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Editorial

This is the foundation year for India. Indian Politics, our sports, Government Policies are going through landscape changes which will have a bearing effect on many years to come. In recent times , we saw this Union Budget presented to build an entrepreneur in an Agricultural Sector as well as Rural as well as Urban. The idea of creating and chasing your dream is catching up and more so because the average Indian is a 25-30 year old youth. This Union Budget is the most balanced budget in recent times looking at laying foundation for the Indian Growth Story in the years to come. Higher allocation of spending on the Agricultural sector, Rural Sector, Infrastructure, etc will be an ideal beginning. Electrification of Villages is other big thing happening in muted voice which according to the concerned Minister , Electrification of all Villages will be done by March 2017. This along with other aspects, will surely create an ideal business environment in India. Some more tax norms are expected to be made liberal. The other big thing that is happening in India is the Cricket World Cup. It is the first time we are hosting T20 World Cup and with the form the Team is in , We can expect a 2011 encore by Dhoni and Co.

Every story happening around gives only one moral - That is Believe in your dreams, Chase it until it becomes Reality.

The writing of Indian Growth story has already begun. And as it is seen, the youth of India have plenty of things to look forward to. It is time to build on your ideas and back it till it is executed. Team work , Planning, Execution of are some of the important aspects of Entrepreneurship that will be honed in today's youth.

We are living in a vibrant society where Debate is an important aspect of our society. And even though there are many good things happening Some Problems keep Haunting the growth story of India. Drought, Unemployment, etc are still hovering over India's growth story.

Debating is not just placing your ideas but listening to new ones too. It is an exchange of different ideas moulding into one great Vision. We, as researchers should place our research on such current affairs , judge the recurring impact on our future and exchange ideas to form an impactful solution to impending problems. Innovation is the key to every problem, and for every problem , Research is where we began.

Analogy of the Functional Equation between \mathbf{Z} and Polynomial Rings over Finite Fields

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Abstract :

In the development of the subject number theory , it was noticed that the ring of integers \mathbf{Z} has many properties in common with $A = F[T]$, the ring of polynomials over F where F is a finite field. Both rings are principal ideal domain with infinitely many prime elements and finitely many units. There are many other surprising analogies between them.

In this exposition we will see one such analogy. We will first see how Hurwitz's formula can be applied to prove Riemann's functional equation for $\zeta(s)$, where $\zeta(s)$ is a Riemann zeta function for \mathbf{Z} and later we will show that functional equation holds in case of A as well.

Main Text: The Riemann zeta function $\zeta(s)$ associated to \mathbf{Z} is defined by, $\zeta(s) = \sum_{n=1}^{\infty} n^{-s}$

Recall that this function $\zeta(s)$, defined for $\sigma > 1$, where $\sigma = \text{Re}[s]$ is analytic in the half plane $\sigma > 0$, except for a simple pole with residue 1, at the point $s = 1$. [refer 2]. The Zeta function for A is an analogue of the classical zeta function. The zeta function for A is denoted by $\zeta_A(s)$ and is

defined by the infinite series $\zeta_A(s) = \sum_{f \in A, f \text{ monic}} \frac{1}{|f|^s}$, $\forall s \in \mathbf{C}$ with real part of $s > 1$.

3.1.9 Theorem: $\zeta_A(s)$ can be extended to a meromorphic function on \mathbf{C} with a simple pole at $s = 1$

with residue equal to $\frac{1}{\log q}$. Also $\zeta_A(s) = \sum_{f \in A, f \text{ monic}} \frac{1}{|f|^s} = \sum_{n=0}^{\infty} \frac{q^n}{q^{ns}} = \frac{1}{1 - q^{1-s}}$. [refer 3]

3.2 Functional equation of zeta function for \mathbf{Z} and A .

In this section we will see how functional equation is satisfied by zeta function for \mathbf{Z} and zeta function for A .

Functional equation of Zeta function for \mathbf{Z} [refer 1] :

If $\Gamma(s)$ is the classical gamma function and $\xi(s) = \pi^{-\frac{s}{2}} \Gamma\left(\frac{s}{2}\right) \zeta(s)$, then $\xi(1-s) = \xi(s)$.

This is called the functional equation for $\zeta(s)$.

Recall that gamma function is defined as $\Gamma(s) = \int_0^{\infty} x^{s-1} e^{-x} dx$.

The function so defined for $\sigma > 0$ can be continued beyond the line $\sigma = 0$ and $\Gamma(s)$ exists as a function which is analytic every where in the s -plane, except for simple poles at the points $s = 0, -1, -2, -3, \dots$ with residue $\frac{(-1)^n}{n!}$ at $s = -n$.

We define for $\alpha \in \mathbb{R}$ and $s = \sigma + it \in \mathbb{C}$, $\zeta(s, a) = \sum_{n=1}^{\infty} \frac{1}{(n+a)^s}$.

$$F(a, s) = \sum_{n=1}^{\infty} \frac{e^{2\pi i n a}}{n^s}, a \in \mathbb{R}, \sigma = \text{Re}(s) > 1.$$

Let $0 < a \leq 1$ and $\sigma > 1$, then

3.2.1 Proposition : [Hurwitz Formula] $\zeta(1-s, a) = \frac{\Gamma(s)}{(2\pi)^s} \left\{ e^{\frac{-\pi i s}{2}} F(a, s) + e^{\frac{\pi i s}{2}} F(-a, s) \right\}.$

If $a \neq 1$, this representation is also valid for $\sigma > 0$.

Proof : refer to T. M. Apostol [1, page 257].

3.2.2 Theorem : If $\Gamma(s)$ is the classical gamma function and $\xi(s) = \pi^{-\frac{s}{2}} \Gamma\left(\frac{s}{2}\right) \zeta(s)$, then

$$\xi(1-s) = \xi(s).$$

Proof : Putting $a = 1$ in the Hurwitz formula (Proposition 3.2.1), we obtain for $\sigma > 1$

$$\begin{aligned} \zeta(1-s, 1) &= \frac{\Gamma(s)}{(2\pi)^s} \left\{ e^{\frac{-\pi i s}{2}} F(1, s) + e^{\frac{\pi i s}{2}} F(-1, s) \right\} \\ &= \frac{\Gamma(s)}{(2\pi)^s} \left\{ \left(\cos \frac{\pi s}{2} + i s \sin \frac{\pi s}{2} \right) \zeta(s) + \left(\cos \frac{-\pi s}{2} - i s \sin \frac{\pi s}{2} \right) \zeta(s) \right\} \end{aligned}$$

Also $\zeta(1-s, 1) = \zeta(1-s)$, (for this result refer [1, page 251])

$$\zeta(1-s) = \frac{\Gamma(s)}{(2\pi)^s} \left\{ \cos \frac{\pi s}{2} \zeta(s) + \cos \frac{\pi s}{2} \zeta(s) \right\}$$

This implies that,

$$= 2(2\pi)^{-s} \Gamma(s) \cos \frac{\pi s}{2} \zeta(s)$$

Taking $s = 2n + 1$, where $n \in \mathbb{N}$ in the above expression, the factor $\cos\left(\frac{\pi s}{2}\right)$ vanishes and we find trivial zeros of $\zeta(s)$ i.e. $\zeta(-2n) = 0$, for $n \in \mathbb{N}$.

In the above formula replace s by $1-s$. we get,
 $\zeta(s) = 2(2\pi)^{-1+s} \Gamma(1-s) \cos\left(\frac{\pi}{2}(1-s)\right) \zeta(1-s).$

So $\zeta(s) = 2(2\pi)^{s-1} \Gamma(1-s) \sin\left(\frac{\pi s}{2}\right) \zeta(1-s)$. Now Duplication formula for gamma function is $2\pi^{\frac{1}{2}} 2^{-2s} \Gamma(2s) = \Gamma(s) \Gamma\left(s + \frac{1}{2}\right).$

In this formula when s is replaced by $\frac{1-s}{2}$, we get, $2^s \pi^{\frac{1}{2}} \Gamma(1-s) = \Gamma\left(\frac{1-s}{2}\right) \Gamma\left(1 - \frac{s}{2}\right).$

But by property $\Gamma(1-s)\Gamma(s) = \frac{\pi}{\sin \pi s}$ we get $\Gamma\left(\frac{s}{2}\right)\Gamma\left(1-\frac{s}{2}\right) = \frac{\pi}{\sin \frac{\pi s}{2}}$.

So $\Gamma\left(1-\frac{s}{2}\right) = \frac{\pi}{\Gamma\left(\frac{s}{2}\right)\sin \frac{\pi s}{2}}$. Substituting in $2^s \pi^{\frac{1}{2}} \Gamma(1-s) = \Gamma\left(\frac{1-s}{2}\right)\Gamma\left(1-\frac{s}{2}\right)$, we get

$$\Gamma(1-s)\sin \frac{\pi s}{2} = \frac{2^{-s} \pi^{\frac{1}{2}} \Gamma\left(\frac{1-s}{2}\right)}{\Gamma\left(\frac{s}{2}\right)}.$$

So we can replace it in the formula, $\zeta(s) = 2(2\pi)^{s-1} \Gamma(1-s) \sin\left(\frac{\pi s}{2}\right) \zeta(1-s)$.

This implies $\zeta(s) = 2(2\pi)^{s-1} \frac{2^{-s} \pi^{\frac{1}{2}} \Gamma\left(\frac{1-s}{2}\right)}{\Gamma\left(\frac{s}{2}\right)} \zeta(1-s)$.

From this we get $\pi^{\frac{-s}{2}} \Gamma\left(\frac{s}{2}\right) \zeta(s) = \pi^{-\left(\frac{1-s}{2}\right)} \Gamma\left(\frac{1-s}{2}\right) \zeta(1-s)$.

Thus we get $\xi(s) = \xi(1-s)$.

Functional equation of zeta function for A : [refer 3]

We define the complex valued function $\xi_A(s)$ as $\xi_A(s) = q^{-s} (1-q^{-s})^{-1} \zeta_A(s)$ where $s \in \mathbb{C}$. As opposed to case of the classical zeta function the proof is very easy for $\zeta_A(s)$.

Theorem: Functional equation for $\zeta_A(s)$ is $\xi_A(1-s) = \xi_A(s)$.

Proof :

$$\begin{aligned} \xi_A(1-s) &= q^{-(1-s)} (1-q^{-(1-s)})^{-1} \zeta_A(1-s) \\ &= q^{-(1-s)} (1-q^{-(1-s)})^{-1} \frac{1}{1-q^{1-(1-s)}}, \text{ by Theorem 3.1.9} \\ &= q^{s-1} (1-q^{s-1})^{-1} \frac{1}{1-q^s} \end{aligned}$$

$$\begin{aligned}
q^{s-1} (1-q^{s-1})^{-1} \frac{1}{1-q^s} &= q^{s-1} (1-q^s)^{-1} \frac{1}{1-q^{s-1}} \\
&= \frac{q^s}{q} (1-q^s)^{-1} \frac{1}{1-q^{s-1}} \\
&= \frac{q^{-s} q^s}{q^{-s} q} (1-q^s)^{-1} \frac{1}{1-q^{s-1}} \\
&= q^{-s} q^s (1-q^s)^{-1} \frac{1}{(q^{1-s} - 1)} \\
&= q^{-s} \frac{-1}{(1-q^{1-s}) q^{-s}} \frac{1}{(1-q^s)} \\
&= q^{-s} (1-q^{-s})^{-1} \frac{1}{1-q^{1-s}} \\
&= \xi_A(s).
\end{aligned}$$

Thus we get $\xi_A(1-s) = \xi_A(s)$. thus functional equation is satisfied in this case also.

Finding:

Thus we can see in case of polynomial rings over finite fields , zeta function is much Simpler object and it leads us rapidly to the proof of functional equation without the need of any complicated investigations.

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A Comparative Study of Selected Psychomotor Variables of Football Players and Volleyball Players

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Abstract :

The present study was undertaken to determine and comparison of the psychomotor variables of football and volleyball players. This study has been conducted on 30 players, out of 30 players 15 were football players and 15 were volleyball players from Ishwar Deshmukh College of physical Education which is affiliated to R.T.M. Nagpur University, Nagpur. The research scholar has compared the psychomotor variables between football players and volleyball players. Mean, standard deviation and 't' ratio was used to find out the comparison of football and volleyball players. The analysis concluded that both the football and volleyball players were equal in Distance perception and the analysis concluded that both the football and volleyball players were equal in Speed of movement.

Key words : Psychomotor, Distance perception, Speed of Movement.

Introduction :

Psychomotor learning is the heart of physical educational experience and result in the achievement of general motor ability as well as selective skills in various activities. This objective is concerned with developing body awareness and making physical movement efficient, graceful, aesthetic and useful, with as little expenditure of energy as possible. It also deals with development of body control, coordination, agility, balance, sense of direction and vigour physical activities.

Psychomotor variable acts as the medium for the realization of cognitive and effective domain of learning and motor behaviours. These domain of learning are inseparable identities and work in perfect harmony and vision with one another. The psychomotor variables are primary concerned with muscular contraction performance of motor skills involves neural, physiological and psychological aspects and is continue that runs the game from physical to cognitive and these is always an integration between these aspect of human behaviours.

Psychomotor Test : Psychomotor test are those test which are used with the players participation of the subjects by their performance in the specific motor activities. Thus, these test measure various factors affecting movement and their mental co-ordination. Actually this category of test is so vast in physical education.

Methodology :

Selection of Subjects : Fifteen football players and fifteen volleyball players were randomly selected as subject from the Ishwar Deshmukh College of Physical Education which is affiliated of R.T.M. Nagpur University, Nagpur.

Selection of Variables : The psychomotor variables play an important role for the performance of any task. Thus the research scholar after having gone through review the feasibility factor in term of the availability of equipments, acceptability to the legitimate time that were devoted for test, as to keep the entire study unitary and integrated with the above criteria in mind the following variables were selected.

Psychomotor :

- (a) Kinaesthetic perception
- (b) Speed of Movement.

Method of Sampling :

While leading this study random sampling method was adopt in selection of subject.

Criterion Measure :

The criterion to measured the psychomotor variables adopted for this is as follows_

Kinaesthetic Perception:

This variables was measure by “Distance Perception Test” and was recorded to the nearest centimetres.

Speed of Movement:

This variables was measured by “Nelson Speed of Movement Test” and was recorded in centimetres.

Analysis of Data :

The statistical analysis of the data (Distance Perception and Speed of Movement) collected on fifteen football players and fifteen volleyball players is presents in this chapter.

Table No. 1

Table show the comparison mean of Distance Perception between football and volleyball players.

Variable		Mean	DM	SE	‘t’ ratio
Distance Perception	Football players	3.87	0.27	0.42	0.64
	Volleyball players	3.6			

Significant at 0.05 level.

Findings :

The mean of football players is 3.87 and mean of volleyball players is 3.6 respectively. The Difference of mean football and Volleyball players is 0.27. The ‘t’ value obtained in respect of football and volleyball players it was 0.64, which is not significant at 0.05 level of confidence. The value of ‘t’ ratio should be greater or equal to 2.05.

Table No. 2

Table show the comparison mean of “Speed of Movement” between football and volleyball players.

Variable		Mean	DM	SE	‘t’ ratio
Speed of Movement	Football players	21.8	0.47	0.92	0.51
	Volleyball players	22.27			

- Significant at 0.05 level.

Findings:

The mean of football players is 21.8 and mean of volleyball players is 22.27 respectively. The Difference of mean football and Volleyball players is 0.47. The ‘t’ value obtained in respect of

football and volleyball players it was 0.51, which is not significant at 0.05 level of confidence. The value of 't' ratio should be greater or equal to 2.05.

Conclusion :

For the purpose of this study following conclusion:-

- (a) On comparing the Distance Perception of football players and volleyball players. It was observed that average mean of football players were greater than that of volleyball players. There were no significant difference among football players and volleyball players.
The analysis concluded that both the football and volleyball players were equal in Distance Perception .
- (b) After comparing the Speed of movement of football and volleyball players statically, it was observed that even though average mean of football players were less that volleyball players.
The analysis concluded that both the football and volleyball players were equal in speed of movement.

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An Overview of Birla Sun Life MNC Fund – Growth Option

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Abstract:

The aim of the study is to analyze the performance of Birla Sun Life MNC Fund - Growth option. The study is done on the basis of secondary data collected from various sources. It is observed that returns given by the fund are substantial in the long term. The study is significant from the point of view of investors who are planning to invest in Birla Sun Life MNC Fund - Growth option.

Keywords: MNC FUND, long term, investor.

Introduction:

Birla Sun Life MNC Fund - Growth option

Birla Sun Life MNC Fund - Growth option is a scheme of Birla Sun Life Mutual Fund. It is an open ended scheme which provides dividend as well as growth option. The researcher has studied the growth option. The scheme was launched on 27th December 1999. CNX MNC is the benchmark for this scheme. During the quarter July - September 2015, the Assets Under Management (AUM) of the scheme was Rs 2048.33 crores on an average. The minimum investment in the scheme is Rs 5000. Although there is no entry load in the scheme, but there is an exit load of 1% if redemption is done within 1 year from the date of allotment. The fund is managed by Mr. Ajay Garg. The scheme invests its funds in securities of multinational companies with an objective to achieve long term growth at relatively moderate levels of risk. The fund adopts research based investment approach.

Objective of the study:

The objective of the study is to analyze the performance of Birla Sun Life MNC Fund - Growth option.

Research Methodology:

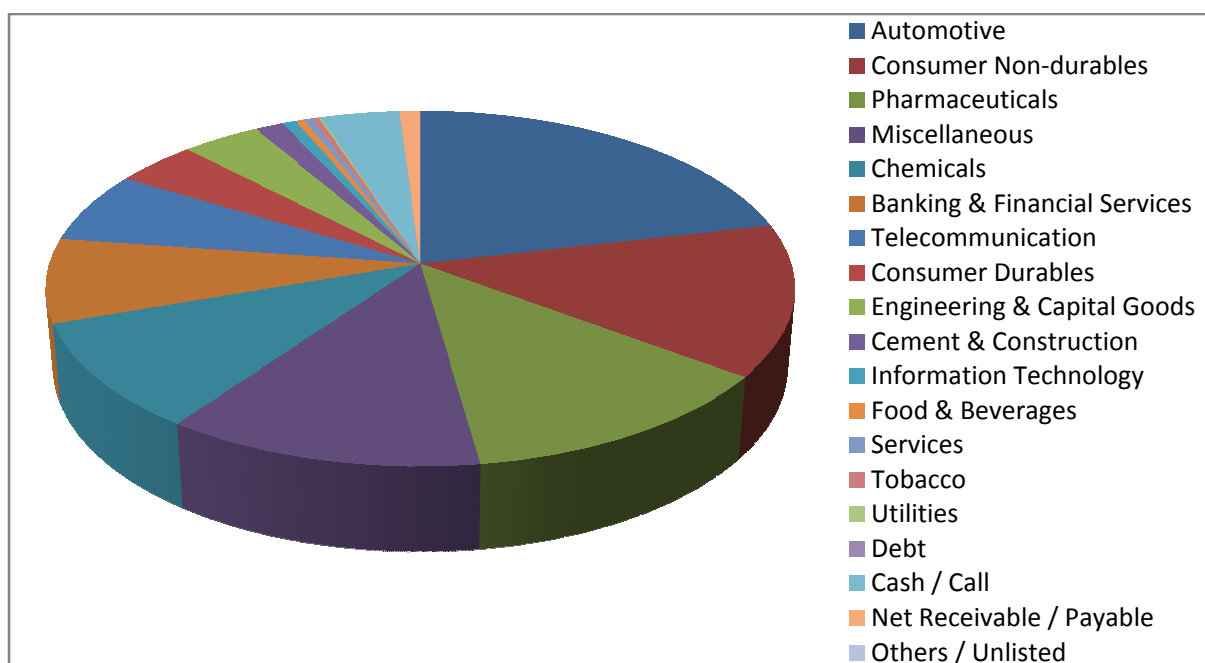
The study is based on the secondary data collected from various sources. Returns of last 1 year, 2 years, 3 years and 5 years are used as parameters for the study. The analysis is explained with the help of tables and diagrams.

Findings and Results :

Table No. 1: Asset Breakup of Birla Sun Life MNC Fund - Growth option (as on 30th September 2015)	
Class	%
Equity	97.11
Others / Unlisted	0
Debt	0
Mutual Funds	N.A
Money Market	N.A
Cash / Call	3.97
Net Receivable / Payable	-1.08

Table no. 1 describes the Asset Breakup for the above mentioned fund (Birla Sun Life MNC Fund - Growth option) as on 30th September 2015. 97.11% is invested in equity and 3.97 % is Cash or Call.

Table No. 2: Sectoral Allocation of Birla Sun Life MNC Fund - Growth option (as on 30th September 2015)	
Sector	%
Automotive	21.9
Consumer Non-durables	14.1
Pharmaceuticals	12.9
Miscellaneous	12.3
Chemicals	10
Banking & Financial Services	7.82
Telecommunication	6.6
Consumer Durables	4.15
Engineering & Capital Goods	3.97
Cement & Construction	1.43
Information Technology	0.73
Food & Beverages	0.42
Services	0.37
Tobacco	0.36
Utilities	0.11
Debt	0
Cash / Call	3.97
Net Receivable / Payable	-1.08
Others / Unlisted	0



**Chart No. 1: Sectoral Allocation of Birla Sun Life MNC Fund - Growth option
(as on 30th September 2015)**

Table no. 2 describes the Sectoral Allocation of Birla Sun Life MNC Fund - Growth option (as on 30th September 2015). The portfolio of the fund is diversified, which reduces the investor's risk.

Graph No. 1: NAV of Birla Sun Life MNC Fund - Growth option since inception that is 27th December 1999 to 31st October 2015



The above graph shows the price movement of Birla Sun Life MNC Fund - Growth option since inception that is 27th December 1999 to 31st October 2015. Since inception the fund has given an absolute return of 1521.5%.

Table No. 3: Performance of Birla Sun Life MNC Fund - Growth option (during the last 1 year, 2 years, 3 years and 5 years)

Parameters	1 Year (%)	2 Years (%)	3 Years (%)	5 Years (%)
Fund returns	34.8	47.9	32.7	21.5
Category Average Returns	13.5	29.5	18.7	9.3
Difference of Fund returns and Category Average Returns	21.3	18.4	14.0	12.2
Best of Category	36.2	62.6	36.5	21.5
Worst of Category	-6.4	19.7	14.6	4.5
Benchmark Returns #	12.2	27.0	19.0	13.1
Difference of Fund returns and Benchmark Returns	22.6	20.9	13.7	8.4

Benchmark Index: CNX MNC

The above table shows the performance of Birla Sun Life MNC Fund - Growth option in last 1 year, 2 years, 3 years and 5 years. It also analyses the fund on various parameters such as Fund Return, Benchmark Return, Category Average Return, Difference between Fund and Category Average Return, Rank in Category.

Fund Returns during last 1 year was 34.8 %, during last 2 years was 47.9%, last 3 years was 32.7% and 21.5% during last 5 years.

Category Average Returns during last 1 year was 13.5%, during last 2 years was 29.5%, during last 3 years was 18.7% and 9.3% during last 5 years. Difference of Fund returns and Category Average Returns during last 1 year was 21.3%, during last 2 years was 18.4%, last 3 years was 14.0% and 12.2% during last 5 years. The fund returns is greater than the category average returns during last 5 years.

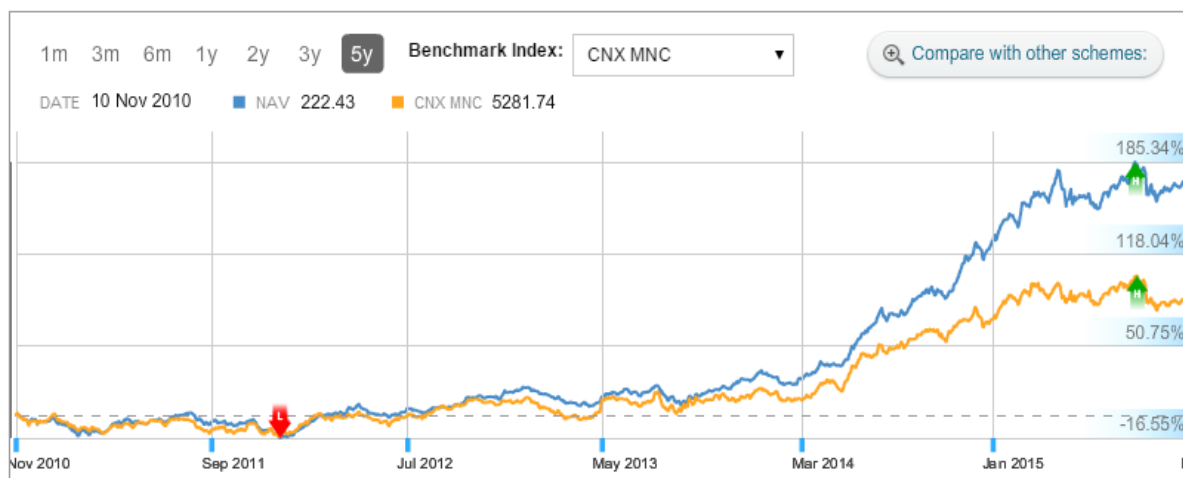
Best of Category during last 1 year was 36.2 %, during last 2 years was 62.6%, last 3 years was 36.5% and 21.5% during last 5 years.

Worst of Category during last 1 year was -6.4%, during last 2 years was 19.7%, last 3 years was 14.6% and 4.5% during last 5 years.

Benchmark Returns during last 1 year was 12.2%, during last 2 years was 27.0%, last 3 years was 19.0% and 13.1% during last 5 years.

Difference of Fund returns and Benchmark Returns during last 1 year was 22.6 %, during last 2 years was 20.9%, last 3 years was 13.7% and 8.4% during last 5 years.

Graph No. 2: Comparison of CNX MNC Index and NAV of Birla Sun Life MNC Fund - Growth option



The above graph compares the NAV of Birla Sun Life MNC Fund - Growth option and CNX MNC Index (Benchmark for this Fund) for the last 5 years. Average Returns during last 1 year was 21.3%, during last 2 years was 18.4%, last 3 years was 14.0% and 12.2% during last 5 years. Difference of Fund returns and Benchmark Returns last 1 year was 22.6 %, during last 2 years was 20.9%, in last 3 years was 13.7% and 8.4% during last 5 years. It is observed that the returns generated by the fund have outperformed the benchmark i.e. CNX MNC Index.

