવાસીઓ માટે આ ચાર્જ જે ખાસ શરતો અને નિયમો નકકી કરાય તે પ્રમાણે રહેશે.

આ સગવડતાનો લાભ લેવા ઈચ્છતા અરજીકર્તાઓએ નીચે સહી કરનાર સાથે પત્ર વ્યવહાર કરવો.[2]

(સહીઃ શ્યામજી કૃષ્ણવર્મા)

ઈન્ડીયન ટ્રાવેલીગ ફેલોશીપઃ

મદ્રાસ અને પંજાબ યુનિવર્સિટીના જે વિદ્યાર્થીઓ વિવિધ પરીક્ષાઓમાં ઉચ્ચતમ ગુણો સાથે ૧૯૦૫ માં પાસ થયેલ હોય તેવા અને આ યોજનાની જાહેરાતના ક્રમ નં.૧ અને ૨ ની શરતોને આધીન (જે જાહેરાત ઈન્ડીયન સોશીયોલોજીસ્ટના જાન્યુ. ૧૯૦૫ ના અંકમા પ્રસિધ્ધ થઈ હતી.) પાત્રતા ધરાવતા હોય તેવા યોગ્ય ઉમેદવાર જે ઉચ્ચતર અભ્યાસ કરવા માગતા હોય અથવા ખાસ કારકિર્દી

* Lecturer, N.M. Bhuta Arts & Commerce College, Shihor

ઘડવા માંગતા હોય અને આ યોજનાનો લાભ લેવા માંગતા હોય તેવા ભારતીયોને ૩૧ જાન્યુઆરી ૧૯૦૬ પહેલા મળી જાય તે રીતે અરજીઓ કરવા વિનંતી.

નીચે સહી કરનાર મુંબઈ, કલકતા અને અલ્હાબાદ યુનિવર્સિટીના ગ્રેજયુએટસ પાસેથી અને બીજા ભારતીય રાજયોમાથી યોગ્ય લાયકાત ધરાવતા ઉમેદવારો પાસેથી આ યોજનાની કલમ–૩ ને આધીન રહી આવીજ અરજીઓ માંગવામાં આવે છે વધુ માહિતી માટે નીચે સહી કરનાર સાથે પત્ર વ્યવહાર કરવો.[3]

(સહી. શ્યામજી કૃષ્ણવર્મા)

ધ ઈન્ડીયન હોમરૂલ સોસાયટીઃ

ઓલીકેશન ફોર્મ

'ધ ઈન્ડીયન હોમરૂલ સોસાયટી' ના સભ્યપદ અને ધ ઈન્ડીયન સોશીયોલોજીસ્ટની મફત ડીલેવરી સાથેની કુલ ફીઉ સેન્ટ અથવા રૂા. ૧–૫–૦ વાર્ષિક.

મને ઉપર જણાવેલી સોસાયટીના ઉદેશોમા પુરી સહાનુભૂતિ છે અને હું આ સોસાયટીનો સભ્ય બનવા ઈચ્છું છું આ સાથે હું ૩ શિલીંગની ફી સામેલ કરું છું.

સહી.....

સરનામુ.....

નોમીનેશન (વારસદાર) [4]

1)

2)

આ નોંધણીની અરજી સેક્રેટરી ૮/૦ શ્યામજી કૃષ્ણવર્મા ૭, કવીન્સવુડ એવન્યુ, હાયગેટ, લંડન (નોર્થ) ના નામે મોકલવી.

યોજના :

[1] નીચે સહી કરનાર છ ટ્રાવેલીંગ ફેલોશીપ શરૂ કરવા માગે છે કે જેનું દરેક માટેનું મૂલ્ય રૂા. ૨૦૦૦/– (બે હજાર) હશે અને જે ભારતીય ગ્રેજયુએટને તેમનું ઈગ્લેન્ડમાં શિક્ષણ પુરુ કરવામાં અથવા સ્વતંત્ર ધંધાકીય કારકિર્દી ઘડવામાં મદદરૂપ થશે જો ઉપરોકત યોગ્ય ઉમેદવાર ન મળે તો યોગ્યતા ધરાવતા અન્ય ઉમેદવારોને તે ફાળવવામાં આવશે.

[2] ઉપરોકત છ માંથી પાંચ ફેલોશીપ 'હર્બટ' સ્પેન્સર ઈન્ડીયન ફેલોશીપ' ના નામથી ઓળખાશે. અને છઠ્ઠી ફેલોશીપ જયારે પણ પંજાબ યુનિવર્સિટીના ભારતીય વિદ્યાર્થીને ફાળવાય ત્યારે તે 'સ્વામી દયાનંદ સરસ્વતી ફેલોશીપ' તરીકે ઓળખાશે

[3] વર્ષ ૧૯૦૫ માં બે ફેલોશીપ આપવામાં આવશે અને તેટલી જ સંખ્યામાં પછીના વર્ષે ૧૯૦૬ માં અને ત્યારબાદ ૧૯૦૭ માં નીચેની શરતોએ અપાશે પસંદગીનો ક્રમ ૧૯૦૫ મુંબઈ અને કલકત્તા, ૧૯૦૬ મદ્રાસ અને પંજાબ અને૧૯૦૭ માં અલ્હાબાદ અને મુંબઈ આ રીતે આગળ ઉપર રોટેશનમાં.[5]

શરતોઃ

[1] એવા ભારતીયો કે જે મુંબઈ, કલકતા, મદ્રાસ, પંજાબ અને અલ્હાબાદ યુનિવર્સિટીઓ માંથી ઉચ્ચ ગુણાક સાથે બી.એ.પાસ થયેલ હોય તેવા વિદ્યાર્થીઓ આ ફેલોશીપ માટે લાયક ગણાશે.

[2] જો બી.એ.ના યોગ્ય ઉમેદવાર પ્રાપ્ત ન થાય તો ફેલોશીપ એલ.એલ. બી., એલ.એમ. એન્ડ સી. અથવા એમ.બી, બી. એસ.સી., એલ. સી.ઈ. અથવા બી.સી.ઈ. પરીક્ષા ઉચ્ચ ગુણાંક સાથે પાસ થયેલ ઉમેદવારોને ફાળવવામાં આવશે.

[3] જો આમ છતાં કોઈ જગ્યા ખાલી રહે તો કોઈપણ કારણસર નીચે સહી કરનાર અન્ય કોઈપણ લાયકાત ઉમેદવારને પસંદ કરવા સ્વતંત્ર છે.

[4] પસંદ થયેલા ઉમેદવારે તેની પસંદગીના સમયથી બે મહિનાના સમયમાં ભારત છોડી ઈગ્લેન્ડ જવા રવાના થવું પડશે. અને ભારત છોડયાની તારીખથી પૂરા બે વર્ષ ઈગ્લેન્ડ કે યુરોપ કે અમેરિકામાં રહેવું પડશે અને તેમાંથી દરેક વર્ષના ઓછામાં ઓછા છ માસ માટે ઈગ્લેન્ડના કોઈ ઘર કે હોસ્ટેલમાં રહેવુ પડશે નીચે સહી કર્તા મંજૂર કરી હોય તેવી બોર્ડીંગ કે લોજમાં દર અઠવાડીયા રૂા.૧૨–૦૦ (૧૬ શિલીંગ) ની જોગવાઈ કરવામાં આવશે ઉમેદવાર પોતાની પસંદગીની કોઈપણ કારકિર્દી પસંદ કરીશકશે.

