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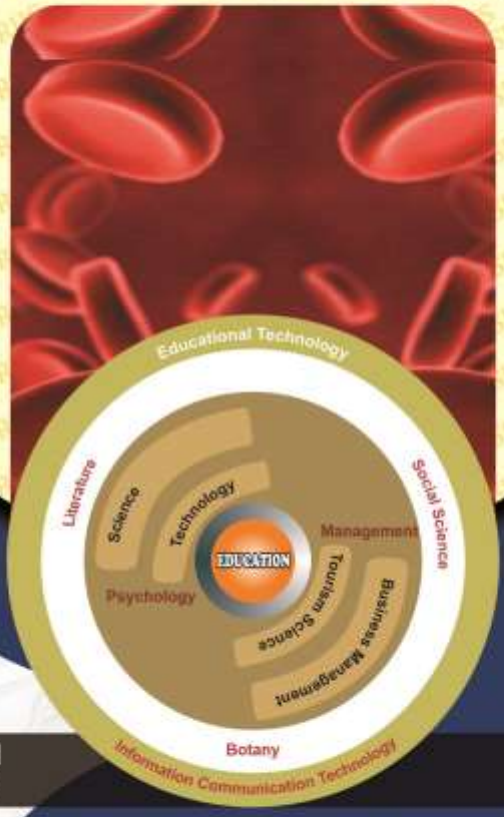

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SPECIAL ISSUE OF PHYSICAL EDUCATION, SPORTS SCIENCE & HOLISTIC APPROACH OF YOGA

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Editorial

I wish you all Happy, Healthy and Safe 2023

The Covid has taught us the importance of Fitness and the Health Awareness. It is the need of hour to give more emphasis on wellbeing and healthy life style of the society. It is with a view to contributing to the field of research in Physical Education, Sports and Yoga. This International Conference on Physical Education, Sports Science and Holistic Approach of Yoga with varied subthemes is organise to provide a platform to research scholars, young and old alike, to put forth the gist of their efforts and new strains of thought to the society.

The topic of physical education, sport science, and the holistic approach of yoga is of great importance to the international community. These fields have the power to improve the physical and mental well-being of individuals around the world, and to foster a greater appreciation of the benefits of physical activity. Physical education helps individuals to develop the skills, knowledge, and confidence to lead active and healthy lives. It can also provide an opportunity for individuals to learn about the benefits of physical activity and to engage in various sports and activities. Sport science, on the other hand, delves deeper into the scientific principles underlying physical activity and sport, enabling individuals to gain a more thorough understanding of how the body responds to exercise and how performance can be optimized.

The diversity of research paper presented in the conference will throw light on varied topics ranging from Sports Management, Rehabilitation, Sport Training, Sports Psychology, Sports Biomechanics, Sports Physiography and Yoga. I assure that each research paper will bring out a new dimension and open a door for discussion and deliberations. This International Conference will broaden our perception and enrich our knowledge and contribute to the overall knowledge that exists.

The holistic approach of yoga combines physical postures, breathing techniques, and meditation to promote overall well-being. It can help individuals improve flexibility, strength, and balance, as well as reduce stress and promote relaxation. By incorporating yoga into physical education and sport science curricula, individuals can adopt a well-rounded approach to physical activity and mental health.

I would like to express my deepest appreciation to the authors whose technical contributions are presented in these journal. It is because of their excellent contributions and hard work that we have been able to publish their papers in this renowned journal. I would like to thank all our resource persons and keynote speakers who make all the efforts to synthesize the materials and their wide and rich experiences to deliver distinguished talks.

I would also like to thank all our paper presenters for their great efforts in delivering interactive and excellent papers that address the learning needs of all levels, post graduate and professionals. We are very grateful to all chair persons for their great efforts in reviewing the papers during the presentation.

As we come together at this international conference, it is our hope that we can share our knowledge and expertise on these crucial topics, and work towards a future where physical and mental well-being is a priority for all.

Prof. (Dr.) G.K. Dhokrat
Editor in Chief
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ROLE OF PHYSICAL EDUCATION, SPORTS AND YOGA IN HUMAN RESOURCE DEVELOPMENT

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Human resources are people who create workforce. Humans are considered as resources because they make the best use of nature to create more resources. They can do this as they have the knowledge, skill and the technology to do so. This ability is acquired by people on the basis of education received by them. That is why the Ministry of Human Resource Development has been renamed as Ministry of Education, Govt. of India. The prime important aspects that determine the quality of life are – Literacy rate, health, and skills. The literate and healthy population can be an asset for the economy. It is because of the reason that the literate and healthy population contributes towards Gross Domestic Product (GDP) of a country. Survey indicate that raising the literacy rate also increases the Gross Domestic Product (GDP). Our country is fortunate enough to have 62.5% of its population in the age group of 15-59 years which is ever increasing and will be at the peak around 2036 when it will reach approximately 65%. Demographic Dividend i.e. growth of an economy which started in 2005-06 and will last till 2055-56. So age structure of our population will not affect our economy till 2055-56. According to Economic Survey 2018-19, India's Demographic Dividend will peak around 2041, when the share of working-age, i.e. 20-59 years, population is expected to hit 59%. But are these facts enough to suggest that India will have strong workforce in future ? Currently, 9.34 million students are pursuing BA programmes in India, making it the course with the highest enrolment pan-India, followed by B.Sc. (4.68 million) and B.Com. (4.03 million). An Economic Times report suggest that 94% of engineering graduates are not fit for hiring. There are severe health issues that is a cause of concern such as growing concern over obesity in India, threat of non-communicable diseases growing among children, adolescents and elevated risk level among adolescent towards acquiring non-communicable diseases. A survey by PubMed Central reported that in India, more than 77 million adults are living with diabetes and this will increase to 134 million by 2045. The prevalence of hypertension ranges from 20-40% in urban adults and 12-17% among rural adults. The number of people with hypertension is projected to increase from 118 million in 2000 to 214 million in 2025, with nearly equal numbers of men and women. The mental health problems are also on the rise in India. These health issue will not only put burden on our financial resources but also negate the efficiency of our large workforce in future. To address these issues an initiative has been taken by the government to introduce New Education Policy 2020. The guiding light for this policy is rich heritage of ancient Indian knowledge system. The ancient Indian knowledge system help children grow and be ready to face and succeed on the greatest test, called Life! Arts, sports, crafts, singing were also given equal importance which is good for development of intelligence and critical thinking. Yoga, meditation, mantra chanting are also part of Ancient Indian education for positivity, peace of mind and physical fitness. In a positive shift from previous educational policy it has been opined that sports cannot be treated as an optional subject and it has to be accepted as a part of education. Sports is also an education, so sports cannot be extra-curricular activities. Thereby sports cannot be treated as an optional subject ... sports as part of education has to be accepted by all. The benefits of physical education, sports and yoga are long lasting because they look for holistic development of a child. Through physical education, sports and yoga our future human resources gain knowledge about physical, mental, social, spiritual, environmental aspects of

health. The inclusion of sports and yoga may have added academic benefits. Sports teaches single minded dedication, increase concentration and focus as well as disciplined lifestyle. The importance of sports and yoga for physical and mental health has also been scientifically proven in various studies. Sports and yoga may also be useful for experiential learning because playing is learning by doing.

Keeping the importance of physical education, sports and yoga for stronger workforce the New Education Policy 2020 lay emphasis on sports integrated education. A cross-curricular pedagogical approach is required for holistic development of children through physical education, sports and yoga so that we can reap the reward of our physically and mentally fit workforce.

In the nutshell, physical education, sports and yoga are pillars of holistic development and needs to be utilised fully to gain advantage of our working age population.

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EFFECTIVENESS OF AEROBIC TRAINING PROGRAMME ON THE BASIS OF OPTIMUM HEALTH OF HOUSEWIVES OF VASAI TALUKA

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Abstract

Context:

To improve health status the urban housewife along with the house hold work must participate in regular physical activities like Exercise, Aerobics, Yoga, etc. Regular participation in suitable physical activities can significantly reduce risk factor of stressed related disease in improving one's health and fitness. In modern citizens Civilization the barriers of regular physical activity for urban Indian housewives to achieve health and fitness (Wallis & Mckenzie 1991) are:
lure of television and mobile phones, internet, lack of appropriate facility for physical activity, lack of proper Awareness of health and fitness

Reports indicate that majority of the females are more prone towards obesity and in long run they become the victim of relative risk for Orthopedic injuries. Females are generally suggested low intensity aerobics and yoga. The purpose of the study was to determine the "Effectiveness Of Aerobic Training Programme on The Basis of Optimum Health of Housewives of Vasai Taluka."

Objectives:
To compare the adjusted mean scores of Optimum Health of the Aerobics Group and Non-Aerobics Group by taking pre Optimum Health as covariate.

Methodology
Sixty House wives of Vasai Taluka aged 35 to 45 years were selected and they were divided randomly into two equals groups i.e. experimental (n=30) and control group (n=30). For the experimental group the training were restricted to only 1 hour per day for 6 days per week for a total period of 12 weeks whereas control group didin't participate in Aerobics training programme. At the baseline and after training intervention Optimum Health test through Custom made questionnaire was used to assess Optimum Health. Data were analyzed by using One Way ANCOVA test.

Result and Discussion of the study
Aerobic Exercise Training programme was also useful in improving Optimum Health of Housewives from Vasai Taluka aged 35 to 45 years.

INTRODUCTION

To improve health status the urban housewife along with the house hold work must participate in regular physical activities like Exercise, Aerobics, Yoga, etc. Regular participation in suitable physical activities can significantly reduce risk factor of stressed related disease in improving one's health and fitness. In modern citizens Civilization the barriers of regular physical activity for urban Indian housewives to achieve health and fitness (Wallis & Mckenzie 1991) are:

The lure of television and mobile phones, internet, The lack of appropriate facility for physical activity and lack of proper Awareness of health and fitness

Reports indicate that majority of the females are more prone towards obesity and in long run they become the victim of relative risk for Orthopedic injuries. Females are generally suggested low intensity aerobics and yoga. The purpose of the study was to determine the "Effectiveness Of Aerobic Training Programme on The Basis of Optimum Health of Housewives of Vasai Taluka."

OBJECTIVES OF THE STUDY

To compare the adjusted mean scores of Optimum Health of the Aerobics Group and Non-Aerobics Group by taking pre Optimum Health as covariate

HYPOTHESIS OF THE STUDY

HO_1: There is no significant difference in the adjusted mean scores of Optimum Health of the Aerobics group and Non Aerobic group by taking pre Optimum Health as covariate

LIMITATIONS OF THE STUDY

- It was not possible to control the day to day activities of the subject.
- Food habits, standard of living and medication if any was beyond the control of the researcher.

DELIMITATION OF THE STUDY

- The study was delimited to Housewives of Vasai Taluka.
- The study was delimited to specific Aerobic exercise training for a period of 12 weeks.
- The study was delimited to housewives aged 35 to 45 years.

SELECTION OF SUBJECT/ SAMPLING

Sixty House wives of Vasai Taluka aged 35 to 45 years were selected and they were divided randomly into two equals groups i.e. experimental (n=30) and control group (n=30). For the experimental group the training were restricted to only 1 hour per day for 6 days per week for a total period of 12 weeks whereas control group didn't participate in Aerobics training programme. At the baseline and after training intervention Optimum Health test through Custom made questionnaire was used to assess Optimum Health. Data were analyzed by using One Way ANCOVA test.

PROCEDURE / DESIGN OF THE STUDY

This is an Experimental Study. Data was Collected by taking test & filling the Questionnaire. Non Equivalent control group design was conducted. The study was planned in the following three phases.

PHASE – I (Pre – Test)

The pre-test was conducted on the experimental and control groups. Before the actual administration of the pre-test the subject were oriented about the testing by giving the detailed explanation about the testing procedures as well as by explaining Do's and Don'ts of the tests. Further, they were also acquainted with the procedure by giving them opportunity and practice if needed. The subjects were also encouraged for participation as well as to execute their full potential. The researcher had carefully ensured that all the subjects are medically normal.

Training phase

The training schedule included warm up, Aerobic training cool down In this phase, experimental group training module for a period of 60 minutes, except Sunday and holiday.

Post test phase

After the given Aerobic Training for the period of 12 weeks, all the subjects were directed to go through post tests as scheduled like a pre-test and data was recorded and preserved.

Selection of Variable and test

There were two types of variable for experimental design. Independent and Dependent Variable were basically required for conduct in any Experimental design. The present study tested Optimum Health of Vasai taluka house wives. The test was standardized test which was used for data collection.

Dependent Variable

Sr.No	Variable	Name of the Test	Tools used	Units
1	**Optimum Health**	Questionnaire on Optimum Health	Custom made Questionnaire	Numbers/ Scores

Independent Variables:

The present study had survey cum experimental design in nature. According to study, Aerobic training had been formulated for twelve weeks.

STATISTICAL PROCEDURE

The data was analysed by employing "One way ANCOVA" test by using SPSS software.

RESULTS OF THE STUDY

1. Results of Optimum Health of Housewives from Vasai Taluka

1.1 ***TREATMENT WISE COMPARISON OF MEAN SCORES OF OPTIMUM HELATH***

The adjusted Mean Scores of Optimum Health of Housewives due to Aerobics Training Programme as obtained from ANCOVA test revealed that:

The adjusted F-Value is 24.68 which is significant at 0.01 level with df= 1/57. The adjusted mean scores of Optimum Health of Housewives of Aerobics Training Group and Non-Aerobics Training Group differ significantly when their Optimum Health was taken as Covariate. Thus, the null hypothesis that there is no significant difference between adjusted mean scores of Housewives of Aerobics Training Group and Non-Aerobics Training Group by taking Optimum Health as Covariate is rejected. Further, the adjusted mean scores of Optimum Health of Housewives of Aerobics Training Group is 187.45 which is significantly higher than those of Control Group whose adjusted mean scores of Optimum Health is 183.05. It may, therefore, be said that Optimum Health of Housewives of Aerobics Training Group was found to be significantly superior to Non-Aerobics Training Group when groups were matched in respect of their Pre- Optimum Health.

CONCLUSION

- Aerobic Exercise Training programme was also useful in improving Optimum Health of Housewives from Vasai Taluka aged 35 to 45 years.

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EFFECT OF RESISTANCE TRAINING ON MOTOR FITNESS COMPONENTS (MUSCULAR STRENGTH) AND SKILL ABILITY (SERVICE ABILITY) ON MALE VOLLEYBALL PLAYERS OF MUMBAI SUBURBAN DISTRICT

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Abstract

Training constitutes a basic concept in human resource development. Volleyball is one of the most popular sports in the world played by over 800 million people. The main objectives of sports training are Improvement of physical fitness, Acquisition of sports skills, Improvement of tactical efficiency etc. Motor fitness includes the ten fitness components including additional five motor performance components i.e., power, speed, agility, balance, and reaction time. Resistance training also called strength training or weight training that uses resistance as muscular contraction to build the strength and size of skeletal muscles. Varying the progressive resistance for eight weeks that may impact the results include sets, repetitions, exercises undertaken, intensity, frequency of sessions and rest between sets. Resistance bands are like giant rubber bands that provide resistance when they are stretched. They are portable and can be adapted in most workouts. The study will signify the effect of resistance training on Motor Fitness component and skills on college male volleyball players of Mumbai. Current study was done on 24 male volleyball players for the period of 8 weeks. After completing the training programme subject were again measured by the criterion variables selected for the test. The difference between initial and final means on criterion variables were considered as the effect of separate treatment among the subjects. Significance level was fixed to 0.05% to test the hypothesis and data was analysed using t-test. Resistance training programme proved to be effective for developing the Motor Fitness Component (Muscular Strength) and Skill Ability (Service ability) of volleyball players.