Conclusion:

Birla Sun Life MNC Fund - Growth option has earned substantial returns for investors in the medium and long term. The investors get an advantage of professional management of mutual funds combined with gains of multinational corporation (MNC). Since inception the fund has given an absolute return of 1521.5%. Fund Returns during last 1 year was 34.8 %, during last 2 years was 47.9%, last 3 years was 32.7% and 21.5% during last 5 years. Difference of Fund returns and Benchmark Returns last 1 year was 22.6 %, during last 2 years was 20.9%, in last 3 years was 13.7% and 8.4% during last 5 years. Hence it can be concluded that Birla Sun Life MNC Fund - Growth option is an avenue for wealth creation in the medium and long term. CRISIL Mutual Fund ranking for this fund is 4 on the scale of 5.

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3. Mutual Funds Products and Services
4. Everything You Want To Know About Investing
5. Beat The Street

A Study of Effect of Circuit Training Programme on Selected Motor Fitness Components of Collage Students

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Abstract :

Circuit training method was developed by R.E.Morgan and G.T.Adamson in 1953 at the University of Leeds, England. This type of conditioning involves almost of the training factors. Circuit training designed to develop Strength, Speed, Power, Muscular endurance, Flexibility, Agility, Co-ordination and Cardiovascular endurance. A study was conducted to see the study of effect of circuit training programme on selected motor fitness components of college students. Twenty students with the age ranging from 20 to 25 were selected as subject from Ishwar Deshmukh College Of Physical Education Nagpur for this study. Only one group of 20 students were selected in this study. Pre-test and Post-test were conducted on the subjects for five dependent variables i.e. Flexibility, Power, Speed, Agility and Muscular endurance test respectively. The circuit training was given for six weeks exception of holiday for the duration of one hours. The collected data was analyzed with 't' test and result revealed that the circuit training exercises contributed positively the improvements in selected motor fitness components of college students.

Key words: Circuit Training, Motor Fitness.

Introduction :

Originally, circuit training was a type of physical training involving movement from one exercise station to another with the aim to add variety to exercise and help the exerciser to maintain his interest in the work out or effort. Circuit training having a combination of aerobic exercises (rides on stationary bicycles and running on treadmill) and weight resistance work-outs are said to give the best results in terms of fitness development. Circuit training is generally used by sports person to bring about specific changes in their fitness level with a view to perform optimally in their respective sports/events.

Without proper knowledge of the training methodology, use no circuit to avoid health complications. If at any stage, you find circuit training overstraining, better change over to some other kind of fitness-developing technique.

Circuit training is a highly specialized fitness training method and is used by athletes participating in competitive sports events, ordinary individuals desirous of improving level of their fitness are not advised to use this complex procedure, nor do they have expertise to develop training circuits. Circuit training was popular with football coaches because the exercises were designed to develop the muscles used in performing the techniques of charging, tackling, blocking and warding off blockers.

The term motor fitness became popular during world war as tests that could be given quickly to many subjects with a minimum of equipment were constructed for use by various branches of the armed forces and by schools

and colleges. Motor fitness is thought to be a limited dimension of general motor ability, (Element of motor fitness) with emphasis placed on the underlying element of vigorous physical activity, but does not include the neuromuscular coordination involved in motor skills.

METHODOLOGY

The main purpose behind this study to see the effect of circuit training programme on selected motor fitness components of college students. Circuit training variables in this study are Bent Knee Sit ups, Half Squat, Side ward running, Toes touch, High knee action.

SELECTION OF SUBJECTS:

Twenty students of M.P.Ed Part-I of Ishwar Deshmukh College of Physical Education were selected for this study. Subjects were oriented to the test of motor fitness variables.

DESIGN OF THE STUDY:

The research scholar selected 20 students male and female for the study of M.P.Ed students of I.D.C.P.E. (Ishwar Deshmukh college of Physical Education).

The subjects were selected each test and administrated of 50m Run, Shuttle run, Standing Broad jump, sit and reach and sit-ups.

All the subjects had given proper response in the test. Mean of pre-test and Post-Test of five fitness variables are calculated. Standard Deviation of Pre-test and Post-test of fitness variables are also calculated by using the following formula.

$$\text{Step 1 - Calculation of Mean} = \frac{\sum x}{N}$$

$$\text{Step 2 - Calculation of standard deviation } (\sigma) = \sqrt{\frac{N\sum x^2 - (\sum x)^2}{N}}$$

$$\text{Step 3 - Calculation of 't' Ratio} = \frac{M_1 - M_2}{\sqrt{\frac{(SD_1)^2}{N_1} + \frac{(SD_2)^2}{N_2}}}$$

For testing the difference between Pre-test and Post-test the level of confidence was set at 0.05.

TABLE NO.1 SHOWS THE PRE-TEST AND POST-TEST MEAN OF 50M. RUN.

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't' Ratio
Pre-test	8.44	1.19	0.64	0.3	2.13
Post-test	7.88	0.76			

The mean value of Pre-test and Post-test of 50m. Run is 8.44 and 7.88 respectively. Standard deviation value of pre-test and Post-test is 1.19 and 0.76 respectively. Value of 't' ratio is 2.13, this value of 50m. run is significant at 0.05 level. To be significant at 0.05 level, the value of 't' ratio should be greater than or equal to 2.02.

TABLE NO.2 SHOWS THE PRE-TEST AND POST-TEST MEAN OF SHUTTLE RUN.

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't' Ratio
Pre-test	31.14	4.18	2.6	1.16	2.24
Post-test	28.82	3.12			

The mean value of Pre-test and Post-test of Shuttle Run is 31.14 and 28.82 respectively. Standard deviation value of pre-test and Post-test is 4.18 and 3.12 respectively. Value of 't' ratio is

2.24, this value of Shuttle Run is significant at 0.05 level. To be significant at 0.05 level, the value of 't' ratio should be greater than or equal to 2.02.

TABLE NO.3 SHOWS THE PRE-TEST AND POST-TEST MEAN OF STANDING BROAD JUMP.

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't' Ratio
Pre-test	1.78	0.33	0.19	0.09	2.11
Post-test	1.97	0.30			

The mean value of Pre-test and Post-test of Standing Broad Jump is 1.78 and 1.97 respectively. Standard deviation value of pre-test and Post-test is 0.33 and 0.30 respectively. Value of 't' ratio is 2.11, this value is significant at 0.05 level. To be significant at 0.05 level, the value of 't' ratio should be greater than or equal to 2.02.

TABLE NO.4 SHOWS THE PRE-TEST AND POST-TEST MEAN OF SIT AND REACH.

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't' Ratio
Pre-test	7.25	1.94	2.3	0.59	3.89
Post-test	9.55	1.80			

The mean value of Pre-test and Post-test of Sit and Reach is 7.25 and 9.55 respectively. Standard deviation value of pre-test and Post-test is 1.94 and 1.80 respectively. Value of 't' ratio is 3.89, this value of sit and reach is significant at 0.05 level. To be significant at 0.05 level, the value of 't' ratio should be greater than or equal to 2.02.

TABLE NO.5 SHOWS THE PRE-TEST AND POST-TEST MEAN OF SIT – UPS

Test	Mean	Standard Deviation	Mean Difference	Standard Error	't' Ratio
Pre-test	17	3.91	3.75	1.13	3.31
Post-test	20.75	3.25			

The mean value of Pre-test and Post-test of Sit-ups is 17 and 20.75 respectively. Standard deviation value of pre-test and Post-test is 3.91 and 3.25 respectively. Value of 't' ratio is 3.31, this value of Sit-ups is significant at 0.05 level. To be significant at 0.05 level, the value of 't' ratio should be greater than or equal to 2.02.

DISCUSSION OF FINDINGS:

From the analysis of data it was evident that the mean of Post-test was improved, it proved that, the motor fitness of the students determined by other factors like heredity, sex, diet and age it also found that the six weeks of circuit training programs is sufficient to improve the motor fitness of the I.D.C.P.E. students.

CONCLUSIONS:

There was significant difference of Pre-test and Post-test of specific motor fitness variables like 50m.Run, shuttle run, standing broad-jump, sit and reach and sit-ups of M.P.Ed. students of I.D.C.P.E.

The above results help to conclude that circuit training exercise for the period of six weeks was effective to improve the motor fitness variables of college students.

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Correlates of Emotional Intelligence and Stress with Teaching Aptitude of B.Ed. Students

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A man is not rightly conditioned until he is a happy, healthy and prosperous being. Emotions appear to be engaged in all aspects of human interaction. Emotions are something that people are familiar with and use in their daily life, as well as something that they recognize readily in everyday situations. According to *Ciarrochi, Chain, Caputi and Roberts (2001)* emotional intelligence plays a potential role in aspects of everyday life. *Ciaarochi et al.* reported that an individual's perception, expression, understanding and management of emotions is directly related to the major life events that they have experienced. These emotions are then interpreted and adopted according to those life events, leading to life outcomes, either positive or negative, hence, the importance of being able to understand and manage an emotion as it is applied to life.

The concept of stress, as number of researchers point out (*Kasal, 1983; Parker & Dactiis, 1983; Dratt & Barling, 1988*) continues to be defined in several fundamentally different ways. Stress has been defined as a stimulus - response, to an environmental condition and as resulting from the interaction of misfit between the individual and environmental demands (*Cox, 1978; Frence, Roder & Cobb, 1974; Khan, et al., 1964; Mc.Grath, 1970*). Stress is more commonly accepted as relationship in nature involving some sort of transaction between the individual and environment. Accordingly, stress occurs when a person appraises a given transaction with the environment as about to tax or to exceed that person's resource, thus endangering well-being (*Lazarus & Lunier, 1978*). Emotions are an important part of one's personality. They determine the nature and effectiveness of the pattern of social interaction and also contribute to the psychological well-being of an individual. If prospective teachers are emotionally intelligent, they will be able to express their emotions positively without actually threatening students or other persons (*Poulou & Norwich, 2000*).

The NCTE Curriculum framework envisages under the practical community based programmes, creativity and personality development programmes, work education, sessional work and other activities, aesthetic development programmes, preparation of lesson plan, achievement tests, psychological practical, preparation of teaching aids etc. if these things are analyzed objectively and minutely, emotional intelligence might have a significant role to play in all these activities so that student-teachers might be able to cope with the stress generated by work load.

During the training period, student teachers have to go through many activities. Some of the activities like maintaining discipline in the classroom, preparation and execution of lesson plans, preparation of low cost material aids, preparation of blue print for achievement test, administration and scoring of psychological tests may work as a source of stress and adjustment problems among student- teachers. They may experience strong feeling of satisfaction or dissatisfaction with their performance during the training programme and with the environment of the training institution. Due to the lack of coping mechanisms or sometimes directly as a consequence of the stressful activities, student-teachers may experience a host of emotional responses, which are either positively oriented such as hope, enjoyment, or passion, or are negatively oriented such as anxiety, frustration and depression or even

suicidal tendencies. These may influence student-teachers commitment level of their work and finally they may experience different levels of emotional exhaustion, depression or personal accomplishment as factors of burnout.

Teaching Aptitude generally means that a man has a great deal of aptitude for teaching, meaning that he has in a high degree many of the characteristics which make for success in teaching profession or that a person lacks aptitude for teaching, meaning that he lacks this specialized ability which is essential for a teacher. **Bingham** defined Teaching Aptitude as – “a condition symptomatic in his readiness to acquire proficiency his potential ability and another is his readiness to development an interest in exercising his ability.” Teaching is an emotional practice which involves emotional relationships, emotional understanding and emotional labour. Teachers have to value emotional bonds with students and educate students as emotional and social beings. During the training period, student teachers have to go through many situations which generate stress and with the development of emotional intelligence among them, their stress may be decreased. The classroom teaching apart from knowledge and methodology requires traits like effective communication, patience, calmness, perseverance, sympathy, optimism and fair play. These activities are part of one’s emotional intelligence. **Benninga, Berkowitz, Kuehn and Smith (2003)** reported that classroom environment can enhance positive dispositions in children if teachers receive appropriate training.

Kaur, Sharma (2011) found that the student-teachers with high level of emotional intelligence had significantly higher level of teaching competence than student-teachers with average and low level of emotional intelligence. **Kant (2011)** determined the difference between teaching aptitude and responsibility feeling of male and female secondary school teachers found that female teachers have more responsibility in comparison to male teachers. **Usha (2010)** in her study revealed that there was a significant difference between teaching aptitude of effective and ineffective male and female teachers. **Ranganathan (2008)** studied the self-esteem and teaching aptitude of DT.Ed. Students, he found that there is a significant positive relationship between high self-esteem and teaching aptitude and there is no significant different between males and females and the level of self-esteem and teaching aptitude. **Misra (2007)** found that student-teachers with high or low emotional intelligence do not differ from one another on stress and they experience similar stressors. It was also found that emotional intelligence is not related to stress. **Pandey (2006)** found that emotional intelligence and professional stress of degree college teachers is negatively related.

Perveen (2006) in her study revealed that Discipline and Sex of the pupil teachers does not contribute towards teaching aptitude of male and female arts pupil teachers, it was observed that female arts pupil teachers secured significantly higher mean scores than their counterpart male arts pupil teacher. It was found that teaching aptitude of the pupil teacher was significantly correlated with their general teaching competence, professional interest and academic achievements. General teaching competence and professional interest of the pupil teachers significantly affect their teaching aptitude. In addition to this, effect of academic achievement on teaching aptitude of the pupil teaches was positive but not significant at acceptable level of confidence. **Srivastava (2006)** studied the personality of stressed student teachers and found that low stressed male student-teachers are more emotionally stable as compared to high stressed male student-teachers. High and low stressed female student-teachers do not differ from one another on emotional stability. Both male and female high stressed student-teachers do not differ from one another on emotional stability.

Objectives:

Objectives for the study are as follows:

1. To study the relationship between emotional intelligence and stress of B.Ed. students.
2. To study the relationship between emotional intelligence and teaching aptitude B.Ed. students.
3. To study the relationship between stress and teaching aptitude of B.Ed. students.

Hypotheses:

Following hypotheses are formulated to achieve the objectives:

1. There is no significant relationship between emotional intelligence and stress of B.Ed. students.
2. There is no significant relationship between emotional intelligence and teaching aptitude of B.Ed. students.
3. There is no significant relationship between stress and teaching aptitude of B.Ed. students.

Methodology:

In the present study field survey method has been employed. The population of the present study consists of B.Ed. students of Allahabad district. Simple random sampling technique is used for the collection of data. The sample for the study comprises of 100 B.Ed. students belonging to two different colleges of Allahabad city. To find out the Emotional Intelligence, Stress and Teaching Aptitude of B.Ed. students Test of Emotional Intelligence (student-teacher form) and Stress scale both constructed by K.S.Misra and Teaching Aptitude Test constructed by Jai Prakash and R.P.Srivastava have been used. To analyze the data the method of Product moment correlation has been employed.

Analysis of Data:**Testing of hypothesis 1:**

The correlation is established between Emotional Intelligence and Stress of B.Ed. students with the help of scatter diagram

Table 1:

No. of Students	Degree of freedom	Value at .05 level	Value at .01 level	r	Significance level
100	98	.205	.267	-0.285	Significant

Testing of hypothesis 2:

The correlation is established between Stress and Teaching Aptitude of B.Ed. students with the help of scatter diagram

Table 2:

No. of Students	Degree of freedom	Value at .05 level	Value at .01 level	r	Significance level
100	98	.205	.267	-0.386	Significant

Testing of hypothesis 3:

The correlation is established between Emotional Intelligence and Teaching Aptitude of B.Ed. students with the help of scatter diagram

Table 3:

No. of Students	Degree of freedom	Value at .05 level	Value at .01 level	r	Significance level
100	98	.205	.267	0.795	Significant

Table 4:

The inter-correlation between Emotional Intelligence, Stress and Teaching Aptitude of B.Ed. Students

	Emotional Intelligence	Stress	Teaching Aptitude
Emotional Intelligence	-	-0.285	0.795
Stress	-0.285	-	-0.386
Teaching Aptitude	0.795	-0.386	-

Findings-

1. According to table 1 it is clear that the value of correlation coefficient is -0.285 significant at .05 and .01 level that means the hypothesis is accepted that there is significant negative correlation between Emotional Intelligence and Stress.
2. According to the table 2 it is clear that the value of correlation coefficient -0.386 is significant at .05 and .01 level that means the hypothesis is accepted that there is significant negative correlation between Stress and Teaching Aptitude.
3. According to the table 3 it is clear that the value of correlation coefficient 0.795 is significant at .05 and .01 level that means the hypothesis is accepted that there is significant correlation between Emotional Intelligence and Teaching Aptitude.
4. According to the table 4 it is clear that the inter-correlation between different variables i.e. Emotional Intelligence, Stress and Teaching Aptitude are 0.285, 0.386 and 0.795 respectively.

Conclusion:

The yielded results of the current study leads to the conclusion that there is negative correlation between Emotional Intelligence and Stress, and Stress and Teaching Aptitude i.e. -0.285 and -0.386 respectively. It is also evident that there is significantly high positive correlation between emotional intelligence and teaching aptitude i.e. 0.795. In case of Inter-correlation between subtests ranges from -0.386 to 0.795 and in all the cases the correlation is significant. This indicates that there exists high degree of relationship between Emotional intelligence, stress and teaching aptitude of B.Ed. students.

Kremenitzer (2005) stated: „„an increase in a teachers emotional intelligence significantly impacts on student learning in a powerful way both in academic and interpersonal domains” .Enhancing student-teachers emotional intelligence might leads to minimizing stress levels. This in turn may lead to amelioration of student-teachers well-being, motivation and teaching effectiveness and accordingly leads to better achievement. To make the student-teachers emotionally intelligent, better institution environment should be provided as it's a well-known fact that environment plays a pivoting

role in development of emotional intelligence. To achieve high emotional intelligence, student-teachers must learn to get a perspective on situation which otherwise would lead to emotional reactions. They can do this best by discussing their problems with others. A teacher, who has high Emotional intelligence, can teach effectively and live in society with better understanding. Training institution can be highly benefited by making it a point to assess these aspects of student-teachers at the time of admission so that the individuals with appropriate characteristic are selected for teacher training programmes. Training institutions may also provide such situations to the prospective teachers in training period through which they may develop those characteristics, which are useful in enhancing emotional intelligence. They should provide opportunities to student-teachers to participate in decision-making process, teamwork and expression of ideas for improvement. If such atmosphere is created, student-teachers are sure to drive higher teaching effectiveness, which in turn, is likely to lead to their greater identification with their institution and its various activities.

Greenberg (2002) also argued that emotionally intelligent teachers are less vulnerable to stress and might easily retrieve healthy information and action tendency within emotions, and avail themselves of this information to better react to stressors as well as to inspire adaptive action. It is also important to focus on raising student-teachers awareness of stress levels and learning judicious strategies for surmounting stress. This may prove to be an effective means of burnout prevention. Stress may cause Psychological and Physiological imbalance. This is an accepted fact that this course exert some frustration to students. Stress and Teaching Aptitude have significant negative relationship. The only one practical measure to minimize the stressful experience of the student teacher is to conduct teaching aptitude test before admitting them to Teacher Education course. The entry behavior of the individual to this course should be controlled by criterion related evaluation, and then only we can inculcate terminal behavior through this course. Unfortunately majority of the students joins in Teacher Educations have less or no teaching aptitude, the consequence far than the scope of this research. This condition have to be eliminated in future then only a nation can dream a civilized society, as our destination shaping is in our Class-room, **Kothari(1964)**.

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Speaking of Stress Management through Yoga and Other Strategies

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Stress:

In a medical or biological context stress is a physical, mental, or emotional factor that causes bodily or mental tension. Stresses can be external (from the environment, psychological, or social situations) or internal (illness, or from a medical procedure). **Stress:** The different kinds of stress:

Stress management can be complicated and confusing because there are different types of stress — acute stress, episodic acute stress, and chronic stress — each with its own characteristics, symptoms, duration and treatment approaches.

Acute stress:

Acute stress is the most common form of stress. It comes from demands and pressures of the recent past and anticipated demands and pressures of the near future. Acute stress is thrilling and exciting in small doses, but too much is exhausting. A fast run down a challenging ski slope, for example, is exhilarating early in the day. That same ski run late in the day is taxing and wearing. Skiing beyond your limits can lead to falls and broken bones. By the same token, overdoing on short-term stress can lead to psychological distress, tension headaches, upset stomach and other symptoms.

Fortunately, acute stress symptoms are recognized by most people. It's a laundry list of what has gone awry in their lives: the auto accident that crumpled the car fender, the loss of an important contract, a deadline they're rushing to meet, their child's occasional problems at school and so on.

Because it is short term, acute stress doesn't have enough time to do the extensive damage associated with long-term stress. The most common symptoms are:

- Emotional distress — some combination of anger or irritability, anxiety and depression, the three stress emotions.
- Muscular problems including tension headache, back pain, jaw pain and the muscular tensions that lead to pulled muscles and tendon and ligament problems.
- Stomach, gut and bowel problems such as heartburn, acid stomach, flatulence, diarrhea, constipation and irritable bowel syndrome.
- Transient over arousal leads to elevation in blood pressure, rapid heartbeat, sweaty palms, heart palpitations, dizziness, migraine headaches, cold hands or feet, shortness of breath and chest pain.

Acute stress can crop up in anyone's life, and it is highly treatable and manageable.

Chronic stress

While acute stress can be thrilling and exciting, chronic stress is not. This is the grinding stress that wears people away day after day, year after year. Chronic stress destroys bodies, minds and lives. It wreaks havoc through long-term attrition. It's the stress of poverty, of dysfunctional families, of being trapped in an unhappy marriage or in a despised job or career. It's the stress that the never-ending "troubles" have brought to the people of Northern Ireland, the tensions of the Middle East have brought to the Arab and Jew, and the endless ethnic rivalries that have been brought to the people of Eastern Europe and the former Soviet Union.

Chronic stress comes when a person never sees a way out of a miserable situation. It's the stress of unrelenting demands and pressures for seemingly interminable periods of time. With no hope, the individual gives up searching for solutions.

Some chronic stresses stem from traumatic, early childhood experiences that become internalized and remain forever painful and present. Some experiences profoundly affect personality. A view of the world, or a belief system, is created that causes unending stress for the individual (e.g., the world is a threatening place, people will find out you are a pretender, you must be perfect at all times). When personality or deep-seated convictions and beliefs must be reformulated, recovery requires active self-examination, often with professional help.

The worst aspect of chronic stress is that people get used to it. They forget it's there. People are immediately aware of acute stress because it is new; they ignore chronic stress because it is old, familiar, and sometimes, almost comfortable.

Chronic stress kills through suicide, violence, heart attack, stroke and, perhaps, even cancer. People wear down to a final, fatal breakdown. Because physical and mental resources are depleted through long-term attrition, the symptoms of chronic stress are difficult to treat and may require extended medical as well as behavioral treatment and stress management.

HOW stress affects our health:

Stress: We've all felt it. Sometimes stress can be a positive force, motivating you to perform well at your piano recital or job interview. But often — like when you're stuck in traffic — it's a negative force. If you experience stress over a prolonged period of time, it could become chronic — unless you take action.

A natural reaction

Have you ever found yourself with sweaty hands on a first date or felt your heart pound during a scary movie? Then you know you can feel stress in both your mind and body.

This automatic response developed in our ancient ancestors as a way to protect them from predators and other threats. Faced with danger, the body kicks into gear, flooding the body with hormones that elevate your heart rate, increase your blood pressure, boost your energy and prepare you to deal with the problem.

These days, you're not likely to face the threat of being eaten. But you probably do confront multiple challenges every day, such as meeting deadlines, paying bills and juggling childcare that make your body react the same way. As a result, your body's natural alarm system — the “fight or flight” response — may be stuck in the on position. And that can have serious consequences for your health.

Pressure points:

Even short-lived, minor stress can have an impact. You might get a stomach-ache before you have to give a presentation, for example. More major acute stress, whether caused by a fight with your spouse or an event like an earthquake or terrorist attack, can have an even bigger impact.

Multiple studies have shown that these sudden emotional stresses — especially anger — can trigger heart attacks, arrhythmias and even sudden death. Although this happens mostly in people who already have heart disease, some people don't know they have a problem until acute stress causes a heart attack or something worse.

Chronic stress:

When stress starts interfering with your ability to live a normal life for an extended period, it becomes even more dangerous. The longer the stress lasts, the worse it is for both your mind and body. You might feel fatigued, unable to concentrate or irritable for no good reason, for example. But chronic stress causes wear and tear on your body, too.

Stress can make existing problems worse. In one study, for example, about half the participants saw improvements in chronic headaches after learning how to stop the stress-producing habit of “catastrophizing,” or constantly thinking negative thoughts about their pain. Chronic stress may also cause disease, either because of changes in your body or the overeating, smoking and other bad habits people use to cope with stress. Job strain — high demands coupled with low decision-making latitude — is associated with increased risk of coronary disease, for example. Other forms of chronic stress, such as depression and low levels of social support, have also been implicated in increased cardiovascular risk. And once you're sick, stress can also make it harder to recover. One analysis of past studies, for instance, suggests that cardiac patients with so-called “Type D” personalities — characterized by chronic distress — face higher risks of bad outcomes.

What you can do:

Reducing your stress levels can not only make you feel better right now, but may also protect your health long-term.

In one study, researchers examined the association between “positive affect” — feelings like happiness, joy, contentment and enthusiasm — and the development of coronary heart disease over a decade. They found that for every one-point increase in positive affect on a five-point scale, the rate of heart disease dropped by 22 percent.

While the study doesn't prove that increasing positive affect decreases cardiovascular risks, the researchers recommend boosting your positive affect by making a little time for enjoyable activities every day.

Other strategies for reducing stress include:

- **Identify what's causing stress.** Monitor your state of mind throughout the day. If you feel stressed, write down the cause, your thoughts and your mood. Once you know what's bothering you, develop a plan for addressing it. That might mean setting more reasonable expectations for yourself and others or asking for help with household responsibilities, job assignments or other tasks. List all your commitments, assess your priorities and then eliminate any tasks that are not absolutely essential.
- **Build strong relationships.** Relationships can be a source of stress. Research has found that negative, hostile reactions with your spouse cause immediate changes in stress-sensitive hormones, for example. But relationships can also serve as stress buffers. Reach out to family members or close friends and let them know you're having a tough time. They may be able to offer practical assistance and support, useful ideas or just a fresh perspective as you begin to tackle whatever's causing your stress.
- **Walk away when you're angry.** Before you react, take time to regroup by counting to 10. Then reconsider. Walking or other physical activities can also help you work off steam. Plus, exercise increases the production of endorphins, your body's natural mood-booster. Commit to a daily walk or other form of exercise — a small step that can make a big difference in reducing stress levels.