[5] ઉપરોકત નિયમ નં.૫ નું ઉલ્લંઘનના કિસ્સામાં ફેલોશીપ એ જ કારણે રદબાતલ થશે. ઉમેદવારનું સ્ટાઈફન્ડ પાંચ અર્ધવાર્ષિક હપ્તામાં આપવામાં આવશે. અને સૌ પ્રથમ હપ્તો તેને ભારત છોડતા પહેલા એક અઠવાડિયા અગાઉ આપવામાં આવશે.

[6] દરેક ઉમેદવાર કે જે ફેલોશીપનો લાભ લેવા માગતો હોય તેણે ૧૮ વર્ષની ઉમર પૂરી કરેલ હોવી જોઈએ. અને સોગંદનામું આપવુ પડશે કે તે ભારત પાછા ફર્યા પછી બ્રિટીશ સરકાર (અંગ્રેજ સરકાર) હસ્તકની કોઈપણ જગ્યા, નોકરી કે સેવામાં સવેતન કે અન્ય સેવામાં જોડાશે નહી.[6]

[7] વધુમાં તે નીચે સહી કરનારને એ લેખિત ખાતરી આપશે કે આ એગ્રીમેન્ટની તારીખથી શરૂ કરીને દશ વર્ષના ગાળ ામાં તે આ રકમ રૂા. ૨૦૦૦/– (ફેલોશીપની રકમ) દર વર્ષે ૪ ટકાના સાદા વ્યાજ સાથે નીચે સહી કરનારને અથવા તે જેને પોતાના વતી નિયુકત કરે તે વ્યકિત કે વ્યકિતઓને પરત કરશે તેમજ ઉપરોકત રકમ સિવાયની જોકોઈ આવી રકમ અપાય હોય તો તે પણ આજ રીતે પરત કરશે.

[8] આ બધી રકમ જે આ રીતે અપાશે અને પરત આવશે તે વધારા સાથે ફેલોશીપના હેતુ માટે ફંડમા સમાવેશ કરાશે અને સમયાંતરે તેમા વધારો થશે અને અપાશે.

[9] આ એગ્રીમેન્ટમાં એવી પણ જોગવાઈ રહેશે જે દરેક ઉમેદવારે ભારત છોડતા પહેલા પોતાના જીવન ઉપર રૂા. ૫૦૦૦/– થી વધુ નહીં તેવો વિમો ઉતારાવેલો હોવો જોઈએ અને તેનું પ્રિમીયમ ઉમેદવારે ભરવાનું રહેશે અને આવા વિમાની પોલીસીઅને જરૂરી કાગળો તથા વિમાની પહોંચો નીચે સહી કરનારે સુપ્રત કરવાના રહેશે જે તે ઉમેદવારને અપાયેલી

રકમની સિકયોરીટી રૂપે રાખવામાં આવશે જો નાણા પુરા કરવાના સમયગાળા પહેલા જો ઉમેદવારનું મૃત્યુ થાય તો તેવા સંજોગોમાં નીચે સહી કરનારા અથવા તેના વતી નિયુકત વ્યકિત કે વ્યકિતઓ વિમાની રકમમાંથી પોતાના નીકળ તા નાણા લઈ અને ત્યાર બાદની રકમ જો વધતી હશે તો જે તે ઉમેદવારના સગા કે વારસને સુપરત કરશે જો ઉમેદવાર તેની ફેલોશીપની રકમ ઉપરોકત સમય પહેલા પરત કરશે તો તેની આ પોલીસી તેને પરત આપવામાં આવશે.[7]

[10] ત્રણ વર્ષના સમય પહેલા જો આ યોજના સફળ સાબિત થાય તો નીચે સહી કરનાર તેને કાયમી ધોરણે ચાલુ રહેતી સ્કીમમા જરૂરી ફંડ સાથે શરૂ રાખશે.

આ યોજનાનો લાભ લેવા ઈચ્છતા ઉમેદવારે તેમની ઉમરના રાષ્ટ્રીયતા, શિક્ષણ વગેરેના આધારો સાથે જરૂરી નકલો જોડી નીચેના સરનામે અરજી કરવી.

બેરિસ્ટર સરદારસિંહ રાણાની છાત્રવૃતિની જાહેરાતઃ ડીસેમ્બરનો અંક સ્વદેશાભિમાની છાત્રવૃતિઓ છવાયેલો રહ્યો ? એડમંડ બર્ક અને ગણેશ વાસુદેવ જોશીના નામે બે વ્યાખ્યાન માળાઓની ઘોષણા કરવામાં આવી બેરિસ્ટર સરદારસિંહ રાણાએ (હોમરૂલ સોસાયટીના ઉપાધ્યક્ષ) ત્રણ ફેલોશિપની જાણ કરતો પત્ર લખ્યો તે આ અંકમાં છપાયો છે. ૧૨, નવેમ્બર, ૧૯૦૫ ના પારિસથી લખાયેલા પત્રમાં 'રાણા પ્રતાપસિંહ' 'શિવાજી મહારાજ' અને ' કોઈ એક ઉદારવાવાદી મુસ્લિમ ચિંતક' ના નામની છાત્રવૃતિઓનો નિદે શ છે. સરદારસિંહ રાણાએ લંડનની ઈન્ડિયન સોસાયટીના પ્રમુખને એક પત્ર લખીને જણાવ્યું. કે ગોખલે જેવા બ્રિટિશ સન્માનોને ચાલુ રાખનાર નેતાના માનમાં ભોજન સમારંભ અનુચિત હતો.[9]

સરદારસિંહ રાણાની ત્રીજી છાત્રવૃતિને અકબરનું નામ અપાયાની માહિતી આ અંકમાં મળે છે.

એપ્રિલના અંકમાં છાત્રવૃતિ મેળવનારાઓની યાદી આપવામાં આવી. વિસમી સદીના પહેલા દશકામા જે જૂવાન ભારતીયો અભ્યાસના નિમિતે ઈંગ્લેન્ડ ગયા તેમાંના ઘણાખરા 'ઈન્ડિયા હાઉસ' માં ક્રાંતિની દિક્ષા પામ્યા. વીર સાવરકર અને મદનલાલ ધીંગરા આમાં મળે છે. આ ર્દષ્ટિએ સંપૂર્ણ યાદી રસપ્રદ થઈ પડશે.

[1] **હર્બર્ટ સ્પેન્સર ફેલોશિપ** :–પરમનાથ ચૈટરજી. કલકતા

[2] **સ્વામી દયાનંદ ફેલોશિપ** :– મોઈનુદિન અહમદ, અલ્હાબાદ, તંત્રીઃ ધ ઈન્સ્ટિટયુટ ગેઝેટ' અલીગઢ

[3] **રાણા પ્રતાપ ફેલોશિપ** :– કન્હૈયાલાલ વર્મા, ઉદયપુર

[4] **શિવાજી ફેલોશિપ** :–વિનાયક દામોદર સાવરકર, તંત્રીઃ– વિહારી, મુંબઈ

[5] **અકબર ફેલોશિપ** :– પ્રભાત સી.એન. કલકતા

[6] **ભારતીય વ્યાખ્યાન માળાઓ** :– એડમંડ બર્ક, લેકચરશિપઃ આર.જી. પ્રધાન, મુંબઈ

ગણેશ વાસુદેવ જોશી લેકચરશિપઃ– વિનાયક નારાયણ મનોહર, મુંબઈ,

સ્વદેશી ઉદ્યોગના આવાર્ડક

આ ઉપરાંત અન્ય માટે 'ઈચ્છા' વ્યકત કરાઈ તે એમ.એન. દત, એન.સેન, દલપતરામ ઈચ્છારામ પાઠક, યુગદત, અક્ષયકુમાર રાય, કે. સોમનાથ, ટી.બી. ભાનગે, એલ.એમ.રાય, એસ.આર.ભાગવત, હેમચંદ્ર બેનરજી, સતીષચંદ્ર સેન, કાર્તિકચરણ નિયોગી, હરિ ચંદ્ર તાલચીકર, મન્મથનાથ ચેટરજી, પંચાનન ઘોષણ, એન.સી.મહેશ.[10]