***Keywords**: Resistance training, Muscular endurance, Service ability, Male volleyball players*

Background of the study

Volleyball strengthens the upper body, arms, shoulders, thighs, abdominals, and lower legs. In addition, volleyball improves hand-eye coordination, balance and reflexes. Volleyball teaches teamwork and communication and is a great social activity. The sport of volleyball gives a great opportunity to develop teamwork skills. Even if one doesn't become a successful volleyball player, one will be able to develop strong teamwork skills which are required in day-to-day life.

Volleyball is a great sport that can be enjoyed by people of all ages. Sports training is a special process of preparation of sports persons based on scientific principles aimed at improving and maintaining higher performance capacity in different sports activities. It is a particular type of training designed to improve fitness and abilities to perform in a given sport. The main objectives of sports training are

Improvement of physical fitness, Acquisition of sports skills, Improvement of tactical efficiency etc. There are various methods of sports training like Continuous Training Method, Circuit Training Method, Interval Training Method, Plyometric Training Method, Repetition Training Method, Weight Training Method, Fartlek Training Method, Cross Training Method.

Resistance training is also called strength training or weight training that uses resistance as muscular contraction to build the strength and size of skeletal muscles. The training program of six to eight weeks for maintaining improvement can be done by varying the progressive resistance. The Variables that may impact the results include sets, repetitions, exercises undertaken, intensity, frequency of sessions and rest between sets. Resistance bands are like giant rubber bands that provide resistance when they are stretched. They are portable and can be adapted in most workouts. The bands provide continuous resistance throughout a movement.

Motor fitness is a more comprehensive term which includes all the ten fitness components including additional five motor performance components i.e., power, speed, agility, balance, and reaction time. These all components are important for the success in sports. The sports skills are evaluated with the help of a number of tests which are standardized often individually. Achievements of performance in sports skills are measured by specific skill tests, rating scales and sports performance etc. These tests are used to measure the changes in players behaviour in the form of a variety of sports skills like basketball passing, modern dance, volleyball service, archery shooting, football forward pass etc.

Testing in sports is based on skill tests which are standardized. The validity of skill tests is evaluated on the basis of consistency between testing and performing environment. Volleyball passing skill is measured by repeated volleying of a volleyball against a wall over a specified period of time and noting the number of successful trials per unit of time.

RATIONAL OF THE STUDY

The Research scholar being a player as well as coach, and after reviewing of related literature, determines that physical fitness and motor skills varies for an individual and an athlete. The level of physical fitness is greater in an athlete than the non-athlete due to their involvement in various training programs. Volleyball players needs to develop motor fitness as well as skill abilities for overall performance in the game. Muscular strength is an important factor for a volleyball player for the development of fundamental skills during the game. Muscular strength being one of the motor fitness components, also helps in developing skill abilities of volleyball players especially in offensive game. There are various ways to develop muscular strength, resistance training is one of the method that can help to improve muscular strength. Thus, the aim of the study is to find out the effect of resistance training on the selected Motor fitness component and skill ability of male volleyball players aged 16-18 years.

HYPOTHESIS OF THE STUDY

- **H_{O1} :** There is no significant difference in adjusted mean scores of Muscular strength of Male Volleyball Players belonging to Experimental and Control Groups.
- **H_{11} :** There is significant difference in adjusted mean scores of Muscular strength of Male Volleyball Players belonging to Experimental and Control Groups.

- **H_{O2} :** There is no significant difference in adjusted mean scores of Service of Male Volleyball Players belonging to Experimental and Control Groups.
- **H_{22} :** There is significant difference in adjusted mean scores of Service of Male Volleyball Players belonging to Experimental and Control Groups.

METHODOLOGY

In present study researcher has to find out the effect of resistance training on motor fitness component (muscular strength) and skill ability(service) of male volleyball players aged 16 to 18 years of Mumbai suburban district. The sample size for the study was 24 male volleyball players divided into two equal groups by the random sampling method. Group I named as resistance training group (RTG) while other group will be called as control group (CG). After the training period of 6 weeks both groups undergone with similar test which they done prior to the training. The differences between the initial and final means on muscular strength and service ability were calculated. The hypothesis was tested at 5 % level of significance, the obtained data was analysed using t test.

STATISTICAL TECHNIQUE

The data has been analyzed by using independent t-test with online Vassar stats Computational package to test this hypothesis as shown in the following table.

Table 1: Mean Gains for Motor Fitness Component (Muscular Strength) of Male Volleyball Players

	n	ΣX	ΣX^2	SS	Mean	Mean a — Mean b	df	t	LoS
Post Control	20	428	14217	568.8	21.4	4.85	38	+2.98	0.005004
Post Experimental	20	525	9728	435.75	26.25				

Interpretation:

The mean gains for Motor Fitness Component (Muscular Strength) of Male Volleyball Players is 4.85, the calculated t for the observed values is +2.98 (p= 00.005004) for df =38 at 5% level of significance, which is highly significant, hence the Motor Fitness Component (Muscular Strength) is improved significantly with the Resistance training programme.

Table 2: Mean Gains for Skill ability (Service ability) of Male Volleyball Players

	n	ΣX	ΣX^2	SS	Mean	Mean a — Mean b	df	t	LoS
Post Control	20	378	7404	259.8	18.9	10.65	38	+7.54	<0.0001
Post Experimental	20	591	17963	498.95	29.55				

Interpretation:

The mean gains for Skill ability (Service ability) of Male Volleyball Players is 10.65, the calculated t for the observed values is +7.54 (p= <0.0001) for df =38 at 5% level of significance, which is highly significant, hence the Skill ability (Service ability) is improved significantly with the Resistance training programme

CONCLUSION

- Resistance training programme proved to be effective for developing the Motor Fitness Component (Muscular Strength) of volleyball players.
- Resistance training programme proved to be effective for developing the Skill Ability (Service ability) of volleyball players.

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IMPORTANCE AND NEED OF PHYSICAL EDUCATION & SPORTS FOR SCHOOL STUDENTS

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Abstract

By enabling children to develop healthy, lifelong attitudes and habits through physical activity as part of the overall educational experience, physical education promotes both individual and social wellness. It encourages a physically active lifestyle, links physical activity to good health, prevents disease, builds self-esteem, and is a programme for building muscle strength and fitness. The goal of physical education is to impart in kids the importance of self-preservation and selecting a healthy lifestyle at a young age. Most physical education curricula are comprehensive. The primary goal of this essay is to shed light on the advantages of physical education programmes for students enrolled in educational institutions. The article comes to the conclusion that policymakers may optimise children's potential for a lifetime by addressing the quality, quantity, and intensity of physical education across the nation (the instructional as well as the exercise component).

Keywords *- Students, active lifestyle, health, programme, school, and physical education*

Introduction

A student's comprehensive, well-rounded education curriculum should include quality, everyday physical education as a way to both improve their long-term health and wellbeing. The ideal physical education curriculum will encourage a lifelong dedication to exercise as a component of a healthy lifestyle. In the end, enhanced coordinated school health initiatives, of which physical education is a key component, will support other prevention initiatives and aid in the reversal of the growing epidemic of childhood obesity that threatens to undo decades of advancement in the fight against cardiovascular disease. Children who receive effective interventions today will be spared a lifetime of chronic illness and incapacity. The children' motor abilities and hand-eye coordination are developed through physical education. Students that are physically well perform even better in the classroom. During class, this circulation results in a longer attention span, enabling more concentration and assimilation. Students perform at their highest levels because they have the self-control and commitment necessary to succeed in sports.

Students are introduced to various sports activities in the physical education curriculum at school, giving them the option to decide which sports they want to participate in. This paper attempts to shed light on the advantages of physical education programmes for students enrolled in educational institutions. In order to raise the standard of physical education, it also offers legislative and regulatory proposals.

Conceptual Framework for Physical Education

By enabling children to develop healthy, lifelong attitudes and habits through physical activity as part of the overall educational experience, physical education promotes both individual and social wellness. A

Physical Education Curriculum Framework The foundation of Adjusting the Focus is the idea that students in a classroom environment have a basic need and desire for mobility.

This idea holds that physical education is that part of the educational process that allows children to become aware of and participate in whole-body, intrinsically valuable, and personally meaningful physical activity in the context of their environmental and social setting.

The benefits of physical education in its broadest sense for students include the following:

Personal development:

Students will be able to, for instance, Make responsible decisions regarding physical exercise; purposefully explore movement activities both independently and in groups; Explore movement activities, Showing that you understand the link between healths and leading an active lifestyle

Citizenship

Students will be able to: Demonstrate understanding of the need for social interdependence; Demonstrate understanding of sustainable development and its implications for the environment; Exhibit understanding of the importance of laws and regulations in society through the application of principles and laws of fair play in practice and competition.

Communication

In relation to games or group activities, students will be able to: Explore, reflect on, and communicate their own ideas, learning, perceptions, and feelings related to movement; Demonstrate comprehension of facts and relationships offered through words, numbers, symbols, graphs, and charts.

Problem solving techniques

For instance, students will be able to

To solve movement problems both individually and collaboratively, one must be able to: Identify, Define, Formulate, and Reformulate Movement Problems; Formulate Tentative Ideas; and Question Assumptions; Acquire, Process, and Interpret Critical Information to Make Informed Decisions Regarding Active Living; Use a Various Approaches and Opinions with Flexibility and Creativity for Problem Solving.

Rationale

A longer, healthier life span and a lower risk of heart disease, high blood pressure, diabetes, obesity, and various malignancies are all linked to regular physical activity. Children should exercise for at least 60 minutes per day, according to current recommendations. It is reasonable to demand that children spend at least 30 minutes of their day in school since they spend more than half of their day at school. Physical education ought to be a significant component of that requirement and should involve more than just a few minutes of moderately intense exertion. Additionally, it teaches students how to incorporate fitness into their daily lives and introduces them to lifetime activities. The public supports increased physical education in schools as a result of the rising prevalence of childhood obesity in all geographical areas. 81% of people, according to a 2003 survey done by Opinion Research Corporation International for the National Association for Sport and Physical Education (NASPE), think that daily physical education should be required in schools. According to recent studies, children who are obese can reduce their cardiovascular risk factors and restore blood vessel function with regular exercise. Body mass index,

diabetes risk variables, and other characteristics have been proven to decrease with a six-month fitness regimen.

Use of Physical Education to Promote Active Living

The whole individual is involved in physical education as a vehicle for active living in a school setting. **Physically**: by engaging at a high level in carefully chosen activities; **mentally**: by focusing intently and intensely while learning new ideas and abilities; **emotionally**: by gaining confidence from using one's existing skills; **socially**: by interacting with others; and spiritually: by feeling content, satisfied, and at peace with oneself.

Active Living is more than Personal Well-being

In an interdependent environment, learners are recognised as multidimensional people by an active living philosophy. A rationale for physical education must be constructed in a way that begins with a holistic perspective of learners within a societal and ecological context and is grounded in the axioms of active living. This idea must recognise the connections between individual health, society health, and ecological or environmental health. Physical education can encourage individual responsibility and control for leading active lifestyles as a health and wellness agent.

However, it is equally crucial that physical education direct students' attention toward understanding the societal issues that can prevent them and others from leading active lifestyles. The goal for physical education is to involve students in activities that compel them to accept personal responsibility for leading active and healthy lifestyles while critically assessing the good and bad effects that society and the environment have on individual health. As an illustration, providing an outdoor play area in a school yard encourages active living, whereas restricting male students to rhythmic activities in a school perpetuates stereotypes and denies them beneficial movement possibilities. Both school staff and students need to carefully consider the social and environmental aspects of their particular school-community settings that both support and restrict kids' participation in physical activity.

Suggestions for Action

Every child's physical, mental, and social/emotional development is improved by a high-quality physical education curriculum, which also integrates fitness teaching and assessment to help kids understand, increase, and/or maintain their physical wellness. The following legislative and/or regulatory tactics can be suggested in this case:

Demand that all schools create and implement a planned, sequenced physical education programme that complies with local, national, and international health and physical education requirements; Add specifications for fitness, cognitive, and affective assessment in physical education that are based on student improvement and knowledge gain. Ensure that programmes have suitable equipment and adequate indoor and outdoor facilities. Require that students engage in moderate-vigorous physical activity for at least 50% of class time.

Conclusion

Using physical activity as a way to inform, open students' minds, and engage them is what is meant by authentic physical education. Students who feel confident with their bodies typically display an increase in self-esteem and quickly develop a greater willingness to take risks in other facets of school life, such

as their academic academics. Students become active agents in re-creating or modifying the social conditions in their life on a personal and global level through the process of personal development. In the growth and development of the pupils, physical education is crucial.

Recent medical research have shown a direct correlation between a student's physical health and success in both the classroom and the workplace. The amount of time spent engaging in moderate to strenuous physical exercise during class should be at least 50%. To sum up, policymakers will optimise children's potential for a lifetime of physical activity, health, and wellness by addressing the quality, amount, and intensity of physical education across the country (the educational as well as the activity component). As a social construct, physical education is "a selection from culture, which incorporates explicit and implicit ideas regarding proper missions, aims, and objectives."

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A STUDY OF THE EFFECT OF EIGHT WEEKS GYMNASTICS TRAINING PROGRAMME ON PHYSICAL FITNESS OF SCHOOL CHILDREN RESIDING IN SLUMS OF GREATER MUMBAI

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Abstract

Globalization has been seen at a large level all across the world along with rapid growth in population. As far as India is concerned the slum dwelling population has been risen up to 65 Million. It includes the very fast progressing states like Maharashtra, Uttar Pradesh, and Madhya Pradesh. Mumbai the financial capital of the country where 60% people reside in slums. It was then felt necessary to undertake research project in the area of "Health and fitness of slum area students to improve the status of health through Gymnastics Training .The present experiment was conducted by using "Non equivalent group design". Sixty (N=60) boys students, age range from 9 to 14 years from slums of Jay Shivaji Nagar,Kach Karkhana Chawl, Sewri Cross Road situated in the surrounding of Sahakar Nagar at Wadala were selected as a sample for this study.Gymnastics training were selected as a independent variable for the experiment whereas physical fitness components such as endurance, forward flexibility and agility were selected as a dependent variable.There were two groups for this experimental study Viz.Experimental group and control group.Experimental group (N=30) and one control group (N=30) .Experimental group was received training of Gymnastics for the period of 8 weeks in the evening for one hour except Sunday's .The study showed that the Gymnastic training resulting improvement in agility and flexibility .

Keywords: *Gymnastic training, Physical fitness*

1. INRTODUCTION

The term slum is usually understood as "court,alley,or street of dirty crowded houses".The report of the socio –economic survey of slums of Old Delhi states that , "The term slum should be applied those parts of the city which may be unfit for human habitation because the structures there in are old ,dilapidated ,grossly confessed and out of repairs or because it is impossible to preserve sanitation for want of sanitary facilities including ventilation ,dranage,water supply etc.or because the sites by themselves are unhealthy. Slum population has been growing at rates much faster than urban population .

The above point reveal that the school children residing at the slums of Greater Mumbai are not only living an unhygienic life and suffering from malnutrition but also lacking a proper level of health and fitness .The present study has made a sincere effort to evaluate their health and fitness if they are exposed to proper gymnastics training.

RESEARCH AIM AND OBJECTIVES

- To impart Gymnastics training for an experimental period.
- To evaluate the effectiveness of the Gymnastics training on physical fitness.

ASSUMPTIONS

A1 Training of gymnastics would improve the level of endurance as assessed by 600 yard/1mile run test.