- **Get help.** If you continue to feel overwhelmed, consult with a psychologist or other licensed mental health professional who can help you learn how to manage stress effectively. He or she can help you identify situations or behaviors that contribute to your chronic stress and then develop an action plan for changing them.
- **Rest your mind.** According to APA's 2012 Stress in America survey, stress keeps more than 40 percent of adults lying awake at night. To help ensure you get the recommended seven or eight hours of shut-eye, cut back on caffeine, remove distractions such as television or computers from your bedroom and go to bed at the same time each night. Research shows that activities like yoga and relaxation exercises not only help reduce stress, but also boost immune functioning.
- **Yoga for Stress Relief:** Dating back over 5000 years, yoga is the oldest defined practice of self development. The methods of classical yoga include ethical disciplines, physical postures, breathing control and meditation. Traditionally an Eastern practice, it's now becoming popular in the West. In fact, many companies, especially in Britain, are seeing the benefit of yoga, recognizing that relaxed workers are healthier and more creative, and are sponsoring yoga fitness programs.

Overview of Yoga:

Yoga, which derives its name from the word, "yoke"—to bring together—does just that, bringing together the mind, body and spirit. But whether you use yoga for spiritual transformation or for stress management and physical well-being, the benefits are numerous.

Yoga's Effects on the Body:

The following is only a partial list of yoga's benefits:

- reduced stress
- sound sleep
- reduced cortisol levels
- improvement of many medical conditions
- allergy and asthma symptom relief
- lower blood pressure
- smoking cessation help
- lower heart rate
- spiritual growth
- sense of well-being
- reduced anxiety and muscle tension
- increased strength and flexibility
- slowed aging process

Yoga's benefits are so numerous; it gives a high payoff for the amount of effort involved.

What's Involved With Yoga?:

The practice of yoga involves stretching the body and forming different poses, while keeping breathing slow and controlled. The body becomes relaxed and energized at the same time. There are various styles of yoga, some moving through the poses more quickly, almost like an aerobic workout, and other styles relaxing deeply into each pose. Some have a more spiritual angle, while others are used purely as a form of exercise.

What Are The Benefits Of Yoga?:

Virtually everyone can see physical benefits from yoga, and its practice can also give psychological benefits, such as stress reduction and a sense of well-being, and spiritual benefits, such as a feeling of connectedness with God or Spirit, or a feeling of transcendence. Certain poses can be done just about anywhere and a yoga program can go for hours or minutes, depending on one's schedule.

What Are the Drawbacks of Yoga?:

Yoga does require some commitment of time and is more difficult for people with certain physical limitations. Some people feel self-conscious doing some of the poses. Also, yoga classes can be expensive, although it is possible, albeit perhaps more challenging, to learn from a book or video.

How Does It Compare To Other Stress Reduction Methods?:

As yoga combines several techniques used for stress reduction, it can be said to provide the combined benefits of breathing exercises, stretching exercises, fitness programs, meditation practice, and guided imagery, in one technique. However, for those with great physical limitations, simple breathing exercises, meditation or guided imagery might be a preferable option and provide similar benefits. Yoga also requires more effort and commitment than taking pills or herbs for stress reduction.

The following yoga techniques can help calm an unsettled mind.

1: Move your body and relieve your mind of stress with Asanas.

These yoga postures can help achieve a happy and healthy mind and body. Asanas help release tension and negativity from the system.

- Dhanurasana (Bow Pose)
- Matsyasana (Fish Pose)
- Janu Shirsasana (One-Legged Forward Bend)
- Setubandhasana (Bridge Pose)
- Marjariasana (Cat Stretch)
- Paschimottanasana (Two-Legged Forward Bend)
- Hastapadasana (Standing Forward Bend)
- Adhomukha Shwanasana (Downward Facing Dog)
- Shirshasana (Headstand)
- Shavasana (Corpse Pose)

Note: *At the end of the yoga posture session, lie down in Yoga Nidra to give your mind and body a few minutes of through relaxation. The technique is helpful in flushing out body toxins, a primary cause of stress, from the system.*

2: Breathe right with Pranayamas to relieve anxiety

Taking your attention to the breath can help free the mind of the unnecessary clutter of thoughts that breed anxiety. Try the following breathing practices:

Kapal Bhati Pranayama (Skull-Shining Breathing Technique) Bhastrika Pranayama Nadi Shodhan Pranayama (Alternate Nostril Breathing) – effective in releasing stress from the system (where the exhalation is longer than the inhalation) Bhramari Pranayama (Bee Breath)

3: Meditate to enjoy the gift of a relaxed mind

Meditation can be an excellent technique to relax a distracted mind, give you a sense of calm and peace, and also observe with daily practice how your mind works to keep you involved in small,

petty things around. It can also help you not worry too much or get anxious of the unknown future.

You might have often heard the term 'adrenalin rush'. This happens when we get too anxious about a potential threat. For instance, while taking an adventure ride. At such a time, the level of adrenalin hormone goes higher, leading our heart to beat faster, making the muscles tense and our body sweat profusely. Scientific research has shown that regular meditation practice can help significantly reduce the level of this stress hormone.

4: Apply yoga philosophy in your life; stay happy and enjoy every moment

Knowing and applying the ancient yoga knowledge in daily life, which talks about some simple yet profound principles (yamas and niyamas) of yoga, can be the secret to happy and healthy living. For instance, the Santosha principle (niyama) teaches the value of contentment. The Aprigraha principle can help us overcome greediness or the desire to keep possessing more, which can be a reason for stress and anxiety. Also, the Shaucha principle talks about cleanliness of the mind and body. This rule can particularly help if you tend to get too anxious about catching infectious diseases.

The yamas and niyamas of yoga will also help us eat nutritious food and live a healthy lifestyle which greatly helps to overcome anxiety and stress. To understand the yoga philosophy, you may consider reading Sri Sri Ravi Shankar's Commentary on Patanjali Yoga Sutras.

5: Pray, keep faith and smile!

Prayer is the best form of reassurance and support to keep you anxiety-free. Developing habits of daily prayer, chanting or singing bhajans (devotional songs) fill you with positive energy and also help still the mind. They also instill a sense of deep faith that all happens for the best and that there is a higher divine power that takes care. Moreover, make a conscious effort to smile more and more. It will instill confidence, calmness and positivity instantaneously. Try it out right now!

6: Think about what you can do for others

When we constantly remain stuck in 'me and mine', it makes room for stress and anxiety. We keep worrying about what will happen to us. Rather, shift your attention to how you can be of some use to others around you. Energizing yourself with some service activity can give you deep satisfaction and immense joy.

7: Know the impermanence of the world

When this realization sets in that everything around us is temporary and would change, we become relaxed and settled from within. A feeling of 'this too shall pass and not remain forever' arises in us and frees us from anxiety. Meditation can help us see this founding principle of life.

8: Remember a similar past situation when you could overcome anxiety

This fills you with immense courage that you can pass even this situation. Keep reminding this to yourself often.

9: Keep positive company around you

When you spend more time with positive-minded people, you are influenced by similar thoughts, which reflects in your overall attitude to life. Only a positive mind can breed joy, peace and relaxation.

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Stylistic Patterns in R. K. Narayan's 'The Guide'

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Abstract

The present research paper explores the stylistic patterns used in the novel 'The Guide' of R.K. Narayan. It is also concerned with patterns of used in given texts. Stylistics is an attempt to make literary build up a literary grammar of language, a literary transformation, much more scientific, methodological, objective and precise. The research paper also expresses the various device of stylistics such as – Cohesion, Foregrounding in the novels of R.K. Narayan with special reference to the novel 'The Guide'. It concentrates on features of connotation, implication, presupposition contained in the lexical, the syntactical and the phonological parameters of the text which are built in the style of the creative writer.

Introduction

The present research paper explores the stylistic patterns used in the novel, 'The Guide' of R.K. Narayan. The Guide, first published by Viking Press, New York, is the most widely read of R.K. Narayan's novels. It has been translated into the leading languages of Europe and India, has had huge sales through, has been prescribed for study at post-graduate standard in many universities, and has been made into an immensely popular film in Hindi and English. It won for him the Sahitya Academy Award in 1961. This celebrated novel tells the story of Raju, and 'the rise and fall of his fortune as guide, lover, and impresario and then his end as ' a saint.

Stylistics is the scientific study of style and that looks at the components of meaning. It concentrates on features of connotation, implication, presupposition Contained in the lexical, the syntactical and the phonological parameters of the text which are built in the style of the creative writer. Stylistics is a link between linguistics and literature. Modern criticism looks upon a work of literary art as an organic unity, in which matter and manner, thought and expression, are indissolubly one. The present day –style studies are based on the verbal texture and literary craftsmanship of the work of art. External literary history and conventional literary judgment has been cast off as an obsolete irrelevance. Precise reference and analysis has given birth to a new kind of stylistic criticism.

G.Leech's approach to stylistic analysis points out that ' a work of literature contains dimensions of meaning additional to those operating in other types of discourse, and he suggests that for this reason descriptive linguistics cannot simply be applied indifferently to literary as to other types of text. He discovers three features of literary expression representing different dimensions of meaning which are not covered by the normal categories of linguistic description with several references. These three features are- Cohesion; Foregrounding; and Cohesion of Foregrounding.

Cohesion means the intra textual relations of a grammatical and lexical kind which knit the parts of a text together into a complete unit of discourse and which, therefore convey the meaning of the text as a whole. R.K. Narayan takes recourse to lexical repetition, the use of pronouns and definite article. Besides these, the underlying idea is a strong unifying link between paragraphs. A careful arrangement of paragraphs is another distinctive feature which is very evident from the organization of material. Despite being a part of a bulk, the beginnings are all self-contained units. The premise overtly stated or hinted in the introductory lines is verified at the end summing up the logic and

sequence in short, well defined sentences. By foregrounding means the deliberate deviation from the rules of the language code or from the accepted conventions of its use which stands out, or is foregrounded against a background of normal usage. Foregrounding occurs, therefore, when the semantic features of an item in the code do not correspond with those which are bestowed upon it by the contextual environment in which it appears. Leech also points out another manifestation of foregrounding. This occurs when the writer instead of exercising a wider choice than is permitted him by the code deliberately renounces his choice and produces uniformity where variety would normally be expected. Cohesion of Foregrounding is meant the manner in which deviations in a text are related to each other to form intra-textual patterns.

Stylistics is the scientific study of style. It concentrates on features of connotation, implication, presupposition looks contained in the lexical, the syntactical and the phonological parameters of the text, which are built in the style of the creative writer. It makes graphological, gesticulatory and mechanical (commas, dashes, semi colon, etc.) details more meaningful. Stylistics is not something opposed to literary criticism, for between true literature and linguistics, there is no conflict ; the real linguist is at least half a literateur and the real literateur at least half a linguist.'

The great asset of Narayan as a descriptive artist is his graceful and simple style. There are very few Indian writers who are able to handle English with so much purity and elegance as he does. He is a master of excellent English prose both in narrative and dialogue. It is to the ease, the refinement and the exquisite naturalness of his prose that we owe a large part of our pleasure in reading him. The most striking quality of Narayan's prose style is its simplicity and transparency. It is direct and free from affectation and obscurity. It is never pompous and dull. It is also never repetitive. It is always marked by clarity and exactness i.e. by the rare quality of saying exactly what is intended as unmistakably and simply as possible, without false or straining after effect. Simplicity and clarity of his style is mainly the result of his use of the very language of everyday life and his scrupulous adherence to the accepted patterns of sentence structure, and choice of words. Narayan's is not an experimental but a conservative and traditional style. He never uses sentences of complicated grammatical construction with such dependent and subordinate clauses, as make the sense difficult to follow. He seldom uses Hindustani words and phrases in his narrative, that is why he rarely needs any glossary and his English never appears slovenly and jerky. Narayan's style is also notable for its economy of detail and purity. It is never weighed with words. His English has a virile force and a mastery which conveys the maximum of meaning in the fewest and simplest words.

R.K.Narayan follows in this novel, new techniques of telling a story. He uses both 'flash on ' and ' flash back' techniques in juxtaposition by describing alternately the incidents of the present life of Raju as they actually take place and the incidents of his early life as they are being retold by him to Velan; and the present as narrated by the omniscient author. This method keeps the curiosity of the reader alive as regards both the present and the past events of Raju's life. It also provides a fresh vigour and interest to the novelist's art of narration.'

The Guide' seems technically more complicated although more satisfying. The first page leaves many questions unanswered and as a stylistic device this is the best way to begin. The narration is the third person and the time scheme is a little confusing and jarring. This too intrigues the reader. In the beginning of the story, we do come to know that 'Raju' is now out of jail and in lonely place where he has been staying cut off from all humanity for the past two days. Here he is happy to accost a simple rustic who eyes him reverentially. Nothing more is conveyed except a few details about the

rustic who is on his way back from his daughter's house after a short visit. Although the passage is cohesive, yet lacks a well-defined context. Sentence 1 begins by identifying two things, first, that Raju is in lonely place and second, that he is bored of his loneliness. Therefore, the 'intrusion is welcome. Sentence 2 connects the 'intrusion' with the 'man' who stands gazing reverentially on Raju's face. There is a psychological build-up and progression in this passage. There is an incipient feeling underlying every sentence that what will come next can take only two forms – either an explication and thereafter elaboration of the fact that Raju was deified; or an explication and elaboration of 'how' and 'why' he went to jail.

R.K. Narayan is a story teller in the Indian tradition of storytelling .The narration moves forward chronologically, each succeeding event being linked casually with the previous one. There is no looking forward or backward, no probing of the sub conscious or even the unconscious as is the case with novelists like Virginia Woolf, James Joyce and others. ' Narayan's is the most simple form of prose fiction-the story which records a succession of events .There is no hiatus between character and plot.; both are inseparably knit together. The qualities the novelist attributes to these characters determine the action, and the action in turn progressively changes the characters and thus the story is carried forward to the end. In other words, as a good story teller, Narayan sees to it that his story has a beginning, a middle and an end. The end of his novel is a solution of the problem which sets the events moving and beyond which the action cannot progress. This end very often consists either in balance of forces and counter forces or in death or both.'" However, 'The Guide' is an exception in this respect. The narrative technique Narayan has followed in this novel is different from that of the other novels. In all his novels except 'The English teacher', ' The Guide' and 'The Man Eater of Malgudi' Narayan is the omniscient author writing in the third person and thus following the traditional and conventional mode of narration. In the 'Guide', Narayan deviates from the traditional mode of narration; part of the story is told by the author and part in the first person by the hero himself. This is certainly an improvement in Narayan's narrative technique; here however it is necessitated by the nature of the story. The novel begins with the release of Raju from prison .Whatever happens to Raju after his release is told by the narrator-the novelist; whereas whatever happened to Raju before he was imprisoned is told in a series of flashbacks in Raju's own words, in the form of a confession to Velan who come to think of him as a saint . Narayan's art of cohesion can be noticed in his smooth shifting from present to flashback. For example,

"Raju liked this rambling talk. He had been all alone in this place for over a day. It was good to hear the human voice again. After the villager resumed the study of his face with intense respect, Raju stroked his chin thoughtfully to make sure that an apostolic beard had not suddenly grown up there. He had had his last shave only days before with the hard- earned coins of his jail life."

The effect of this technique is to make the figure of the hero more sharp and real than the other characters. Also, Raju in making the confession characterizes himself by what he reports and how he reports it. The impression that the reader gets is that Raju's character develops because of certain events and the events in turn change his character till he finds a saint, fasting to induce rain for the drought-affected village in response to the expectations of a crowd of admirers and worshippers .In other words, character and action develop simultaneously and both influence each other .It is in this way that the complex personality of Raju is built up and made convincing and credible. The interesting technique of narration Narayan has used in this novel keeps the curiosity of the readers alive, regarding both the past and present of Raju. It makes the narrative fresh, vigorous and

interesting. As the past and present are cunningly jumbled, there is a constant impression of suspense and anticipation. The zig-zag narration gives a piquancy to the novel without in any way confusing the reader. In this way Raju becomes his own critic and we are enabled to see the action as Raju sees it, and as the later Raju sober sees the earlier Raju 'Drunk'. In this way, the past and the present are juxtaposed, and each illuminates the other. In short, the technique of narration the novelist has followed in 'The Guide' is complex and original and unique in several ways.

The novels when viewed as the work of one person, do reveal some common features of style. R.K. Narayan prefers simple words to polysyllabic words. A discreet mixture of Saxon and archaic words give his English a narrative touch. Although writing about human psyche he uses more concrete nouns than abstract. This is to eliminate the 'disjunction of self and world'. As a result of this his writing gives an authenticity, since man's two halves the subjective and objective make a whole. For vividness and visibility, he includes adjectives, referring to physical and psychological states. The narrative voice is mirrored in evaluative epithets. A large number of adverbs of time, place, direction, and degree give his writing a palpable quality-and the adverbs of manner throw light on the personalities of the characters, so as to render their total image for immediate apprehension. A judicious use of adjuncts and conjuncts clarifies the contrasts and juxtapositions of which of his writing is full. A balanced use of transitive and intransitive verbs adds speed to the progression of images, which are created in order to dramatize an inner conflict and symbolize it objectively through a situation or object. The transitive verbs give the reader an impression of movement and activity and thus add liveliness to the description.

With 'The Guide', Narayan has established himself as a master of fictional technique. It won the Sahitya Academy Award in 1960. 'The Guide' is the story of Raju, a rather restless and ambitious shopkeeper on Malgudi Railway station, who turns a tourist guide and who in the discharge of such duties in one case rides on the crest of an adulterous passion for Rosie, a dancer, right into jail. At the conclusion of two year imprisonment he emerges only to embark upon another crisis of his life which ends with his last adventure in realms of enforced sainthood. The story of Raju falls into two parts- the past and the present. The past is told by Raju, the present by the author. The past and the present are related by the skillful plot construction. The consistently braided time - scheme that is used in the novel contributes to a better and deeper understanding of the hero who is both a swindler and a holyman. By alternating two time schemes at sharp intervals, the author brings into focus those aspects of Raju's character which are essential for an understanding of his inner confusion."

But when a more complex effect is attempted, as in 'The Guide' where situation has a certain intensity, one is not always sure that the language is equal to the task. We seem to be left how to take in what is presented, whether to respond in sympathy or in comic detachment. Now it is possible of course to regard this as the very effect Narayan's art aims at. **William Walsh** calls it an intricate alliance of the serious and the comic considering it as a sort of culminating point of the art. "*The serious and the comic flow in and out of one another throughout in an intricate, inseparable alliance.*" But the mingled effect may simply be the result of the fact that the language lacks amplitude. "*The same language that formerly served the comic is now employed for the situations which have emotional magnitude and complexity. There are scores of places in the guide where one seems to feel this want. Nothing happens to the language, though the narrative raises the expectation of a heightened tone.*"

For example, when Raju first meets Rosie or when he persuades her to come out of her room

to join the ride to the caves or when he foirst learns that Rosie belongs to the temple dancing- girl cast or gets inexorably pushed into the role of saint and savior against his will or, for example the most excruciating moment in their relations when, after Raju has been arrested for forgery, she heroically takes up her dancing engagements to find the money to save him from jail. The crisis that overtakes them has considerable psychological complexity as is shown in Raju's sudden spitefulness towards her and her genuine bewilderment. These call for a skillfull presentation, are indeed an opportunity and a challenge to the novelist. The situation demands expert manipulation of language and tone. The staleness of the language, the lifeless tone, the very clichés that clutter the passage- "in spite of protestations to the contrary"; go from strength to strength"; "the way she was going about her busy; "inside the bars or outside"- announce that the challenge has had not been fairly met and the opportunity is all but lost.

This is not to belittle Narayan's very considerable achievements. With his limited language he is yet able to evoke through all the appearance of stillness and strangeness, a rhythm of life as it is lived in South India. The welter and vitality of that scene, the absurdities, the pretensions and the excitements od religious and traditional routine all brought out with the precious touch of irony.

Conclusion

On the whole, Narayan's style comprises lucidity, liveliness, simplicity and humour. He is such a stylist that his style is filled with idiomatic expressions and naturalness. Thus his way of writing is delicate and elegant. His description of incidents is down-to-earth and pleasing with the natural impulse. With the help of agility of style, he passes into humourous, tragic, ironic and realistic portrayal of life. He is very much particular about purity of style and moral quality. He finds the plain language as a vehicle of truth. His style and technique have compatibility with the theme of the story. **Narayan** himself told about the cultivation of this unadorned style: "*I am very conscious of style, and I wish to make the style as unnoticed as possible --- style should not be noticed. The idea must be more prominent than the style in which it is written. That's a very difficult style you know--- you have that kind of thing only in the Bible. you have to remove things which are extraneous; an ornament here and there. You have to have a watchful eye to make your sentences just right. It's very hard. That's what I try to do. I'm aware of this style which is one that abolishes style*".

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Effect of Selected Weight Training Exercise on Percentage of Body Fat among the Females Aged 30-35 yrs

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Abstract :

Now day's weight training exercises are getting popularity among the population irrespective of age, sex, creed and colour, as means for maintenance of physical fitness. Therefore to improve the general physical fitness of females the weight training program has been chosen by the researcher. Thus the research project entitled "Effect of selected weight training exercise on percentage of body fat among the females aged 30 to 35 yrs". The investigator has used a single group method of true experimental design for the present study that consists of one experimental group. The investigator was carried out in the Talwalkars Better Value fitness. For the experimental Students (n=20), who were randomly selected.

After the pre-test with the Percentage of body fat, the experimental group underwent a weight training programmed of exercises. All the training programmed have been conducted daily 1hour in the evening, three days in a week except Saturday and Sunday for a total period of 8 weeks.

The Percentage of Body Fat was considered as the main dependent variable as selected in this study. This variable had some components viz., waist to hip ratio, body mass index, Percentage of body. Here training interventions Weight training was considered as the independent variables. After the experimental period was over, the subjects of all the groups were post-tested with the items of the Percentage of Body Fat. There was significant improvement in Waist to hip ratio, Body mass Index and fat percentage of Experimental group at pre and post tests which may be due the training given to the subjects of Experimental group.

DEFINITION: Body Mass Index, waist Hip Ratio, body fat, weight training etc

Introduction :

Weight training is a common type of strength training for developing the strength and size of skeletal muscles. It uses the weight force of gravity (in the form of weighted bars, dumbbells or weight stacks) to oppose the force generated by muscle through concentric or eccentric contraction. Weight training uses a variety of specialized equipment to target specific muscle groups and types of movement.

NEED OF THE STUDY:

Many working women's/middle women's/ house wife may not want to participate in activities because they feel tired. But in the "couch-potato" era, where both children and adults spend hours and hours each day in front of the television or computers. This inactive lifestyle is leading to an ever-increasing number of overweight. Unfortunately, more and more females are also facing the same challenge.

Our females are our future-and understanding and supporting their natural yearning for physical activity will help lead them to a lifetime of happy and healthy living. If we joyfully teach them how to include healthy exercise routine from the early stages of their development, we will be giving our children a gift that will endure throughout their lives.

SIGNIFICANCE OF THE STUDY:

The present study will be of significance in the following ways, i.e.

- This research will encourage the female's population to practice weight training for improving their Body Fat Percentage.
- This research will also useful to the working woman's, middle age woman/ house wife for improve their Body Fat Percentage.
- This study will help the female's interest towards the fitness.

HYPOTHESES OF THE STUDY:

H₁: The weight training will significantly enhance waist to hip ratio of females.

H₂: The weight training will significantly enhance body mass index of females.

H₃: The weight training will significantly decreases the fat percentage of females.

OBJECTIVES OF THE STUDY:

- To find out the percentage of body fat of the females
- To prepare the weight training program for females.
- To find out the waist to hips ratio, body mass index & fat percentage of the females
- To see effect of weight training program to improve the general fitness on females

DELIMITATIONS OF THE STUDY:

- The study was delimited only for the women's residing in Talwalkar's Better Value Fitness area, Dombivali.
- The study was delimited to the age group 30-35 years.
- The study was delimited to single group of 20 subjects only.
- The study was delimited for one hour of weekly three days for eight weeks.
- The study was delimited to weight training.
- The study was delimited to general fitness waist to hips ratio, body mass index, and fat percentage.

LIMITATIONS OF THE STUDY:

- Weather / climate which may have effect on training and performance were considered as limitation.
- It could not possible to control the day to day activities of the subject selected for the group which include diet, food, habits and rest.

METHODOLOGY:**SELECTION OF THE SUBJECTS:**

Twenty women's aged 30 to 35 years from Talwalkar's better value Fitness were randomly selected as subjects for this study and they were physically fit.

DESIGN OF THE STUDY:

The researcher has chosen a one group design for conducting experiment in this study. The pre test was conducted on fat percentage variables groups of females. The weight training was given to the subjects of the experimental groups of females for eight weeks for 3days in a week i.e. on Monday, Wednesday and Friday in the evening for one hour. After the weight training programmed the post test was conducted same as pre test.

SELECTION OF THE VARIABLES

The following are the variables selected for this study

Independent variable- Weight Training: Squat, Leg press, Leg extension, Leg curl, Calf raises,

Vertical chest press, Lat pull down, Shoulder Press, Biceps curl, Triceps extension and Sit ups etc.

Dependent variables: Waist - hip ratio, Body mass index and Fat percentage

STATISTICAL PROCEDURES:

The collected data were analyzed by using the (t) test as Suggested by McGuigan for significance of difference within experimental group.

ANALYSIS AND INTERPRETATION OF DATA:

The analysis of the data collected by the researcher before and after the training intervention has been presented in this study. The data was analyzed by using paired sample 't' test. Within group comparison was done paired sample 't' test. The comparison of mean gain of selected variables of experimental group has been presented in this chapter.

Table no. 1 The comparison of experimental group mean between pre and post test.

TABLE 1 Comparison of mean of between pre and post Test of the Experimental group								
Variable	Pre Test		Post Test		Mean Diff	Std Err Mean	't'	sig.
	Mean	SD	Mean	SD				
Waist to hip ratio	0.78	0.05	0.77	0.04	0.005	0.006	0.75	P<0.000
Body mass index	30.82	3.017	29.02	2.99	1.80	0.006	12.62	P<0.000
Fat percentage	48.84	8.49	45.07	9.14	3.77	0.53	7.14	P<0.000

Significance at 0.00 level, where $df = 19$, $t' = 2.04$

1. Comparison of mean between Pre and Post test of Waist to hip ratio in experimental group

In the case of Waist to Hip ratio the mean performance of experimental group in the pre and post tests were 0.78 (SD = 0.05) and 0.77 (SD = 0.04) respectively. The mean difference for experimental group was 0.005 ($SE_M = 0.006$) since calculated 't' (0.75) is greater than tab (2.04), H_1 will be accepted at 0.00 level of significance.