વામન જી.દેસાઈ, ઈન્દ્ર માધવ મલિક, રઘુવીર પ્રસાદ ખરે, બાપુરાવ રામચંદ્ર અવતે, હરિદાસ બોઝ, જે. સજાણા, એમ.એસ.માસ્ટર, જે.કે.દાસ ગુપ્તા, સુરેશ સી. નિયોગી, ભીમરાવ, હીરાલાલસુદ, હરિદાસ બોઝ, દેવીપ્રસાદ શુકલ, એમ.શંકર નારાયણ, તલમાઝહુસેન, મનોહરલાલ, આર.એન. આગસકર, હેમાંગનાથ બેનરજી, રતનજી સરદેશજી, એસ.એમ.મહેમુદ, છોટુરામ, નરેન્દ્ર નાથ બોઝ, એ. રામારાવ, કે.એમ.પારઘી, એસ.ચૈલૈયા. સુબારાવ હલકટ, જી. રામે વર રાવ, શિવપ્રસાદ રાયજાદા, કે.ડબલ્યુ. રામાનાથ, એસ.સી.સેન, દેવવ્રત મુખરજી. [11]

પાદ નોંધ

⇨ Edited by Shyamaji Krishna Varma.M.A. (Oxon) 'Queen' s wood Avenue., Hizzte,London, N.One Pennvy, Mothly The Indian Sociologist, May,1905 P.4

⇨ એજન. પૃ.4

⇨ એજન. પૃ.4

⇨ એજન પૃ.4

⇨ THE INDIAN SOCIOLOGIST, ફેબ્રુઆરી, 1905.P.4

⇨ એજન. પૃ.4

⇨ એજન પૃ.4

⇨ એજન. પૃ.4

⇨ પંડયા વિષ્ણુ. ડો.આરતી પંડયા, આઝાદી જંગનું પત્રકારત્વ, લંડનમા ઈન્ડિયન સોશિયોલોજીસ્ટ, પ્રકાશક, ડો.આરતી પંડયા, નૈસદ પ્રિન્ટર્સ, નારણપુરા, ગામ, અમદાવાદ પૃ.35

⇨ THE INDIAN SOCIOLOGIST V[l5|, 1906 P.1

⇨ એજન પૃ.1

* **Dr. S.A. Kureshi**

Arts [SOCIOLOGY]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 219 - 221
ISSN 2319 - 8168

સ્ત્રી સશકિતકરણ

ભારતીય સમાજમાં સ્ત્રીનું સ્થાન પુરુષની સરખામણીમાં નીચું રહેવા પામ્યુ છે. સ્વતંત્ર ભારતમાં બંધારણીય જોગવાઈઓ અને મહીલાઓની પુરુષ સમોવડી બનાવવા માટેની કાનૂની જોગવાઈ હોવા છતાં વર્તમાન સમયમાં પણ સ્ત્રી પુરુષ વચ્ચે અસમાનતાની સમસ્યા સ્પષ્ટ સ્વરૂપે જોવા મળે છે.

સ્ત્રી સશકિતકરણ સ્ત્રીશક્ષિણ તેમજ મહિલા જાગૃતિ અંગેના અનેકવિધ કાર્યક્રમો થયા હોવા છતાં સ્ત્રી દરજજામાં સુધારો જોવા મળતો નથી.

સ્ત્રી સશકતીકરણની સૌ પ્રથમ શરૂઆત ૧૯૮૫ માં મહિલા આંતરરાષ્ટ્રીય સંમેલન 'નેરોબી' માં થઈ હતી. સ્ત્રી સશકિતકરણનો મુખ્ય ઉદ્રેશ સ્ત્રીઓને પુરુષ સમકક્ષ, રાજકીય, શારીરિક, માનસિક, સામાજિક અને આર્થીક ક્ષેત્રોમાં કુટુંબ, સમુદાય સમાજ અને રાષ્ટ્રના સંદર્ભમાં નિર્ણય લેવાની સ્વાયતતા છે. ભારતમાં સ્ત્રી સશકિતકરણનો પ્રાથમિક ઉદેશ સ્ત્રીઓની સામાજિક આર્થીક સ્થિતિને સુધારવાનો છે. ભારતીય સ્વતંત્રતા સંગ્રામમાં સ્ત્રીઓની ભૂમિકાને આજે દેશ યાદ કરતો નથી. પરંતુ સત્ય એ છે કે કસ્તુરબા, કમલા નહેરું વગેરેએ ઘણા બધા દુઃખ સહન કરીને પુત્ર અને પતિનું મનોબળ વધાર્યુ હતું. ઝાંસીની રાણી લક્ષ્મીબાઈ, બેગમ હજરત મહલ, બેગમ નિતમહલ, મેડમ કામા, સરોજીની નાયડું, શ્રીમતી એની બેસન્ટ, ઈન્દીરાગાંધી, વગેરેના બલિદાનની કહાની આજ પણ ઈતિહાસની સાક્ષી પુરે છે. આ સંદર્ભમાં ડો.રમીલા થાપર જણાવે છે કે,

" મહિલાના સ્થાનમાં પરિવર્તન લાવવાની પ્રેરણા રાષ્ટ્રીય આંદોલન ધ્વારા થઈ આંદોલનની શરૂઆત ૧૯ મી સદીમા થઈ હતી. તેનો સામાજિક પ્રભાવ હજુ સુધી આપણા પર દેખાઈ રહયો છે. "

આમ છતાં આઝાદીના ૬૬–૬૭ વર્ષ પછી પણ સ્ત્રીઓના સામાજિક દરજજા અને આરોગ્યક્ષેત્રે સુધારો જણાતો નથી. એક અભ્યાસમાં જણાવ્યા અનુસાર ૫૦% સામાન્ય ૭૦% ગર્ભવતી મહિલાઓ અનેમિયા રોગથી પીડાય છે. ૨૫% માતા અપુરતા પોષણના કારણે સમય પહેલા બાળકોને જન્મ આપે છે. અર્થાત બંધારણક્ષેત્રે કાનૂની જોગવાઈ હોવા છતાં સ્ત્રીઓ વર્તમાનમાં પણ નિરક્ષર ભ્રૂણહત્યા માતાનું મૃત્યુ અત્યાચાર સ્ત્રી – પુરુષ અસમાનતા વગેરે સમસ્યાઓનો સામનો કરવો પડે છે.

- **ભારતમાં સ્ત્રી મતાધિકાર :–**

બ્રિટનની મહિલાઓને ૮૬ વર્ષની લાંબી લડાઈ બાદ ૧૯૧૮ માં મત દેવાનો અધિકાર પ્રાપ્ત થયો હતો પરંતુ ભારતમાં સ્ત્રીને મત દેવાનો અધિકાર ૧૯૧૯ માં પ્રાપ્ત થયો અને સ્વતંત્ર અધિકાર ૧૯૨૬ માં મળ્યો જેના શ્રેય ભારત પ્રેમી, વિદેશી મહિલા શ્રીમતી માર્ગરેટને જાય છે. સાથે સાથે ચુંટણીમાં ભાગ લેવા માટે બે મહિલા કમલાદેવી અને મુતુલક્ષ્મીને ૧૯૨૬ માં ઉભા કરાયા અને ૧૯૫૦ માં ભારતમાં સ્ત્રીઓને સંવિધાનમાં સમાનતા અધિકારો પ્રાપ્ત થયા.