A2 Training of gymnastics would improve the level of agility as assessed by shuttle run test.

A3 Training of gymnastics would improve ability of forward flexiblity as measured by bend and reach test.

Design of the study:

The present experiment was conducted by using Non Equivalent Group

Sample:

Sixty(n=60) boys students age ranged from 9 to 14 years from Sahakar Nagar Municipal School ,Wadala ,Mumbai where selected as a samples for this study.

Independent Variable:

The following Gymnastics training showed in Table 1 were selected as a Independent variable for the experiment

Table 1: Independent variables i.e.Gymnastics skills

Floor Excercise	Vaulting Table	Parralel Bars	Horizontal Bars
Front Roll	The Run-Up	Front Hand Support	Grips
Back Roll	Hurdle Step	Straddle Leg Support	Swings
Straddle Front Roll	Take-Off	Straddle Travel	Support
Straddle Back Roll	The Pre-flight	Hand Travel	Keep
Standing Dive Roll	Kneeling Vault	L Seat in Hand Support	One Leg Support
Cartwheel	Jump to Squat Stand	Support Swing	Hock Off
Head Stand	Jump to Straddle Stand	Shoulder Stand	Backward Landing
Hand Stand	Squat Vault	Front Dismount	Forward Landing

Dependent Variables

Health Realted Physical Fitness Component **Cardiovascular Endurance, Forward Flexibility** and **Agility** were selected as dependent variables.

Procedure of the Study

There were two groups for this experimental study Viz: Experimental Group and Control Group with Pre test and Post test **,**the selected samples were randomly assigned into two equal groups Viz: One Experimental Group (n=30) and one Contrl group (n=30).Experimental group was received Gymnastics Training for the period of 8 weeks daily in the evening for one hour except Sundays.

Result:

The experimental group could not show the significant superiority over the control group in 600 yard/ 1 mile run test (CD=1.10,p>0.05)

Experimental group could show significant superiority over the control group in shuttle run test (CD=3.86,p>0.01)

Experimental group could show significant superiority over the control group in Bend and Reach test (CD=2.08,p<0.01)

Conclusion:

8 Weeks Gymnastic training program is helpful to improve forward flexibility and agility of slum area school boys students.

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SURVEY OF BODY COMPOSITION AND SOMATOTYPE OF JUNIOR NATIONAL LEVEL TAEKWONDO ATHLETES

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Abstract

The physical characteristics are of important fundamentals to reach high levels in the sports activities as they contribute in developing a player's level. This enables the player to effectively perform the basic skills where the nature of sports requires the presence of those qualities (physical elements) in a varying degree according to their relative importance and the type of the practiced activity. The individual's physiological state recently has gained the attention of many researchers worldwide as it contributes by a great deal in judging the individual's high competency. Research has revealed that technical, perceptual, psychological, physiological, and anthropometric factors must all be highly developed in order to reach an elite performance level. In this paper, the objective is to study the body composition and somatotype of National Level Taekwondo athletes. This paper is also intended to make the Taekwondo coaches/ experts and the Taekwondo athletes themselves aware about the body composition and the somatotypes in Taekwondo athletes. The results of this study attained from the statistical analysis after the application of Percentage method that the athletes have a good height on an average, the weight, leg length, and thigh and calf circumference. But in case of the skin fold measurements – maximum of them have more fats in suprailliac skinfolds which means on an average the athletes have a larger portion of fats in the abdomen.

Keywords: *physical characteristics, physiological, anthropometric, somatotype, skinfold*.

INTRODUCTION:

Performance in Taekwondo may be determined by a competitor's technical, tactical, psychological, physical and physiological characteristics1. Taekwondo training is therefore structured to target these specific performance mediators. The physical activity and physiological requirements of Taekwondo competition require athletes to be competent in several aspects of fitness, including aerobic and anaerobic power, muscular strength, muscular power, flexibility, speed and agility. It is therefore important that coaches and sports scientists collect objective information about their players' physical performance capabilities to substantiate the objectives of training, establish short- and long-term training programs, and provide objective feedback and to motivate athletes during training. Few studies have investigated differences in body components and gender in Taekwondo athletes compared to non-athletes2. Being one of many martial art forms, Taekwondo is unique by the predominant use of powerful kicking techniques. In more recent times, Taekwondo has transformed from a Korean
self-defense skill set during warfare to a recognized international sport. With the increase in popularity of Taekwondo as a sport, there has been a rise in interest in various areas of research, with injury rates being

the most frequently investigated. Kicking generates the most powerful strikes while keeping the greatest distance from the opponent; therefore, it is not surprising that the lower limb has been found to be the most commonly injured body segment3. The paper attempts to analyse the body components and skin-fold thickness of National Level Junior Taekwondo athletes (male and female).

STATEMENT OF THE PROBLEM:

The researcher considered it to be appropriate to include National level Taekwondo athletes as subjects and do a study on the specified topic that was entitled as – "Survey of Body Composition and Somatotype of Junior National Level Taekwondo Athletes"

OBJECTIVES OF THE STUDY:

To study the body composition of National Level Taekwondo athletes.

To study the somatotype of the National Level Taekwondo athletes.

RESEARCH METHODOLOGY:

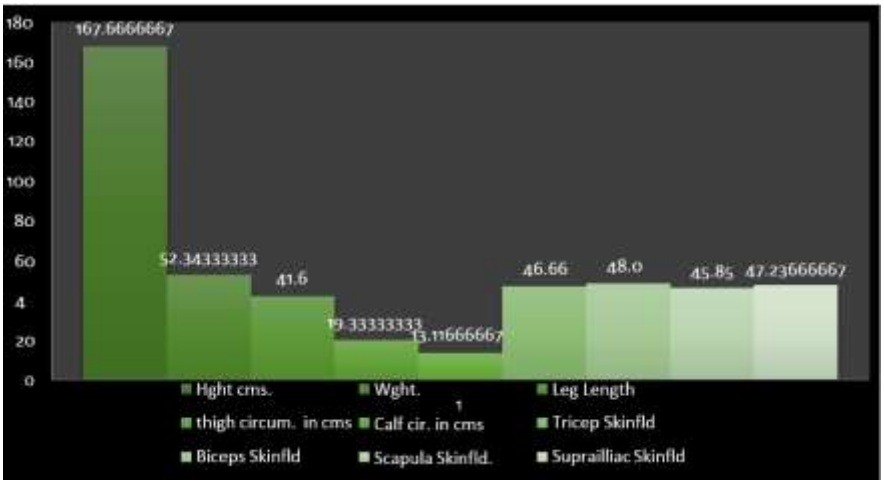
Total 60 Taekwondo athletes (30 male and 30 female), belonging between 15 to 18 years of age were selected for the study through administration of appropriate informed consent forms. The criterion measures for the study were comparison of the following anthropometric variables:

Height, Weight, Leg length, Thigh circumferences, Calf circumferences, Skinfold measurement for: Triceps, Biceps, Sub scapula and supra iliac.

FINDINGS:

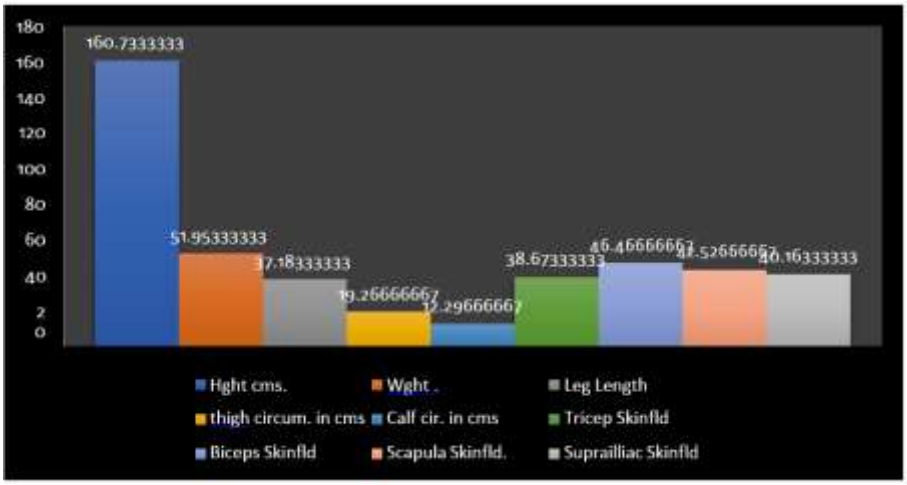
The purpose of this study was to do a survey on the body composition and somatotype in National Junior Taekwondo Athletes. The researcher studied the anthropometric variables from 60 National level Taekwondo athletes (N = 30 male and N = 30 female), at the National camp that was held from 24th to 26th December 2015 at SAI Centre Aurangabad. The researcher analysed the data by using the Percentage Method. The analysis of the entire data was done to accomplish the objectives of the study. The analysis was done manually as well as by using Ms-Excel software to check the results of the data analyzed. The researcher used the anthropometric variables from 60 National level Taekwondo athletes at the National camp that was held from 24th to 26th December 2015 at SAI Centre Aurangabad. The data was collected from the male and female Taekwondoists who aged between 15-17 years and weighed between 49 to 54 kgs (for boys) and 50 to 55 kgs (for girls).

Table 1:



The above diagram represents the average of all the variables included for this study

Table 2:



The above diagram represents the average of all the variables included for this study (female)

Discussion of Findings:

The researcher selected an investigation entitled, "Survey of body composition and somatotypes in junior National Taekwondo athletes" considering that it was important to undertake research in the field of Taekwondo and it was needed as well. Hence to measure the above-mentioned variables of the Junior Taekwondo athletes between 49 to 55kgs (as there are maximum participants in these weights) was considered correct by the researcher. This study would further somehow help the athletes in general and the Taekwondoists/ Coaches in particular to emphasize more on the anthropometric characteristics of an athlete, to study the body type, body composition or the somatotype (the endo, ecto or the meso) and eventually do the selection, training etc. on such grounds. The results of this study attained from the

statistical analysis after the application of Percentage method that the athletes have a good height on an average, the weight, leg length, thigh and calf circumferencs. But in case of the skin fold measurements – maximum of them have more fats in suprailliac skinfolds which means on an average the athletes have a larger portion of fats in the abdomen. Hence, to emphasize more on abdomen exercises is required along with the regular Taekwondo training.

Result of the findings:

Because of the increased errors involved, it is usually not appropriate to convert skinfold measures to percentage body fat (%BF). It is best to use the sum of several sites to monitor and compare body fat measures. In order to satisfy those who want to calculate a percentage body fat measure, there is a sample of equations for calculating this here. Below is a table of general guidelines (based on personal experience) for using total sum (in millimeters) of the main skinfold sites (tricep, bicep, subscapula and suprailliac).

General Guidelines (based on personal experience) for using total sum (in millimeters) of the main skinfold sites (Tricep, Bicep, Subscapula and Suprailliac):

		Excellent	**Good**	**Average**	**Below average**	**Poor**
Normal	Male	60-80	81-90	91-110	111-150	150+
	Female	70-90	91-100	101-120	121-150	150+
Athletic	Male	40-60	61-80	81-100	101-130	130+
	Female	50-70	71-85	86-110	111-130	130+

Conclusion:

It was concluded that in order to gain the highest possible VO2max (aerobic ability) in Taekwondo, it is necessary to reduce the percentage of body fat and increase the lean body mass. The nature of a Taekwondo performance mainly requires bursts of sudden, fast and powerful kicks. This means that what is needed is a speed and power athletic profile and not an endurance athletic physiological profile. A suitable VO2 max will enable the Taekwondo competitor to have a fast recovery between random and sudden activities. Based on the results of this study, it is clear that successful Taekwondo athletes need remarkable anthropometric and physiological characteristics. Also, they should have a low percentage of body fat, high speed in performing skills, perfect agility for rapid movements which would, thus, help them to prevent their opponents from scoring, and would allow good and suitable reaction time against the opponent's attacks. Taekwondo athletes demonstrate high peak anaerobic power characteristics of the lower limbs and this attribute appears to be conducive to achieving success in international competition.

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UTILITY OF SELECTED YOGIC PRACTICES IN ENHANCEMENT OF LIFE SKILLS

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Abstract

In present scenario students are suffering from lots of stress and emotional instability. Negative stress and emotional instability affects all the life skills. The purpose of this paper is to identify significance of selected yogic practices in enhancing life skills in students. Yogic practices are the ancient activities which has physiological and psychological benefits. Paper will explain interdependence life skills and how we can enhance life skills with the help of Yogic Practices.

Keywords: *Life Skills, Yogic practice, Distress*

Introduction:

Globalization is an emerging phenomenon in the Indian context. It demands communicating and coping with members of other countries and work together in group for productive outcomes. In order to achieve these objective different strategies, need to be used. Life skill education is one of the way through which students can satisfy the demands of 21" century. These life skills are also included in the curriculum. So it's very important to give life skill education for the students. But with the theory of life skill education, we need to provide knowledge of activities to enhance life skills. One of the effective activities is Yogic practices. Yogic practices plays important role in enhancement of life skills. Life skills training in the management of stress is a key preventative of many mental health problems. The regular practice of Yoga and Mindfulness will empower us with the tools and techniques we need to bring calm and balance in life.

DISTRESS

If the response to stress is inadequate, it is called as distress. If the stressor is strong and the individual is weak then there is stress over load i.e. Distress or tension.

Life Skills

Definition:

The World Health Organization has defined life skills as, "the abilities of adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life". UNICEF defines life skills as "a behavior change or behavior development approach designed to address a balance of three areas: knowledge, attitude and skills.

What are the Core Life Skill Strategies and Techniques?

NICEF, UNESCO and WHO list the ten core life skill strategies and techniques as:

Self-awareness includes recognition of 'self', our character, our strengths and weaknesses, desires and dislikes. Developing self-awareness can help us to recognize when we are stressed or feel under pressure. It is often a prerequisite to effective communication and interpersonal relations, as well as for developing empathy with others.

Empathy-To have a successful relationship with our loved ones and society at large, we need to understand and care about other peoples' needs, desires and feelings. Empathy is the ability to imagine what life is like for another person. Without empathy, our communication with others will amount to one-way traffic. Worst, we will be acting and behaving according to our self-interest and are bound to run into problems. No man is an island, no woman either! We grow up in relationships with many people-parents, brothers and sisters, cousins, uncles and aunts, classmates, friends and neighbors. When we understand ourselves as well as others, we are better prepared to communicate our needs and desires. At the same time, we will be able to elicit support from others, and win their understanding. Empathy can help us to accept others, who may be very different from ourselves. This can improve social interactions, especially, in situations of ethnic or cultural diversity

Critical thinking is an ability to analyze information and experiences in an objective manner. Critical thinking can contribute to health by helping us to recognize and assess the factors that influence attitudes and behavior, such as values, peer pressure and the media. Creative thinking is a novel way of seeing or doing things that is characteristic of four components fluency (generating new ideas), flexibility (shifting perspective easily), originality (conceiving of something new), and elaboration (building on other ideas).

Decision making helps us to deal constructively with decisions about our lives. This can have consequences for health. It can teach people how to actively make decisions about their actions in relation to healthy assessment of different options and, what effects these different decisions are likely to have.

Problem solving helps us to deal constructively with problems in our lives. Significant problems that are left unresolved can cause mental stress and give rise to accompanying physical strain.

Interpersonal relationship skills help us to relate in positive ways with the people we interact with. This may mean being able to make and keep friendly relationships, which can be of great importance to our mental and social well-being. It may mean keeping, good relations with family members, which are an important source of social support. It may also mean being able to end relationships constructively.

Effective communication means that we are able to express ourselves, both verbally and non-verbally, in ways that are appropriate to our cultures and situations. This means being able to express opinions and desires, and also needs and fears. And it may mean being able to ask for advice and help in a time of need.