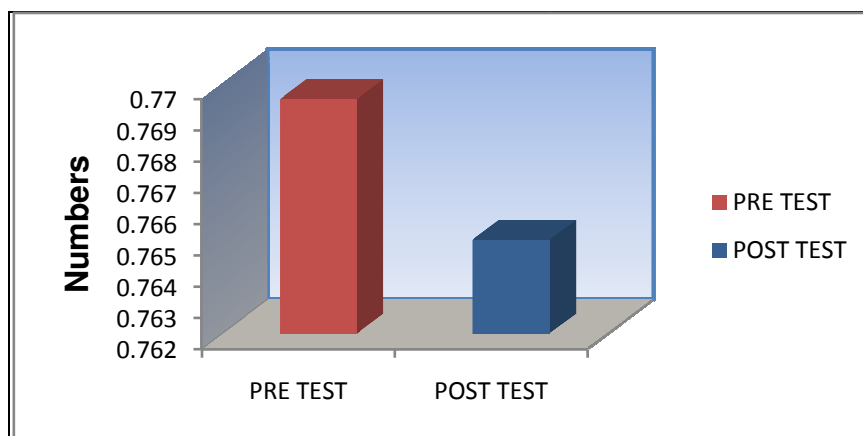


Fig. no.1 Comparison of mean between Pre and Post test of Waist to hip ratio

It can be seen from the graph that there was significant improvement in waist to hip ratio of Experimental group at pre and post tests which may be due the training given to the subjects.

2. Comparison of mean between Pre and Post test of Body mass Index in experimental group

In the case of Waist to Hip ratio the mean performance of experimental group in the pre and post tests were 30.82 (SD = 3.017) and 29.02 (SD = 2.99) respectively. The mean difference for experimental group was 1.80 (SE_M = 0.006) since calculated 't' (12.62) is greater than tab (2.04), H₁ will be accepted at 0.00 level of significance.

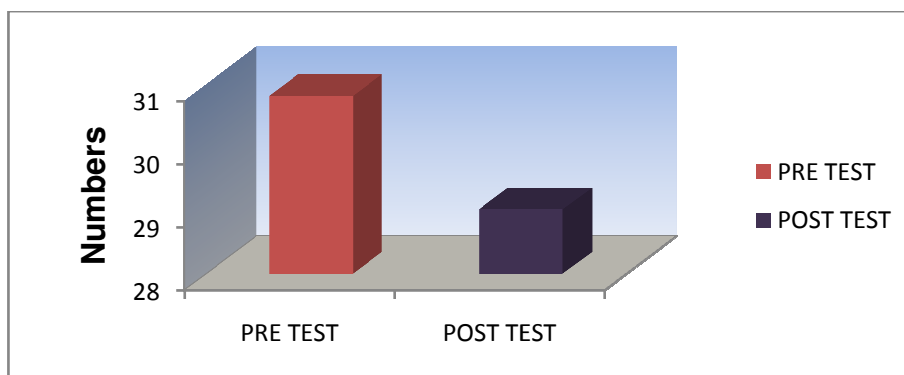


Fig. no. 2 Comparison of mean between Pre and Post test of Body Mass Index

It can be seen from the graph that there was significant improvement in Body mass index of Experimental group at pre and post tests which may be due the training given to the subjects.

3. Comparison of mean between Pre and Post test of Fat percentage in experimental group

In the case of Waist to Hip ratio the mean performance of experimental group in the pre and post tests were 48.84 (SD = 8.49) and 45.07 (SD = 9.14) respectively. The mean difference for experimental group was 3.77 (SE_M = 0.53) since calculated 't' (7.14) is greater than tab (2.04), H₁ will be accepted at 0.00 level of significance.

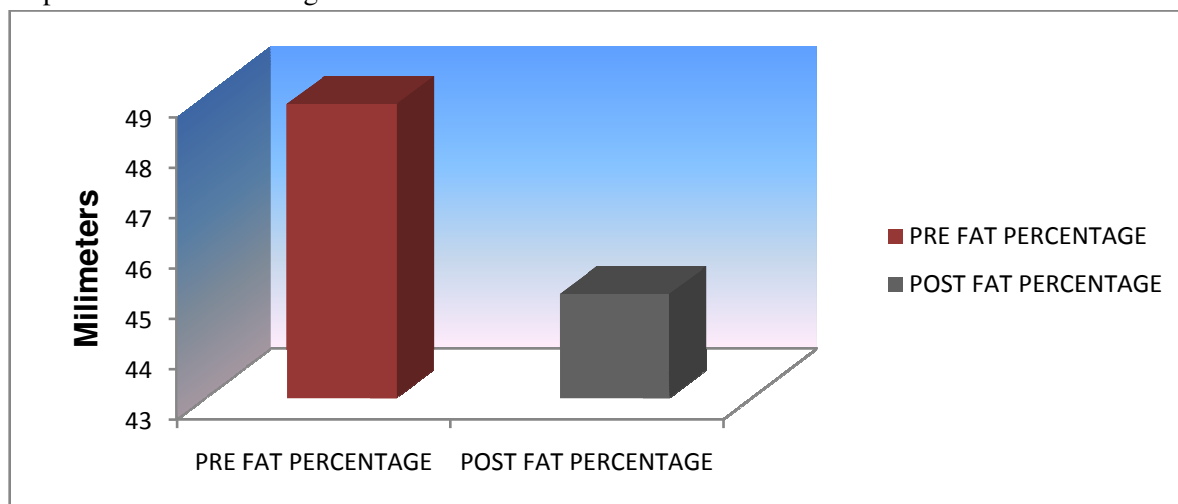


Fig. no. 3 Comparison of mean between Pre and Post test of Fat Percentage

It can be seen from the graph that there was significant improvement in fat percentage of Experimental group at pre and post tests which may be due the training given to the subjects.

FINDINGS:

The findings of this experiment, within limitations, help to conclude that-

- There was significant improvement in Waist to hip ratio of Experimental group at pre and post tests which may be due the training given to the subjects of Experimental group.
- There was significant improvement in body mass index of Experimental group at pre and post tests which may be due the training given to the subjects of Experimental group.
- There was significant improvement in fat percentage of Experimental group at pre and post tests which may be due the training given to the subjects of Experimental group.

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Effective Performance of Students through Classroom Interaction

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Introduction

Classroom interaction, classroom behaviour Describes the form and content of behaviour or social interaction in the classroom. In particular, research on gender, class, and 'race' in education has examined the relationship between teacher and students in the classroom. A variety of methods have been used to investigate the amount and type of 'teacher-time' received by different groups of students. Much of the research has then sought to relate this to different educational experiences and outcomes among particular groups. For example, some studies showed that boys received a disproportionate amount of the teachers' time, sat in different places in the classroom, and were more highly regarded by teachers, which may go some way towards explaining the educational differential between men and women. More recently, focus has shifted to examining the role of the school as a whole on student experiences as well as behavi There was a time when the traditional approach of teaching was adopted by most of the teachers, where the learner used to be dependent only on the lecture delivered by the teacher. They were not exposed to enough practice of speaking on their own and hence the interaction among the students in the classroom was almost absent. But as the education system changed with time so has the teaching methods. Education system now demands more of student interaction rather than just listening to the instructor. Hence **Classroom Interaction** is very essential in today's education system.

Definition:

Classroom Interaction is a practice that enhances the development of the two very important language skills which are speaking and listening among the learners. This device helps the learner to be competent enough to think critically and share their views among their peers.

Objectives of Classroom Interaction

- This type of interaction helps the learners to identify their own learning methods.
- This interaction will guide the learners to communicate with their peers easily and will give them an exposure to the vase genres of language learning.
- It will help the learner to come face to face with the various types of interaction that can take place inside the classroom.
- Classroom Interaction aims at meaningful communication among the students in their target language.
- It also aims at probing into the learner's prior learning ability and his way of conceptualizing facts and ideas.
- This practice will help the teacher to have a detailed study of the nature and the frequency of student interaction inside the classroom.

Types of Classroom Interaction

Classroom Interaction can be categorized under these main headings such as:

- Collaborative Learning
- Discussions and Debates
- Interactive Sessions
- Loud Reading

- Story-telling
- Soliloquies
- Conversation with learners
- Role Play

Teacher's Role

The role of the teacher during these sessions is passive yet very crucial. It is the responsibility of the teacher to create a learning atmosphere inside the classroom. It is through these interactive sessions that the teacher can extract responses from learners and motivate them to come out with new ideas related to the topic. She is an observer who helps the learners to construct an innovative learning product through group discussions, debates and many more. She will define herself as a planner who plans out the best of the modules of interaction that would be effective to invite the learners in classroom interaction.

Merits

Through classroom interaction the learners will be able to get themselves involved with concepts, ideas and various other devices and products for language and culture learning.

our outs What is student-student classroom interaction and how does it affect learning?

This theme addresses how well students communicate with one another in class. Classes where students have opportunities to communicate with each other help students effectively construct their knowledge. By emphasizing the collaborative and cooperative nature of scientific work, students share responsibility for learning with each other, discuss divergent understandings, and shape the direction of the class. The Pedagogy in Action module on Cooperative Learning is a great place to learn more about structuring student-student interactions both in and out of the classroom. The Cutting Edge teaching method module on using ConcepTests in the classroom also has tips for integrating think-pair-share activities into even large classrooms.

Characteristics/examples of classes with low and high student-student classroom interaction

Classes that have low interaction among students are more lecture-focused, often well-organized, and tend to present material clearly, with minimal text and well-chosen images. The instructor is usually well-versed in the content, but teaches in a way that does not provide an opportunity for interactions among students.

In contrast, a more student-focused class provides multiple opportunities for students to discuss ideas in small groups and may support a whole class discussion. One simple measure of this is the proportion of the class dedicated to students talking to one another. The quality of the discussion is also important: tasks that have the potential for more than one answer can generate deeper thinking processes and may also shift the direction of the lesson. (Note the connection here with aspects of the Lesson Design and Procedural Knowledge themes.) Successful discussions are characterized by small group conversations that seek to give voice to all students and to provide sufficient time and opportunity to listen and consider the ideas of others.

Consider structuring your class so that it:

- Provides opportunities for students to work in pairs and small groups and use multiple modes of communication (e.g., discussions, making presentations, brainstorming).
- Encourages students to work together as a class to contribute to a comprehensive answer to an open-ended problem.
- Devotes a significant proportion of class time (15-30%) to student interactions.

- Encourages in-depth conversations among students (and between students and instructor).
- Features several students explaining their ideas to a respectful class that listens well.

Tips and examples for improving student-student classroom interaction

- I want students to interact at different scales and engage in discussion my classroom. Consider using...
 - In-class assignments where students think individually about a question, talk to their peers about an idea, and then report their findings back to the class. These think-pair-share exercises work best when there are multiple answers to a question (nurturing and valuing divergent thinking).
 - Conceptual multiple-choice questions (ConcepTests) about themes from the lesson mingled with peer instruction. The use of clickers can facilitate this technique.
 - More structured discussion exercises such as jigsaw activities where students become experts in some facet of a topic and then work as teams of mixed experts to further explore a topic.
 - One or more cooperative learning techniques that encompasses a variety of methods to encourage student-student interactions within your classroom.
 - I want students to work on open-ended problems to encourage in-depth conversations with each other and with me. Consider using...
 - Open-ended questions. These are questions with more than one right answer and encourage students to make a judgment call. Sometimes such questions can foster in-class debates.
 - Structured academic controversies in which small teams of students learn about a controversial issue from multiple perspectives and attempt to come to consensus.
 - Explorations of data in your classroom. Encourage students to delve into the real data to decide how best to use/interpret/display it.
 - I want students to present their ideas to others and to have all ideas respected. Consider...
 - Professional communication projects that involve students in the presentation of their ideas as oral or poster presentations.
 - Incorporating gallery walks to encourage groups of students to build a class response to an instructional prompt. Students are actively involved in synthesizing important concepts, consensus building, writing, and public speaking to share their findings. This technique works best in small to medium-sized classes.
- side the classroom, such as bullying and racial and sexual harassment

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The Effect of Pranayama (Breathing Awareness) on Physiological Aspects

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Abstract

Yoga is an old system essentially a way of life that integrates the means of harmonizing the body, mind, and spirit. It is all about a series of postures, breathing exercises and meditation. There are different types Pranayama and it has been found that these techniques influence cardio-respiratory and autonomic functions.

The purpose of this study was to evaluate effect of pranayama on physiological aspects among adolescents Sixty male adolescents (n=60) aged 18 to 22 years, who are thoroughly screened through an eminent physician of Nanded and are with no known medical complications, were pooled for this controlled experiment. The subjects were matched into two groups viz., Pranayama group (Gr. I) and Control group (Gr. II). The participants who were willing to participate and medically fit were included in this experiment.

The experiment was conducted in considering three phases i.e. Phase – I: Pretest, Phase – II: Training or Treatment, and Phase – III: Post test. All the subjects of experimental and control groups were exposed to different physiological and biochemical tests viz., Pulse Rate, Breath holding capacity, Vital Capacity, Body fat % and Lipid profile to record the pre test and post test data.

The report of analysis (2 x 2 x 11 Factorial ANOVA) as revealed that the achievement scores in the selected dependent variables of the Pranayama and Control group were significantly different (F=32.60, p<0.01). The impact of such statistical difference has been evidenced in the case of their group comparison (F=25.56, p<0.01). This indicates, the interaction was also statistically significant (F=11.48, p<0.05). However, employing Scheffe's Post Hoc techniques, the specific variables were identified, which showed significant changes as a result of pranayama training intervention.

Introduction: -

Yoga is an old system essentially a way of life that integrates the means of harmonizing the body, mind, and spirit. It is all about a series of postures, breathing exercises and meditation. With an increase in awareness and interest in health and alternative therapies, various yoga techniques are gaining importance and becoming acceptable in scientific community.

Pranayama is a type of yogic practice which produces many systemic physical effects in the body, besides its specific effects on the respiratory functions. The beneficial effects of different Pranayama are well reported and have sound scientific basis. There are different types Pranayama and it has been found that these techniques influence cardio-respiratory and autonomic functions.

With the increase in psychosomatic disorders due to sedentary or altered lifestyle, the time has come to avert youths towards yoga. In fact, research studies revealed that due to lifestyle changes the most common causes of morbidity and mortality are coronary heart disease, stroke, obesity, hypertension, type-2 diabetes, allergies and several cancers. Evidence suggests that sedentary behavior, low levels of physical activity, and cardio respiratory fitness in youth track into adulthood. Similarly, metabolic risk factors also appear to track over time, and may predispose young people to disease later in life.

Therefore, if one has to reduce the risk of various diseases and to improve work capacity one must improve the cardiovascular and respiratory function. Therefore, it has been a longstanding effort from various researchers to identify the cardio-vascular efficiency and lung function ability of adolescents. A number of approaches have been made through various faculties of medicine, in this quest; one of the significant approaches seems to be the traditional Yoga's Pranayama techniques. Various aspects that improve the cardio-respiratory endurance need to be studied and evaluated, so as to form a comprehensive program of yoga exercise for enriching one's heart and lungs function. Being a non-invasive, drugless and non-expensive technique, Pranayama methods can be promoted to the adolescents at gross levels for enhancing their cardio respiratory fitness. Therefore, the main objective of this study was to see the effect of pranayama on the psychological functions, biochemical variables and personality.

Origin of Research Problem

Normally individuals realize the importance of breath yogic statement of prana, Shusumna and Pingala etc. deem strange to one who hardly observes his breathing. There are several beliefs and misbeliefs regarding pranayama. But no scientific data is made authentically available. Due to change in lifestyle the total capacity of few human organs is not completely utilized.

Today human movement is largely restricted to pushing buttons and keyboards clicking switches, walking a few steps to a car or public transport. Human body is hardly used and as a result suffers from many disorders and health problems. Everyone needs some physical activity to maintain physiological health.

Interdisciplinary Relevance

Sports and physical activities are associated with mental as well as physical health of an individual. In yoga, mudra, asana or pranayama the effects are omnifarious and touching to every discipline associated with human life. Such as psychology, physiology, anatomy, physiotherapy, medical, pharmaceutical etc.

The importance of yoga, pranayama and Ayurveda along with regular physical mental, respiratory exercise is increasing rapidly. Certain NGO's, health organizations and certain institutions are working in direction to popularize yogic and pranayama practices. But the things are propagated by the support of ancient scriptures and mythologies. It is the need of time to support such activities on the basis of firm scientific data.

Patanjali Yogapeeth, Haridwar and Kaivalyadhama Lonavala yoga research center is doing lot of research in this field. Swami Ramadev Baba and and Shri Shri Ravshankar along with other saints are restlessly working to spread the importance of pranayama. All over the India, activities are being preferred, practiced and popularized with the assistance of NGO's and other organization working in the field of human health.

Objectives

- To assess physiological function especially pulmonary function, and status of biochemical variables and personality of healthy collegiate students.
- To design a schedule of "Pranayama" considering the physiological and biochemical aspects leading to good health.
- To record the efficacy of the Pranayama schedule on the physiological functions, biochemical status.

METHODOLGOY

The purpose of this study was to evaluate effect of pranayama on physiological aspects among adolescents Sixty male adolescents (n=60) aged 18 to 22 years, who are thoroughly screened through an eminent physician of Nanded and are with no known medical complications, were pooled for this controlled experiment. The subjects were matched into two groups viz., *Pranayama group* (Gr. I) and *Control group* (Gr. II). The participants who were willing to participate and medically fit were included in this experiment. Further, known smokers or chronic alcoholics were excluded due to complex nature of their problem and expected poor compliance.

Informed consent (of all the participants prior to the experiment was taken with standard format (as per the Declaration of Helsinki). The training stimulus for this experiment was of low to medium intensity, which was constructed on the basis of scientific principles of Yoga. Moreover, as the period of actual training was for eight weeks, the consequences of the same are not expected to be detrimental in any way. Nevertheless, the study protocol had been approved by the institutional ethical committee.

The experiment was conducted in considering three phases i.e. Phase – I: Pretest, Phase – II: Training or Treatment, and Phase – III: Post test. All the subjects of experimental and control groups were exposed to different physiological and biochemical tests viz., Pulse Rate, Breath holding capacity, Vital Capacity, Body fat %, personality and Lipid profile to record the pre test or baseline data.

After the completion of pre test, all the subject of experimental group were exposed to a two months (8 week) training of selected pranayama techniques for one hour daily in the morning from 6.30 to 7.30 except Sunday and holidays under expert yoga teacher. During this period control group subjects were engaged in recreational activities. In general, asanas are practiced prior to the practice of pranayama, because they are complimentary to each other. However, as this project has specially designed to record the effect of pranayama, some of the basic asanas were introduced. They were –**1st – 2nd Week** Shavasana, Crocodile (4), Ardhalasana, Niralambasana, Naukasana, Sarpasana, and Paschimottanasana, Vrikshasana, Deep Breathing (10), Anuloma-Viloma (2-10), Kapalabhati (5-10), Bhastrika (5) 1 Om Recitation (5-10), Sit silently (breathing awareness for 5 mins.) **3rd – 4th Week** Shavasana, Pawanmuktasana, Naukasana, Viparitarani, Matsyasana, Ujjayi, Anuloma-Viloma (10), Kapalabhati (10-30), Bhastrika (5-25) 2 Om recitation (10), Sit silently (breathing awareness for 5 mins.). **5th -6th Week** Shavasana, Sarvangasana, Matsyasana, Yogmudra, Ujjayi, Bhastrika (25-40) 2 Om recitation (3), Sit silently (breathing awareness for 5 mins.). **7th – 8th Week** Shavasana, Sarvangasana, Matsyasana, Yogmudra, Ujjayi, Bhastrika (40) 2 Om recitation (3) Sit silently (breathing awareness for 5 mins.).

After completion of training period of 8 week posttest on selected physiological variables was assessed for all the subject of both the groups.

Statistical Analysis

Descriptive statistics have been applied to process the data prior to employing inferential statistics. Since there are two testing programmes (i.e., pre-test and post-test) conducted for two different groups on twelve variables, the inferential statistics applied was 2 x 2 x 11 Factorial ANOVA. Further, Scheffe's post hoc test was employed to record comparative effects of yoga on the selected variables.

RESULTS

The report of analysis (2 x 2 x 11 Factorial ANOVA) as revealed that the achievement scores in the selected dependent variables of the Pranayama and Control group were significantly different (F=32.60, p<0.01). The impact of such statistical difference has been evidenced in the case of their group comparison (F=25.56, p<0.01). This indicates, the interaction was also statistically significant (F=11.48, p<0.05). However, employing Scheffe's Post Hoc techniques, the specific variables were identified, which showed significant changes as a result of pranayama training intervention.

Result on Pulse Rate

In pulse rate control group did not show significant change (CD=0.13, p>0.05). Pranayama group showed significant reduction (CD=0.27, p<0.05) in Resting Pulse Rate. Further, Pranayama group showed significant superiority over the Control group in reducing Resting Pulse Rate (CD=0.22, p<0.05).

Result on Breath Holding Capacity

In breath holding capacity Control group did not show significant change (CD=0.15, p>0.05). Pranayama group showed significant improvement (CD=0.41, p<0.01) in Breath holding capacity. Pranayama group showed significant superiority over the Control group in improving Breath holding capacity (CD=0.30, p<0.05).

Result on Vital Capacity

Control group did not show significant change in Vital capacity (CD=0.10, p>0.05). Pranayama group showed significant improvement (CD=0.45, p<0.01) in Vital capacity. Pranayama group showed significant superiority over the Control group in improving Vital capacity (CD=0.37, p<0.05).

Result on Cholesterol

Control group did not show significant change in Cholesterol (CD=0.11, p>0.05). Pranayama group showed significant reduction (CD=0.25, p<0.05) in Cholesterol. Pranayama group showed significant superiority over the Control group in improving Cholesterol (CD=0.29, p<0.05).

Result on Triglyceride

Control group did not show significant change in Triglyceride (CD=0.08, p>0.05). Pranayama group showed significant reduction (CD=0.27, p<0.05) in Triglyceride. Pranayama group showed significant superiority over the Control group in improving Triglyceride (CD=0.23, p<0.05).

Result on HDL

Control group did not show significant change in HDL Cholesterol (CD=0.13, p>0.05). Pranayama group also could not show significant reduction (CD=0.10, p<0.05) in HDL Cholesterol. Pranayama group showed similar result like the Control group in maintaining HDL Cholesterol (CD=0.11, p>0.05).

Result on LDL

Control group did not show significant change in LDL Cholesterol (CD=0.16, p>0.05). Pranayama group showed significant reduction (CD=0.36, p<0.05) in LDL Cholesterol.

Pranayama group showed significant superiority over the Control group in reducing LDL Cholesterol (CD=0.30, p<0.05).

Result on VLDL

Control group did not show significant change in VLDL Cholesterol (CD=0.14, p>0.05). Pranayama group showed significant reduction (CD=0.28, p<0.05) in VLDL Cholesterol. Pranayama

group showed significant superiority over the Control group in reducing VLDL Cholesterol (CD=0.22, $p<0.05$).

Result on Cholesterol to HDL Ratio

Control group did not show significant change in Cholesterol-HDL ratio (CD=0.12, $p>0.05$). Pranayama group also could not show significant reduction (CD=0.09, $p<0.05$) in Cholesterol-HDL ratio. Pranayama group showed similar result like the Control group in maintaining Cholesterol-HDL ratio (CD=0.08, $p>0.05$).

Result on LDL to HDL Ratio

Control group did not show significant change in LDL-HDL ratio (CD=0.13, $p>0.05$). Pranayama group also could show significant reduction (CD=0.26, $p<0.05$) in LDL-HDL ratio. Pranayama group showed significant reduction than the Control group in reducing LDL-HDL ratio (CD=0.20, $p<0.05$).

Result on Body Fat

Control group did not show significant change in Body fat (CD=0.15, $p>0.05$). Pranayama group also could show significant reduction (CD=0.33, $p<0.05$) in Body fat. Pranayama group showed significant reduction than the Control group in reducing Body fat (CD=0.27, $p<0.05$).

DISCUSSION OF RESULTS

Human, in general, became sedentary due to change in modern lifestyle. In this age of automation, human takes help from machines for almost every work. Therefore, they become sedentary and more dependent on machines. The collegiate students are not the exception. Such a state of physically inactive life affects blood circulation, reduces muscles function, declines range of motion in joints and puts on excessive body fat (Anderson *et al.*, 1998; Twisk *et al.*, 2000). This indicates that collegiate students might be akin to poor physiological and biochemical functions, which may affect personality too.

To overcome such a poor state of physiological as well as biochemical functions and to reinstate good health, various strategies (viz., daily walking, participation in games, sports, or doing regular gym exercises, control of diet etc) are available today. Since many of these strategies are very costly and need handful of facilities (sports equipments, play ground, gym, space etc.) which are rarely available in urban areas; the researcher, therefore, thought yoga in general and pranayama in particular might be useful. As pranayama is easy to practice and does not need much facilities, and cost effective, it was thought appropriate to include pranayama for the collegiate students.

The result on physiological variables revealed that selected pranayama practices were found useful to reduce pulse rate. In fact, *pulse rate is one of the attributes that represent heart functions*. The reduction in pulse rate among the healthy individuals signifies lower workload on heart. Moreover, improvement in breath holding capacity and vital capacity suggests that pranayama practices could help to improve the functional ability of the lungs. Since the function of lungs and heart are complementary to each other, the appearance of such results infers that pranayama is useful to regulate cardio-respiratory functions. Thus, pranayama training improves overall physiological functions and therefore the hypothesis- “H₁: Pranayama practices would improve physiological attributes especially pulmonary functions” as formulated in this study has been retained statistically.

The result on biochemical variables revealed that selected pranayama practices were found useful to reduce cholesterol, triglycerides, LDL, VLDL, Cholesterol-HDL ratio, and LDL-HDL ratio. In fact, all these variables are detrimental to heart functions. Reduction trend of these lipids to the

normal range in the blood plays a significant role to keep the heart healthy and enhance the process of circulation. As the lipid profiles in the blood are well regulated by pranayama, obviously physiological functions are enhanced. It seems there is a possibility to improve HDL by pranayam practices and in reality such result appears. In fact, HDL is known as good cholesterol and pranayama helps to improve HDL in blood of collegiate students. It is commonly known that reduction in bad cholesterol (LDL) and improvement in good cholesterol (HDL) is a sign of good health and pranayama plays a key role for appearance of such result. Moreover, many of the earlier researches revealed that reduction of detrimental lipid profiles in blood reduces body fat to the normal range. In fact, pranayama could help to bring the same result and thus body fat is controlled to normal range. Thus, the hypothesis-“H₂: Pranayama practices would lead to improvement in lipid profiles” has been sustained.