મહિલા આર્થિક વિકાસના કાર્યક્રમો :–

જવાહર રોજગાર યોજના (J.R.U) એપ્રીલ ૧૯૮૯ અનામત આવાસન યોજના E.A.S, ૧૯૯૩ માં મહિલા અને બાળવિકાસ કાર્યક્રમJ.R.D.P૧૯૮૨–૮૩ માં ૫૦ જિલ્લામાં લાગુ પાડવામાં આવ્યો. રાષ્ટ્રીય સામાજિક સહાયતા કાર્યક્રમ (N.S.D.P.) કાર્યક્રમ ૧૫ ઓગષ્ટ ૧૯૫૫ માં શરૂઆત કરવામાં આવી જેમાં રાષ્ટ્રીય વૃધ્ધાવસ્થા પેન્શન યોજના, રાષ્ટ્રીય પરિવાર લાભ યોજના, રાષ્ટ્રીય પ્રસવ લાભ યોજના જેવા કાર્યક્રમોની શરૂઆત કરવામાં આવી.

- **આર્થિક વિકાસની વિશિષ્ટ યોજના :** –

"અપની બેટી અપના ધન" હરીયાણા સરકારે મહાત્મા ગાંધીના ૧૨૫ માં જન્મ દિવસે ૨ ઓકટોમ્બર ૧૯૯૪ માં આપની બેટી અપના ધનની શરૂઆત કરી આ નવા રચનાત્મક અભિગમને કારણે રાજય અને રાષ્ટ્રને ઘણો લાભ થશે જેમાં જાતી સંતુલન કરવી અને છોકરી અને મા બંનેની પતિષ્ઠા કાયમી રહે તેવા હેતુથી આ યોજના અમલમાં મુકવામાં આવી.

- **લગ્નક્ષેત્રે સ્ત્રીનો દરજજો :** –

માનવ સમાજ જીવનમાં લગ્નક્ષેત્રે અનેકવિધ કાયદાઓ જેવા કે હિન્દુ મેરેજ એકટ (૧૯૫૫) કાયદા ધ્વારા હિન્દુ સમાજમાં સ્ત્રી– પુરુષને સમકક્ષ દરજજો આપવામાં આવ્યો છે. મુસ્લીમ સમાજમાં મુસ્લીમ લગ્નના નિયમો (૧૯૫૫) પારસી લગ્નના નિયમો (૧૯૩૬) આદીવાસી લગ્નના નિયમો વગેરે

*** Head, Sociology Department, S.B. Mahila Arts College, Himmatnagar**

ધ્વારા ભારતીય સમાજમાં મહિલાઓને પુરુષ સમકક્ષ કૌટુંબિક જીવનમાં દરજ્જો આપવામાં આવ્યો છે.

મહિલાઓ પર થતા અત્યાચારો દુર કરવા માટે અનેકવિધ કાયદા નિયમો અમલી બનાવવામાં આવ્યા છે. જેમ કે મહિલાઓના વ્યભિચાર – અનૈતીક વ્યાપાર નિષેધક નિયમ (૧૯૫૬–૧૯૫૮) દહેજ પ્રતિબંધક કાનુન ૧૯૬૧ રાજકીય ક્ષેત્રે મહિલાઓને ૩૩% અનામતની જોગવાઈ , મહિલા સશકિતકરણ અંગેના બંધારણીય અધિકારો વગેરે મહિલા સશકિતકરણની જાગૃતિ લાવવા માટેના પ્રયાસો હાથ ધરવામાં આવ્યા છે. આમ છતાં Indian Institute Of Opinion ના સર્વેક્ષણમાં મહિલાઓના પ્રતિનિધિત્વ અંગેના અધિકારો આપવામાં સંતોષપ્રદ જણાવ્યુ નથી.

• માનવ અધિકાર સ્ત્રીના સંદર્ભમાં જોઈએ તો સ્ત્રી પણ એક માનવી છે. સમાજમાં તેનું પણ મહત્વનું સ્થાન છે. જેના વગર સમાજ સંભવ નથી. " Life is a beautiful " તેથી જીવન આ વિશ્વાસે જીવવું જોઈએ.

"It was not only one, that there were peple who suffered More than I am possible imagine. I am so lucky. For all the Terrible things that happen, you learn that Life goes on and that if you are fortunate enough to have been given a second change , you have to make the most of a new life"

- **" The Sanday Times"** એક શાયર કહે છે તેમ , નશેમન પર નશેમન ઈસ તરહ , તામીર (નિર્માણ) કરતા જા, કિ બિજલીયા ગિરતે ગિરતે, ખુદ હી બેજાર (હતાશ) હો જાય "

વર્તમાન આઈ.ટી. યુગમાં મહિલાઓ પુરુષ સમકક્ષ દરેક ક્ષેત્રમાં સાહસીક પ્રવૃતિ કરીને રાષ્ટ્રની પ્રગતી – પરીવર્તનમાં મહિલાનું યોગદાન આપી રહી છે. અને પુરુષ પાસેથી પોતાના અધિકારો માંગતી થઈ છે.

• ભારતીય નારી વિકાસ યોજના : –

વિશ્વા મહિલા સંમેલન સપ્ટેમ્બર ૧૮૮૫ માં નારી વિકાસ યોજના ભારત સરકારે બનાવી મહિલા રાષ્ટ્રીય આયોગની અધ્યક્ષ શ્રીમતિ મોરીની ગીરીનો મત નોંધ છે કે ,

" મહિલા જયાં સુધી પોતાના અધિકારોની સામે સંઘર્ષ નહી કરે ત્યાં સુધી પુરુષ સમાજ તેને કંઈ નહી આપે"

– આંતર રાષ્ટ્રીય મહિલા વર્ષ સંયુકત રાષ્ટ્ર ધ્વારા આંતરરાષ્ટ્રીય મહિલા વર્ષની સ્થાપના ૧૯૭૫ માં થઈ શા માટે થઈ? શુ સ્ત્રીને ઘરમાં બીજા નાગરિક વ્યકિત તરીકે સમાજતા હતાં એટલા માટે? પુરુષને સબળ થઈને વિશ્વશાંતિ અને સમૃધ્ધીના લીધે સંઘર્ષ કરવો પડે છે. તો શાંતિમાં સ્ત્રીનો સહયોગ જરૂરી છે. આ નગ્ન સત્યએ સંયુકત રાષ્ટ્રસંઘના પુરુષ માનવ સમાજને સમજમાં આવી ગયુ હશે.