Coping with stress means recognizing the sources of stress in our lives, recognizing how this affects us, and acting in ways that help us control our levels of stress, by changing our environment or lifestyle and learning how to relax.

Coping with emotions means involving recognizing emotions within us and others, being aware of how emotions influence behavior and being able to respond to emotions appropriately. Intense emotions like anger or sadness can have negative effects on our health if we do not respond appropriately.

Interdependence of Life Skills:

Every human being experience emotions in his day today's life. As a human being our life is full of emotions and stress. As we faces lots of problem in our life, these problems creates negative stress. Stress is a common experience in meeting with the demands of life and a natural fabric of life, Anxiety of exam, self-aspirations, expectation of parents, peer pressure can create negative stress among students. "Negative stress mainly leads to discomfort, anxiety, irritation & emotional instability" (Malthi,A.).

"Everyone experiences emotions whether positive or negative. Strong feelings, such as joy, fear, or anger can control our thoughts and actions. During times of emotional stress, it may seem as though feelings are controlling a person's action; but the fact is, we can learn to choose and control our emotions, rather than let them take over mind" (Paul J. 2011).

When students suffer from stress they cannot think creatively. Higher level of creativity is associates with lower levels of stress (Nicol, Jennifer, J. 1993). Problem solving ability of students gets decreases. They cannot critically analyze the situation. Awareness about self gets covered. Due to lack of ability to cope up with stress and emotion it would difficult for students to achieve all life skills. It is very important for students to achieve life skills for students. Hence with theoretical perspective of life skill education it is important to enhance these skills with Yogic practices.

Yoga

Yoga is that system which is directly related with the human psycho physiology and Anatomy, yoga means the experience of oneness or unity with inner being. Yoga integrates physical poses and breathing techniques to stretch the body, breath and mind to improve endurance, strength, balance and flexibility.

Yoga is an ancient philosophy of life as well as a system of exercises that encourages the union of mind, body, and spirit. In the words of Patanjali, author of the Yoga Sutras, "yoga is the ability to focus the mind on a single point without distraction." Yoga is a physical discipline; it uses the body and breathing to develop self-awareness and mental clarity.

Yoga is indeed a spiritual path that is based on ancient sacred philosophy, but one does not need to make an ethical decision when practicing yoga, rather finding our own path is wholly accepted. The holistic benefits of yoga are suitable for the young or old, sick or well, with any religious background. The secrets of yoga are inwardness, concentration, and purification of mind and body with cleansing thoughts and food.

Yogic Practices:

The practices enjoined in yogic literature and handed down in different traditions are called the Yogic Practices. These may be classified in the following groups: 1) Asana 2) Pranayama 3) Bandha and Mudras 4) Kriya 5)Meditation

*__Asanas (__Postures) these are the certain special patterns of postures that stabilize the mind and body. The aim of asana establishing proper rhythm in the neuromuscular tonic of the muscles.

1. Sarvangasana (The whole standing Posture)

In Sanskrit "sarva" means "whole" "anga" means "limb" and "asana" in dictates a stable & comfortable posture. It is thought that this posture does influence positively the thyroid gland and through it the whole body and its functions. It is sometimes determined as a further development of viparitkarni. It is occasionally included under the balancing posture Swami kavalyananda considered it as a "Yogic physical Culture" position in his book or asanas.

2. Halasana (The plough posture)

It is a traditional posture in which the body irritates the shape of a plough. In Sanskrit "hala" means "plough" and "asana" indicates "a stable and comfortable posture" This asana benefits all the body by

increasing the spine flexibility. While practicing one should not force to teach the final position but maintain the comfortable point, flexibility will increase day by day naturally.

3. Dhanurasana (The Bow Posture)

It is a posture in which the body is supposed to imitate the shape and stand of a bow. This traditional asana is mentioned in the Gheranda samhita and Hathapradipika. In Sanskrit "dhanus" means "bow" and asana indicates " a stable and comfortable posture". Dhanurasana can be considered as a combination of Bhujangasana and shalbhasana.

4. Paschimottansasana (The Back Stretching Posture)

This posture is called paschimatana because it generates in almost all the body a gentle but wide back stretching. It is a traditional asana mentioned in the Hathapradipika as "paschimtana" (1: 28-29) and in the Gheranda samhita as "paschimottana" (11:26). The Siva Samhita describes a difficult variation of it as "Ugrasana" in (III: 111-112). In Sanskrit "paschima" indicates "back" the rro "tan" means "to stretch" and asana indicates " a stable and comfortable posture" Swami Kuvalayanda included it under the programme of "yogic physical culture" positions.

5. Ardha Matsyendrasana (The matsyendra posture)

It is a traditional asana. Mentioned in the Hathapradipika (1-27) and the Gheranda Sumhita (11 22-23). "Matsyendra" comes from a famous yogi (Hathayogi) matsyendranath) who was one of the yogis pioneer, and 'asana' indicates" a stable and comfortable posture". Because the complete matsyendrasana is quite a difficult posture it is not popular and the half one is usually practiced.

Pranayama

***Pranayama (Breathing Exercises) - Pranayama is a science of breath.** Not only control of breath, despite a management of breath. Normally breath fluctuates during emotional disturbances. Breathing patterns can affect the spine in various ways, such as movement of the ribs and changes in pressure within the chest and abdomen. Exhaling can help relax muscles. Through pranayama fluctuation of breath can be normalize very easily. Pranayama is an exact science. It is fourth limb of astang yoga. Pranayama defines in Patanjala Yoga Sutra, Chapter-2, breath is external manifestation of prana. The vital force Breath is like electricity is gross prana.

Meditation is a science of mind. In Patanjala Sutra, it defines as a higher level of consciousness and in Sankhya Yoga, it define as an ultimate state of thoughtlessness. The practice of meditation involves a whole, peculiar and special process of absorption in which the individual turns his attention or awareness to dwell upon a single object, sound, concept or experience. Traditionally the aim of this practice has been enlightenment.

Bandha and Mudras

These contain practices that consciously control certain semi-voluntary muscles in the body. In these muscles there is integration of central and autonomic nerve supply.

Kriyas-These are purificatory process usually classified into six divisions and, therefore these are often are called shat kriya. Kriya purify the body and mind which ultimately open the pathways of the body, the nadis, the energy body, the mind, and the heart.

Significant of Yogic Practices with reference to Life Skills:

Yogic practices reduce of anxiety and stress. It prevents from depression. It also balances mood and promote to recovery from depression. It creates awareness of the nature of our thoughts and feelings. These practices also make clarity in minds which aids learning, decision making, creativity and productivity. It improves general sense of wellbeing. It creates deeper connection and sense of self that enhances our ability to connect to others, communicate, and establish healthy attachments. Yoga also strives to increase self-awareness on both a physical and psychological level. Patients who study yoga learn to induce relaxation and then can use the technique whenever pain appears. Practicing yoga can provide chronic pain sufferers with useful tools to actively cope with their pain and help counter feelings of helplessness and depression.

Mental health and physical energy are difficult to quantify, but virtually everyone who participates in yoga over a period of time reports a positive effect on outlook and energy level. A British study of 71 healthy volunteers aged 21 to 76 found that a 30minute program of yogic stretching and breathing exercises was simple to learn and resulted in a "markedly invigorating" effect on perceptions of both mental and physical energy and improved mood. The study compared relaxation, Visualization and yoga. It found that the yoga group had a significantly greater increase in perceptions of mental and physical energy and feelings of alertness and enthusiasm than the other groups. Relaxation was found to make people sleepier and more sluggish after a session, and visualization made them more sluggish and less content than those in the yoga group. Secondly, yoga deep breathing increases the oxygen intake to the body cells, including the fat cells. This causes increased oxidation or burning up of fat cells.). Yogic practices that reduce anxiety tend to reduce anxious eating. When under nervous strain we tend to gulp our food without attaining much genuine satisfaction. We end up in eating more. If, on the other hand, we approach our meals with greater calmness of mood, whether produced by habits which have calmed our life or by yoga (like a pause for prayer before a meal), we tend to be less likely to overeat in a frantic effort to quiet our midday anxieties.

Conclusion:

With the utilization of yogic practices students would able to cope up with negative stress and emotional instabilities and explore alternatives, and make rational decisions in solving each problem or issue as it arises. Life skills enable effective communication, for example, being able to differentiate between hearing and listening and ensuring that messages are transmitted accurately to avoid miscommunication and misinterpretations. If enhance these life skills, these skills will definitely improve the way of thinking and behaving. Thus, it is very important to developed life skills with the help of yogic practices for preparing students for the 21st century's world so that they can face the challenges and problems faced in the society as well as in the world

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AN INVESTIGATION ON ANOREXIA NERVOSA OF GIRLS AGED 14 TO 16 YEARS OF MUMBAI CITY

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Abstract

There is a great scope and need for research in Physical Education for investigating the effect of Anorexia Nervosa of Girls. Total 150 Girls from CBSE Board and 150 Girls from ICSE Board of Mumbai City were selected as sample for the study by using Simple Random Sampling. Data was collected through the Questionnaire of Anorexia which consisted of 30 test items by Vijaya Lakshmi Chouhan & Aditi Banerjee (2004). The data was analyzed by using Percentile Technique. Data were analyzed by using Percentile Technique. The results revealed that there was higher level of Anorexia Nervosa amongst ICSE Schools as compared to CBSE Schools.

INTRODUCTION

Eating disorders are generally understood as an intense preoccupation with food, body image/weight, and behaviour associated with eating that significantly affects an individual's thoughts, feelings, behaviour, and relationships with others. Anorexia nervosa is a serious, potentially life-threatening eating disorder which is characterized by self-starvation and excessive weight loss. The body denies the essential nutrients it needs to function normally, hence slowdowns all its processes to conserve energy.

Rationale of the study

The present study was conducted on CBSE and ICSE girls who were prone to the problems related to eating and Body image. As per many studies it was considered that girls are more worried about their looks and body image, which creates lot of Psychological problem in them. Accepting the truth about their weight was really a challenge for such students. These students should know the reality and require awareness about the problem which can be caused due to Anorexia Nervosa where the Parents, friends and Psychologist can help them to deal with the situation.

Definitions:

Anorexia Nervosa:

Anorexia nervosa is characterized by the individual's refusal to maintain minimally normal body weight, an intense fear of gaining weight, and significant disturbance in the perception of the shape or size of the body.

Objective of the Study: To study the present status of Anorexia Nervosa amongst CBSE and ICSE girls in Mumbai City aged 14 to 16 years.

METHODOLOGY

The information was collected with the help of standardized questionnaire. On the basis of the information obtained from the questionnaire, the data was identified, evaluated and discussed.

DESIGN OF THE STUDY

Total 150 Girls of CBSE and 150 Girls of ICSE Board of Mumbai City were selected as sample for the study by using Simple Random Sampling Technique.

Criterion measures

Data was collected through the Questionnaire of Anorexia which consisted of 30 test items by Vijaya Lakshmi Chouhan & Aditi Banerjee (2004). The data was analyzed by using Percentile Technique.

The tests used was Anorexia (AT-CB) by Vijaya Chouhan & Aditi Banerjee. Anorexia Test have 4 different dimensions of which, clinical- psychological literature shows that this to a significant degree of relation to the extent is involved or otherwise, namely

Food Avoidance (7 items)

Medical Complication(7 items)

Psychological Factors (9 items)

Body and Figure Consciousness (7 items)

Results and Discussion:

An Investigation of Anorexia Nervosa of Girls Aged 14 to16 Years of Mumbai City:

Food Avoidance was found maximum amongst ICSE Girls than CBSE Girls.

Medical Complications were found maximum amongst CBSE Girl than ICSE girls.

Psychological Factors were found maximum amongst ICSE Girls than CBSE Girls.

Body and Figure Consciousness were found maximum amongst ICSE Girls than CBSE girls.

The problem of Anorexia Nervosa faced by ICSE Girls was maximum as compared to CBSE Girls.

Maximum students fall under Mild Anorexia Nervosa whereas very few showed Serious condition of Anorexia Nervosa.

In case of Anorexia Nervosa, students of ICSE School are more prone to these problems where maximum students suffer from Body and Figure Consciousness. Especially Girls of ICSE board face this problem more, because they want look slim and want to have well maintained body.

Conclusion:

The findings conclude that there was higher level of Anorexia Nervosa amongst ICSE School girls as compared to CBSE School girls.

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EFFECT OF SELECTED YOGIC EXERCISES ON EMOTIONAL HEALTH OF MEN VOLLEYBALL PLAYERS IN TELANGANA STATE

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Abstract

The aim of the study was to find out the effect of selected yogic exercises on emotional health of men volleyball players in Telangana state. To achieve the purpose of this study, 90 volleyball players in the age group of 18 to 21 years those who have participated in inter-college tournament taken as subject. The selected 90 subjects were divided into three equal groups of thirty, each as two experimental groups and one control group. Group 'I' underwent Yogasana and Group 'II' underwent Pranayama along with Surya Namaskaras and group III acted as control group who are not participate any training. The selected psychological variable such as flexibility was assessed before and after training period. Sit and reach test is the test which was used to conduct the pre-test and post-test for measuring the physical variable such as flexibility. The result of the study was found that there was a significant difference due to the Yogasana and Pranayama along with Surya Namaskaras when compared with the control group.

Keywords: *Emotional health, Yogasana, Pranayama along with Surya Namaskaras*.

INTRODUCTION

Yoga is a discipline that seers and saints have been practicing since ancient times to bring flexibility to the spine and joints, to keep the muscles of the body pliable and youthful, increase circulation in arteries and strengthen internal organs. And yet, yoga is so much more than this. Yoga has been said to help strengthen the power of concentration, to banish constipation, to relieve stomach disorders, improve muscle coordination and reduce excess body fat. Yoga has also been said to strengthen the mind-body connection, bring calmness and relaxation to mind, enhance self-confidence, strengthen self-discipline and self-resolve, reduce flexibility and increase vitality and energy throughout the body. Evidently, it would appear that yoga has extensive benefits and can help us to be a more balanced, relaxed, focused, efficient and effective person. The benefits of yoga can thus be applied to a variety of disciplines including professional sporting athletes. This paper will highlight the benefits for professional athletes through the practice of Yoga and explore how Yoga can significantly enhance their performance.

METHODOLOGY

The purpose of the study to find out the effect of selected yogic exercises on emotional health of men volleyball players in Telangana state. To achieve the purpose of the study, ninety men volleyball players randomly selected from Telangana state, India were selected as subject for this study. They play volleyball at inter-college competitions. Their age ranged between 18 to 21 years. They were further divided into three equal groups of thirty namely group I Yogasana, group II Pranayama along with

Surya Namaskara and group III act as control group. The group I underwent Yogasana and group II Pranayama along with Surya Namaskaras group III underwent control group. The Yogasana and Pranayama along with Surya Namaskaras group participated in the training for a period of three days in a week for twelve weeks to find out the outcome of the training exercises and the control group did not participate in any training program. The variable to be used in the present study was collected from all subjects before they have to treat with the respective treatments. After completion of treatment they were tested again as it was in the pre-test on flexibility variable used in the present study. This test was assumed as post-test. The analysis of data on flexibility test has been examined by analysis of covariance (ANACOVA). In all the cases, 0.05 level of confidence was fixed to test the significance, which was considered as appropriate.