CONCLUSION

The present study warrants following conclusions:

- Pranayama training for 8 weeks is found effective in improving physiological attributes especially pulmonary functions.
- The Pranayama training helps to reduce lipid profiles, which in turn controls obesity.

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Today's Nanomaterial

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Abstract:

Carbon nanomaterial like, graphene, fullerenes, etc.—have found that they have a special properties sothat they conserve and storage energy. Energy storage applications due to their large aspect ratios, specific surface areas, and electrical conductivity. This succinct review aims to report on the recent advantages of these nanomaterial. It is in great need to use efficiently the existing sources of energy and also to look for clean and inexhaustible ones. Hence, advances and investigation of different materials for energy storage and other applications are getting global attention and increasing interest in research.

Introduction

The 2000s have seen the beginnings of the applications of nanotechnology in commercial products, although most applications are limited to the bulk use of passive nanomaterials. Examples include titanium dioxide and zinc oxide nanoparticles in sunscreen, cosmetics and some food products; silver nanoparticles in food packaging, clothing, disinfectants and household appliances such as Silver Nano; carbon nanotubes for stain-resistant textiles; and cerium oxide as a fuel catalyst. Nanotechnologies estimated that over 1300 manufacturer-identified nanotech products are publicly available, with new ones hitting the market at a pace of 3–4 per week.

Nanotechnology is being used in developing countries to help treat disease and prevent health issues Nanotechnology is also being applied to or developed for application to a variety of industrial and purification processes. Purification and environmental cleanup applications include the desalination of water, water filtration, wastewater treatment, groundwater treatment, and other nanoremediation. In industry, applications may include construction materials, military goods, and nano-machining of nano-wires, nano-rods, few layers of graphene, etc.

Smart nanogels at the air/water interface: structural studies by neutron reflectivity

Gels are materials that are present in many everyday products such as shampoos, sunscreens and food gelatin among many others. They are formed by mixtures in which large amounts of liquid, usually water, are confined within a flexible network of polymer chains or colloidal particles. Among the different types of gels, all with different properties and applications, nanogels are sub-micrometer sized cross-linked polymer particles that can carry or incorporate macromolecules in their network structure. This property, coupled with their 'soft' character and the ability to introduce stimuli-responsive characteristics, means that they have many attractive applications, including within pharmaceuticals, in particular drug delivery.

Nanogels based on NIPAM (N-isopropylacrylamide) are considered to be 'smart' or 'switchable' materials because of the fact that they undergo a phase transition at a critical temperature close to that of the physiological temperature – the normal human temperature of 37°C. This means that they have the potential as an intelligent drug delivery vehicle where the release of an active agent or drug can be triggered by changes in temperature. This can be used by simple contact, for example, in transdermal delivery systems via our skin. The development of such systems based on polymers requires a better understanding of the complex dynamic structure of such nanomaterials and currently there is a lack of experimental data about how these materials actually behave at interfaces.

Neutrons are the ideal tool to investigate the microscopic structure of nanogels, thus helping to

understand how their properties can be controlled. In particular, neutron reflectometry is the technique of choice for the study of surfaces and interfaces.

Nano-coating makes coaxial cables lighter

The Rice lab of Professor Matteo Pasquali has developed a coating that could replace the tin-coated copper braid that transmits the signal and shields the cable from electromagnetic interference. The metal braid is the heaviest component in modern coaxial data cables.

Replacing the outer conductor with Rice's flexible, high-performance coating would benefit airplanes and spacecraft, in which the weight and strength of data-carrying cables are significant factors in performance.

Rice research scientist Francesca Mirri, made three versions of the new cable by varying the carbon-nanotube thickness of the coating. She found that the thickest, about 90 microns - approximately the width of the average human hair - met military-grade standards for shielding and was also the most robust; it handled 10,000 bending cycles with no detrimental effect on the cable performance.

"Current coaxial cables have to use a thick metal braid to meet the mechanical requirements and appropriate conductance," Mirri said. "Our cable meets military standards, but we're able to supply the strength and flexibility without the bulk."

Nano-hybrid materials create magnetic effect

Graphene is a perfect conductor when its atoms align as hexagonal rings, but the material becomes strained when it deforms to accommodate nanotubes in hybrids. The atoms balance their energies at these junctions by forming five-, seven- or eight-member rings. These all induce changes in the way electricity flows across the junctions, turning the hybrid material into a valuable semiconductor.

The researchers' calculations allowed them to map out a number of effects. For example, it turned out the junctions of the hybrid system create pseudomagnetic fields.

"The pseudomagnetic field due to strain was reported earlier for graphene, but not these hybrid boron nitride and carbon nanostructures where strain is inherent to the system,". The effect may be useful in spintronic and nano-transistor applications.

"The pseudomagnetic field causes charge carriers in the hybrid to circulate as if under the influence of an applied external magnetic field. "Thus, in view of the exceptional flexibility, strength and thermal conductivity of hybrid carbon and boron nitride systems, we propose the pseudomagnetic field may be a viable way to control the electronic structure of new materials."

All the effects serve as a road map for nanoengineering applications.

"We're laying the foundations for a range of tunable hybrid architectures, especially for boron nitride, which is as promising as graphene but much less explored.

Graphene made superconductive by doping with lithium atoms

Monolayer graphene exhibits many spectacular electronic properties, with superconductivity being arguably the most notable exception. It was theoretically proposed that superconductivity might be induced by enhancing the electron-phonon coupling through the decoration of graphene with an alkali adatom superlattice. While experiments have indeed demonstrated an adatom-induced enhancement of the electron-phonon coupling, superconductivity has never been observed. Using angle-resolved photoemission spectroscopy (ARPES) we show that lithium deposited on graphene at low temperature strongly modifies the phonon density of states, leading to an enhancement of the

electron-phonon coupling of up to $\lambda \approx 0.58$. On part of the graphene-derived π^* -band Fermi surface, we then observe the opening of a $\Delta \approx 0.9$ meV temperature-dependent pairing gap. This result suggests for the first time, to our knowledge, that Li-decorated monolayer graphene is indeed superconducting with $T_c \approx 5.9$ K.

Touchless displays superseding touchscreens?

While touchscreens are practical, touchless displays would be even more so. That's because, despite touchscreens having enabled the smartphone's advance into our lives and being essential for us to be able to use cash dispensers or ticket machines, they do have certain disadvantages. Touchscreens suffer from mechanical wear over time and are a transmission path for bacteria and viruses. To avoid these problems, scientists at Stuttgart's Max Planck Institute for Solid State Research and LMU Munich have now developed nanostructures that change their electrical and even their optical properties as soon as a finger comes anywhere near them.

A touchless display may be able to capitalize on a human trait which is of vital importance, although sometimes unwanted: This is the fact that our body sweats – and is constantly emitting water molecules through tiny pores in the skin. Scientists of the Nanochemistry group led by Bettina Lotsch at the Max Planck Institute for Solid State Research in Stuttgart and the LMU Munich have now been able to visualize the transpiration of a finger with a special moisture sensor which reacts as soon as an object - like an index finger – approaches its surface, without touching it. The increasing humidity is converted into an electrical signal or translated into a colour change, thus enabling it to be measured.

Phosphoantimonic acid is what enables it to do this. This acid is a crystalline solid at room temperature with a structure made up of antimony, phosphorous, oxygen and hydrogen atoms. "It's long been known to scientists that this material is able to take up water and swells considerably in the process," explained Pirmin Ganter, doctoral student at the Max Planck Institute for Solid State Research and the Chemistry Department at LMU Munich. This water uptake also changes the properties of the material. For instance, its electrical conductivity increases as the number of stored water molecules rises. This is what enables it to serve as a measure of ambient moisture.

A sandwich nanomaterial structure exposed to moisture also changes its colour

However, the scientists aren't so interested in developing a new moisture sensor. What they really want is to use it in touchless displays. "Because these sensors react in a very local manner to any increase in moisture, it is quite conceivable that this sort of material with moisture-dependent properties could also be used for touchless displays and monitors," said Ganter. Touchless screens of this kind would require nothing more than a finger to get near the display to change their electrical or optical properties – and with them the input signal – at a specific point on the display.

Taking phosphoantimonate nanosheets as their basis, the Stuttgart scientists then developed a photonic nanostructure which reacts to the moisture by changing colour. "If this was built into a monitor, the users would then receive visible feedback to their finger motion" explained Katalin Szendrei, also a doctoral student in Bettina Lotsch's group. To this end, the scientists created a multilayer sandwich material with alternating layers of ultrathin phosphoantimonate nanosheets and silicon dioxide (SiO₂) or titanium dioxide nanoparticles (TiO₂). Comprising more than ten layers, the stack ultimately reached a height of little more than one millionth of a metre. For one thing, the colour of the sandwich material can be set via the thickness of the layers. And for another, the colour of the sandwich changes if the scientists increase the relative humidity in the immediate surroundings of the material, for instance by moving a finger towards the screen. "The reason for this lies in the storage of

water molecules between the phosphoantimonate layers, which makes the layers swell considerably," explained Katalin Szendrei. "A change in the thickness of the layers in this process is accompanied by a change in the colour of the sensor – produced in a similar way to what gives colour to a butterfly wing or in mother-of-pearl."

The material reacts to the humidity change within a few milliseconds

This is a property that is fundamentally well known and characteristic of so-called photonic crystals. But scientists had never before observed such a large colour change as they now have in the lab in Stuttgart. "The colour of the nanostructure turns from blue to red when a finger gets near, for example. In this way, the colour can be tuned through the whole of the visible spectrum depending on the amount of water vapour taken up," stressed Bettina Lotsch.

The scientists' new approach is not only captivating because of the striking colour change. What's also important is the fact that the material reacts to the change in humidity within a few milliseconds – literally in the blink of an eye. Previously reported materials normally took several seconds or more to respond. That is much too slow for practical applications. And there's another thing that other materials couldn't always do: The sandwich structure consisting of phosphoantimonate nanosheets and oxide nanoparticles is highly stable from a chemical perspective and responds selectively to water vapour.

A layer protecting against chemical influences has to let moisture through

The scientists can imagine their materials being used in much more than just future generations of smartphones, tablets or notebooks. "Ultimately, we could see touchless displays also being deployed in many places where people currently have to touch monitors to navigate," said Bettina Lotsch. For instance in cash dispensers or ticket machines, or even at the weighing scales in the supermarket's vegetable aisle. Displays in public places that are used by many different people would have distinct hygiene benefits if they were touchless.

But before we see them being used in such places, the scientists have a few more challenges to overcome. It's important, for example, that the nanostructures can be produced economically. To minimize wear, the structures still need to be coated with a protective layer if they're going to be used in anything like a display. And that, again, has to meet not one but two different requirements: It must protect the moisture-sensitive layers against chemical and mechanical influences. And it must, of course, let the moisture pass through. But the Stuttgart scientists have an idea for how to achieve that already. An idea they are currently starting to put into practice with an additional cooperation partner on board.

Flexible film can coil light for cancer detection

A thin, stretchable film that is able to coil light waves like a Slinky could one day lead to more precise, less expensive monitoring for cancer survivors. The University of Michigan (U-M) chemical engineers who developed the film say it could help patients get better follow-up treatment with less disruption to their everyday lives. The film provides a simpler, more cost-effective way to produce circularly polarized light, which is a central component of a novel technique for detecting the recurrence of cancer. The film is detailed in a paper published online in Nature Materials. "More frequent monitoring could enable doctors to catch cancer recurrence earlier, to more effectively monitor the effectiveness of medications and to give patients better peace of mind. This new film may help make that happen," said Nicholas Kotov, professor of engineering at U-M. Circular polarization is similar to the linear version that's common in things like polarized sunglasses. But instead of

polarizing light as a two-dimensional wave, circular polarization coils it into a three-dimensional helix shape that can spin in either a clockwise or counterclockwise direction. Circular polarization is invisible to the naked eye and is rare in nature, which is why it's being employed in an up-and-coming cancer detection technique that can spot telltale signs of the disease in blood samples. Currently in the research stage, the process requires large, expensive machines to generate the circularly polarized light. Kotov believes the new film could provide a simpler, less expensive way to induce polarization. The detection process identifies biomarkers such as bits of protein and snippets of DNA that are present in the blood from the earliest stages of cancer recurrence. It utilizes synthetic biological particles that can bind to these biomarkers. These particles are coated with a reflective layer that responds to circularly polarized light and added to a small blood sample from the patient. Clinicians can then see whether the reflective particles bind to the cancer biomarkers by examining the sample under circularly polarized light. Kotov envisions that the film could be used to make a portable smartphone-sized device that could quickly analyze blood samples. These devices could be used by doctors, or potentially even at home.

"This film is light, flexible and easy to manufacture," he said. "It creates many new possible applications for circularly polarized light, of which cancer detection is just one." Another key advantage is the film's stretchability, as stretching can cause precise, instantaneous oscillations in the polarization of the light passing through the film. This can change the intensity of the polarization, alter its angle or reverse the direction of its spin. It's a feature that could enable doctors to change the properties of light, like focusing a telescope, to zero in on a wider variety of particles.

To make the film, the research team started with a rectangle of polydimethylsiloxane (PDMS), the flexible plastic used for soft contact lenses. They twisted one end of the plastic by 360° and clamped both ends down. They then applied five layers of reflective gold nanoparticles – enough to induce reflectivity but not enough to block light from passing through. Next, they used alternating layers of clear polyurethane to stick the particles to the plastic. Finally, they untwisted the plastic. The untwisting motion caused the nanoparticle coating to buckle, forming S-shaped particle chains that induce circular polarization in light passing through the plastic. The plastic can be stretched and released tens of thousands of times, altering the degree of polarization when it's stretched and returning to normal when it's released.

"We used gold nanoparticles for two reasons," explained Yoonseob Kim, a graduate student research assistant in chemical engineering. "First, they're very good at polarizing the kind of visible light that we were working with in this experiment. In addition, they're very good at self-organizing into the S-shaped chains that we needed to induce circular polarization." A commercially available device is likely several years away. Kotov also envisions using the film to produce circularly polarized light for data transmission and even devices that can bend light around objects, making them partially invisible. U-M is pursuing patent protection for the technology.

Nanosteel promotes benefits of automotive lightweighting

Nanosteel has released an infographic promoting automotive lightweighting as a principal solution to improving fuel economy. "There can be advantages to losing weight in the body of a vehicle, the impact of which compounds through secondary systems such as the powertrain and suspension," the company said. "The result is a 6-8% improvement in fuel economy for a 10% reduction in vehicle weight. Additionally, the lower spending on gas that results from the fuel economy improvements achieved through weight reduction can be accomplished without impacting

the driving experience

Making a robot from nanoparticles and polymers

A novel technique for using chains of magnetic nanoparticles to manipulate elastic polymers in three dimensions developed by researchers from North Carolina State University (NC State) could provide a way to remotely control new 'soft robots'. These robots could find use in a wide range of applications, from biomedical technologies to manufacturing processes.

Researchers are interested in using magnetic fields to control the movement of soft robots because it can be done remotely – the control can be exerted without physical connections to the polymer – and because magnetic fields are easily obtained from permanent magnets and electromagnets. A team of researchers has now found a way of embedding long chains of nanoscale magnetite particles in sheets of elastic polymer to form a magnetic polymer nanocomposite. By applying a magnetic field, the researchers can control the way the nanocomposite bends – making it a soft robot.

The process begins by dispersing nanoparticles of magnetite – an iron oxide – into a solvent. A polymer is dissolved into this mixture, which is then poured into a mold to form the desired shape. Applying a magnetic field causes the magnetite nanoparticles to arrange themselves into parallel chains. The solution is dried, locking the chains into place, and the finished nanocomposite can be cut to further refine its shape.

"Using this technique, we can create large nanocomposites, in many different shapes, which can be manipulated remotely," says Sumeet Mishra, a PhD student at NC State and lead author of a paper on the work in Nanoscale. "The nanoparticle chains give us an enhanced response, and by controlling the strength and direction of the magnetic field, you can control the extent and direction of the movements of soft robots."

The mechanism stems from the structure of the chains. The researchers have also constructed a simple model to explain how the chained nanoparticles affect the mechanical response in magnetic fields.

"The key here is that the nanoparticles in the chains and their magnetic dipoles are arranged head-to-tail, with the positive end of one magnetic nanoparticle lined up with the negative end of the next, all the way down the line," explains Joe Tracy, an associate professor of materials science and engineering at NC State and corresponding author of the paper. "At issue is something called magnetic anisotropy, which is caused by assembling the nanoparticles into chains. When a magnetic field is applied in any direction, the chain re-orient itself to become as parallel as possible to the magnetic field, limited only by the constraints of gravity and the elasticity of the polymer."

The researchers believe this technique may be especially attractive for biomedical applications that currently rely on electricity or light for control. "Electrical control can raise safety issues for some medical applications," says Mishra. "And both electrical and light signals pose challenges in terms of communicating those signals to devices embedded in the body. Magnetic fields, on the other hand, pass through easily – and pose fewer safety challenges."

Conclusion

There is much about carbon nanotubes and nanomaterials that are still unknown. More research needs to be done regarding the environmental and health impacts of producing large quantities of them. There is also much work to be done towards cheaper mass-production and incorporation with other materials before many of the current applications being researched can be

commercialized. There is no doubt however that carbon

Nanotubes and nanomaterials will play a significant role in a wide range of commercial applications in the very near future. Not only will they help create some very cool tech gadgets, they may also help solve the world's energy problem

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Oct 1, 2015 - A moisture sensor enables touchless screens. ... A sandwich nanomaterial structure exposed to moisture also changes its colour
- 5- The commercialization of nanomaterials: Today and tomorrow
Todd M. Osman, Daniel E. Rardon, Lawrence B. Friedman, Luis Fanor Vega.

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Study of Rural and Urban Wrestler Personality

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Abstract:-

From the ancient age living style of the human being decided according their work and life style. Some of them have hard work & some had very soft and also some of them had mentally hard work. So it is very important to spread out the importance of physical exercise and healthy life among the citizens of India & how they live long life with the help of this factor. Sports and Games are the only way to achieve such physical fitness & good physical or mental health. Wrestling so sole combative sport it is contact sport but regulated by rules that prohibit physical punishment.

Introduction:-

The physical fitness & healthiness of human being is very important & to achieve such type of healthy life diet, exercise, and cleanliness to live away from bad habits is very important. Human being thinking about this from the age of Ayurveda.

Ancient record document are presence art of wrestling. Artwork depending hand to hand combat have been found on the walls of the temple tomb of Beni Hasan Among the river Nile The early culture of the Babylonian Egyptian & Thionals use wrestling as an educational tool to instruct their young in offensive techniques for battles.

Wrestling can contribute to the development of personality characteristic & encourage the qualities that are important in the development of well rounded mature person. A person which is in wrestling naturally learns traits such as courage determination and initiative. A wrestler soon learns to be aggressive in a healthy way & acquires self confidence & confidence & self reliance, there is no one else to depend on in my student life youth were did the specific type of fitness exercise in counseling fields. But nowadays the youths knows the importance of the physical fitness. Wrestling special appeal is its individual challenge & sense of personal achievements which can be enjoyed exciting sport, since the result of each wrestler performance determined the score this dual features has helped increases wrestling popularity wrestling is sole combative sport. It is a contact sport but regulated by rules that prohibit physical punishment contestant are not permitted to use hold or maneuvers that would cause and injury.

It is very essential to look positively towards wrestling. All the above promotional programs in the Maharashtra especially in Khandesh, Kolhapur, Pune, Solapur district will have good parental as well as community support. Government of Maharashtra also have to support. Government of Maharashtra also have to support properly to run such programs through education & adminstreted well.

Exercise:-

- 1) Yoga
- 2) Vyayam
- 3) Suryanamskar
- 4) Dand Baithak
- 5) Jor
- 6) Massage
- 7) Diet
- 8) Malla Yuddha

Defination of Wrestling:-

A form of wrestling in which two opponents stand facing each other with usually right hand interlocked & outside of their corresponding feet set together and attempt to unbalance each other.

The epic of Gilgamesh in Sumerian literature features its hero Gilgamesh establishing his credibility is a leader after wrestling Enkidu other sculpture & literature from ancient Mesopotamia show that wrestling was held in popularity one other early description of wrestling appears in the old

testament book genesis.

Significance of the Study:-

- 1) Behavior of wrestler is ugly & antisocial.
- 2) Wrestlers are having low intelligence & high physical strength only this is main misconception in society.
- 3) Wrestlers are academically poor & his head & brain is always in knee is critical conception about to them.

These misconceptions are not in reality therefore researcher want to study why the misconceptions are discouraged them & the behavior style become irrelevant. These misconceptions directly played role on mental health life satisfaction & their attitude.

Investigator himself wrestler in his students life & very acquired about the present status of wrestler in the society therefore he focused on mental health attitude & life satisfaction he had proud that Sugriv – Vali Hanuman were wrestler in Ramayana while Bhim Lord Krishna were I dwapur period. Through today this school is not popular Investigator is always in complex due to modern wrestler & focus the problem.

Concept in the study:

▪ **Wrestling**

A Form or wrestling in which two opponents sit facing each other with usually right hand interlocked & elbows firmly planted as on a table surface and attempt to force each other arm down also called Indian wrestling.

Objectives Studies :

To study the present scenario of wrestling with reference to mental health life satisfaction & attitude of wrestler of three generation

- 1) To study the personal information of the wrestler
- 2) To study the physical health of wrestler of various groups.
- 3) To study the economical status of wrestlers.
- 4) To study the family status of wrestlers.
- 5) To study the social, religious, moral, political, economical attitude of wrestlers of various group.

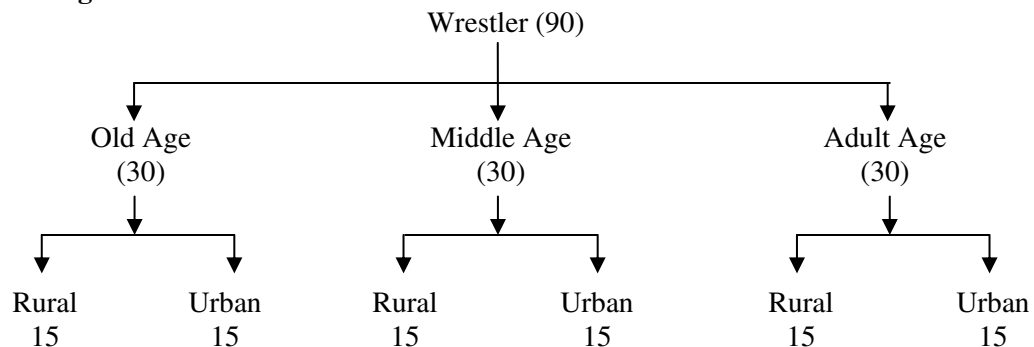
Hypothesis:

- 1) There is personal differences among the wrestlers according to age education, physical status, social status.
- 2) There is no significant different between wrestlers from old age, middle age & adult age for there mental health.

Limitation of studies :

The study is related with the wrestler of North Maharashtra region only Researcher is not interpreted & differentiated the data according to Rural and Urban area due to time limit for submission of dissertation only data is mentioned in research design middle hood wrestler are very alert for the response.

Research Design:-



Respond Classification:-

Old Age	Middle Age	Adult Age	Total
Rural 15	15	15	45
Urban 15	15	15	45
Total 30	30	30	90

With reference to table 01 & Hypothesis on there is difference through the qualitative analysis on the responses are based on interview schedule though the personal information. In the interview S.C. researcher formed 21 questions & all the related with the wrestler of there are group In the 21 question seven variables are consisted.

Occupational status is very remarkable a group is showing that 16.66 are in agricultural occupation 16.66 in shop 3.44 in service sector 13.33 in job & 50% are in other like wine shop hotels, beerbars, clubs B group is showing that 16.66% are in agricultural 10% are in shop 3.44 in service sector 13.33 in job 36.66 are in other job.

The C group is showing 3.44% in agricultural 33.33% in shop 33.33% are in service Sector & 30% are in other sector.

The political participation & interest exist among all the group 66.66% are party members & participation in politics while 33.33% are away from politics among the B group 66.66 are achievevly participated 33.33% are not interested in politics.

Among the C group 83.33% are achievevly particiapated in politics & 16.66% are not interested in politics through the qualitative analysis it is clear that government is encouraging the athelets & many athelets are preferred social recognized Occupation & they are using their skills to trained new wrestiers (70%) while few wrestler are having alcoholic habits drugs habit and physical health is excellent among all the three groups & the present situation in satisfactory,

In short the interview schedule represent that the present scinaro is more achievement oriented wrestling with reference to social economic occupational, education & health value.

- Conclusions:- Education level is 100% literacy among adult wrestler for the economic status A group is 33.33% at average level B group is 33.33% at sound level 33.33% average level 33.33% poor level C group is 33.33% of average level 50% at sound; even; 16.66 at poor level.

The social status of hogh among C group (66.66%) they are A and B group & social status is low among A group. There is significant difference between AC & BC for political attitude but difference between AB group. There is significant difference between AB, BC & AC group for economic attitude.

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On A New Species of Cestode of Genus *Davainea* Blanchard 1891, From Host Domestic Fowl *Gallus Gallus Domesticus*

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S. S. Patil: P. G. Centre of Zoology, KMR, Shivnagar, Tal.Karad.

Description

Gallus gallus domesticus is an important item of human food also source of income. Cestode parasite are Capable of infecting many birds, hence automatically human gets infected, by eating the infected hen. The present investigation deals with new species of cestode parasite from *Gallus gallus domesticus*. The scolex is medium, almost globular in shape, narrow anterior, broad posterior. Rosetelium with armed hooks and four suckers. There are two circles of total shape, narrow anterior, broad posterior. Rostellum with armed hooks and four suckers. There are two circles of total 12 each with 6 hooks. The four suckers are medium, oval and arranged in two pairs, one pair in each half overlapping to each other. Neck is medium in length, broader anterior and narrow posterior with straight lateral margins. Mature convex lateral margins, blunt, wide projections at the posterior corners of the segments. Testes are smaller oval to round 110320 in number, in a single field of central medulla, scattered throughout the segment. Circus is large oval, long, cylindrical, situated in the 1/5th to 1/6th region of the segment, obliquely placed. The vasdegerence thin, long placed coiled runs transversely oblique open marginally, ovary is medium, distincy bilobed dumbbell shaped and transversely placed in the anterior region of segment. Each lobe of ovary having 10 to 12 short, blunt, rounded acini. The vagina is thin tube, posterior to cirrus pouch runs obliquely for short distance, take a posterior turn from the cirrus ponch enlarges to form the receptaculum seminis and open into the ootype. The ootype larger, oval compact placed almost at the centre in the anterior half of the segment. Genital pores are smaller in size, oval and irregularly alternative opens marginal, placed at 1/4th of segment, vitelline gland medium, oval or bean shaped, slightly oblique placed. Post ovarian, central to segment. Gravid segment medium, rectangular, slightly longer than broad with convex lateral margins. The uterus is secular offupied entire space of the segment. It contains numerous eggs of medium in size, oval to round, non operculate. Each egg with single embryo.