• આંતરષ્ટ્રીય મહિલા વર્ષના કાર્યક્રમો : – ૧૯૭૫

ભારતમાં આંતર રાષ્ટ્રીય મહિલા વર્ષમાં મહિલા વ્યકિતત્વ વિકાસ સામાજિક સ્થિતિની સુધારણા આર્થીક સ્વાવલંબન ની સમસ્યાઓનું નિવારણના થોડા કાર્યક્રમો નકકી થયા. જેમાં મહિલા સમ્માન અને સમૃધ્ધી છે. જેમ કે શરાબ બંધી, અનિવાર્ય શિક્ષા, લગ્ન માટે સીવીલ કોડ, દહેજ પ્રથા, બાળલગ્ન, આત્મનિર્ભરતા, શાસન વ્યવસ્થામાં પ્રતિનિધિત્વના અંતર્ગત પ્રથમ આંતર રાષ્ટ્રીય વિશ્વ મહિલા સંમેલન મેકસીકો (૧૯૭૫) દ્વિતીય ડેનમાર્ક (૧૯૮૦) તૃતીય નેરોબી(૧૯૮૫) ચોથું ચીન(૧૯૯૫) માં યોજાયું હતું. જેમાં અગામી પંચવર્ષીય ગુણાત્મક સંખ્યાત્મક નિર્ધારણ, રાજનિતિ પ્રક્રિયામાં મહિલા ભાગીદારી સંચાર માધ્યમો ધ્વારા રજુ થતી સમસ્યાની રીતનું નિરીક્ષણ કરનારી તેને સુધારવું સરકારી બિનસરકારી સંગઠનનો સહયોગ સ્થાપીત કરવો સામાજીક આર્થીક વિકાસ ધ્વારા શારીરિક માનસીક સ્વાસ્થ્ય સેવા ઉપલબ્ધ કરાવવી શૈક્ષણિક દરજ્જામાં સમાનતા અપાવવી વગેરે બાબતો બધા જ દેશોએ મહિલાની સ્થિતી સુધારવા પ્રયત્નો કર્યા છે. આમ છતાં ઘણા બધા ક્ષેત્રોમાં વર્તમાન સમયમાં અસમાનતા જોવા મળે છે.

' નેપોલીયન બોનાપાર્ટ કહે છે કે ,
''મુજે એક યોગ્ય માતા દો ,
મે તુમ્હે યોગ્ય રાષ્ટ્ર દુંગા.''

આ સંદર્ભમાં કહી શકાય કે દેશ અને સમાજના નવ નિર્માણમાં મહિલાઓની ભાગીદારી અતિ આવશ્યક છે. પુરુષોમાં જોવા મળતી પ્રેરણા શકિત અને ઉષ્મા શકિતના પાયામાં નારી શકિત રહેલી છે. ઈ.સ. ૧૯૭૫ માં ૧૯ જુન, ૨ , જુલાઈ પ્રથમ આંતર રાષ્ટ્રીય મહિલા સંમેલનમાં પ્રથમવાર સંયુકત રાષ્ટ્ર સંઘે મહિલા કલ્યાણ હેતુંનું આયોજન કર્યુ હતું સમાજની પ્રગતી અને વિશ્વશાંતિ માટે મહિલા શિક્ષણ મહિલા જાગૃતી લાવવાના પ્રયાસો સ્વામી વિવેકાનંદ, સ્વામી દયાનંદ સરસ્વતી, રાજા રામમોહનરાય ,શ્વરચંદ્ર વિદ્યાસાગર, મહાત્મા ગાંધીજી, સરોજીની નાયડું વગેરેઓએ પ્રયાસો કર્યા હતાં. જેમાં મહિલા સશકિતકરણની પ્રક્રિયાને વેગ મળેલો જોવા મળે છે. જેમા સરકારી અને સ્વૈચ્છિક સંગઠનોના પ્રયાસોની પણ અગ્રીમતા રહેલી છે. પંચાયતી રાજનો ૭૩ ના બંધારણીય સુધારાઓને પણ મહિલાઓના તૃતીય સ્થાનની અનામતની જોગવાઈ કરેલી છે. જેના લીધે મહિલા આર્થીક સશકિતકરણને પ્રોત્સાહન મળ્યુ છે. જેના અંતર્ગત મહિલા સ્વયમ સિધ્ધ કાર્યક્રમ ઈ.સ. ૨૦૦૧ માં શરૂ કર્યા જેના અંતર્ગત ૧૧૬.૩૦ કરોડ રૂપિયા ફાળવવામાં આવ્યા હતાં. જેમાં મહિલા રોજગારી,રહેઠાણ,આરોગ્ય મહિલાઓને સ્વાવલંબી બનાવવી માતા બાળકોના કલ્યાણ કેન્દ્રની જોગવાઈ કરવામાં આવી.

ટુંકમાં સરકાર અને સ્વૈચ્છિક સંગઠનો ધ્વારા મહિલા સશકિતકરણ

માટે અનેક વિધ પ્રયાસો કરવામાં આવ્યા છે. આ પ્રયાસોના ફળ સ્વરૂપે સ્ત્રીઓના દરજજામાં સ્ત્રી સશકિતકરણનો નોંધપાત્ર વિકાસ અને પ્રશંસનીય કામગીરી થયેલી જોવા મળે છે. આ ઉપરાંત મહિલાએ સ્વયમ સશકિતકરણ માટે જાગૃત બનવું જોઈએ .

- **સુચનો :** –

(૧) મહિલાઓએ પોતાનો સામાજિક દરજજો ટકાવી રાખવા માટે સતત પ્રયત્નશીલ અને જાગૃત રહેવુ જોઈએ.

(૨) બંધારણીય અધિકાર કાયદાઓનું દરેક ક્ષેત્રમાં મહિલાઓ ઉપયોગ કરતી થાય તેવા કાર્યક્રમોનું આયોજન કરવું જોઈએ.

(૩) સમાજમાં ભૃણ હત્યામાં નકારાત્મક ભાવનાઓ દર્શાવી નિર્ણય લેવામાં સાહસીક બની જીવન રક્ષણ માટે સાહસીક પગલાઓ લેવા જરૂરી છે.

(૪) શિક્ષણમાં છોકરા– છોકરીઓનો ભેદભાવ રાખવો નહી. કારણ કે પુત્રોને જીવનમાં શિક્ષિત પત્ની, પુત્રીત્યારે જ મળે છે. જયારે સ્ત્રી શિક્ષણને પ્રોત્સાહન અપાય.

(૫) રાજય સરકારની નાના કુટુંબની અનિવાર્યતા લાગુ પાડવી જોઈએ કારણ કે નાના કુટુંબમાં વધુ પડતા પ્રયાસો સ્ત્રીને ભૃણહત્યા તરફ લઈ જાય છે.

(૬) દેશ અને સમાજના નવ નિર્માણમાં વધુ ને વધુ મહિલાની ભાગીદારી હોવી જોઈએ.

(૭) મહિલાના વ્યકિતત્વ વિકાસમાં હકારાત્મક, રચનાત્મક શિક્ષણનું સ્થાન હોવુ જોઈએ.

સમગ્ર રીતે જોઈએ તો મહિલાઓનું સ્થાન એમાંથી ઉદભવતી સમસ્યા અને આ સંદર્ભમાં સ્ત્રીનું સ્થાન ટકાવી રાખવા અને વિકાસ કરવા એટલે મહિલા સશિકિતકરણ આ વર્તમાન સમયની ગંભીર ચુનોતી છે. જેના માટે સરકાર અને સ્વૈચ્છિક સંસ્થાઓએ અનેક પ્રયાસો કર્યા છે. તેમાં સ્ત્રીઓએ પણ જાગૃત બનવુ જોઈએ.