Table 1: C**omputation of Analysis of Covariance of Flexibility**

(Scores in centimeters)

Test	Asana group	Pranayama group	Control group	Total mean	Source of variance	Sum of square	DF	Mean square	F ratio	Sig.
Pre-test	15.86	14.73	15.26	15.28	Between group	19.28	2	9.644	1.667	.195
					Within group	503.20	87	5.784		
SD	2.38	2.25	2.55	2.42	Between group	137.60	2	68.80	14.571	.000
Post-test	17.86	18.26	15.46	17.20	Within group	410.80	87	4.72		
SD	2.12	1.89	2.45	2.48	Between group	157.58	2	78.79	82.814	.000
ADJUSTED POST TEST	17.39	18.71	15.48	17.19	Within group	81.82	86	.951		

Table F ratio at 0.05 level of confidence for 2 and 87 degrees of freedom = 3.10, 2 and 86 of DF also 3.10

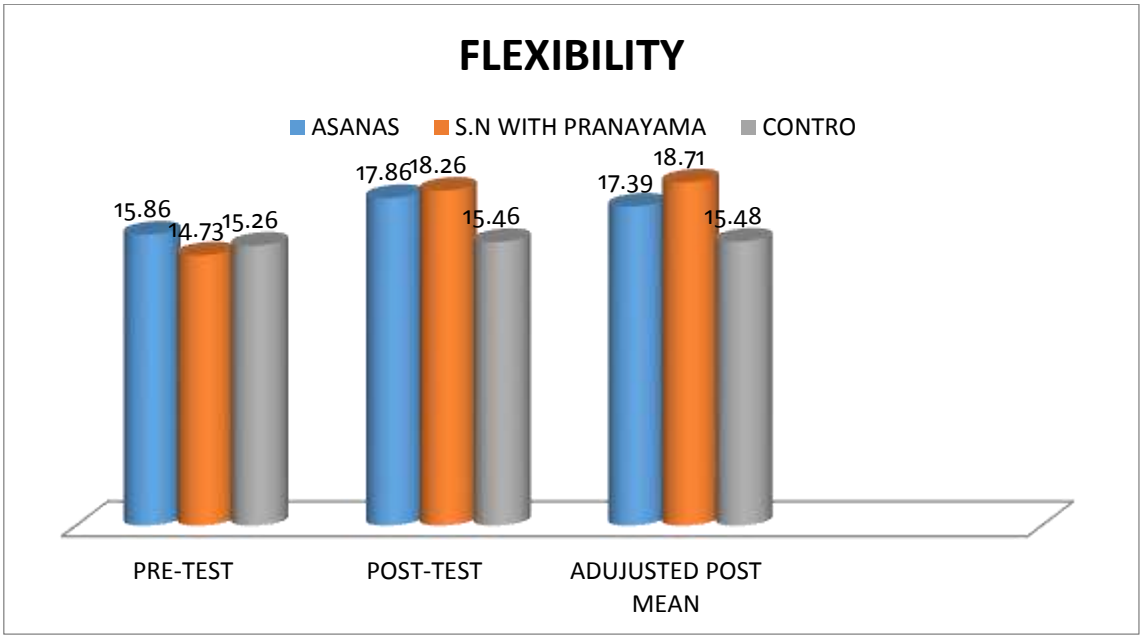
The above table shows that the pre-test mean and SD scores of flexibility of Yogasana group were the 15.86, and 2.38. Pranayama along with Surya Namaskaras group was 14.73, and 2.25 and control group was 15.26, and 2.55. the obtained F value on the scores of pre-test means .195 was lesser than the required F table of value, which proved that the random assignment of the subjects were successful and their score in flexibility before the training were equal and there was no significance differences.

The post test means showed difference due to 12 weeks of Yogasana group, Pranayama along with Surya Namaskaras and control group mean and recorded SD values were 17.86 and 2.12, 18.26, and 1.89 and 15.46 and 2.45 respectively.

As shown above table the obtained F value on the scores of post-test means 14.571 was GREATER than the required F table of value, of 3.10 to be significant at 0.05 levels. Taking into consideration of

the pre-test means and post-test means adjusted post-test means were determined and analysis of covariance was done and the obtained F value 82.814 was greater than the table value of 3.10 and hence it was accepted that the Yogasana practice group and Pranayama along with Surya Namaskaras were significantly difference the flexibility of the subjects.

Figure 1: Bar Graph of Pre, Post, and Adjusted Post-Test Value of Asanas, Pranayama Along With Surya Namaskaras and Control Groups on Flexibility



*Significant at 0.05

DISCUSSION ON THE FINDINGS OF FLEXIBILITY

The results presented in the table 1 showed that the obtained adjusted means on flexibility among Yogasana group was 17.39 followed by Pranayama along with Surya Namaskaras group with the mean value of 18.71 and control group mean value of 15.48. The difference among pre-test scores post-test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and F value obtained were on pre-test score was 1.667, 14.571 and 82.814 respectively. It was found that obtained F value on pre-test score was not significant at 0.05 level of confidence as the obtained value was lesser than the required table value and post-test Scores was significant at 0.05 level of confidence as the value was greater than the required table F value of 3.10.

CONCLUSION

The results of the study showed that the experimental groups improved in flexibility and their emotional health significantly after the twelve weeks' yogic exercises among men volleyball players of Telangana state.

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COMPARATIVE STUDY OF DEVELOPMENT OF STRENGTH OF GYMNASTICS AND MALLAKHAMB PLAYERS AGED BETWEEN 8-10, 11-12 AND 13-14 YEARS

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Abstract

Gymnastics and Mallakhamb both have emerged as very competitive sporting events throughout India. These two disciplines are developing as individual sports in various parts of the country. In early times Mallakhamb was known as indigenous fitness exercise and now it has evolved as competitive sports. Gymnastics requires more space, equipments and variety of movements whereas in Mallakhamb various yogic postures and movements are performed only on a single wooden pole which requires very less space. The researcher has carried comparative study of developments of strength in three age categories viz. 8-10, 11-12 and 13-14 years. For the study total 180 novice players (30 from each discipline as well as each age group) were selected as samples from five various centers within state of Maharashtra. It was hypothesized that there will be no significant difference in strength in Gymnastics and Mallakhamb players of age 8-10, 11-12 and 13-14 years. Medicine ball throw test was used as standardized tests to collect data. Four tests were conducted throughout the year. The mean of all four tests was drawn and considered for further statistical treatment. Mean standard deviation and t- test was applied for statistical findings and draw conclusions. From the statistical treatments it was observed that that there was no significant difference in strength in Gymnastics and Mallakhamb players in the 8-10 and 13-14 age group whereas there was significant difference found in the age groups of 10-12 years.

Key words: *Strength, Gymnastics, Mallakhamb, novice players*.

Introduction: Basic gymnastics and mallakhamb exercises tend to develop general physical fitness and motor abilities. It is very much necessary to conduct an exclusive study of both forms of exercises due to some circumstances. The main reasons is that basic gymnastics requires various multiple training equipments. Thus the training zone requires more space and more funds. Not every individual coach, school or institution can afford to invest huge funds in purchasing basic gymnastics equipments. On the other side Mallakhamb is a traditional Indian form of fitness exercise now emerged as a sporting discipline. Mallakhamb as an equipment that is in the form of just a wooden pole fixed in ground and requires some foam mats for safety and less space. The cost of a Mallakhamb is very less and depends upon the wood used in its making. It is clear that both basic exercises tend to develop physical fitness and motor abilities. But it will be more beneficial if a comparative study of motor abilities is carried out of Mallakhamb and Gymnastics players undergoing regular training of the respective games. Strength being the key factor in earlier age groups in children involved in Gymnastics and Mallakhamb, it was considered for the study. Only novice players were considered for the study.

Significance of the study: The study may reveal development in strength in Gymnasts and Mallakhamb players of 8-10, 11-12 and 13-14 years.

Scope of the research: Development of strength was considered for the study. The gymnasts and mallakhamb players from various centres within Maharashtra state were considered for the study. Only

male gymnasts and mallakhamb players aged between 8-10, 11-12 and 13-14 11 years were considered for the study.

Statement of the problem: "Analysis of development of strength of Gymnastics and Mallakhamb Players aged between 8-10, 11-12 and 13-14 years."

Objectives of the study: To analyse the development of strength in gymnastics and mallakhamb players of age 8-10, 11-12 and 13-14 years.

Limitations of the study:

1. Any bias that may exist due to insincere response from the subject.
2. Difference in intellectual and cognitive level of the subjects.
3. Individual physical abilities of the participating subjects.
4. Response from the samples.

Delimitation of the study:

(1) The study is delimited to boys only. (2) The study is delimited to novice players only. (3) The study is delimited to only five training centers within the state of Maharashtra only.

Hypotheses:

1. There will be no significant difference in strength of Gymnastics and Mallakhamb players of age 8-10.
2. There will be no significant difference in strength of Gymnastics and Mallakhamb players of age 11 and 12 years.
3. There will be no significant difference in strength of Gymnastics and Mallakhamb players of age 13 and 14 years.

Materials and methods:

Methodology: Sample: For the present study survey method is applied. For the study total 180 novice players (30 from each discipline as well as each age group) were selected as samples from five various centres within state of Maharashtra.

Tools and Means of collection of data: Personal data bank used to collect the information of an individual. Medicine ball throw test for strength was used as standardized test to collect the data.

Equipment: 1kg. Medicine ball, measuring tape and marking chalk powder

Procedure: Standardized marking and procedure was followed. The sample was asked to throw the ball from the position with bend arms bringing ball to the chest and stretching it towards the angle approximately 45 degree in order to gain maximum distance. Each sample was given three attempts and best performance was recorded.

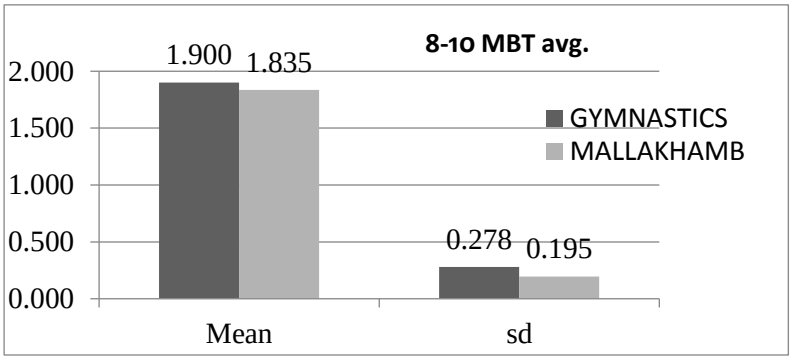
Statistical means: Mean, standard deviation and t- test was applied.

Analysis and interpretation:

1. **Table 1 showing Statistical treatment of test of strength of 8-10 age group:**

Discipline	Mean of four tests	Standard deviation	Standard error mean	Mean Difference	't' Value	df
Gymnastics	1.900	0.278	0.039	0.065	1.356	98
Mallakhamb	1.835	0.195	0.027			

From the above table, graph 1 below showing the comparison of the mean scores of the average of test of bend and reach conducted on the players of the Gymnastics and Mallakhamb of the age ranging from 08 to 10 years.



Graph 1

Interpretation:

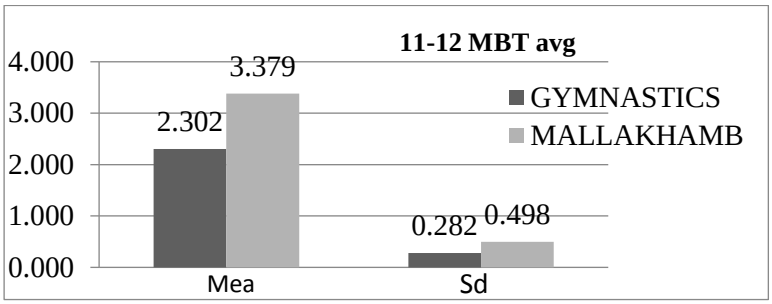
Graph 1.1.5 depicts the following facts regarding the average test of Medicine Ball Throw conducted on the players of the Gymnastics and Mallakhamb of the age ranging from 08 to 10 years.

1. Mean score of the Gymnastics players is 1.900 with standard deviation of 0.278
2. Mean score of the Mallakhamb players is 1.835 with standard deviation of 0.195
3. The mean difference among the Gymnastics and Mallakhamb players is 0.065
4. T-test was used at 0.05 level of significance. The obtained t- value 1.356 at 98 degree of freedom was found insignificant at 0.05 level of significance further confirms that the mean difference is **insignificant.** Therefore the first hypothesis stating that there will be no difference in the strength among the Gymnastics and Mallakhamb players of the age ranging between 8 to 10 years is **accepted** on the basis of statistical findings.

2. **Table 2 showing Statistical treatment of test of strength of 11-12 age group:**

Discipline	Mean of four tests	Standard deviation	Standard error mean	Mean Difference	't' Value	df
Gymnastics	2.301	0.281	0.039	-1.077	-13.313*	98
Mallakhamb	3.378	0.497	0.070			

From the above table, graph 2 below showing the comparison of the mean scores of the average of test of bend and reach conducted on Gymnastics and Mallakhamb players of the age ranging from 11-12 years.



Graph 2

Interpretation:

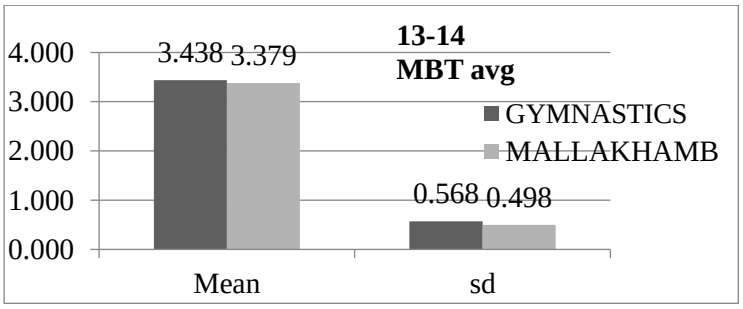
Graph 4.1.5 depicts the following facts regarding the average of the tests of Medicine Ball Throw conducted on the players of the Gymnastics and Mallakhamb of the age ranging from 11 & 12 years.

1. Mean score of the Gymnastics players is 2.302 with standard deviation of 0.282
2. Mean score of the Mallakhamb players is 3.379 with standard deviation of 0.498
3. The mean difference among the Gymnastics and Mallakhamb players is -1.077
4. T-test was used at 0.05 level of significance. The obtained t- value -13.313 at 98 degree of freedom was found significant at 0.05 level of significance further confirms that the mean difference is **significant**. Therefore the second hypothesis stating that there will be no difference in the strength among the Gymnastics and Mallakhamb players of the age ranging between 11-12 years is **rejected** on the basis of statistical findings.

3. **Table 3 showing Statistical treatment of test of strength of 13-14 age group:**

Discipline	Mean of four tests	Standard deviation	Standard error mean	Mean Difference	't' Value	df
Gymnastics	3.438	0.568	0.080	0.059	0.560	98
Mallakhamb	3.379	0.498	0.070			

From the above table, graph 3 below showing the comparison of the mean scores of the average of test of bend and reach conducted on Gymnastics and Mallakhamb players of the age ranging from 13-14 years.



Graph 3

Interpretation:

Graph 3.1.5 depicts the following facts regarding the average of tests of Medicine Ball Throw conducted on the players of the Gymnastics and Mallakhamb of the age ranging 13 and 14 years.

1. Mean score of the Gymnastics players is 3.438 with standard deviation of 0.568
2. Mean score of the Mallakhamb players is 3.379 with standard deviation of 0.498
3. The mean difference among the Gymnastics and Mallakhamb players is 0.059
4. T-test was used at 0.05 level of significance. The obtained t- value 0.560 at 98 degree of freedom was found insignifican**t** at 0.05 level of significance further confirms that the mean difference is insignificant. Therefore third hypothesis stating that there will be no difference in the strength among the Gymnastics and Mallakhamb players of the age ranging between 13 and 14 years is **accepted** on the basis of statistical findings.