Material and Method

The cestodes were collected from untestine of *Gallus gallus domesticus*, freshly collected cestodes flattened in between slides, fied in 4% formalin, stained with Harris Haematoxyline, dehydrated. Drawings are made with the aid of Camera lucida and indentification was carried with the help of *Systema Helminthum* Vol. II (Yamaguti 1960)

Diagnosis and Relationship

After going through literature the worm under discussion having 310-320 testes, position of cirrus pouch, length and breadth of mature segments are totally different from following worms.

- It differs from *Davalnea* Yamaguti in having testes number (17-22), preovarian in position, evenly distributed. The cirrus pouch medium, the cirrus is thin curved tube. The vas deference is long straight tube. Ovary with single mass on each side. Cirrus and vagina opens in common genital pore.
- It differs from *Davalnea proglottina* in having persistant in gravid proglottids, uterus replaced by egg capsule. Test is usually few in number. Cirrus pouch large. Ovary bilobed medium or poral.
- It also differs from *Davalnca/shinde* 1969, *D. ambejogalensis*, shinde and Ghare and *D. Muktabee* Lakhe et.al

Result

By comparing the distinct as well as differentiating characters as noted above. It is regarded as a new species and hence the name *Davalnea urali* (n. sp.) collected from Uralikanchan locality.

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Shivnagar for providing necessary facilities during this work.

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भारतातील कुस्ती प्रकार व विदेशातील प्रकाराचा अभ्यास

पगारे राजेंद्र श्रावण (क्रिडा संचालक): एस.एस.व्ही.पी.एस., कै.क.डॉ.पां.रा. घोगरे विज्ञान महाविद्यालय, देवपूरे धुळे (महाराष्ट्र)

कुस्ती हा मराठी शब्द “कुशती” या फार्सी शब्दावरून तयार झाला असून त्याचा अर्थ मल्लयुद्ध, अंगयुद्ध किंवा बहुयुद्ध असा आहे. प्राचीन काळी इराण देशात मल्लयुद्धाची द्वंद्व खेळतांना कमरेला जो पट्टा किंवा जी दोरी बांधत त्याला कुशती हे नाव होते. त्याला धरून जे द्वंद्व खेळले जाई त्यास कुस्ती म्हणत. फार्सी भाषेत कुशत म्हणजे मारणे किंवा कत्तल करणे. प्रतिस्पर्धास शक्तीने वा युक्तीनेमात करून त्याला नामोहरण करणे हा कुस्ती या शब्दाचा अर्थ आहे.

इ.स. पुर्व ३००० वर्ष ईजिप्त देशात नाईल नदीजवळ बेनीहसन येथील मशिदीच्या व दर्गाच्या भिंतीवर केलेल्या कोरीव कामात कुस्त्यातील डाव पेचांचे शेकडो देखावे पहावयास मिळतात. प्राचीन ग्रीक वाडमयात मल्ल युद्धाचा उल्लेख आढळतो. होमरच्या ईलीयड व सुप्रसिद्ध महाकाव्यात अँजेक्स व ओडिसीअस यांच्यामध्ये झालेल्या कुस्तीचा उल्लेख आहे. ग्रीक संस्कृतीत सुरु झालेल्या ऑलम्पिक सामन्यात मल्ल युद्धाचा समावेश केलेला होता. पायथॉगोरस या सुप्रसिद्ध ग्रीक तत्ववेत्त्याचा शिष्य मिलो याने मल्लयुद्धात महापराक्रम केला.

कुस्ती या मल्ल युद्धाची पूर्व पिढीका फार प्राचीन आहे. भारतात वैदिक वाडमयात तसेच रामायण, महाभारतात आदी ग्रंथांमध्ये मल्लविद्येचा उल्लेख अनेक प्रसंगी येतो. रामायणात बाली व सुग्रीव यांच्यामध्ये मल्लयुद्ध होवून सुग्रीवाने बालीचा पाडाव केला. हनुमान हा रामायणातील बलदंड असा मल्ल होवून गेला. त्याला भारतात शक्ती देवता म्हणून पुजतात.

महाभारतातील कृष्ण, बलराम, भीम हे मल्ल विद्येत प्रविण होते. कृष्णाने मुष्टीक व चाणूर ह्या कंसाच्या दरबारातील महामल्लांना मल्ल युद्धात मारून शेवटी कंसाला सुद्धा मारले. भिमाने मल्ल युद्धात किचक व जरासंधाला ही ठार मारले.

मंगोलीया, चीन, जपान या राष्ट्रातही कुस्तीचा इ.स. पूर्व काळात उल्लेख आढळतो. या देशात धार्मिक उत्सवात मल्ल युद्धाचा प्रामुख्याने अंतर्भाव केलेला होता. जपानमधील इ.स. पूर्व २३ मध्ये विजयी झालेल्या साकूने या मल्लास मल्लविद्येचा देव मानतात. शोनू या बादशहाने कापणीच्या हंगामात कुस्तीचा हंगाम ठेवण्याची प्रथा पाडली. त्या वेळे पासून कुस्ती हा खेळ लोकप्रिय झाला. मध्य युगीन इंग्लंडमध्ये सॅक्सन व केल्टिक लोकांनी मल्ल युद्धास विशेष चालना देवून ती लोकप्रिय केली. त्या काळात मल्ल विद्येला राजाश्रय होता. आठवा हेन्री हा स्वतः सामर्थ्यवान कुस्तीगीर होता.त्यानंतर इंग्लंडमध्ये निरनिराळ्या मल्ल युद्धाच्या पध्दती रुढ होत गेल्यात. व वेगवेगळ्या प्रांतांमध्ये त्यांना नावे सुद्धा वेगवेगळी पडलीत.

ज्यू जमातीत कुस्तीगीरांचा अत्यंत गौरवपूर्ण उल्लेख आढळतो. ख्रिस्त शतकाच्या प्रारंभी म्हणजे सुमारे इ.स. पुर्व २००० वर्षपुर्व युरोपातील बहुतेक राजेशाही आपआपल्या पदरी उत्तमोत्तम कुस्तीगीर बाळगीत आणि राज्यातील महत्वाच्या उत्सव प्रसंगी प्रेक्षकांना खास आकर्षण म्हणून या कुस्ती गटांच्या लढती ठेवल्या जात.

प्राचीन ग्रीक देशात कुस्तीच्या लढतीचे प्रकार होत. ग्रीक पुराणात पृथ्वीवर कोणाची सत्ता असावी यासाठी झिजस आणि क्रोनास यांच्यात प्रत्यक्ष कुस्ती झाली. यामध्ये झिजस विजयी झाला. तेव्हापासून धार्मिक उत्सव म्हणून ऑलम्पिक स्पर्धा सुरु झाल्यात.

जपानमधील सुमो हा कुस्तीसारखा प्रकार दोन हजार वर्षापूर्वीच जुना आहे.

मल्लविद्येस आधुनिक स्वरूप देण्याची महत्वाची कामगिरी रामायण कालीन श्री. हनुमंताने केली. हनुमंत हा दक्षिण भारतातील बलदंड मल्ल होता. हनुमंताने मल्ल विद्येतील आडदांडपणा नष्ट केला. त्यास खेळाचे स्वरूप प्राप्त करून दिले. मल्लविद्येचे नियम तयार केले. चित्रपट प्रतिस्पर्धास ठार न करता त्यास सोडून द्यायचे व त्यास संधी द्यायची व त्याने तयारी करून करून पुन्हा आव्हान दिले तर त्याच्या बरोबर पुन्हा कुस्ती करावयाची अशा तऱ्हेचा आधुनिक पायंडा श्री. हनुमानाने मल्लविद्येच्या क्षेत्रात निर्माण केला. व आपल्या कृतीने सिध्दी करून दाखविल. याशिवाय उत्तर भारतातील मल्लविद्या व दक्षिण भारतातील मल्लविद्या यामध्ये समन्वय साधला म्हणूनच हनुमंतास मल्ल विद्येचा आद्यजनक मानले जाते.

आजही मल्लविद्येच्या क्षेत्रामध्ये प्रथम हनुमंताची आराधना केली जाते. रामायण, महाभारत कालीन मल्लयुद्धाचे चार प्रकार प्रचलीत होते.

१) हनुमंती मल्लविद्या, २) जरासंधी मल्लविद्या, ३) भिमसेनी मल्लविद्या, ४) जांबुवंती मल्लविद्या

१) हनुमंती मल्लविद्या -

या पध्दतीने बुध्दी, शक्ती व युक्ती यांचा सुरेख संगम साधलेला आहे. या पध्दतीमध्ये शक्तीपेक्षा युक्ती व डावपेच यास अधिक प्राधान्य दिले जाते. यामध्ये कमी शक्तीचा मल्ल सुध्दा जास्त शक्तीच्या मल्लास डावपेचाने विजय मिळू शकतो. पराभव झालेल्या प्रतिस्पर्धास ठार न करता सोडून दिले जाते व परत तयारीची संधी दिली जाते.

२) जरासंधी मल्लविद्या -

जरासंधी मल्लविद्या ही मगध राजाच्या नावावरून निर्माण झालेली पध्दत होय. जरासंध हा महाभारतातील बलदंड मल्ल होता. यामध्ये डावपेचात कपटनितीचा वापर केला जातो. मल्लविद्येचे नियम सोडून आडदांडपणाचा मार्ग स्विकारला जातो. म्हणून ही पध्दत हलक्या दर्जाची मानली जाते.

३) जांबुवंती मल्लविद्या -

जांबुवंत हा त्या काळातील दक्षिण भारतातील एक बलदंड मल्ल होता. त्याच्या नावावरून या पध्दतीस हे नाव पडले. या पध्दतीत कोणत्याही प्रकारचे नियम नव्हते. आडदांडपणा होता. प्रतीस्पर्धास लाथा, बुक्क्या, ठोसे मारून घायाळ करून ठार केले जात असे. म्हणून हाही प्रकार हलक्या दर्जाचा व रानटी प्रकाराचा मानला जात असे.

कुस्तीचा कोणताही डाव घेतला तर त्याचा समावेश वरील चार प्रकारांपैकी कोणत्याही एका प्रकारात मोडतो. शक्तीचे डाव खेडे गावाचे कुस्ती खेळणारे आणि अडाणी लोक फार करतात. जाणत्या वस्तादाकडून ही विद्या शिकावयास न मिळाल्यामुळे केवळ शक्तीच्या जोरावर प्रतिस्पर्धास चीत करण्याचा प्रयत्न अशा मल्लांकडून होतो.

★ भिमसेनी (शक्तीचे डाव) खालीलप्रमाणे -

१) लंगोट्याचा निकाल प्रकार - १, २) लंगोट्याचा निकाल प्रकार - २, ३) लंगोट्याचा निकाल प्रकार - ३, ४) गडजय्या - कमरमोड, ५) लंगोट्याचा कोलू - नांगर - लाट, ६. आरेंज, ७. मान दाबून चित करणे, ८. समोरची मोहरीची उखेड, ९. धुरणा, १०. मोळीचा निकाल, ११. चित्ता पछाड, १२. लंगोट्याची झोळी, १३. दुहेरीपट, १४. उखाड, १५. छातीचा छक्का, १६. दंडलोट.

★ हनुमंती कुस्ती - (युक्तीचे डाव)

१) दस्तीची तोड, २) दस्ती, ३) कोणीतील, ४) आतली टांग, ५) आतली टांगेची हुल, ६) आतली टांगीची बदली, ७) आतली टांगेची रोख, ८) एकेरी पटाची टांग, ९) डगबेडी, १०) लंगर, ११) बाळ सांगडा, १२) गोदी, १३) आतल्या

टांगेची तोड - १, १४) आतल्या टांगेची तोड - २, १५) बाहेरील टांग, १६) कंबरेची ठाक, १७) कलाजंग प्रकार - १, १८) कलाजंग प्रकार - २, १९) कलाजंग - प्रकार - ३, २०) सकी, २१) सकीची हुल, २२) सकीची तोड, २३) धोबीपाट, २४) उलटी खाच, २५) चकरी गिरा २६) भैसा पछाड, २७) सिधी खाचे, २८) गर्दबाह, २९) अगलबाह, ३०) भट्टा, ३१) खडा पुस्तंग, ३२) समोरची बाहेरची गिरे, ३३) कमंठा, ३४) हाताची कमची, ३५) डावाची साखळी - १ ली, ३६) डावाची साखळी - २ री, ३७) एकामागून एक करण्याचे डाव, ३८) गर्दनची कमची,

★ जांबुवंती कुस्तीचे डाव - (बांधाचे डाव)

१) उलटा हात खोडा, २) मनगटाचा भुट्टा, ३) दंडाचा भुट्टा, ४) पंजाचा आतील भुट्टा, ५) समोरचा गलुबंध, ६) बंगडा, ७) बुलबुल फास, ८) पुडी लपेट, ९) आतील एकेरी मोजी चूर, १०) बाहेरील एकेरी मोजीचूर, ११) गुडघ्याचा मोजीचूर, १२) दोन पायाचा मोजीचूर, १३) देवबंध, १४) डगबेडी, १५) कनसलाई, १६) खफासिधा, १७) माहुती स्वार, १८) पायाचा कस

★ जर्रासंधी कुस्तीचे डाव - (नेस्तीचे डाव)

१) बोटाची हातकटी प्रकार - १ ला, २) बोटाची हातकटी प्रकार - २ रा, ३) साटा (मनगटाचा), ४) साटा (दुहेरी), ५) कसोटा प्रकार १ ला, ६) कसोटा प्रकार २ रा, ७) आडवा कसोटा ८) हलकूमची आडीतली, ९) हाताचा मोजी चुरा, १०) काल फास, ११) उलटा हात खोडा, १२) बाहेरचा नौंदर, १३) आतील दुहेरी नौंदर, १४) दुसरे बाजूचा नौंदर, १५) उरबे धोबीपाट (एकेरी), १६) उरबे धोबीपाट (दुहेरी), १७) आडवा उरबे (भुट्टा), १८) भैसा पछाड (उभ्याने)

वज्रमुष्टी कुस्तीचे डाव खालीलप्रमाणे -

१) साधा पवित्रा, २) कर्नाल पवित्रा, ३) तमाचाचा मार, ४) बाहेऱ्याचा मार, ५) तोंडाचा मार, ६) धोबी पछाड, ७) खडा नमाजबंद, ८) बसुन नमाजबंद, ९) मोतीचुर, १०) हात बांधल्यानंतर उलटवून बांध, ११) कुशीनपट्टीची तोंड करून बांध, १२) सीसमपट्टीची तोंड करून बांध १३) नरसिंगगत पकड, १४) गळफासाचा बांध, १५) नमाजबंधाचा बांध, १६) स्वारी बांध, १७) तबक फाडीचा बांध, १८) हाताचा बांध,

मुष्टीयुद्धाचे वर्णन वेदामध्ये अनेक ठिकाणी आहे. नियेन मुष्टीहत्याया निवृत्ता उण धाम है।

ऋग्वेद - १/८/२, अथर्व - २०/७०/१८ साहा ये सन्ति मुष्टी हेव हव्यो

विश्वासुपुत्सू ।।ऋग्वेद - ०८/२०/२०

सर्व सैन्यामध्ये बलीष्ठ योद्धे आहेत त्यात मुष्टीयुद्ध करणारा मुख्य होय.

सर्वसाधारण जनसमाजाची कुस्तीबद्दलची जी कल्पना आहे त्या पेक्षाही कुस्ती अगदी निराळ्या प्रकारची आहे. खेळणाऱ्यांपैकी एक गडी चीत झाला. म्हणजे कुस्ती झाली असे समजण्यात येते. पण वज्रमुष्टी कुस्तीत एक गडी चीपट झाला म्हणजे कुस्ती झाली असे समजण्यात येते. पण वज्रमुष्टी कुस्तीत एक गडी चीपट झाला म्हणजे कुस्ती संपत नाही. खाली पडणारा गडी चीत झालेला गडी वरच्या गडीवर जास्त सुलभतेने अनेक प्रकारचे डाव करू शकतो. मनुष्य चीत पडला तरी त्याचे तोंड प्रतिस्पर्ध्याकडे असते. दोन्ही हात पाय मोकळे असतात. त्यामुळे तो प्रतिस्पर्ध्याच्या ताब्यात गेलेला नसून प्रतिकार करण्यास समर्थ असतो. ह्या कुस्तीचा निकाल होतांना जेव्हा एक गड्याचा कचकड्याचा (हत्याराचा) हात डाव करणारा बांधतो व डाव करणाऱ्याचा हत्याराचा हात मोकळा असतो त्यावेळी डाव करणारा विजयी झाला असे समजण्यात येते.

भारताबाहेरील निरनिराळ्या देशात वेगवेगळ्या प्रकारातील कुस्ती प्रकार आहेत. इंग्लंडमध्ये

१) कंबरलँड व वेस्टमोरलँड पध्दत (Cumberland and Westmoreland Styles):

ही पध्दत इंग्लंडच्या उत्तर भागात प्रचलीत आहे. कंबरलँड व वेस्टमोरलँड या दोन तालुक्यात ही कुस्तीची पध्दत चालू आहे. दोन्ही तालुक्यांच्या नावाने कुस्तींना नाव देण्यात आली आहेत. तेथील तज्ञांच्या मते या प्रकाराची कुस्ती प्रथम शिकल्यामुळे इतर पध्दतीची कुस्ती खेळण्यास सोपी जाते. या कुस्ती प्रकारात दोन्ही प्रतिस्पर्धींनी आपला एक हात समोरील प्रतिस्पर्धीच्या एका हाताखालून व दुसरा हात त्याच्या दुसऱ्या हातावरून त्याच्या पाठीवर नेऊन आपल्या हाताची बोटे एकमेकात बिजागरीप्रमाणे अडकवून प्रतिस्पर्ध्यास धरून उभे रहावे. त्याच प्रमाणे दोघांनी आपल्या हाताची पकड मजबुत धरल्यानंतर पंचांनी सुरुवात करताच कुस्तीला सुरुवात होते. कुस्तीचा निकाल लागेपर्यंत हाताची पकड सुटू द्यावयाची नसते. डाव सुरु असतांना ज्याची बोटाची पकड सुटेल तो हारेल. या पध्दतीत कोणताही डाव करतांना बोटाची पकड सुटू नये महत्वाची आहे. कुस्तीतील ड्रेस हाफ पॅन्ट (चड्डी) पायात कापडी बुट ह्या कुस्तीत इजा होण्याचा संभव फारच कमी असतो. कुस्तीतील कौशल्य १) प्राथमिक पड (The Hold) २) बॅकहिल (Back Heal) ३) हॅक (Hack) ४) दि इनसाईड क्लिक (The inside click) ४) दि क्रॉस बट कट (The cross Buttock) ५) दि बटक (The Buttack) ६) द हॉईप (The Hipe)

२) कार्नवाल व डेव्हन कुस्तीची पध्दती (Cornwall and Devon Styles) -

या कुस्ती प्रकारात कुस्ती खेळणारे कॅनव्हॉची मजबुत सैल जाकीटे अंगात घालून कुस्ती करतात. या पध्दतीत कमरेवरी भाग धरण्यास परवानगी आहे. पण कमरेच्या खाली धरणे मना आहे. जाकीटाचा कोणताही भाग धरता येतो. खेळतांना कुस्तीगीराचे दोन मुठे व एक हुंगण इतकी अंगे जमिनीस लागली तर तो चित समजला जातो. तसेच हुंगणाचे दोन्ही भाग व एक मुठ जमिनीस लागली तरी तो चित समजतात. जाकीट धरून डाव करतात. म्हणून पकड चांगली मिळते. जाकीट धरतांना प्रतिस्पर्धीचा गळा आवळला जाऊ शकतो. अशा रितीने जाकीट धरणे मना आहे. या पध्दतीत कुस्ती उभे राहूनच होते. जमिनीवर बसून अथवा पालथे पाडून डाव करता येत नाही. या कुस्तीत कोणतेही डाव उभे राहूनच करावयाचा असल्याने कुस्तीचा निकाल लवकर लागत नाही. ठरलेला वेळ झाल्याने कुस्ती बरोबरीने सोडावी लागते. क्वचितच कुस्ती एका बाजूने लागते. कुस्तीसाठी जोडा लावण्यासाठी मैदानात कुस्ती खेळणारा आपली टोपी मैदानात टाकतो. त्याला चॅलेंज करणारा प्रतिस्पर्धी सुध्दा आपली टोपी मैदानात टाकतो. अशा प्रकारे एक दुसऱ्याला आव्हान करतात. कुस्तीतील डाव - १) दि ऑउट साईड लॉक (The outside lock) २) दि इनसाईड लॉ - फॉरवर्ड (The inside lock - Forward) ३) दि डबल लॉक - The Double lock, ४) दि हीव (The Heave)

३) ग्रीको रोमन कुस्तीची पध्दत - Graco - Roman Style

या पध्दतीच्या नावावरून ही पध्दत ग्रीक व रोमन लोकांमध्ये जुन्याकाळी चालू असलेला कुस्ती प्रकार असेल अशी कल्पना येते. पण खरी परीस्थिती उलट आहे. ही पध्दत युरोपीयन कुस्तीगिरांनी शोधून काढली. ही पध्दत प्रचार व प्रसार करण्यासाठी कुस्तीच्या फ्रेंच स्कुलचे मोठे योगदान आहे. ह्या पध्दतीत कमरेच्या खाली धरणे मना आहे. तसेच ड्रिपींग म्हणजे चाट मारणे मना आहे. ही कुस्ती जमिनीवर पडूनच खेळावी लागते. ह्या कुस्तीचा निकाल लवकर होत नाही. म्हणून प्रेक्षक कंटाळतात. पुढीसारखे डाव करण्यासाठी पायाचा उपयोग मना आहे. तसेच बोटात बोटे अडकवून पकड बांधणे मना आहे. दोन मुठे जमिनीस लागले की, कुस्ती संपते. खेळणारे पहिलवान भारी वजनाचे असतात. इस १८७० मध्ये ही कुस्ती इंग्लंडमध्ये आली. ती लोकांना पसंत पडली नाही. म्हणून तिचा प्रसार झाला नाही. हल्ली ही पध्दत इंग्लंडशिवाय युरोपीय देशात चालू आहे. उभ्याने खेळता खेळता खेळाडू जमिनीवर पडला तर ती गोष्ट निराळी पण या कुस्तीत खेळणारे आपणहून जमिनीवर

पडतात. तसे केल्याशिवाय त्यास ती कुस्ती निटशी करता येत नाही. या कुस्तीत डाव करतांना पायाची मदत घ्यावयाची नसते. कुस्तीतील डाव दि एल्बो रोल (The Elbow roll) ची पकड

४) कॅच होल्ड कुस्तीची पध्दत (The catch Hold style) -

या पध्दतीत खेळतांना प्रतिस्पर्धीचे पाय अगर कपडे धरायचे नसतात. त्याशिवाय वरच्या भागास वाटेल त्या रीतीने धरता येते. ही कुस्ती कंबरलॅन्ड व वेस्टमोअर लॅंड पध्दतीने उभ्यानेच करावयाची असते. या पध्दतीत पायाची वाटी व टांगा मारण्याची मनाई आहे. खेळतांना ज्याच्या शरीराचा कोणताही भाग जमिनीस लागला तो गडी हरला.

या पध्दतीतील डाव - १. दि फ्लायिंग मेअर (The Flying mare) धोबी पछाड २. दि आऊट साईड स्ट्रोक (The out side stroke) दि हाफ नेलसन ऑफ दि ग्राउंड, ३) The half Nelson of the Ground)

५) कुस्तीच्या इतर काही पध्दती -

१) कुस्तीची स्कॉटीश पध्दत - (Scottish Method Wrestling)

या कुस्तीत कंबरलॅंड व वेस्टमोअरलॅंडची पध्दत व कॅच अज कॅच कॅन (लोकेशनस) पध्दतीच्या दोन पध्दतीचे मिश्रण आहे. या कुस्तीची सुरुवात कमरलॅंड व वेस्टमोअरलॅंड पध्दतीप्रमाणे एकमेकास धरूनच करतात. पण नंतर लॅकेशाअर पध्दतीप्रमाणे जमिनीवर पडून कुस्ती चालू राहते. शेवटी प्रतिस्पर्धीचे दोन मुठ्ठ जमिनीस लावून दाबून ठेवले पाहिजे. म्हणजे कुस्ती पूर्ण झाली असे समजतात.

२) कुस्तीची आयरीश पध्दत - (Irish Method of Wrestling) -

या पध्दतीत खेळणारे एका हाताने प्रतिस्पर्धी खेळाडूचा कॉलर व दुसऱ्या हाताने त्याचे कोपर धरून खेळतात. म्हणून हिला कॉलर एलबो मेथड (Collar and Elbow Method) म्हणतात. ही कुस्ती उभ्या उभ्यानेच करावी लागते. शेवटी ज्याचे शरीर जमिनीस लागले तो हरला असे समजतात.

३) कुस्तीची स्विस पध्दती - (Swiss Style of Wrestling) -

स्विट्झरलॅंडमधील कुस्तीच्या राष्ट्रीय पध्दतीस स्विसझेन म्हणतात. या पध्दतीप्रमाणे कुस्ती खेळतांना खेळणारे आखुड पण मजबुत अशा ब्रिचीस घालून कुस्ती खेळतात. या पध्दतीत प्रतिस्पर्ध्यास जमिनीवरून उचलून पुनः जमिनीवरच टाकावयाचे असते. याप्रमाणे उचलतांना प्रतिस्पर्धीची ब्रिचेस धरून त्यास उचलण्याची परवानगी असते.

४) कुस्तीची जर्मन पध्दती - ही पध्दत कॅच कॅन या पध्दतीशी मिळती आहे.