સંદર્ભ સૂચિ

- ⇨ સ્ત્રી અને સમાજ – એ.જી.શાહ – જે.કે.દવે (અનડા પ્રકાશન).
- ⇨ સ્ત્રીનો બદલાતો દરજજો અને ભૂમિકા– ડો.કલ્પના શાહ– યુનિવર્સિટી ગ્રથ નિર્માણબોર્ડ, ગુજરાત રાજય, અમદાવાદ.
- ⇨ મહિલાઓ અને કાયદો – પ્રો.બી.એચ.ગાંધી– યુનિવર્સિટી ગ્રથ નિર્માણબોર્ડ, ગુજરાત રાજય, અમદાવાદ.
- ⇨ ભારતમાં સ્ત્રીઓનો દરજજો – નીરા દેસાઈ – ભગવતી પ્રકાશન– અમદાવાદ.
- ⇨ જાની બળવંત (૨૦૦૬) કન્યા કેળવણી વિમર્શ, અમદાવાદ, : પાર્શ્વ પબ્લીકેશન.

* Dr. B.M. Gohel ** J.B. Parmar

Arts [LIB. & INFO. SCI.]
Research Zone India
Vol. 2 Issue - (3)
June - 2014 Page - 222 - 224
ISSN 2319 - 8168

]jayaogktaAaorosayakmahaivVaalayaga`MqalaYa

*pa`stavaNa:
iSxNaAmaavaTaInaUBUtaJ#yatamaaMTAkJ#yataCo.
MmahaivVaalayaAo]caiSxNapa`tkvamaaTomaa`paqsapaNaCo.
maQyaikiSxNapUNa-qayabad]caiSxNamaaNsaaMtugaI
ivVaqIAomahaivVaalayaMpa`vaSmaaNCo.mahaivVaalayaA]ca
iSxNaMmaaTkoSC,caMkoYapaNyaoKvaSo.]caiSxNa
vyaikatmaPaNaGaTanaopayaaCoAnaoAnasaMgaiknvaSa
saQanaMsahyakrNaCo.iSxNapa`tkvamaaAiQkarsaO
kaMpnaolaCo,AnaoAqaI.Tkvyaktaonaapsa&anapa`tkTpatanaovaSkITkCoAnaoAnaBaNaI
SkCo.
kaMkivayaaMvaSTaRAnaoMDNapUvkaMBayasaaISAta
samaanyaTomahaivVaalayakaqaIqataqayaCo.AiMvVaqI-
AsapaMsaMsaQaNaoMSaaMkCo,naMmaaMSIkCo,pataaMI
suYptaSaktaonaopNaharlavaCo.ivVaqI-AonaMmaola
SaktaonaMpa`SnaaoiMpayaCo,pataaMnaMmaolaAvDtaano
sUcanaonkya-tarfvaLavaaMgaonaMGDtaraMya-mahaivVaa
gaMqalayaMqatMayaCo.
mahaivVaaMyaMtaraBayasa`maaNaUpayaogaIsaMga
maTokaMkaonsapa`kaaraMmaaiEtaqayaAgaMqalayaonaM
AvSykCo.iSxNaaMSaaonaivVaalayaaMQayaonapUNa-
kvaMaTomahaivVaalayagaMqalayaMdhrabaCo.ivVaqI-sayaM
ivVaSaoYaaonaicarSaIlabaMdtaonaAqairkiSxNamaaoTaCo,
tmaonaivVaqIAonaPramaaoTkxaNaMpadtaMAtmaBa-ta
sadtakrIskotmaaoTaMo]naesalatomahaivVaalayagaMqalaya
Co,AnaoAmaaoTkmahaivVaalayaMAkSmaPUgaMqalayonaM
AvSykCo.]caiSxNaivVaqI-AonaBaivSyonaMtarfAgUla
vaQarvaaMsahyakrNaCo,AnaoAkaya-saMtaapUNa-kayatao
gaMqalayaMTkaUJ#ICo.

*mahaivVaalayagaMqalayaonaAQaunaAkrNaonaoyaKyaAo:-
mahaivVaalayagaMqalayaonaAQaunaAkrNa:
mahaivVaalayaSaOMdXyaonao-nakaya-invtakvaaMtugaI.o
gaMqalayaonaSqapnakvaaMAvCo,tmaonamahaivVaalayagaMqalaya
kvaaMAvCo.JmahaivVaalayaMsaMkLpnaMJAnaoAlaMbna,
tmaonaonaoMgahNaotmaonaApvaAtsvaAotmaonaMjayagkta-
AonaoTlokotyaMBayasaktaivVaqI-Ao,QapkovgaronaI
J#yatmaonaAnaMdpNaotmaonaMgaMqalayonamahaivVaalayagaMqalaya
kCo.
mahaivVaalayagaMqalayonaVyaKyaAo:
"A library established, maintained and administered by a college meet the needs of its students and faculty".
-Harrod's Librarians' Glossary
mahaivVaalayonaivVaqI-AonaAvSyktaonaMQyaanmaaTonaI
vyavSqaJ#yatapUNa-kvaMaTogaMqalayonaIsaMpUNa-kvaMaM
AvtaotaonaovdhvaonsmalamahaivVaalayonaMkvaMaM
AvtaodhyatomahaivVaalayagaMqalayokhIzkI.
mahaivVaalayagaMqalayonaTlaovaMgaMqalayokmaMkyaMdSa
mahaivVaalayonaMBayasqaonaonaMgkSmaMgalmaaivkisttkI
tomahaivVaalayonaMivVaqI-AonaAQaunaIkSaOlInk
AvSyktaonaopUrpUNa-kvaonaCo.'
TUMkmaaMTotao,sataMkvaaOApvaaMAvtaiSxNaMmaaTo
maaTopa`aptonaJ#yata]BavaCotaonaMsaMtaoYavaMjayo-
mahaivVaalayagaMqalayonaMkvaMaMAvCo.

*mahaivVaalayagaMqalayonaMmaaTonaAvSyktaAo:-
mahaivVaalayagaMqalayonaMmaaTonaAvSyktaAonaIcaonaMdaSaIkIkrNa.
1.ivVaqI-aonaBayask`maNaAsanapustkonaMjaLvaQaranaMvaonaa:
mahaivVaalayonaMBayasktaivVaqI-aonaAvSyktaonaBayask`maNaM
pustkonaupyaogIqavaonaMtaonaMmahaivVaalayagaMqalayonaM
rolaCo.koTlkvaramahaivVaalayonaMBayasktaivVaqI-
AonaAvSyktaonaMAiqkisttaMdaLavaqayCo,tmaonaAMtrIStIyaMk
laMbapustkonaMTlsavaonaMtaonaqLaqIMmahaivVaalayagaMqalaya
AvSyktaonaivVaqI-aonaBayask`maNaMsapustkonaupyaogIqavaonaMBayasa
kayaMmaMsahyatakrCo.
2.ivVaqI-aonaupyaogIMvyaMjanaMAyaivVaqI-aonaMkfkvaro:
ivVaqI-aonaMtaonaBayask`maNaMpustkonaMtaonaMdXyaMgaMqalayonaM
pustkonaMpa`tkaoMnaMu,tonaMjaLvaNaIyaMsaMgaRivVaqI-aonaM

* Asst. Librarian, M.K. Bhavnagar University, Bhavnagar
** Libratrian, Sir P.P. Institute of Science, Bhavnagar

pa\kaSta sahityasaMgaRIvaqI-Aonao Avaiva Aayaonao sMlaona
kTAonaonaonaa`yaqa`vaonaqMkaoDaogMqalayaonao
©

3.gMqalayaonaTvaonaonaonaSgaRIvaqI-Aonaqpaircaalkavaa:
nanaivaVlayaonaMvaonaonaonaonaMyaonaqpaZyaqpustkaoMpaUrNaonao
naqIparMtuqpaZyaqpustkaoqpaoSaMQonaAvSyaoyaqpustkaoqI
taqpivaBaonaonaoMkaonaMDIonaonaoqpaoSaqgaqnaonaivaVyaonaM
vaonaonavaMQaonaoMjaUgaqIonaMyaoC.AqpaustkaonaIgaZMqI
pustkaonaonaMtarivaVyaesaMQaIonaoSaonaovaMjaU.pustkaona
kaonaTparaqpa`kaonaI inaoSqpaeRAoivaVaqI-AonaqpaotaonaonaA
[icaqpustkaqpa`taikvaonaMvaQaoSayakaonaC.gMqalayaonaA
vyavasqpakaonaoMkaonaTaonaMvaMtarftaoQaonaonaMvaMjaU.
paMtuonaonaovyaonaonaMkaTaoSaonaBaoDaonaonaovaMjaU.kaotaonaonaI
paesaqpaIsaonaMkra`laovaonaonaivaVlayaonaonaesaBaAoStaunaMro.