Results and discussion: From the above interpretations it is observed that the strength in the age group 8-10 and 13 & 14 is similar in Gymnastics players and Mallakhamb players whereas it is more in Mallakhamb players than Gymnasts in the age groups of 11-12. The first and third hypothesis is accepted whereas second hypotheses is rejected.

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IMPACT OF COVID-19 PANDEMIC DIFFICULTIES ON SPORTS TRAINING AND COACHING OF SCHOOL CHILDREN

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Abstract

Sport is said to be a major contributor to economic and social development. With the growth of sports and its growing awareness in society, its being well recognized by Governments, including in the U.N. Political Declaration of the 2030 Agenda, which reflects on "the contribution sports make to the empowerment of women and of young people, individuals and communities, as well as to health, education and social inclusion objectives. Since its onset, the COVID-19 pandemic has spread to almost all countries of the world, creating a havoc in all possible spheres of human life. The COVID-19 pandemic has significantly impacted the lives of children around the world in a variety of domains. A total of 188 countries have closed their schools in response to the pandemic which is estimated to have resulted in over 1.5 billion children missing a significant period of education (United Nations 2020a). Although medical literature shows that children are minimally susceptible to 2019-Corona virus disease (COVID-19), they are hit the hardest by psychosocial impact of this pandemic. Online education helped students to learn and develop content knowledge and improve communication skills but online learning method, wasn't helpful when it came to sports.

The key impacts are discussed in 4 main areas are, a) Difficulty of children to do sports,
Changes in children after pandemic, c) Challenges faced by parents and d) Coaches view on the present scenario. The paper further concerns the future impact and possible solution to saving our future generation from the massive harms of the Covid-19 pandemic effects.

Keywords: *Sports training, sports coaching, school children, Covid-19, pandemic, WHO, U.N.*

INTRODUCTION

Sports training and coaching focuses on helping the children develop their physical, social and fitness skills. It is a particular type of training designed to improve fitness and abilities to perform in a particular sport. It includes strength in training, corrective and restorative exercises, conditioning and cardiovascular training, along with mental and psychological training and advice on nutritional values. Beyond the development of strategies and skills associated with a particular sport, a sports coach can ignite a child's curiosity, teach positive social and team skills, cultivate resilience, promote self-awareness, model integrity, and foster resourcefulness, encourage creativity, and nurture empathy. All of us who have performed some sports actively can surely remember their beginnings and the first coaches that taught us. Those coaches who brought sports to our lives were also an example to us for strength, determination and authority. They were a source of inspiration and also were the ones to determine whether sports would be a part of our lives or not. Hence, the knowledge and skills of a coach are of utmost importance.

Coaches were already facing a set of difficulties before Covid-19 to keeps children of schooling age inclined in sports and after the pandemic the challenges have significantly increased in number. Similarly, children and parents had their own challenges before Covid-19 onset which have multiplied after the pandemic.

On 31st December, 2019, the World Health Organization (WHO) became aware of an unknown virus which we now know as SARS-CoV-2. The WHO requested information from officials in China on January 1st and declared a Public Health Emergency on January 30th, 2020. A global pandemic was then officially recognized on March 11th in relation to the novel coronavirus disease COVID-19. This paper considers the impacts of the COVID-19 pandemic on children in terms of sports training and coaching.

OBJECTIVES

To study the impact of Covid-19 Pandemic on school children's sports training and coaching challenges that have significantly increased. The four main areas of focus are as follows-

To study the main reasons of difficulty of children to do sports,

To study the Behavioral Changes in children after pandemic,

To study the Challenges faced by parents and

To study the Challenges faced by Coaches.

METHODOLOGY

Personal interviews of coaches, parents and school children (of varied age groups) give me an upfront understanding of their day to day challenges in terms of pursuing sports. The available online articles, research work and similar studies grant me a better understanding to the current scenario with an unbiased view to the surging problems in sporting industry.

RESULTS AND DISCUSSIONS

The Reasons of Difficulty to do Sports for school children are as follows:-

More stress, less fun-In nearly every study when children were asked why they stop playing, one of the most common answers is that it's just not fun anymore. While learning to deal with pressure and compete is a very important part of youth sports, we have gone too far in that direction. Hence, children are not interested in paying a sport for enjoyment rather it has become result oriented which has increased the boredom resulting in high number of quitting the game.

Wrong goals-In most youth sports, especially as kids get older, the only goal or metric of success is winning. Unfortunately, winning doesn't tell you how well you played. Especially in team sports. Sometimes you play well, but the opponent was just better. Sometimes you play better but lose due to factors you can't control. Winning is important, but it's not always an accurate measure of performance and development. If winning is our only measurement of success, then 50% of kids are failures every time they finish playing.

Very expensive- While some sports are still relatively affordable for many kids to play, many of the most popular sports are becoming more expensive. Example: After 2004 Athens and 2008 Beijing Olympics, India winning a Silver and first ever Gold in Rifle Shooting surged great amount of attraction to the sport by Students and parents resulting in increase in shooting equipment and ammunition to a considerable amount.

Early specialization pressure-With youth national championships, the creation of regional super teams, and year-round training facilities, many parents feel immense pressure to encourage their child to specialize in a single sport as young as age 6. It's no wonder kids are quitting at age 13. At that point, they've already been at it 12 months a year, 6 days a week, for 7 years straight. The National Athletic Trainers Association of US recently released an official statement recommending that children delay specializing in a sport as long as possible. They specifically state that the physical demands of specialization, the pressure to perform, and lack of rest put these young athletes at a higher risk for injury, burnout, and dropping out of sports.

Quitting too soon-Research shows that 50% of kids quit youth sports by age 11 and that 70% quit by age 13. A more recent study showed that that 76% of kids do not regularly participate a high calorie burning sports. That's nearly 80% of our kids missing out on the incredible benefits of youth sports. What a tragedy. Kids are quitting at a time in their lives when there is so much that youth sports can do for them and before they even have time to physically develop and reach their potential. Unfortunately, according to the kids, youth sports in their current state, just don't have enough to offer.

Changes in children after pandemic are as follows:-

Less physical activity-The global outbreak of COVID-19 has resulted in closure of gyms, stadiums, pools, dance and fitness studios, physiotherapy centers, parks and playgrounds. Many individuals are therefore not able to actively participate in their regular individual or group sporting or physical activities outside of their homes. Under such conditions, many tend to be less physically active, have longer screen time, irregular sleep patterns as well as worse diets, resulting in weight gain and loss of physical fitness. Low-income families are especially vulnerable to negative effects of stay at home rules as they tend to have sub-standard accommodations and more confined spaces, making it difficult to engage in physical exercise.

Increase in health problems-The WHO recommends 150 minutes of moderate- intensity or 75 minutes of vigorous-intensity physical activity per week. The benefits of such periodic exercise are proven very helpful, especially in times of anxiety, crisis and fear. There are concerns therefore that, in the context of the pandemic, lack of access to regular sporting or exercise routines may result in challenges to the immune system, physical health, including by leading to the commencement of or exacerbating existing diseases that have their roots in a sedentary lifestyle.

Mental problems-Lack of access to exercise and physical activity can also have mental health impacts, which can compound stress or anxiety that many will experience in the face of isolation from normal social life. Students have been affected psychologically by school closures, lack of equipment to participate in courses, being unable to access online materials from home and being unable to leave home for a long time.

Emotional and Financial loss- Many students have gone through loss of family or friends from the virus which has impacted on their economic wellbeing resulting in reduced access to nutrition will surely exacerbate effects on one's physical health and mental well-being.

Challenges faced by parents are as follows:-

Concern for certified and experienced Coaches- In common practice of sports clubs, youth coaches are recruited among the top athletes of the club. Such coaches start training children without any practical experience and often also without required coach license. Not everyone is able to face this situation because experience which they have acquired during their active career need not (and often they do not) work with children.

Child as an instrument to make parent's dream and desire come true- It is a very frequent phenomenon in training practice. Parents often have the feeling that their offspring should achieve what they themselves never have. This phenomenon is more often manifested in individual sports such as tennis. The parents' participating in the competition can then present a crucial stressor for their children.

Child as an investment plan- Parents usually pressurize their children that as they have provided them financially for all their sport's needs, it's now the child's turn to compensate them by winning the competition.

Choosing the right sport- With increase in choices of sports and development in sporting industry on a large scale, it's becoming a huge task for parents to choose the right sport for their kids. Social Media and television have brought various sports closer to people now in modern times, which has created more confusion for parents to make the right selection so that their child gets the best possible opportunity in his sporting life.

Challenges faced by Coaches are as follows:-

Handling exited parents in a positive manner-

If you hear a parent yelling negative comments from the sideline, confront them when the time is right. As the coach, call a meeting with all parents and players and set expectations at the start of the season about how the next few months will look.

Be clear about the importance of youth sports being fun and what your coaching philosophy is Embrace feedback from parents.

Support parents to allow their kids to play multiple sports, but not at the same time.

Encourage parents to not remove all obstacles for their kid's life.

Do's and Don'ts in Coaching-

As a coach, don't create "elite" teams for kids

Keeping the Children Engaged-Your job as a youth sports coach is to keep your kids engaged, having fun and enjoying sports. But did you know 70% of children are dropping out of organized sports by the age of 13.

Mentoring Driven Kids

Teaching Kids Sport Is More Than What's on the Scoreboard

Balancing Coaching vs Everyday Life

Being on the Same Page as the Youth Sports Organization You're Coaching For

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AN INVESTIGATION OF MUSCULAR ENDURANCE OF URBAN, RURAL AND TRIBAL AREA STUDENTS OF THANE DISTRICT AGED 12 TO 14 YEARS

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Abstract

Context:
In India various tribal communities are in different stages of development, but they are still backward in comparison to those who are so called civilized people. These tribes are aborigines of our country. They have been studied from number of angles. The active life with lot of physical activity to earn their daily bread and butter is contributory to their physical development. The genetical potentialities in performing vigorous physical activity can be useful to excel in certain sports and games. The purpose of the study was "An investigation of Muscular Endurance of Urban, Rural and Tribal Area Students of Thane District aged 12 to 14 years".

Aim:
This study is conducted to determine the influence of Gender, Age Group, Area of School and their various interactions on Muscular Endurance of School Students

Objectives:
H01 a: There is no significant influence of Gender on Muscular Endurance of School Students
b: There is no significant influence of Age on Muscular Endurance of School Students
c: There is no significant influence of Area of School on Muscular Endurance of School Students
d: There is no significant influence of interaction between Gender and Age on Muscular Endurance of School Students
e: There is no significant influence of interaction between Gender and Area of School on Muscular Endurance of School Students
f: There is no significant influence of interaction between Age and Area of School on Muscular Endurance of School Students
g: There is no significant influence of interactions among Gender, Age and Area of School on Muscular Endurance of School Students

Methodology
This study was survey in nature under the heading of Descriptive Research. The present study was undertaken with the purpose to collect the information regarding School Students of Thane District. This study was Comparative Survey method for collection of data. The researcher selected total 3600 Students belong to Urban, Rural and Tribal Area Schools Students Aged 12 To 14 Years situated in the region of Thane District. The sample for the present study was selected by using Non-Probability (Convenience)

sampling technique. This study was analyzed by employing Three Way ANOVA (Analysis of variance) and descriptive method of percentile.

Result and Discussion of the study

In case of 12, 13 and 14 years age group in case of Male & Female Students it is seen that there is significant difference in Muscular Endurance of Schools situated in Rural, Urban and Tribal Area. It is also found that the Male students studying in Schools situated in Tribal Area superior in Muscular Endurance as compare to Rural and Urban Area whereas Female students studying in Schools situated in Urban as well as Tribal Area superior in Muscular Endurance at same level as compare to Rural Area whereas in case of 13 and 14 years Female students studying in Schools situated in Urban Area are superior in Muscular Endurance as compared to Rural and Tribal Area.

INTRODUCTION

In India various tribal communities are in different stages of development, but they are still backward in comparison to those who are so called civilized people. These tribes are aborigines of our country. They have been studied from number of angles. The active life with lot of physical activity to earn their daily bread and butter is contributory to their physical development. The genetical potentialities in performing vigorous physical activity can be useful to excel in certain sports and games.

Due to the rapid development of the urban areas in India and relatively slow development of tribal area and pace between the urban and tribal section, the industries become concentrated in cities like Bombay, Pune, Delhi, Ahmedabad, Thane, etc. Social Life in tribal, rural and urban area has a marked contrast. Tribal society has tended to remain small in terms of size and density of population and isolated, while in the urban areas especially cities, people living in large groups in terms of area and population. Due to the rapid expansion of industries in and around the city's urban people have become better off, raised their standard of living and enhanced their purchasing power.

It is a matter of common knowledge that tribal children are brought up in the lap of open natural space and outdoor setting of vigorous life. Because of this conducive environment, their physical capabilities in running, jumping, throwing and such other natural activities are developed. On the other side it is generally noticed that the people residing in urban areas of the country lead a comfortable life, are lethargic and less prone to physical labour and hard work, whereas people living in rural, tribal area who are habituated to hard work from beginning of their life, would be more receptive to physical education and sports for which they would have a natural aptitude.

It is true that physical activity has been a part of the fundamental pattern of living for every creature that has ever lived on earth. For this reason the condition of persons body must have always been of a great concern. In primitive society there appears to have been very little organised, purposive instruction in physical education, although early people considered that a certain type of fitness was necessary for their survival. The usual activities of labour, searching of food, dancing, hunting skills of archery, spear and rock throwing games were essential to the development of superior bodies with physical efficiency as a basic survival, need, the muscles including the heart had to be strong, vision had to be keen, body had to be moved fast and lift heavy loads.

OBJECTIVES OF THE STUDY

To study the influence of Gender, Age Group, Area of School and their various interactions on Muscular Endurance of School Students

HYPOTHESIS OF THE STUDY

The hypothesis sought to be tested are as follows:

H01 a: There is no significant influence of Gender on Muscular Endurance of School Students

b: There is no significant influence of Age on Muscular Endurance of School Students

c: There is no significant influence of Area of School on Muscular Endurance of School Students

d: There is no significant influence of interaction between Gender and Age on Muscular Endurance of School Students

e: There is no significant influence of interaction between Gender and Area of School on Muscular Endurance of School Students

f: There is no significant influence of interaction between Age and Area of School on Muscular Endurance of School Students

g: There is no significant influence of interactions among Gender, Age and Area of School on Muscular Endurance of School Students

METHODOLOGY

DESIGN OF THE STUDY

This study was survey in nature under the heading of Descriptive Research. The present study was undertaken with the purpose to collect the information regarding School Students of Thane District and present study was Comparative Survey method for collection of data.

SELECTION OF SAMPLE

The researcher selected total 3600 Students belong to Urban, Rural and Tribal Area Schools Students Aged 12 To 14 Years situated in the region of Thane District. The sample for the present study was selected by using Non-Probability (Convenience) sampling technique. The details of the selected sample are given in the following Table.

	Boys			**Girls**			**Total**
	12 Years	**13 Years**	**14 Years**	**12 Years**	**13 Years**	**14 Years**	
Rural	200	200	200	200	200	200	1200
Urban	200	200	200	200	200	200	1200
Tribal	200	200	200	200	200	200	1200
Total	600	600	600	600	600	600	3600

SELECTED VARIABLES

1. Muscular Endurance

TOOLS/ INSTRUMENTS

The following criterion measures were included to record the reading of test items.