५) पॅनक्रेशियन - (Pancration) -

पॅनक्रेशियन शब्दाचा अर्थ संपूर्ण (Complete) असा आहे. ही कुस्ती संपूर्ण मल्लयुद्धाच्या स्वरूपाची असल्यामुळे तिला हे नाव असावे असे वाटते. पूर्वी ग्रीक देशात ऑलिंपिक गेम्स व इतर मर्दानी खेळाचे सामने घेत असत. त्यात ह्या प्रकारच्या कुस्तीच्या सामन्यांचा समावेश केलेला असे. हि कुस्ती त्यावेळी फार लोकप्रिय होती. ह्या कुस्तीत कुस्ती व बाॅक्सींग ह्या दोन्ही प्रकारांचा समावेश केलेला आहे. ह्या कुस्तीत हत्याराशिवाय दोन गडी एकमेकास पराजित करण्यासाठी वाटेल त्या प्रकारचे डाव करू शकतात. एकमेकांच्या गळ्यावर दाब देवून त्याचा श्वास बंद करण्याची देखील ह्या कुस्तीत परवानगी आहे. अलीकडे ऑल इन रेसलींगचा प्रकार थोड्या फेरफाराने या कुस्तीसारख्याच आहे.

६) आईसलॅन्डची ग्लिमा पध्दतीची कुस्ती - (Iceland Glima Style)

आईसलॅन्ड नावाचे बेट अटलान्टीक महासागराच्या उत्तरेस युरोप अमेरिकेच्या मध्यावर आहे. त्या बेटातील लोकांच्या कुस्तीच्या पध्दतीस ग्लिमा (Glima) म्हणतात. ही कुस्ती आईसलॅन्डचा राष्ट्रीय खेळ समजतात. व ही कुस्ती उत्तम खेळणारे तेथील राष्ट्रीयवीर (हिरो) समजला जातो. तेथे या पध्दतीची कुस्ती खेळणारे धंदेवाईक पहेलवान नाहीत. हा कुस्तीचा प्रकार या आईसलॅन्ड बेटाशिवाय इतर कोठेही प्रचलीत नाहीत. हि पध्दती नऊशे वर्षांपेक्षा जास्त वर्षांपासून तेथे चालू आहे. ही कुस्ती उभे राहूनच खेळावयाची असल्याने ही कुस्ती खेळणाऱ्याचे पाय फार मजबूत असावे लागतात. हि कुस्ती खेळणाऱ्याची शरीर स्थूल नसतात. या कुस्तीमुळे खेळणाऱ्याचे सर्व अवयव समप्रमाणात वाढून फार मजबूत होतात. हि कुस्ती खेळणारे एका विशेष प्रकाराचे चामडी पट्टे घालून कुस्ती खेळतात. कमरेस एकपट्टा व मांडीला सुध्दा पट्टा असतो. व दोन्ही बाजूस ज्या चामडी तुकड्याने जोडला असतो. ह्या पट्ट्यांना धरुनच डाव करावा लागतो. उभे राहूनच व दोघांनी एकमेकांचे पट्टे धरुनच कुस्ती खेळायची असते. कुस्तीचे नियम नऊशे वर्षांपासून जसेच्या तसेच आहेत. त्यात थोडाफारच बदल झालेला असतो. इतर देशाशी फारच कमी दळणवळण असल्याने कुस्तीच्या डावांची नावे जुनीच आहेत. पट्ट्याशिवाय शरीराच्या दुसऱ्या भागास धरणे मना आहे. कुस्तीत दोन्ही हाताने ढकललेली चालते. प्रतिस्पर्धी खेळाडूचे गुढगा किंवा कोपरा जमिनीस लागले तर तो पडला (चित झाला) असे समजतात. खेळणारा कुस्तीगिराला वेळ मर्यादा नाही. कुस्ती पूर्ण होईपर्यंत चालू राहते.

७) ऑल इन रेसलिंग - (All in Wrestling) -

या प्रकारच्या कुस्ती इंग्लंडमध्ये होतात. युरोपीयन कुस्तीत सुध्दा वरील कुस्तीचे डाव मना केलेले आहेत. कारण या कुस्तीमध्ये कुस्तीगिराला ईजा होईल अशा प्रकारचे डाव आहेत. हा कुस्ती प्रकार १९३० मध्ये परदेशात सुरु झाला. हा कुस्ती प्रकार तसा नवा नाही. बॉक्सींगच्या आराखड्याप्रमाणे १५ फुट लांब व १५ फुट रुंद अशी एक मॅट पसरवून तिच्या चारही बाजूने लाकडी खांब पुरतात. त्यास दोऱ्या बांधून आखाडा तयार करतात. बॉक्सींग खेळाप्रमाणे राऊंड ठरवून त्यामध्ये सामने होतात. प्रत्येक फेरीला ७ मिनिटांचा अवधी देतात. प्रत्येकी दोन फेऱ्यात ५ मिनिटांची विश्रांती देतात. तीन फेरीत गडी चित झाला नाही अथवा त्याने हार मानली नाही तर कुस्ती बरोबरीने झाली असे समजतात. या कुस्तीत वाटेल तो डाव करतात. केस ओढणे, चावणे, मुठ आवळून ठोसा मारणे मात्र मनाई आहे. उघड्या तळहाताने प्रतिस्पर्ध्यास चपराक मारण्याची कुस्तीत परवानगी आहे. नेहमीच्या कुस्तीत पाहण्यात येत नाही असे नाना प्रकारचे विचित्र डाव व बांध या कुस्तीत पाहण्यास मिळतात. कित्येक वेळा प्रतिस्पर्धी खेळाडूचे पाय धरुन गरगर फिरवून आखाड्याबाहेर फेकून देतात. एखाद्या वेळेस नसांवर दाब देवून रक्त प्रवाह बंद करतात. मनुष्य स्वभाव फार विलक्षण आहे. नुसता कौशल्याचा खेळ पाहून समाधान होत नाही. खेळणाऱ्याचे हातपाय मोडून किंवा रक्तबंबाळ झालेला पाहून प्रेक्षकांचे समाधान होत नाही. रोमन साम्राजाच्या शेवटच्या काळी ग्लडीएटर्सच्या कुस्तीच्यावेळी हाच प्रकार होता. ही कुस्ती मारामारीच्या स्वरूपाची असल्याने ती पाहतांना प्रेक्षकांमध्ये एक प्रकारची मजा वाटते. अलीकडे WWF सारखाच प्रकार होता.

८) कॅच अँड कॅच कॅन - पध्दतीची स्टँडींग कुस्ती (Standing Catch as Catch can Wrestling) -

युरोपमध्ये ही कुस्ती मॅटवर खेळली जाते. इंग्लंडचे कुस्तीचे ऑलिंपिक चॅम्पीयन एस. व्ही. बेकन यांनी उभे राहून कुस्ती प्रकार विकसीत केला. ह्या कुस्तीतील डाव १) वेस्ट अँड थाय होल्ड (West and Thigh hold), २) नेक अँड थाय होल्ड (Neck and Thigh hold), ३) रिअर वेस्ट होल्ड अँड हाफ नेल्सन (Rear Waist hold and half nelson) ४) लेग लॉक्स (Leg Locks)

१) कॅच अँज कॅच कॅन अथवा लँकेशायर पध्दती (The catch as catch can or Lancashire style)

इंग्लंडमध्ये कुस्तीच्या अनेक पध्दती प्रचलीत आहेत. त्याच कॅच अँज कॅच कॅन नावाची कुस्तीपध्दत जास्त लोकप्रिय आहे. या पध्दतीस लँकेशायर पध्दत सुध्दा म्हणतात. कुस्ती १६X१६ फुटाच्या मॅटवर होते. ही कुस्ती भारतासारखीच आहे. कुस्तीतील डाव १) स्टँडींग फ्रन्ट चॅन्सरी होल्ड (Standing Front Chancer Hold), २) फ्रंट चॅन्सरी अँड आऊट साईड बॅक लेग स्ट्रोक (Front Chancery and Outside Back Leg Strock), ३) फ्रंट चॅन्सरी अँड बॅक हिल (Front Chancery and Outside Back Heal), ४) फ्रंट चॅन्सरी अँड फ्रंट हॅमर लॉक (Front Chancery and Front Hammer Lock), ५) चॅन्सरी हॅमर लॉक अँड बॅक हिल (Chancery Hammer Lock and Back Heal), ६) Double Front Chancery Hold, ७) Front Nelson, ८) The outside stroke, ९) Double leg hold, १०) Leg Hold and Back heal, ११) Double Chanceries, १२) Crotch Hold, १३) Forcing the Foot up the Back, १४) Half Nelson and Back Throw, १५) A standing throw, १६) Side arm Liver Hold, १७) Head Near Arm and Near Leg in Chanceries, १८) Quarter Nelson, १९) Half Nelson, २०) Back against Half Nelson, २१) Brake Against Half Nelson, २२) Side Roll following sit out, २३) Sit Back and Inside Leg grap vine, २४) Cirelingout, २५) Bridging three quarter Nelson, २६) Leg Nelson, २७) Reverse Double Leg Nelson.

संदर्भ

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१०. नमस्कार व बैठक - श्री. द. ची. मुजुमदार व्यायामशाळा, बडोदा - १९२५
११. मल्लविद्या शास्त्र - खंड १ ते २ श्री. ग.ग. पटवर्धन राजेसाहेब, व्यायाम कार्यालय, बोदा - १९३२
१२. कुस्ती भिमसेनी - राजे सर गंगाधरराव, गणेश पटवर्धन मिरज संस्थांन अधिकारी - १९३०
१३. कुस्ती हनुमंती - रा. दृ. माधव सहस्त्रबुध्दे
१४. कुस्ती भिमसेनी - राजेसर ग. ग. पटवर्धन रावपूरा - बडोदा - १९२२
१५. मल्लविद्याशास्त्र - खंड १ ते २ राजेसर ग. ग. पटवर्धन रावपूरा - बडोदे - १९२६
१६. व्यायाम ज्ञानकोष - खंड १ ते १० दत्तात्रय चिंतामण मुजुमदार

महिलांचे राजकीय सामाजिकरण आणि सबलीकरणावर आधारीत तीन शोधनिबंधातील राजकीय वातावरणाचा विश्लेषणात्मक अभ्यास

(विशेष संदर्भ – आदिवासी महिला – धुळे जिल्हा)

प्रा. विरेंद्र मुरलीधर घरडे: (विभागप्रमुख राज्यशास्त्र), गंगामाई एज्यु. संस्थेचे कला आणि वाणिज्य विज्ञान महाविद्यालय नगांव. ता.जि.धुळे.

● प्रस्तावना

आधुनिक काळात महिला सक्षमीकरण आणि त्यांच्या सामाजिकरणाला खुप महत्व प्राप्त झाले आहे. कारण शासन महिला मुक्ती व विकास धोरणाला प्राधान्य देवून त्यांना प्रगतीच्या मार्गावर आणण्याचा प्रयत्न शासनाच्या धोरणात्मक कार्यक्रमातून होतांना दिसून येतो. याचाच परिणाम असा कि महिलांमध्ये मुलभूत अधिकार व हक्कांची जाणीव निर्माण झाली आहे. ही प्रगती होण्यात जेवढे शासनाचे धोरण मोलाचे आहे तेवढेच सामाजिक प्रबोधनकारांनी आपल्या विचारांतून जी शासनाची कानउघाडणी केली ते देखील तेवढेच महत्वाचे आहे.

● मुख्य शब्द –

राजकीय सामाजिकरण, दलित चळचळ, स्त्री संघटना, मानवाधिकार, स्त्रीयांचे सक्षमीकरण, महिला आयोग, शोषण, स्त्रीयांचे हक्क व अधिकार, दलित स्त्रीचे प्रश्न, आरक्षण.

● उद्देश –

प्रस्तुत शोधनिबंधाचा उद्देश समाजप्रबोधनकारांनी आपल्या मौलिक विचारांतून जे महिला सबलीकरणाचे व सामाजिकरणाचे विचार मांडले त्या विचारातील राजकीय निर्णय क्रिया प्रक्रियांचे विश्लेषण करून शासनाला महिला समस्या व कल्याणाबाबत जागृत करणे हा आहे.

● महत्व –

महिला सक्षमीकरणाला राष्ट्रीय व आंतरराष्ट्रीय पातळीवर महत्व आहे. कारण बुध्दी, साहस, भावना आणि क्रियाशीलता याचा मोठया प्रमाणात असल्यामुळे त्यांचा उपयोग शासनाने करून घेतला तर मोठया प्रमाणात प्रगतीचे मार्ग मोकळे होऊ शकतात म्हणून याला महत्व आहे.

● गृहितेक –

- 1) देशाच्या प्रगतीत महिलांची भूमिका महत्वाची आहे.
- 2) प्रस्तुत निबंधातून महिला सबलीकरण व सामाजिकरणाचे महत्व जास्त दिसून येते. लेखकांची भूमिका महिलांच्या परिवर्तनवादी चळवळीला महत्वाचे स्थान देणारी आहे.

● संशोधन पध्दती –

प्रस्तुत शोधनिबंधासाठी विश्लेषणात्मक संशोधन पध्दतीचा उपयोग करण्यात आला आहे. त्याचबरोबर प्रकाशित लेख व पुस्तकांचा व ग्रंथाचा उपयोग करण्यात आला.

विश्लेषण –

महिला सबलीकरण व सामाजिकरणाशी संबंधित अनेक विचार लेखक, विचारवंतांनी आपल्या लेखनीच्या माध्यमातून समाजासमोर मांडले. प्रा. डॉ. प्रफुल्ल गवई हे एस. पी. एम. महाविद्यालय चिखली जि. बुलढाणा येथील अभ्यासू शिक्षक त्यांनी आपला शोधनिबंध “भारतीय स्त्रियांची स्थिती आणि मानवी हक्काच्या पायमल्लीचे विश्लेषण”, अथर्व पब्लिकेशन जळगांव यांनी “मानव अधिकार” (ISBN-९७-९३-८११७१-६२-२) यामध्ये प्रकाशित केला.

या निबंधात त्यांनी आधुनिक काळात महिलांवर ज्यात मुख्यत्वे दलित, आदिवासी, अल्पसंख्यांक आहेत. त्यांच्यावर होणाऱ्या शारिरीक, मानसिक अन्यायाचे यथार्थवादी दर्शन आकडेवारीसह दर्शविले आहे. त्याचबरोबर पारिवारीक कलहापासून ते आधुनिक भौतिक जगात वावरत असतांना येणाऱ्या समस्यांचे हुबेहुब विश्लेषण यात करण्यात आले. विशेष म्हणजे त्यांनी १९९४ च्या भारतातील गुन्हे या नियतकालिकेत प्रकाशित स्त्रियांवरील अत्याचाराचे गुन्हे यांची सांख्यिकीय आकडेवारीचे विश्लेषण केले. यांत हुंडाबळी ४९३५, बलात्कार १२३५१, पळवून नेणे व फसवणूक करणे १२९९७, मुलींना त्रास देणे १०४९६, छळ करणे १०४९६, तीव्र वेदना पोचविणे २५९४६.

वरील आकडेवारी मांडून लेखकाने स्त्रियांवर होणाऱ्या विदारक अन्याय अत्याचाराचे खरे विश्लेषण केले आहे. एक प्रकारे त्यांनी महिलांच्या राजकीय सामाजिकरणातील व सबलीकरणातील अडथळे शासनासमोर मांडले आहे.

त्यांनी स्त्रियांच्या सबलीकरणाचा विषय सरकार व समाजापुढे मांडून मोठी जनजागृती करण्याचा प्रयत्न केला आहे. त्याच्या या निबंधातून काही महत्वाची तत्वे पुढे येतात त्यात –

- 1) स्त्रियांचे सामाजिक आर्थिक व राजकीय सबलीकरण व्हायला पाहिजे त्यामुळे त्यांना अन्याय अत्याचाराची जाणीव निर्माण होईल.
- 2) महिला मानवाधिकार कायद्याची लागवण सक्षमपणे होणे अत्यावश्यक आहे. जेणेकरून राजकीय जागृती होईल.
- 3) स्त्रीयांचे मानवी हक्क हे नैसर्गिक असून आदिवासी दलीत महिलांना स्त्रीयांचे मानवी हक्कांची पायमल्ली होणार नाही याचा सक्षम दुतोवाच त्यांनी दिला आहे. म्हणून प्रा. कुमूद पावडे म्हणतात “स्त्रीमुक्तीतून स्त्रीवादाकडे नेण्यात कायद्याची सक्षम भूमिका महत्वाची आहे”¹ म्हणून भारतीय स्त्रियांची स्थिती व मानवी हक्कांच्या सक्षमीकरणासाठी कायद्याची अंमलबजावणी योग्यरित्या शासनातर्फे होणे आवश्यक आहे हे या लेखातून स्पष्ट होते.

अर्थव प्रकाशन जळगांव प्रतिबिंब या पुस्तकामध्ये डॉ. माधुरी दाताळकर यांचा “स्त्री-सबलीकरण सामाजिक, आर्थिक व राजकीय दृष्टीने मुल्यमापन” (ISBN - ९७-९३-८११७१-६२-२) हा निबंध प्रकाशित झाला. डॉ. माधुरी दाताळकर नागपूर येथील एल.ए.डी. महाविद्यालयात सहा प्राध्यापक पदावर कार्यरत आहेत. त्यांचा हा लेख म्हणजे स्त्रियांच्या राजकीय सामाजिकरण आणि सबलीकरणाच्या दृष्टीकोनातून आवश्यक वाटणाऱ्या घटकांची संपूर्ण गोळाबेरीज होय. या निबंधात त्यांनी स्त्रीयांना घटनेचे संरक्षण मिळाले असले तरी वास्तविक स्त्रियांची वास्तव परिस्थिती ही पुरुषप्रधान व्यवस्थेत खुपच हलाकीची आहे हे दाखवून दिले आहे. समाज सत्ता, आर्थिक विकास हे सर्व एक दुसऱ्यावर अवलंबून असणारे घटक आहे. या तीन घटकांचा सजातीय, विजातीय परीणाम महिलांच्या विकासावर होत असतो म्हणून त्यात आदिवासी बरोबर प्रत्येक स्त्री ही सक्षम व्हायला पाहिजे हेच त्यांनी आपल्या शोधलेखातून दाखवून दिले.

या शोधनिबंधात त्यांनी स्त्रीयांच्या आर्थिक सक्षमीकरणाचे समर्थन केले कारण तिला तिच्या कामाचे योग्य मोल मिळते परीणामी ती जर विधवा, परित्यक्ता, कुटुंबापासून दूर एकटी राहत असेल तर तिच्या उदरनिर्वाहाच्या समस्या सुटून तीचा

आत्मविश्वास वाढतो. महाराष्ट्राच्या दृष्टीकोनातून विचार केला तर महाराष्ट्रात स्त्री पुरुषांची रोजगाराची स्थिती पुढीलप्रमाणे होती.

(१९९१)

अ.क्र.	वेजगार प्रकार	पुरुष	स्त्रिया
१	शेतकरी	६२.३१ %	३७.४१ %
२	शेतमजूर	३९.०६ %	४४.०८ %
३	पशुसंवर्धन व पुरक उदयोग	०४.०४ %	००.६८ %
४	खाणकाम	००.९७ %	००.१७ %
५	घरगुती उदयोग	०३.३७ %	०१.६२ %
६	बांधकाम	०७.०९ %	००.७३ %
७	व्यापार	२४.०० %	०२.५६ %
८	वाहतूक	११.१६ %	००.४५ %
९	इतर	२४.६७ %	०७.५१ %
१०	अन्य उदयोग	३२.५१ %	०३.४५ %
११	काम न करणारे	१९५.२५ %	२४५.८६ %

(स्रोत महिलांच्या हक्कांची सनद २००१, पृ. १०)

थोडक्यात शासन व्यवस्थेने स्त्रियांचे अर्थिक सक्षमीकरण करावे जेणेकरून दिलेल्या अर्थिक स्वातंत्र्याचा उपयोग तीला घेता येईल, राष्ट्रीय आयोगाने १९८८ मध्ये अमशक्ती अहवाल सादर केला यात ते म्हणतात “दिवसभर काबाडकष्ट करणाऱ्या या पाणी, जळण, धरण यासाठी मैलान मैल चालत जाणाऱ्या घराची व मुलाची जबाबदारी सतत सांभाळून शिवाय चार पैसे मिळवून पोरान्या तोंडी घास घालण्याकरीता धडपडणाऱ्या स्त्रियांच्या कामाचे काही मोल होत नाही. त्यांच्या काबाडकष्टाला अर्थिक भाषेत काम समजले जात नाही. या स्त्रीयाही राष्ट्रीय संपत्तीत मोलाची भर घालीत आहेत याची दखल कोणी घेत नाही. स्त्रीयांना कायदे संरक्षण देत नाही. विकास योजना स्त्रीयांपर्यंत पोचत नाहीत. सहानुभूतीशून्य अधिकारी तिची दाद घेत नाहीत पाणी कामगार संघटना तिला पाठबळ देत नाही”^२ वरीलप्रमाणे अत्यंत पेचात सापडलेल्या स्त्रीचे दर्शन निबंधात त्यांनी केले.

इतकेच नव्हे तर त्यांनी स्त्रीयांच्या सामाजिक स्वातंत्र्याचे समर्थन करून हुंडाबळी, बलात्कार, शारीरिक व मानसिक शोषण सारख्या अनिष्ट कृतीबद्दल समाज व सरकारने जागृत असायला पाहिजे असे प्रतिपादन केले. महाराष्ट्रात स्त्रीवरील अत्याचाराचे प्रमाण कोष्टकावरून समजेल.

अ.क्र.	गुन्ह्याचे स्वरूप	जानेवारी २०१२	जानेवारी २००१ ते ऑगस्ट २००१
१	विनयभंगाच्या केसेस	२७९९ (डिसें. २००१)	१८२८
२	पळून नेण्याच्या केसेस	९६१ (साल २०००)	५९८

३	हुंडाबळीस जाळून मारण्याच्या केसेस	२५	२१
४	हुंडा बळी अन्य मार्गाने खून करण्याच्या केसेस	३१	१५
५	हुंडाबळीत स्वतला जाळून आत्महत्या करण्याच्या केसेस	३७	४१

(स्रोत - वृत्तसंकलन दै. तरूण भारत दि. ८/६/२००२ to १५/६/२००२)

विशेष म्हणजे डॉ. माधुरी दाताळकर यांनी स्त्रीचे आरोग्य ज्यात बाळंतपणी मृत्यू, स्त्री भ्रूणहत्येची आकडेवारी, स्त्री विरुद्ध गुन्ह्याची आकडेवारी सादर करून स्त्रीयांवर होणाऱ्या विदारक अन्याय व अत्याचाराचे वात्सव दर्शन यांत करून दिले आहे. त्यांनी अदिवासी दलित स्त्रियांच्या राजकीय सबलीकरणाचा प्रश्न शासनासमोर, समाजासमोर मांडला आहे. विशेष म्हणजे महिला आरक्षण बिलाचे समर्थन करून 10% च्या वर भारतात महिला राजकारणात असायला पाहिजे असे त्या म्हणतात. तसेच स्थानिक स्वशासन संस्थेत महिला आरक्षण व सुरक्षाचे सक्षमीकरण व्हावे असे सांगितले. स्त्रियांना राजकारणात 1/3 जागा राखीव दिल्यामुळे आज शहर व खेड्यांमध्ये सरपंच, सभापती, उपसभापती आमदार व खासदार पदावर महिलांचा सहभाग मोठ्या प्रमाणात वाढला आहे असे ते सांगतात. याच महिला सरपंच, सभापती, आमदार व खासदार या पदांवर कार्यरत आहेत. प्रा. पी.के. कुलकर्णी यांना “दलीतांचे व अदिवासींचे समानशास्त्र” या पुस्तकात श्रेष्ठत्व आणि कनिष्ठत्व या सामाजिक स्तराचा विचार केला. दोष कनिष्ठत्व निर्धारित करणाऱ्या दोन घटकांचा उल्लेख समाजशास्त्रात करावा. त्यातील पहिला घटक म्हणजे जन्म आणि दुसरा घटक म्हणजे कर्तृत्व होय. व्यक्ती हा कर्तृत्वाने मोठा होतो जन्माने, वर्णाने होत नाही हे प्रथमदर्शनी त्यांनी दाखवून दिले. यांत स्पृश्य व अस्पृश्य ही असमानता दूर करण्याचे समर्थन केले.

डॉ. माधुरी दाताळकर यांचा हा लेख म्हणजे डॉ. बाबासाहेब आंबेडकरांच्या स्त्रीमुक्ती आंदोलनाच्या पावलावर चालणारा अग्रदुतच आहे. डॉ. बाबासाहेब आंबेडकर हिंदू कोड बिलाच्या संबंधात आपली भूमिका स्पष्ट करतांना म्हणतात वर्गसंघर्ष व त्यातील असमानता स्त्री पुरुषांचे भेदाभेद तसेच अस्पृश्यता तशीच राहू देवून अर्थिक समस्यांशी निगडित कायदे संमत करत जाणे म्हणजे आमच्या संविधानाची चेष्टा करणे होय. आणि शेणाच्या ढिगाऱ्यावर राजप्रसाद बांधण्यासारखे आहे. डॉ. आंबेडकरांच्या याच विचाराची भूमिका डॉ. माधुरी दाताळकर यांनी आपल्या शोधनिबंधात मांडली आहे त्यांच्या अशाच लेखातून खालील तत्वे प्रदर्शित होतात. त्यात

- 1) त्यांचा हा निबंध स्त्रियांना समान सामाजिक दर्जा व प्रतिष्ठा मिळावी याचे समर्थन करणारा आहे.
- 2) राजकीय आरक्षण कायद्याचे योग्य व त्वरीत अंमलबजावणी करण्याचे समर्थन तो करतो.
- 3) त्याचबरोबर स्त्रियांच्या सक्षमीकरणाचे, अनिष्ट, रूढी, प्रथा परंपरा, अंधश्रद्धा यांमुळे होणारे भारतीय अदिवासी दलीत कष्टकरी स्त्रियांचे होणारे शोषण आणि जागतिकरणाच्या बाजारपेठेय अर्थरचनेत स्त्रियांचे होत असलेले वास्तुकरण हा परीप्रक्षय शासनाच्या धोरणात दाखविण्याचा प्रयत्न त्यांनी केला आहे.