4.paustkaqpa`tyaoAdBavaonaonaoMfica.JgRtaikvaI:
AaonaoTBaqgaonaMgMqalayaoMTaesaonaMvaonaonaMo]naitaraqIonaonaya
koJaU]jayaogMkaqpaotaonaIvaonaonaonaSgaRIvaqIvaQaoSayakaonaoMsaMgRhaonaonaMo]jayaogMkaTIkaqpaotaonaIsaMyaotaolaqpaotaonaI
vaonaonaonaSgaRIvaqIvaQaoSayakaonaoMsaMgRhaonaonaMo]jayaogMkaTI
kaqpaotaonaIsaMyaotaolaqpaotaqpaotaonaonaonaonaonaoMSaolaonaonaoMDaonaonaonaIkaqpaotaonaonaonaonaMgMqalayaonaqpaotaonaonaonaonaon

4.vaEyai@tkrNaAmaka pustakaalayaAMkaI vyavasqaa
Aaotaomaatapaivaiqa palabQataa AaOr vaEkiLpk
maaDyamaaMkaI jaanakarI.

5.tamaamavaEkiLpkmaaDyamaaMkaI jaanakarIkao
sqaaniyatvastau maaMkaI jaanakarIkao saMgaRiqat
kr sakto hOM.

6.ivaSlaoYaNaAtmak AaOr saaMiKyakIya AaMkD,aaoM
kao saMsaaiQat kr sakto hOM.

gaRMqaalayaaoM kao gaRMqaalayaaoM kI AavaSyakta
gaRMqaalayaaoM kI saMKyaa
gaRMqaalayaaoM kI saMrcanaa
gaRMqaalayaaoM kI saMcaalana

AaMkD,aaoM kao saMkilat kr sakto hOM.

1.ivaiBanna gaRMqaalayaaoM kao AavaSyak jaanakarI
AapvatarNa AaOr pasaar kr sakto hOM.

2.gaRMqaalayaaoM kao saMsaaQanaoM kao AavaMTana
ivaiQayaaoM kao saaJaa kr sakto hOM.

3.&aaMkD,aaoM kao saaMiKyakIya ivaSlaoYaNa kao
kvaaMTaoM kao AavaMkD,aaoM kao saaMiKyakIya
JaaMkI kao saMpaadIt kr sakto hOM.

4.ivaiBanna gaRMqaalayaaoM kao saMgaRnaaoM kao
kaya-kSalata kao baZ,aavaa dao sakto hOM.

saMdBa- sUcaI

- surOMdr, koAsa. ³1991´. saMdBa- pustakaalaya : saMgaRnaatmak AaOr saaMiKyakIya saMdBa-. navaIdlhI : Aosa. Aosa. pabalIkoSana. pa. 49.
- Harrod, Leonard M. ³1995´. Harrod's librarian's glossary. England : Gower, p. 163.
- Dhyani, Pushpa ³2002´.Glossarium of library and information science terms : English to Hindi. New Delhi : Ess Ess publication,p.15.
- iqvaarI, Aosa.Aoma. ³1999´. gaRMqaalayaAaosaMa, navaIdlhI : Aosa.Aosa.pabalIkoSana, pa. 57.
- Trehan, G. L. (1969´. College library management. New Delhi : Sterling, p.79.
- surOMdr, koAsa. ³1991´. saMdBa- pustakaalaya : saMgaRnaatmak AaOr saaMiKyakIya saMdBa-, navaIdlhI : Aosa.Aosa.pabalIkoSana, pa. 501-502.
- SaMkr, Ao. ³1992´. pustakaalaya ivaSlaoYaNa. dlhI : vaD-bauk hOlsa, pa. 26.

Contents

Research Zone India, Vol. II Issue -(3) III JUNE- 2014

SCIENCE

1 M.K. Gondaliya ⇨ Habit And Morphology Of Gel Grown Nickel Doped Potassium Hydrogen Tartrate Single Crystals

3 G.D. Vyas ⇨ Conceptual Framework Of Vedic Mathematics In Recent Education System, In India

6 R.L. Thadesar ⇨ Mathematicas And Art

9 R.P. Madhu, S.M. Thathagar ⇨ Is 'E Learning And M Learning' Are The Effective Education System For Up-Coming Education System

MEDICAL

11 Dr. G.S. Patel, Dr. P. Shah ⇨ An Experimental Analysis Of Homoeopathic Medicine (Arsenic Album) In The Growth, Development And Disease Capability In Plant (Calendula Officinalis)

AYURVEDA

15 A.K. Katariya ⇨ Ksharsutra In Fistula In Ano (Bhagandara)

COMMERCE

18 R.M. Parmar ⇨ Rural Entrepreneurs: Problems & Remedies To Solve

21 M.M. Goswami ⇨ Rainwater Harvesting In India

26 M.D. Vachhani ⇨ ગુજરાતમાં સામાજીક ક્ષેત્રોનો વિકાસ

30 G.A. Patel ⇨ In 21 Century: Entrepreneurship Challenges

33 B. Kamdar ⇨ Corporate Social Responsibility

36 V.B. Vala ⇨ Impact Of Advertisement On Students

39 T.S. Shaikh, J.D. Patel ⇨ Risk Management

43 P.M. Chapaneri ⇨ Analysis Of Cost Structure Of Aluminium Industry In India Precis

47 Akkata Pandya ⇨ પરંપરાગત વેપાર વ્યવસ્થા ઉપર આધુનિક મોલ કલ્ચરની અસર

50 Pratik Trivedi ⇨ A Mathematical Study On Marketing Management

RURAL

54 Dr. Hemu Jambukiya ⇨ S[r)bilki[n) (AY(tni[a¿yis: amdivid

57 P.M. Kherala ⇨ સામાજિક વિલુપ્ત : વિચરતી અને વિમુકત જાતિ

EDUCATION

60 D.D. Gohil ⇨ Äkuhý-Lkðlkk rðkÚkeoykuÃkhytøkúuSÔkfhýlkkt 'NOUN' yuf{{kxulkk C.A.I. (fBÃfoxhyrMkxuzRLMÙfplk) fkbot{Lkeyrkhfkhfikk: yuf«kkhurøkfyÇkMk

63 V.B. Chauhan ⇨ To Study The Effect Of Stress On Stress-Managementof Higher Secondary Students

66 Ranjana Devi ⇨ Proper Listening Habit In English Language Improves Speaking, Reading And Writing Skill In College Going Students: An Experimental Study