Sr. No.	Dependent Variable	Test	Criterion Measures
Health Related Physical Fitness			
1.	Muscular Endurance	Bent Knee Setups	Count/min

STATISTICS

The data was analyzed by employing Three Way ANOVA (Analysis of variance) and descriptive method of percentile.

RESULT AND DISCUSSION:

Result on Muscular Endurance

1.1 Influence of Gender on Muscular Endurance of School Students

The F value for gender is 1348.61 which is significant at 0.01 level with df = 1/3599. It indicates that the Mean Score of Muscular Endurance of Male and Female Students differ significantly so, there was a significant influence of Gender on Muscular Endurance of Students. Thus, the Null Hypothesis that there is no significant influence of Gender on Muscular Endurance of Students is rejected. Further, the means scores of Muscular Endurance of Male Students is 24.37 which is significantly higher than that of Female Students whose mean score of Muscular Endurance is 15.16. It may therefore be said that Male Students were found to have higher Muscular Endurance as compared to Female Students.

1.2 Influence of Age Group on Muscular Endurance of School Students

The F value for Age Group is 38.03 which is significant at 0.01 level with df = 2/3599. It indicates that the Mean Score of Muscular Endurance of 12 Years of Students 13 Years of Students and 14 Years of Students differ significantly so, there was a significant influence of Age Group on Muscular Endurance of Students. Thus, the Null Hypothesis that there is no significant influence of Age Group on Muscular Endurance of Students is rejected. Further, the means of Muscular Endurance of 13 Years of Students is 21.15 which is significantly higher than that of 12 Years of Students and 14 Years of Students whose mean score of Muscular Endurance is 18.45 and 19.68. It may therefore be said that 13 Years of Students were found to have higher Muscular Endurance as compared to 12 Years of Students and 14 Years of Students.

1.3 Influence of Area of School on Muscular Endurance of School Students

The F value for Area of School is 27.15 which is significant at 0.01 level with df = 2/3599. It indicates that the mean scores of Muscular Endurance of Rural, Urban and Tribal School Students differ significantly, so there was a significant influence of Area of school on Muscular Endurance of Students. Thus, the Null Hypothesis that there is no significant influence of Area of school on Muscular Endurance of Students is rejected. Further, the mean score of Muscular Endurance of Tribal Schools Students is 20.17 which is significantly higher than those of Rural and Urban School Students whose means scores of Muscular Endurance is 18.52 and 20.03. It may therefore be said that Tribal Schools Students were found to have higher Muscular Endurance as compared to Rural and Urban School Students.

1.4 Influence of interaction between Gender and Age Group on Muscular Endurance of Students

The F value for interaction between gender and Age Group is 52.15 which is significant at 0.01 level with df = 2/3599. It indicates that the means course of Muscular Endurance of Male and Female Students belonging to Age Group of 12 Years, 13 Years and 14 Years differs significantly so there was a significant influence of interaction between Gender and Age Group on Muscular Endurance of Students. Thus, the Null Hypothesis that there is no significant influence of interaction between Gender and Area Group on Muscular Endurance of Students is rejected.

1.5 Influence of interaction between Gender and Area of schools on Muscular Endurance of Students

The F value for the interaction between Gender and Area of school is 44.10 which is significant at 0.01 level with df = 2/3599. It indicates that the means scores of Muscular Endurance of Male and Female Students Studding in Rural and Urban Area Schools differ significantly so, there was a significant influence of interaction between Gender and Area of school on Muscular Endurance of Students. Thus, the Null Hypothesis that there is no significant influence of interaction between Gender and Area of schools on Muscular Endurance of Students is rejected.

1.6 Influence of interaction between Age Group and Area of school on Muscular Endurance of Students

The F value for interaction between Age Group and Area of school is 2.06 which is not significant. It indicates that the mean scores of Muscular Endurance of 12 Years, 13 Years and 14 Years School Students learning in Schools situated in Rural, Urban and Tribal Area did not differ significantly so, there was no significant influence of interaction between Age Group and Area of school on Muscular Endurance of Students. Thus, the Null Hypothesis that there is no significant influence of interaction between Age Group and Area of School on Muscular Endurance of Students is not rejected. It may therefore be said that Muscular Endurance was found to be independent of interaction between Age Group and Area of schools.

1.7 Influence of interaction among Gender, Age Group and Area of School on Muscular Endurance of Students

The F value for interaction among Gender, Age Group and Area of School is 5.51 which is significant at 0.01 level with df = 4/3599. It indicates that the mean scores of Muscular Endurance of male and female Students belonging to 12 Years, 13 Years and 14 Years studding in Schools situated in Rural, Urban and Tribal Area differ significantly so, there was a significant influence of interaction among Gender, Age Group and Area of School on Muscular Endurance of Students. Thus, the Null Hypothesis that there is no significant influence of interaction among Gender, Age Group and Area of School on Muscular Endurance of Students is rejected.

CONCLUSION

- In case of 12 years age group in case of Male Students it is seen that there is significant difference in Muscular Endurance of Schools situated in Rural, Urban and Tribal Area. It is also found that the Male students studying in Schools situated in Tribal Area superior in Muscular Endurance as compare to Rural and Urban Area.
- In case of 12 years age group in case of Female Students it is seen that there is significant difference in Muscular Endurance of Schools situated in Rural, Urban and Tribal Area. It is also found that the

Female students studying in Schools situated in Urban as well as Tribal Area superior in Muscular Endurance at same level as compare to Rural Area.

- In case of 13 years age group in case of Male Students it is seen that there is significant difference in Muscular Endurance of Schools situated in Rural, Urban and Tribal Area. It is also found that the Male students studying in Schools situated in Tribal Area superior in Muscular Endurance as compare to Rural and Urban Area.
- In case of 13 years age group in case of Female Students it is seen that there is significant difference in Muscular Endurance of Schools situated in Rural, Urban and Tribal Area. It is also found that the Female students studying in Schools situated in Urban Area superior in Muscular Endurance as compare to Rural and Tribal Area.
- In case of 14 years age group in case of Male Students it is seen that there is significant difference in Muscular Endurance of Schools situated in Rural, Urban and Tribal Area. It is also found that the Male students studying in Schools situated in Tribal Area superior in Muscular Endurance as compare to Rural and Urban Area.
- In case of 14 years age group in case of Female Students it is seen that there is significant difference in Muscular Endurance of Schools situated in Rural, Urban and Tribal Area. It is also found that the Female students studying in Schools situated in Urban Area superior in Muscular Endurance as compare to Rural and Tribal Area.

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STUDY OF ANTHROPOMETRIC MEASUREMENTS (WEIGHT & HEIGHT) AMONGST EARLY ADOLESCENT BOYS IN RURAL AND URBAN AREAS OF SRINAGAR DISTRICT OF JAMMU AND KASHMIR

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Abstract

Anthropometry has played a determining role in sports counseling, talent selection, talent identification, and guidance for nutritional intake in determining parameters for health related physical fitness. The developmental stages comprises of infancy, childhood, puberty, adolescence and adulthood. There are four characteristics stages of growth from birth to adult: Rapid growth in infancy and early childhood, slow steady growth in middle childhood, rapid growth during puberty, gradual slowing down of growth in adolescence until adult height is reached. For identification of places which would qualify to be classified as 'urban' all villages, which, as per the 2001 Census had a population of 4,000 and above, a population density of 400 persons per sq. km. and having at least 75 per cent of male working population engaged in non-agricultural activity were considered. An area is considered 'Rural' if it is not classified as 'Urban' as per the above definition. The Researcher has undertaken a comprehensive survey comparing the anthropometric measurements and physical fitness levels amongst the Early Adolescent age, 50 students each from rural and urban areas of Srinagar district of Jammu and Kashmir. The data was analyzed using independent Factorial ANOVA test. In the early adolescent age group the rural adolescent age group seems to have significant advantage in the anthropometric measurements and physical fitness over the urban adolescent age group.In Srinagar District, the Early Adolescent age boys show significant difference in the Gross Body Measurements variables, viz. Weight and Height between Rural and Urban areas.

***Keywords**: Anthropometry, Physical fitness variables, Rural, Urban, Early Adolescent age*

Background of the study

The society in modern times provides a number of challenges that test the knowledge acquired by human beings. The human race comprises of different ethnic groups, each ethnic group provides unique features that differ with ethnicity and geographical location. The geographical location is an indicator that influences the general environmental conditions in which the humans are structured and develops. The development of the human being is the result of the type of diet, socio-cultural and political environment.As children growvarious groups of people become more or less important. Significant groups and individuals are sometimes more important because of the powerful influence they can have on children. Significant others include parents, teachers, and other children, all of whom may have different attitudes towards a child. The information and changing situations received from these different sources means that children frequently have to adapt their image of themselves. The exposure todifferent adults and other children allows themto fit according to the needs becomes important. As they mature they understand better how to get on with others[1].

The word Anthropometry is derived from the Greek word “Anthropo” meaning “Human” and “Metron” meaning “Measurement”(Gorstein et. al.,1994). It includes a range of human body measurement such as

Weight, Height, Skin fold thickness, Circumferences, Diameters, and Length measurements of the body ssegments[1,2]. Anthropometric measurements has played a very significant role in sports counseling, talent selection, talent identification, and guidance for nutritional intake in determining parameters for health related physical fitness.

Play and sport is not necessarily the same thing and play has different functions for adults and children. Playing as far as adults are concerned means relaxing or taking time away from work and possibly taking some recreationwhile for childrenit provides unique opportunities and interesting learning experiences. Children shouldlive for long periods inthe world of play that provides a pathway for transforming their life upward from childhood to adulthood. Competition is a form of comparison and means different things to the child than to the adult[4].

Jammu and Kashmir occupies a unique position lying in the northern most part of India which is mostly situated in the Himalayan mountain range.The state of Jammu and Kashmir is bounded with Himachal Pradesh and Punjab to the south, Pakistan to the west, Afghanistan to the North and China to the North - East. Some of its territory was forcibly captured by Pakistan, which is called Pakistan occupied Kashmir (PoK).

Rural - Urban Areas: While classifying places as Rural and Urban areas, as per the 2001 Census, the areasthat would qualify to be classified as 'urban' all villages, which, had a population of 4,000 and above, and population density of 400 persons per sq. km. Another criteria, is that at least 75 per cent of themale working population should be engaged in non-agricultural activity. An area is considered 'Rural' if it is not classified as 'Urban' as per the given definition below:

a) The areassuch as municipality, corporation, cantonment board or notified town area committee, etc.

b) A place is considered as Rural if the following three criteria are satisfied simultaneously:

i. The area has a minimum population of 5,000;
ii. At least 75 per cent of male working population are engaged in agricultural pursuits;
iii. Has density of population of at least 400 per sq. km or 1,000 per sq .mile[5].

RATIONALE OF THE STUDY: Physical fitness is the capacity of an individual to do work effectively with joy and pleasure. Human beings come in all shapes and sizes and have different skin colors, but their bodies all work in exactly the same way. In children, the anthropometric measurements shows the health status of child and can act as an indicator to assess the health, work capacity and cognitive function of children. These measurements help in the early stage of children, as this period experiences physical, mental, emotional and social change in a child. Physical fitness at the childhood stage has important benefits, as it is reflected in the later stage of adulthood. The individual undergoes the following developmental stages that comprises of infancy, childhood, puberty, adolescence and adulthood. The growth from birth to adult can be characterized intofour stages: Rapid growth in infancy and early childhood, slow steady growth in middle childhood, rapid growth during puberty,that leads to gradual slowing down of growth in adolescence until adult height is reached. Throughout the world, anthropometric characteristics and physical fitness levels are considered to guide any individual to take up any physical activity or sports.

HYPOTHESIS OF THE STUDY

H_{o01}. There is no significant difference between rural and urban areas in the Anthropometric variables of Early Adolescent Boys of Srinagar district.

H_{11}. There is no significant difference between rural and urban areas in the Anthropometric variables of Early Adolescent Boys of Srinagar district.

METHODOLOGY

In this work, the Researcher has tried to collect the Anthropometric Measurements and Physical fitness levels of Adolescent Boys in Rural and Urban Areas of Jammu and Kashmir. The Researcher visited (3) Districts each of Jammu Division and Kashmir Division respectively .In total six (6)districts were covered for collecting the required data from the State of Jammu and Kashmir, that are mentioned below:

- Jammu Division: Doda, Kishtwar, Kathua.
- Kashmir Division: Kulgam, Srinagar, Ganderbal.

The sample collected from the six districts of Jammu and Kashmir has been categorized into two groups.

- Early Adolescent age (E.A.A) 10 to14 Years.
- Middle Adolescent age (M.A.A) 15 to17 Years.

STATISTICAL TECHNIQUE

The data has been analyzed using independent Factorial ANOVA test with online Vassar stats Computational package to test this hypothesis as shown in the following table.

Table 1: 2x2 Factorial ANOVA Summary for Gross Body Measurements variables, viz. Weight & Heightof Rural and Urban boys of Early Adolescent age in Srinagar District

ANOVA Summary					
Source	**SS**	**df**	**MS**	**F**	**P**
Rows	334.89	1	334.89	4.9	0.0292
Columns	327985.29	1	327985.29	4800.9	<.0001
r x c	90.25	1	90.25	1.32	0.2534
Error	6558.48	96	68.32		
Total	334968.91	99			

Interpretation:

The observed F- ratio F(1,96)= 1.32 is greater than the tabulated F- ratio p=0.2534 (p>.05)we accept the null hypothesis that thereis no significant difference between the interaction of Rural boys and Urban boys of Early Adolescent age in Srinagar District with respect toGross Body Measurements variables.The observed F- ratio F(1,96)= 4.9 is lesser than the tabulated F- ratio p=0.0292 (p.<.05) we reject the null hypothesis that there is no significant difference between theRural boys and Urban boys with respect toGross Body Measurements variables. The observed F- ratio F(1,96)= 4800.9 is lesser than the tabulated F- ratio p<.0001(p<.05)we reject the null hypothesis that there is no significant difference within the Gross

Body Measurements variables, viz. Weight and Height of Rural boys and Urban boys of Early Adolescent age in Srinagar District.

CONCLUSIONS:

In Srinagar District, the Early Adolescent age boys show significant difference in the Gross Body Measurements variables, viz. Weight and Height between Rural and Urban areas.

SUGGESTIONS:

1. The same Anthropometric measurements and Physical Fitness variables may be used for different districts of Jammu and Kashmir.
2. The same Anthropometric measurements and Physical Fitness variables may be used for different districts of various States in India.
3. Different Anthropometric measurements and Physical Fitness variables may be used for different districts of Jammu and Kashmir.
4. Different Anthropometric measurements and Physical Fitness variables may be used for different districts of various States in India.
5. The same Anthropometric measurements and Physical Fitness variables may be used for suggesting different sports disciplines in the different districts of Jammu and Kashmir.
6. The same Anthropometric measurements and Physical Fitness variables may be used for suggesting different sports disciplines in the different districts of various States in India.
7. Different Anthropometric measurements and Physical Fitness variables may be used for suggesting different sports disciplines in the different districts of Jammu and Kashmir.
8. Different Anthropometric measurements and Physical Fitness variables may be used for suggesting different sports disciplines in the different districts of various States in India.

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EFFECT OF SCIENTIFIC EXERCISE PROGRAM ON STRENGTH AMONG SECONDARY SCHOOL GIRLS OF JALGAON DISTRICT

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Abstract

This research study was aimed at to compare and analyze the effect of scientific exercise program on strength among secondary school girls of Jalgaon district. For the present study 80 girls were selected with purposeful random sampling method from KCES's A. T. Zambare Madhyamik Vidyalaya, Jalgaon. The age ranged between 13 and 16 years and limited for VIII and X standards. All samples were randomly divided into two group's namely experimental group and control group with 10 each from respective age groups. The experimental group was gone with 12 week multi-station proprioceptive exercises program which was scientifically created under the guidance of experts. After Collecting pretest and post test data the paired t test was used.