आज महाराष्ट्रातील एकूण लोकसंख्येपैकी सर्वाधिक अदिवासी लोकसंख्येचे केंद्रीकरण खान्देशात झाले आहे. खान्देशातील धुळे, जळगांव, नंदुरबार या जिल्ह्यात अदिवासींची वस्ती आहे. धुळे व नंदुरबार हे दोन्ही जिल्हे अदिवासी लोकसंख्यांबाबत महाराष्ट्रात प्रथम क्रमांकावर आहे. अदिवासींच्या अभ्यासासाठी महात्मा गांधीजींच्या प्रेरणेने थोर समाज

कार्यकर्ते ठक्कर बाप्पा यांनी 1992 मध्ये गुजरात मध्ये भिल्ल सेवा नावाची संस्था निर्मिती केली. 1981 मध्ये खान्देशात भिल्ल सेवा मंडळ स्थापन करण्यात आले. या सर्वांचे राजकीय, सामाजिक व सबलीकरण इतर प्रगत राज्यांच्या दृष्टीने कमी आहे. म्हणून 45.88% अनुसूचित जमातीची लोकसंख्या असून देखील राजकीय नेतृत्व पाहिजे त्या प्रमाणात पुढे आलेले नाही. फक्त मंजुळाबाई गावीत, ज्योती पावरा, सायराबाई सरपंच, नज्जूबाई गावीत व राष्ट्रीय स्तरावर डॉ. हिना गावीत सारखेच बेटावर मोजण्याइतकेच नेतृत्व पुढे आले आहे. त्यामुळे बहुसंख्य आदिवासी क्षेत्र धुळे जिल्हयात असून देखील महिलांचा राजकीय सामाजिकरणाचा प्रश्न बिकट आहे. त्यामुळे डॉ. माधुरी दाताळकर यांचा लेख जिल्हयातील आदिवासी महिलांच्या राजकीय जागृती, सहभाग व सामाजिकरणात महत्वाची भूमिका बजावेल हे सत्य मानावे लागेल.

डॉ. स्वाती कर्वे संपादित “स्त्रीविकासाचे नवे क्षितीज” या पुस्तकांत स्त्रीमुक्ती, सबलीकरण व सामाजिकरणाशी संबंधित विविध मान्यवरांचे लेख या पुस्तकात प्रकाशित केले आहे. याच पुस्तकात कुमुद पावडे यांचा “दलित स्त्रीसंघटनांची वेगळी निर्मिती का झाली?” हा सखोल चिकित्सक विचारांचे समर्थन करणारा लेख प्रकाशित झाला. यात त्यांनी दलीत स्त्रीयांच्या उत्थानासाठी दलीत स्त्रीसंघटनांची निर्मिती करणे आवश्यक आहे याचे समर्थन केले.

स्त्रीसंघटनेची पार्श्वभूमी, स्त्री चळवळीची अपूर्णता, दलित स्त्रीयांच्या समस्या, दलित स्त्रीयांतील फूट, दलित पुरुषांकडून स्त्रीयांची होणारी हेळसांड अशी मुद्देसूद मांडणी या लेखांत करून धर्म, जात वंश आणि लिंग यांच्या नावावर स्त्री संघटनांची कशी हेळसांड झाली याचे वास्तव स्वरूप यांत दर्शविले आहे. स्त्रियांना मानव म्हणून जगण्यास वंचित करणे व त्यांच्या मुलभूत अधिकार व हक्कांचे दमण मोठया प्रमाणात झाल्याने अशा प्रवृत्ती विरुद्ध आवाज उठविण्यासाठी दलीत स्त्री संघटनेची आवश्यकता असते ते सांगतात.

डॉ. बाबासाहेब आंबेडकरांच्या स्त्रीमुक्ती लढयामुळे दलीत अदिवासी अल्पसंख्यांक महिला आरक्षणाच्या माध्यमातून पुढे येऊ लागल्या. त्यामुळे दलित महिला संघटनाची निर्मितीला बळकटी मिळाली. डॉ. आंबेडकरांच्या मते आरक्षण हे दलित अदिवासी अल्पसंख्यांक समाजाला दिलेली भिक नव्हे ते म्हणतात “The demand for reservation is a demand for protection Against the aggressive communalism of the governing class which wants to dominate the servile classes in all fields of life”³.

डॉ. आंबेडकरांनी जातीच्या नावांवर होणारे महिलांचे सामाजिक, अर्थिक, राजकीय शोषण थांबविणे हि काळाची गरज आहे असे सांगितले ते म्हणतात “Cast in the hands of Orthodox has been a powerful weapon to persecuting the reformers and for killing all reforms.”⁴ असा प्रबोधनकारी संदेश त्यांनी या लेखातून दिला आहे.

सवित्रीबाई फुलेपासून ते डॉ. बाबासाहेब आंबेडकरपर्यंतच्या समाजसुधारकांनी दलित अदिवासी, अल्पसंख्यांक, स्त्रीयांच्या सक्षमीकरणासाठी आपले जीवन वेचले त्याचीच परिणीती म्हणजे जगाचा स्त्रीकडे बघण्याचा दृष्टीकोन हळूहळू समतावादी, न्यायवादी, स्वातंत्र्यवादी बनला आहे. त्यातूनच जातीजमातीच्या महिलांना देखील नेतृत्व व संघटना करण्याचे स्वातंत्र्य मिळाले. त्यांनी या लेखातून दलित नेतृत्वाची आणि संघटनांची अनिष्ट, रूढी, प्रथा परंपराच्या बंधनातून बाहेर पडावे असा संदेश दिला आहे, स्त्रीशिक्षण हक्काचे समर्थन केले, चूल आणि मूल या विश्वात न राहता आधुनिक, भौतिक परिवर्तन स्विकारावी तसेच समता न्याय स्वातंत्र्याचे समर्थन करून स्वराजकीय नेतृत्व गुण विकसित करण्याचे आवाहन केले आहे. थोडक्यात हा शोधनिबंध म्हणजे दुषित समाजप्रवृत्तीचे खच्चीकरण स्त्रीयांच्या राजकीय संघटनांच्या माध्यमातून होऊ शकतो याची दिशा दर्शविणारा मार्गदाता आहे.

• निष्कर्ष –

हे तीनही शोधनिबंध म्हणजे महिलाचे राजकीय सामाजिकरण आणि सबलीकरणाच्या विकासातील मौलिक आधारस्तंभ आहे. ताराबाई शिंदे, सावित्रीबाई फुले डॉ. आंबेडकर सारख्या समाजक्रांतीकारांनी स्त्री मुक्तीचे जे लढे पुढे चालविले त्या महिलाविषयक पुरोगामी धोरणाचे समर्थन करणारे असल्याने भविष्यकाळात हे विचार महिला नेतृत्व विशेष अदिवासी, दलित जाती जमाती अल्पसंख्याकांसाठी मानाचा बिंदू ठरेल हे नाकारता येत नाही.

• संदर्भ –

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अम्बेडकरवादी चेतना और वर्तमान राजनीतिक परिप्रेक्ष्य में दलित राजनीति

प्रेम प्रकाश सिंह :शोधछात्र, समाज विज्ञान विद्याशाखा, उ.प्र. राजर्षि टण्डन मुक्त विश्वविद्यालय, इलाहाबाद

प्रत्येक संस्कृति और सभ्यता में असमानता को एक दार्शनिक, सामाजिक, राजनीतिक और सांस्कृतिक आधार देने का प्रयास किया जाता रहा है। भारत का लिखित इतिहास ऋग्वेद से आरम्भ होता है और ऋग्वेद से ही वर्ण-व्यवस्था आरम्भ हो गयी थी। इसने भारतीय समाज को आने वाली शताब्दियों में ब्राह्मण, क्षत्रिय, वैश्य और शूद्रों के वर्ण में बाँटा गया। शूद्र वर्ण में शामिल जातियों को ऊपर के तीन वर्णों की सेवा चाकरी तो करनी ही पड़ी साथ ही साथ उन्हें हमेशा के लिए अधीनता लाद लेनी पड़ी। इस अधीनता से स्वतंत्र होने की अकुलाहट भी बनी रही थी और इसके खिलाफ लड़ने वाले लोग भी थे। मकखलि गोशाल, महावीर स्वामी, महात्मा बुद्ध, सुदूर दक्षिण के अलवार और नयनार संत, भक्ति काल के संत महाराष्ट्र के संतों से चलने वाली यह परम्परा ज्योतिराव फुले, भीमराव अम्बेडकर तक चली आयी है।

1920 के दशक से ही भारत के एक प्रमुख विद्वान के तौर पर अम्बेडकर काफी सक्रिय रहे थे। सन 1927 में डॉ. अम्बेडकर ने छुआछूत के खिलाफ एक व्यापक आंदोलन शुरू करने का फैसला किया। उन्होंने सार्वजनिक आंदोलनों और जुलूसों के द्वारा पेयजल के सार्वजनिक संसाधन समाज के सभी लोगों के लिये खुलवाने के साथ ही उन्होंने अछूतों को भी हिंदू मंदिरों में प्रवेश करने का अधिकार दिलाने के लिये भी संघर्ष किया। 1928 में साइमन आयोग के समक्ष उन्होंने दलितों की समस्याएँ प्रभावपूर्ण तरीके से रखी।

डॉ. अम्बेडकर दलित राजनीति के जनक माने जाते हैं क्योंकि उन्होंने ही सब से पहले दलितों के लिए राजनैतिक अधिकारों की लड़ाई लड़ी थी। उन्होंने ही भारत के भावी संविधान के निर्माण के सम्बन्ध में लन्दन में 1930 में हुए गोलमेज सम्मेलन में दलितों को एक अलग अल्पसंख्यक समूह के रूप में मान्यता दिलाई थी और अन्य अल्पसंख्यकों मुस्लिम, सिख, ईसाई की तरह अलग अधिकार दिए जाने की मांग को स्वीकार करवाया था। 1932 में जब कम्युनल अवार्ड के अंतर्गत दलितों को भी अन्य अल्पसंख्यकों की तरह अलग मताधिकार मिला तो गाँधी जी ने उस के विरोध में यह कहते हुए कि इस से हिन्दू समाज टूट जायेगा, आमरण अनशन की धमकी दे डाली जब कि उन्हें अन्य अल्पसंख्यकों को यह अधिकार दिए जाने में कोई आपत्ति नहीं थी। अंत में अनुचित दबाव में मजबूर होकर डॉ. अम्बेडकर को गाँधी जी की जान बचाने के लिए पूना पैक्ट करना पड़ा और दलितों के राजनैतिक स्वतंत्रता के अधिकार की बलि देनी पड़ी तथा संयुक्त चुनाव क्षेत्र और आरक्षित सीटें स्वीकार करनी पड़ीं।

गोलमेज कांफ्रेंस में लिए गए निर्णय के अनुसार नया कानून गवर्नमेंट आफ इंडिया 1935 एक्ट 1936 में लागू हुआ। इस के अंतर्गत 1937 में पहला चुनाव कराने की घोषणा की गयी। इस चुनाव में भाग लेने के लिए डॉ. अम्बेडकर ने अगस्त 1936 में इंडिपेंडेंट लेबर पार्टी (स्वतंत्र मजदूर पार्टी) की स्थापना की और बम्बई प्रेजीडेंसी में 17 सीटों पर चुनाव लड़ा और 15 सीटें जीतीं। इस के बाद उन्होंने 19 जुलाई, 1942 को आल इंडिया शैड्यूल्ड कास्टस फेडरेशन बनायी। इस पार्टी से उन्होंने 1946 और 1952 में चुनाव लड़े परन्तु इस में पूना पैक्ट के दुष्प्रभाव के कारण उन्हें कोई विशेष सफलता नहीं मिली। फलस्वरूप 1952 और 1954 के चुनाव में डॉ. अम्बेडकर स्वयं हार गए। अंत में उन्होंने 14 अक्टूबर 1956 को नागपुर में आल इंडिया शैड्यूल्ड कास्टस फेडरेशन को भंग करके रिपब्लिकन पार्टी आफ इंडिया (आरपीआई) नाम से नयी पार्टी बनाने

की घोषणा की। इस के लिए उन्होंने इस पार्टी का संविधान भी बनाया। वास्तव में यह पार्टी उनके परिनिर्वाण के बाद 3 अक्टूबर, 1957 को अस्तित्व में आई। इस विवरण के अनुसार बाबा साहेब ने अपने जीवन काल में तीन राजनैतिक पार्टियाँ बनायीं। इन में से वर्तमान में आरपीआई अलग अलग गुटों के रूप में मौजूद है।

डॉ. अम्बेडकर ने अपने भाषण में दलित मजदूर पार्टी के बनाने के कारणों और उसके काम के बारे में स्पष्टीकरण देते हुए कहा था कि इस बात को ध्यान में रखते हुए कि आज पार्टियों को सम्प्रदाय के आधार पर संगठित करने का समय नहीं है, मैंने अपने मित्रों की इच्छाओं से सहमति रखते हुए पार्टी का नाम तथा इस के प्रोग्राम को विशाल बना दिया है ताकि अन्य वर्ग के लोगों के साथ राजनीतिक सहयोग संभव हो सके। पार्टी का मुख्य केंद्रबिंदु तो दलित जातियों के 15 सदस्य ही रहेंगे परन्तु अन्य वर्ग के लोग भी पार्टी में शामिल हो सकेंगे। पार्टी के मैनिफेस्टो में भूमिहीन, गरीब किसानों और पट्टेदारों और मजदूरों की जरूरतों और समस्याओं का निवारण, पुराने उद्योगों की पुनर्स्थापना, और नए उद्योगों की स्थापना, छोटी जोतों की चकबंदी, तकनीकी शिक्षा का विस्तार, उद्योगों पर राज्य का नियंत्रण, भूमि के पट्टेदारों का जामीदारों द्वारा शोषण और बेदखली, औद्योगिक मजदूरों के संरक्षण के लिए कानून, सभी प्रकार की कट्टरपंथी और प्रतिक्रियावाद को दण्डित करने, दान में मिले पैसे से शिक्षा प्रसार, गाँव के नजरिये को आधुनिक बनाने के लिए सफाई और मकानों का नियोजन और गाँव के लिए पुस्तकालय और सिनेमा घर आदि का प्रावधान करना था। पार्टी ने मुख्य रूप से किसानों और गरीब मजदूरों के कल्याण पर बल दिया था। पार्टी की कोशिश लोगों को लोकतंत्र के तरीकों से शिक्षित करना, उन के सामने सही विचारधारा रखना और उन्हें कानून द्वारा राजनीतिक कार्यवाही के लिए संगठित करना आदि था। इससे स्पष्ट है इस पार्टी की राजनीति जातिवादी न होकर वर्ग और मुद्दा आधारित थी और इस के केंद्र में मुख्यतया दलित थे। यह पार्टी बम्बई विधान सभा में सत्ताधारी कांग्रेस की विपक्षी पार्टी थी। इस पार्टी ने अपने कार्यकाल में बहुत जनोपयोगी कानून बनवाये थे। इस पार्टी के विरोध के कारण ही फैक्टरियों में हड़ताल पर रोक लगाने सम्बन्धी औद्योगिक विवाद बिल पास नहीं हो सका था।

यदि बाबा साहेब द्वारा स्थापित 1942 में स्थापित आल इंडिया शैड्यूल्ड कास्ट्स फेडरेशन के उद्देश्य और एजंडा को देखा जाये तो डॉ. अम्बेडकर ने इसे सत्ताधारी कांग्रेस और सोशलिस्ट पार्टियों के बीच संतुलन बनाने के लिए तीसरी पार्टी के रूप में स्थापित करने की बात कही थी। पार्टी के मैनिफेस्टो में कुछ मुख्य मुद्दे थे— सभी भारतीय समानता के अधिकारी हैं, सभी भारतीयों के लिए धार्मिक, आर्थिक और राजनैतिक समानता की पक्षधरता, सभी भारतीयों को अभाव और भय से मुक्त रखना राज्य की जिम्मेदारी है, स्वतंत्रता, समानता और बंधुत्व का संरक्षण आदमी का आदमी द्वारा, वर्ग का वर्ग द्वारा तथा राष्ट्र का राष्ट्र द्वारा उत्पीड़न और शोषण से मुक्ति और सरकार की संसदीय व्यवस्था का संरक्षण आर्थिक प्रोग्राम के अंतर्गत बीमा का राष्ट्रीयकरण और सभी सरकारी कर्मचारियों के लिए अनिवार्य बीमा योजना और नशेबंदी का निषेध था। यद्यपि यह पार्टी पूना पैक्ट के कारण शक्तिशाली कांग्रेस के सामने चुनाव में कोई विशेष सफलता प्राप्त नहीं कर सकी परन्तु पार्टी के एजंडे और जन आंदोलन जैसे भूमि आन्दोलन आदि के कारण अछूत एक राजनीतिक झंडे के तले जमा होने लगे जिससे उन में आत्मविश्वास बढ़ने लगा। फेडरेशन के प्रोग्राम से स्पष्ट है कि यद्यपि इस पार्टी के केंद्र में दलित थे परन्तु पार्टी जाति की राजनीति की जगह मुद्दों पर राजनीति करती थी और इसका फलक व्यापक था।

जैसा कि विदित है बाबा साहेब ने बदलती परिस्थितियों और लोगों की जरूरत को ध्यान में रख कर एक नयी राजनीतिक पार्टी रिपब्लिकन पार्टी आफ इंडिया की स्थापना की घोषणा 14 अक्टूबर, 1956 को की थी और इस का संविधान भी उन्होंने ही बनाया था। इस पार्टी को बनाने के पीछे उन का मुख्य उद्देश्य एक ऐसी पार्टी बनाना था जो संविधान में किये गए

वादों के अनुसार हो और उन्हें पूरा करना उस का उद्देश्य हो। वे इसे केवल अछूतों की पार्टी नहीं बनाना चाहते थे क्योंकि एक जाति या वर्ग के नाम पर बनायी गयी पार्टी सत्ता प्राप्त नहीं कर सकती। वह केवल दबाव डालने वाला ग्रुप ही बन सकती है। आरपीआई की स्थापना के पीछे मुख्य ध्येय थे –

1. समाज व्यवस्था से विषमतायें हटाई जाएं ताकि कोई विशेषाधिकार प्राप्त तथा वंचित वर्ग न रहे।
2. दो पार्टी सिस्टम हो एक सत्ता में दूसरा विरोधी पक्ष।
3. कानून के सामने समानता और सब के लिए एक जैसा कानून हो।
4. समाज में नैतिक मूल्यों की स्थापना।
5. अल्पसंख्यक लोगों के साथ सामान व्यवहार।
6. मानवता की भावना जिस का भारतीय समाज में अभाव रहा है।

पार्टी के संविधान की प्रस्तावना में पार्टी का मुख्य लक्ष्य व उद्देश्य न्याय, स्वतंत्रता, समता व बंधुता को प्राप्त करना था। पार्टी का कार्यक्रम बहुत व्यापक था। पार्टी की स्थापना के पीछे बाबा साहेब का उद्देश्य था कि अल्पसंख्यक लोग, गरीब मुस्लिम, गरीब ईसाई, गरीब तथा निचली जाति के सिक्ख तथा कमजोर वर्ग के अछूत, पिछड़ी जातियों के लोग, आदिम जातियों के लोग, शोषण का अंत, न्याय और प्रगति चाहने वाले सभी लोग एक झंडे के तले संगठित हो सकें और पूंजीपतियों के मुकाबले में खड़े होकर संविधान तथा अपने अधिकारों की रक्षा कर सकें।

आरपीआई की विधिवत स्थापना बाबा साहेब के परिनिर्वाण के बाद 1957 में हुयी और पार्टी ने नए एजंडे के साथ 1957 व 1962 का चुनाव लड़ा। पार्टी को महाराष्ट्र के अलावा देश के अन्य हिस्सों में भी अच्छी सफलता मिली। शुरू में पार्टी ने जमीन के बंटवारे, नौकरियों में आरक्षण, न्यूनतम मजदूरी, दलितों से बौद्ध बने लोगों लिए आरक्षण आदि के लिए संघर्ष किया। पार्टी में मुसलमान, सिक्ख और जैन आदि धर्मों के लोग शामिल हुए। उनमें पंजाब के जनरल राजिंदर सिंह स्पैरो, दिल्ली में डॉ. अब्बास मलिक, उत्तर प्रदेश में राहत मोलाई, डॉ. छेदी लाल साथी, नासिर अहमद, बंगाल में श्री.एस.एच.घोष आदि प्रसिद्ध व्यक्ति और कार्यकर्ता हुए। 1964 में 6 दिसंबर से फरवरी 1965 तक पार्टी ने स्वतंत्र भारत में जमीन के मुद्दे को लेकर पहला जेल भरो आन्दोलन चलाया जिस में तीन लाख से अधिक दलित जेल गए। सरकार को मजबूर हो कर भूमि आबंटन और कुछ अन्य मागें माननी पडीं। इस दौर में आरपीआई दलितों पिछड़ों और अल्पसंख्यकों की एक मजबूत पार्टी के रूप में उभर कर सामने आई। परन्तु 1962 के बाद यह पार्टी टूटने लगी। इस का मुख्य कारण था कि इस पार्टी से उस समय की सब से मजबूत राजनैतिक पार्टी कांग्रेस को महाराष्ट्र में खतरा पैदा हो रहा था। इस पार्टी की एक बड़ी कमजोरी थी कि इसकी सदस्यता केवल महारों तक ही सीमित थी। कांग्रेस के नेताओं ने इस पार्टी के नेताओं की कमजोरियों का फायदा उठा कर पार्टी में तोड़ फोड़ शुरू कर दी। सब से पहले उन्होंने पार्टी के सब से शक्तिशाली नेता दादा साहेब गायकवाड़ को पटाया और उन्हें राज्य सभा का सदस्य बना दिया। इस पर पार्टी दो गुटों में बंट गयी। गायकवाड़ का एक गुट कांग्रेस के साथ और दूसरा बी डी खोब्रागडे गुट विरोध में। इसके बाद अलग नेताओं के नाम पर अलग गुट बनते गए और वर्तमान में यह कई गुटों में बंट कर बेअसर हो चुकी है। इन गुटों के नेता रिपब्लिकन नाम का इस्तेमाल तो करते है परन्तु उन का इस पार्टी के मूल एजंडे से कुछ भी लेना देना नहीं है। ये अपने अपने फायदे के लिए अलग पार्टियों से समझौते करते है और यदाकदा लाभ भी उठाते है।

आरपीआई के पतन के बाद उत्तर भारत में बहुजन समाज पार्टी (बसपा) के नाम से एक पार्टी उभरी जिस ने बाबा

साहेब के मिशन को पूरा करने का वादा किया। शुरू में इस पार्टी को कोई खास सफलता नहीं मिली। बाद में 1993 में उत्तर प्रदेश में पिछड़ी जातियों की समाजवादी पार्टी (सपा) के साथ मिल कर चुनाव लड़ने से इस पार्टी को अच्छी सीटें मिली और एक सम्मिलित सरकार बनी। परन्तु कुछ व्यक्तिगत स्वार्थों के कारण जल्दी ही इसका पतन हो गया। इस पार्टी की नेता मायावती ने सत्ता पाने के लालच में दलितों की घोर विरोधी पार्टी भारतीय जनता पार्टी से समझौता करके मुख्य मंत्री की कुर्सी हथिया ली परन्तु बाबा साहेब के मिशन और सिद्धांतों को पूरी तरह से तिलांजलि दे दी। इस के बाद पार्टी ने दो बार फिर भाजपा से गठबंधन किया और सत्ता सुख भोगा और अब अपने पतन की ओर अग्रसर हैं। इस पार्टी ने अवसरवादी, ब्राह्मणवादी, माफियाओं और पूंजीपति तत्वों को पार्टी में शामिल करके दलितों को मायूस किया और उन्हें राज्य से मिलने वाले कल्याणकारी लाभों से वंचित कर दिया। इस के नेतृत्व के व्यक्तिगत भ्रष्टाचार, तानाशाही और अदूरदर्शिता से बाबा साहेब के नाम पर दलितों, पिछड़ों और अल्पसंख्यकों की बनी एकता छिन-भिन्न हो गयी है। आज दलितों का एक बड़ा हिस्सा इस पार्टी से टूट कर हिन्दुत्ववादी भाजपा के साथ चला गया है। दलितों की एक प्रमुख जाति चमार को छोड़ कर दलितों की शेष उपजातियां अधिकार भाजपा की तरफ चली गयी हैं। भाजपा इन जातियों का इस्तेमाल दलितों और मुसलमानों के बीच टकराव करवाने के लिए कर रही है। इस से हिंदुत्व मजबूत हो रहा है और बहुसंख्यकवाद उग्र होता जा रहा है।

निष्कर्ष

उपरोक्त विवेचन से एक बात बहुत स्पष्ट है कि डॉ. अम्बेडकर जाति की राजनीति के कतई पक्षधर नहीं थे क्योंकि इस से जाति मजबूत होती है। इस से हिंदुत्व मजबूत होता है जो कि जाति व्यवस्था की उपज है। डॉ. अम्बेडकर का लक्ष्य तो जाति का विनाश करके भारत में जातिविहीन और वर्णविहीन समाज की स्थापना करना था। डॉ. अम्बेडकर ने जो भी राजनैतिक पार्टियाँ बनायीं वे जातिगत पार्टियाँ नहीं थीं क्योंकि उन के लक्ष्य और उद्देश्य व्यापक थे। यह बात सही है कि उनके केंद्र में दलित थे परन्तु उन के कार्यक्रम व्यापक और जाति निरपेक्ष थे। वे सभी कमजोर वर्गों के उत्थान के लिए थे। इसी लिए जब तक उनके द्वारा स्थापित की गयी पार्टी आरपीआई उन के सिद्धांतों और एजेंडा पर चलती रही तब तक वह दलितों, मजदूरों और अल्पसंख्यकों को एकजुट करने में सफल रही। जब तक उन में आन्तरिक लोकतंत्र रहा और वे जन मुद्दों को लेकर संघर्ष करती रही तब तक वह फलती फूलती रही, जैसे ही वह व्यक्तिवादी और जातिवादी राजनीति के चंगुल में पड़ी उसका पतन हो गया।

अतः यदि वर्तमान में विघटित दलित राजनीति को पुनर्जीवित करना है तो दलितों को जातिवादी राजनीति से निकल कर व्यापक मुद्दों की राजनीति को अपनाना होगा। जाति के नाम पर राजनीति करके व्यक्तिगत स्वार्थसिद्धि करने वाले नेताओं से मुक्त होना होगा। उन्हें यह जानना चाहिए कि जाति की राजनीति जाति के नायकों की व्यक्ति पूजा को मान्यता देती है और तानाशाही को बढ़ावा देती है। जाति की राजनीति में नेता प्रमुख हो जाते हैं और मुद्दे गौण। अब तक के अनुभव से यह सिद्ध हो चुका है कि दलित वर्ग अपनी राजनैतिक पार्टियों और राजनेताओं का पुनर्मूल्यांकन और जाति की विघटनकारी राजनीति को नकार कर जनवादी, प्रगतिशील और मुद्दा आधारित राजनीति का अनुसरण करे जैसा कि डॉ. अम्बेडकर कि अपेक्षा थी दरअसल अब देश को जातिवादी पार्टियों की जरूरत नहीं बल्कि सब के सहयोग से जाति-व्यवस्था विरोधी एक मोर्चे की जरूरत है।

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