70 Dr. Ajay. Boricha ⇨ માધ્યમિક શિક્ષક – પ્રશિક્ષણ કોલેજના પ્રશિક્ષણાર્થીઓની સ્વ–કાર્ય સાધકતા

72 H. Prajapati ⇨ Technical Skills Of Teaching

74 M.N. Thadeshwar ⇨ Innovative Methods Of Teaching

EDUCATION		
77	B.G. Pandya	⇨ ઈન્ટરનેટ આધારિત આઠમા ધોરણના વિજ્ઞાનની પ્રશ્ન સંચયિકાની રચના અને યથાર્થીકરણ
ARTS		
79	J.V. Bhatt **(ECONOMICS)**	⇨ જિલ્લાની : ભાવનગર યુનિવર્સિટી
PHYSICAL EDUCATION		
81	Dr. P.M. Kasundra	⇨ Effectiveness Of Biofeedback And Autogenic Training On Reaction And Co-Ordination Time Of Tennis And Cricket Player
86	Dr. C.G. Jhala	⇨ Health Promotion During Aging
88	Dr. G.M. Patel	⇨ A Comparative Study Of Anthropometry Of National Level Players Of Karate, Judo And Wrestling
91	N.D. Chaudhari	⇨ Effect Of Selected Pilates Exercises On Body Composition Percentage Of Obese People
95	M.D. Bhatt	⇨ A Study In The Field Of Physical Fitness Of Students And Their Effects Through Multimedia Package Programme
98	Dr. B.K. Joshi	⇨ Effectiveness Of Biofeedback And Autogenic Training On Reaction And Co-Ordination Time Of Tennis And Cricket Player
102	A.D. Chaudhari	⇨ Effect Of Socio-Economi Status And Anxiety On The Performance Of Physical Eucation Studant
105	H.R. Pansuria	⇨ A Study of Diet And Health Related Habits of Professors of Colleges Affiliated to Veer Narmad South Gujarat University
107	V.S. Vakani	⇨ Physiology Of Yoga Poses
109	Akash Gohil	⇨ Importance Of Food Nutrition In Physical Education
111	Dr. Arjunsinh Rana	⇨ Concept Of Ayurvedic Body Types And Fitness
116	Hitaxi	⇨ Life Style Correction And Social Wellness Through Yoga
119	V.G. Patel	⇨ Common Sports Injuries And Their Prevention
122	T.R. Sharma	⇨ Exploring Stress And Its Management Strategies Amongst National Level Sports Persons
124	Chetan Dhanani	⇨ Drugs In Sports
127	Y.L. Jethava	⇨ The Relationship Of Sports Climbing Performance With The Selected Variables Of Fitness
129	B.H. Kantesariya	⇨ Interrelationship Of Bmi With Strength, Speed And Flexibility In Different Age Groups
132	V.S. Vakani	⇨ Pranayama A Science Of Breathing
134	Arjunsinh Rana	⇨ The Use Of The Person-Centered Approach For The Reduction Of The State-Trait Anxiety In Football Players
137	J.B. Chauhan	⇨ Career In Sports Psychology
140	A.M. Chaudhary	⇨ શામળાજી કોલેજના કબડ્ડીના ખેલાડીઓ અને રાજેન્દ્રનગર કોલેજના ખો–ખોના ખેલાડીઓ પર રમત ચિંતાનો તુલનાત્મક અભ્યાસ
142	K.S. Limbani	⇨ અમરેલી જિલ્લાની શહેરી અને ગ્રામ્ય વિસ્તારની માધ્યમિક શાળાઓની વિદ્યાર્થીનીઓની શારીરિક યોગ્યતાનો તુલનાત્મક અભ્યાસ
145	S.R. Odedara	⇨ રમતવીર અને બિનરમતવીર બહેનોના માનસિક સ્વાસ્થ્યનો તુલનાત્મક અભ્યાસ
147	V.J. Chaudhary	⇨ ખો–ખો અને હેન્ડબોલ રમતમાં આંતરવિશ્વ વિદ્યાલય કક્ષાએ પસંદગી પામેલા ખેલાડીઓના શરીર પરિમિતિનો તુલનાત્મક અભ્યાસ
150	G.N. Vasava	⇨ Nutrition For The Athlete
154	J.B. Chauhan	⇨ The 3 Body Types And Traning
158	V.R. Desai	⇨ Physical And Health Education
160	Dr. N.H. Gamit R.K. Dariya	⇨ Sport Competition Anxiety Among Male And Female Inter – Collge Level Sportspersons Of Diffrent Games
163	D.G. Patel	⇨ Stress Affect Sports Performance

LAW

166 Dr. J.A. Pandya ⇨ સમાજમાં ન્યાયના વહીવટની જરૂરીયાત

168 M.P. Bhatt ⇨ Ethics Of Human Rights And Good Governance Abstract

MANAGEMENT

170 P.B. Prajapati ⇨ How indian companies & mncs made the marketing very successful with indian solution and indian touch?

172 Deepa Kesari ⇨ Knowledge Management –An Intangible Asset Of The Organization

176 Rahul . Sondarva ⇨ An Empirical Research On Hrd Climate At Excel Industry

ARTS

179 P.H. Solanki **(ENGLISH)** ⇨ A semiotic inquiry in to the interface between selected novels and their film versions: insights for teaching literature at the u.g. Level

183 K.J. Parmar **(ENGLISH)** ⇨ Whooping Cough: A Story Of Struggle For Rights Of Dalit Kachra

186 V. Pandya **(ENGLISH)** ⇨ Curriculum Designing: Inception To Execution

189 Shruti Trivedi **(ENGLISH)** ⇨ Effects Of Non-Verbal Communication On College English Classroom Teaching

191 D.N. Solanki **(HINDI)** ⇨ çkÅ;kfid>ke,oa[kkn~;Lo:ikadsla

193 Dr. N.R. Shaikh **(GUJARATI)** ⇨ દામ્પત્યની દાહક સમસ્યાઃ અંતર

195 S.N. Patel **(GUJARATI)** ⇨ વાર્તાકાર કનૈયાલાલ મુનશીની સર્જક પ્રતિભા

197 Dr. M.J. Vyas **(SANSKRIT)** ⇨ આચાર્ય હેમચંદ્રસૂરિ રચિત સ્તોત્ર – સરિતા

200 D.D. Badheka **(SANSKRIT)** ⇨ આદિ શંકરાચાર્યના હરિસ્તુતિ : સ્તોત્રમાં બ્રહ્મ વિભાવના

202 Dr. P.G. Trivedi **(SANSKRIT)** ⇨ osnksesai;kZoj.k&laj{k.k

204 Dr. M.J. Vyas **(SANSKRIT)** ⇨ વેદમાં પર્યાવરણ ચિંતન

206 P.R. Trivedi **(PSYCHOLOGY)** ⇨ A Study Of Aggression And Dependence Proneness Among Employed And Unemployed Youth

209 H.M. Mahida **(ECONOMICS)** ⇨ A Socio-Economic Study Of Woman Worker In Shopping Mall

211 P.G. Sindha **(ECONOMICS)** ⇨ pæmhal ijLlana lImDIya Ane[sroDa gamno Aai4R ivkasno tuInaTmk AWyas

214 A. Galani **(ECONOMICS)** ⇨ ૭૫ લાખ આદીવાસીઓ માટે વનબંધુ કલ્યાણ યોજના

216 Dr.D.V. Gohil **(HISTORY)** ⇨ સરદારસિંહ રાણાની ભારતમાં પ્રવૃતિઓ

219 Dr. S.A. Kureshi **(SOCIOLOGY)** ⇨ સ્ત્રી સશકિતકરણ

222 Dr .B.M. Gohel J.B. Parmar **(LIB. & INFO. SCI.)** ⇨ Jpayaogkta-Aamosnayakmahitivalayagmpalaya