It is seen that, there is no significant difference found in strength development between mean gain scores of experimental group and control group of secondary school girls. The compensatory development does not found in the strength development.

Keywords: *Proprioceptive Exercises, Strength.*

Introduction:

Proprioception is the body's ability to transmit a sense of position, analyze that information and react (consciously or unconsciously) to the stimulation with the proper movement **(Houglum, 2001)**. In simple words, it is the capability to know where your body part is without having to look at them. Proprioception allows you to scratch your head without looking at them in the mirror or walk up a stairs without having to look at each stair every time.

The cerebellum is highly responsible for coordinating the unconscious aspects of proprioception. Proprioception word originated from Latin proprius, meaning "one's own", "individual", and capio, capere, means to take or grasp, that means it is the sense of the relative position of one's own parts of the body and strength of effort being utilized in movement **(Mosby's Medical, Nursing & Allied Health Dictionary, 1994).**

Objectives:

1. To find out the compensatory development in strength among secondary school girls of Jalgaon district by using scientific exercise program.

Hypothesis:

H_0- 01: There will be no compensatory development will found in strength between experimental group and control group of secondary school girls of Jalgaon district.

Limitations:

1. Physical, mental, weather, school, house and surrounding conditions of subjects.
2. The changes accrue due to puberty stage and involvement of subjects.

Delimitations:

1. The study was delimitated to secondary school girls aged 13 to 16 years in Jalgaon district.
2. The study was delimitated to the standing broad jump and standing vertical jump test.
3. The study was delimitated to multi-station proprioceptive exercises program.

Methodology:

The target population of this study was all secondary school girls of Jalgaon district of Maharashtra. For the present study 80 girls were selected with purposeful random sampling method from KCES's A. T. Zambare Madhyamik Vidyalaya, Jalgaon. The age ranged between 13 and 16 years and limited for VIII to X standards. All samples were randomly divided into two group's namely experimental group and control group with 10 each from respective age groups. The experimental group was gone with 12 week multi-station proprioceptive exercises program which was scientifically created under the guidance of experts. During the training sessions of experimental group, various recreational activities were planned for control group.

After Collecting pretest and post test data the paired t test was used.

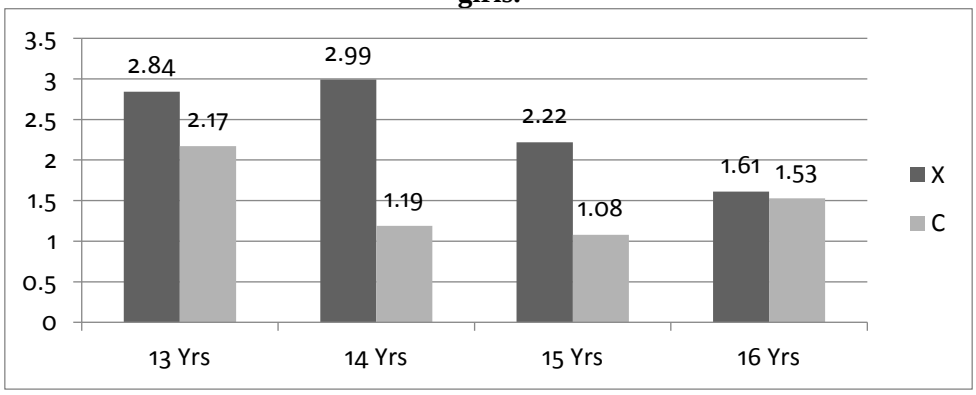
Results:

Table: Showing the comparison of mean gain of strength tests conducted on the secondary school girls.

Variables	13 Years	14 Years	15 Years	16 Years
t-test	**2.030***	1.193	1.075	0.600
Strength	**Significant Difference Found**	Significant Difference Not Found		

Significant at 0.05 level

Graph: Showing the comparison of mean gain of strength tests conducted on the secondary school girls.



Conclusion:

It is seen that, there is no significant difference found in strength development between mean gain scores of experimental group and control group of secondary school girls. The compensatory development does not found in the strength development. Hence, the hypothesis is **accepted** on the basis of statistical findings.

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EFFECT OF BATTLE ROPE TRAINING ON MOTOR FITNESS COMPONENT (MUSCULAR ENDURANCE) AND SKILL ABILITY (STRAIGHT PUNCHES) ON MALE BOXERS OF MUMBAI

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Abstract

The system of training using thick ropes or now called as Battling Ropes was created and developed by John Brookfield. It is a very safe and a highly effective tool for direct upper body conditioning and also puts an indirect load on the lower body. It is an excellent workout for the shoulder, forearm, and backhand with a unique range of exercise variations targeting the quadriceps and hamstrings as well. One of the best tools for improving grip strength and forearm development. Repetitive motion of the arms by sparring and jogging while punching helps one's arm and legs to gain strength and power. Boxing training enhances the hand-eye coordination too. Drilling punch combinations helps one to train arms to hit at the right angle and position that builds muscle memory which is vital in the ring. The purpose of the study is to investigate the effect of battle rope training programme along with boxing training designed by researcher in the promotion of muscular endurance and straight punches of male boxers. The study was done on 20 students and the training given was for eight weeks. After the completion of the experimental period, the differences between the initial and final means on muscular endurance and straight punches were considered for their effect of battle rope training programme among the subjects. The hypothesis was tested at 5 % level of significance, the obtained data was analysed using t test. Battle rope training programme proved to be effective for developing the Motor Fitness Component (Muscular Endurance) and Skill Ability (Straight Punches) of Male Boxers.

Keywords*: Battle rope training programme, Male boxers, Muscular Endurance, Boxing skills, straight punches*

Background of the study

Ropes are being used since thousands of years, and probably are one of the greatest inventions ever made. Whether you want to pull, push, carry, drive; equipment or people, ropes make the work quite easy. But it has been only very recently when ropes are being used for performance enhancements of individuals, through the use of force production and power output. The system of training using thick ropes or now called as Battling Ropes was created and developed by John Brookfield. John Brookfieldis a multiple world record holder and has achieved many feats in strength and endurance. It is a very safe and a highly effective tool for direct upper body conditioning and also puts an indirect load on the lower body. It is an excellent workout for the shoulder, forearm, backhand with a unique range of exercise variations targeting the quadriceps and hamstrings as well .One of the best tools for improving grip strength and forearm development. Battling Ropes can be used to maintain both muscle strength and

cardiovascular fitness during rehabilitation. It is one of the few tools which target muscular strength, strength endurance and cardiovascular endurance at the same time. It builds grip strength, strength endurance, stability, agility, speed, explosive power, cardiovascular endurance and much more which together gives a phenomenal high intensity workout especially for combat athletes and other pro sportsmen. Unlike the relatively static movement of lifting and lowering a barbell, using battle ropes is a dynamic, everchanging form of movement. The ropes can be whipped, slammed, or dragged, but among the most popular are undulating movements that cause the ropes to move in waves. Battle rope training program work the muscles of abdominals, back, and glutes, and one can incorporate movements, such as jumps, lunges, and squats, that work on the legs too. One very unique aspect of using ropes as a training system is that it is not a very complex system of learning. Unlike various other movements like weightlifting and for that matter even common weight training movements like squats and bench presses will take time to learn before we can effectively use them as a training tool. Battling Ropes can be learnt in a very short time and it provides immediate challenge and benefits the user.

Boxing has become an exciting sport in today's time. Boxing is perceived and can be found world-wide. Boxing helps in developing cardiovascular endurance and toning of the muscles by training workouts. Cardio boxing training program and the innovative variations of the sparring jabs, power punches defence, fitness blends are considered as aerobics exercises.

Moreover, boxing training program improves speed, resistance, strength, flexibility and the reflexes and also enhancement of the muscles. Repetitive motion of the arms by sparring and jogging while punching helps one's arm and legs to gain strength and power. Boxing training enhances the hand-eye coordination too. Drilling punch combinations help one to train arms to hit at the right angle and position that builds muscle memory which is vital in the ring. Whether one is shadowboxing, working with a punching bag or sparring with a partner, one needs to ensure that an individual doesn't just strike out blindly. An individual will always want to set clear targets for where to land punches that will also build up any individual's hand-eye coordination.

The term physical fitness is used by sports coaches very regularly, but it is very important for the physical education student to understand the basic difference between physical fitness and motor fitness. Physical fitness is used to denote only five basic fitness components i.e. muscular strength, muscular endurance, cardiovascular endurance, freedom from obesity and flexibility whereas motor fitness is a more comprehensive term which includes all the ten fitness components including additional five motor performance components i.e. power, speed, agility, balance, and reaction time. All these components are important for the success in sports. The athlete obviously has greater fitness than the non-athlete because of his training for a chosen event. There are several motor fitness abilities namely agility, power, speed, flexibility and co-ordination. Each exercise in training will tend to develop particular motor fitness ability. When the load of an exercise is in maximal it is a strength exercise. Speed and frequent movement that has relatively various movements are called coordination exercises. Different exercise has different demands on fitness. The fitness of the marathon runner is obviously very different to the fitness of the shot putter.

RATIONALE OF THE STUDY: The researcher being a boxer as well as coach and in consultation with experts, determine that the term physical fitness and motor fitness are different for an individual and an athlete. The athlete obviously has greater fitness than the non-athlete due to variety in the training aspects. This variety in training helps the athlete not only to develop individual's motor fitness components but also helps in developing skill ability. The boxers need to develop motor fitness components for enhancing the overall development of any individual and also to develop skill ability. In boxing having a good guard helps to develop the defensive skills. Also, boxers are not able to deliver maximum straight and accurate punches. Thus the defensive skill is effected helping the opponent to win. One reason for all this is lack of muscular endurance. So one needs to focus on developing muscular endurance which will not just help them develop a good guard but also the delivery of more accurate and straight punches becomes possible. There are various ways to develop ones muscular endurance battle rope training is one such method that can help to improve one's muscular endurance. This method is best suited for teen boxers and also help them to develop muscular endurance and straight punches effectively. This thereby will not only help the boxer to develop but also improve his boxing performance

HYPOTHESIS OF THE STUDY

- Ho_1: There is no significant difference of battle rope training on muscular endurance among the male boxers.
- H_{11}: There is significant difference of battle rope training on muscular endurance among the male boxers.
- Ho_2: There is no significant difference of battle rope training on Straight Punches among the male boxers.
- H_{22}: There is significant difference of battle rope training on Straight Punches among the male boxers.

METHODOLOGY

Purpose of this study was to see effect on muscular endurance and straight punches of Battle rope training on male boxers aged between 14 to 16 years of Mumbai. 20 boxers will be divided into two equal groups by random sampling method. Group I will act as Experimental Group I – battle rope Training and Group – II act as Control Group (CG). After the completion of the experimental period, all the subjects were again measured for muscular endurance and straight punches.The differences between the initial and final means on muscular endurance and straight punches were calculated. The hypothesis was tested at 5 % level of significance, the obtained data was analysed using t test.

STATISTICAL TECHNIQUE

The data has been analyzed using independent t test with online Vassar stats Computational package to test this hypothesis as shown in the following table.

Table 1: Mean Gains for Motor Fitness Component (Muscular Endurance) of Male Boxers

	n	ΣX	ΣX^2	SS	Mean	Mean a — Mean b	df	t	LoS
Pre test	10	270	7606	316	27	6.9	18	+1.65	0.116284
Post test	10	339	12751	1258.9	33.9				

Interpretation:

The mean gains for Motor Fitness Component (Muscular Endurance) of Male Boxers is 6.9, the calculated t for the observed values is +1.65(p= 0.116284)for df =18 at 5% level of significance, which is highly significant, hence the Motor Fitness Component (Muscular Endurance) is improved significantly with the Battle Rope training programme.

Table 2: Mean Gains for Skill Ability (Straight Punches) of Male Boxers

	n	ΣX	ΣX^2	SS	Mean	Mean a — Mean b	df	t	LoS
Pre test	10	1137	130497	1220.1	113.7	31.7	18	+3.88	0.001097
Post test	10	1454	216186	4774.4	145.4				

Interpretation:

The mean gain for Skill Ability (Straight Punches) of Male Boxers is 31.7, the calculated t for the observed values is +3.88 (p= 0.001097)for df =18 at 5% level of significance, which is highly significant, hence the Skill Ability (Straight Punches) of Male Boxers is improved significantly with the Battle Rope training programme.

CONCLUSION

- ✓ Battle rope training programme proved to be effective for developing the Motor Fitness Component (Muscular Endurance) of Male Boxers.
- ✓ Battle rope training programme proved to be effective for developing the Skill Ability (Straight Punches)of Male Boxers.

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IMPORTANCE OF YOGA IN PHYSICAL EDUCATION AND SPORTS

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Abstract

Physical Education and Sports is one of the most important for the development of personality "sound body is sound mind" both are co- related if you are physical fit. Physical education develops all aspect of personality like health, mental, social etc. Physical education and sports play importance role in personality development process, and its contributes a lot in the development of all aspect of personality mental status and social adjustment etc. first impression is basically judges is by your fitness level. In fact the expression physical education originally means "education through the body "both yoga and physical education in their origin use the body as a tool for developing attitudes and abilities that are important to achieve physical and mental health. Aerobic condition and sports training, same goals through concentration and relaxation.

Keyword *: yoga asanas, pranayama, exercise, personality.*

INTRODUCTION

Man has a accomplished a great deal of development in every filed of life. Present day science and innovation have changed the method for living. Which causes physical and mental anxiety. Yoga is one of the surest solution for man's physical and mental health. The word yoga is taken from the Sanskrit dialect word "YUJ" which means join together or unite to comprehend the significance of yoga we need to study some definition of yoga.

Important components of pranayama are:

1) Puraka intends to inhale
2) Kumbhaka intends breath
3) Rechka to exhale

Types of pranayama

1) Surya bandana
2) Sheetakari
3) Bhastrika
4) Moorcha
5) Ujjai
6) Shethali
7) Bharmari
8) Plavani
9) Kapalabathi

ASANAS:

ASANA implies holding body in a specific stance to bring stability to the body and balance to the brain and types of asanas

1) Padmasana
2) Vajrasana
3) Halasana
4) Bhujangasana
5) Sarvangasana
6) Salabhasana
7) Chakrasana
8) Savasana

TYPES OF YOGA

There is different sort of yoga. There are particular adavantages of particular yoga.some of imperative yoga are depicted beneath :

- Karma yoga (yoga of action)
- Jnana yoga (yoga of knowledge of wisidom)
- Hatha yoga (yoga of achieving physical and mental activity)
- Raj yoga (yoga of achieving the psychic awareness and facilities)
- Mantra yoga (yoga of liberathing the brain)
- Laya yoga (yoga of conscious disintegration of individuality)
- Bhakti yoga (yoga of extraordinary dedication)

Importance of yoga in health and sports :

Mental control :

Yoga is useful is mental control, with the help breathing and focusing techniques the level of stress and tention can be decresed. Just a tranquil personality can give better outcome in games performance.

Types of exercise

Exercise and physical education activity fall into four basic categories endurance, strength, balance, and flexibility. Most people have a habit of to focus on one activity or type of exercise and think they are doing enough for their health. Each type of exercise is different; however doing them all will give you extra benefits.

Endurance

Endurance or aerobic activites increase your breathing and heart rate. They keep your heart, lungs, and circulatory system healthy and improve your overall fitness. Walking or mowing, raking, digging and dancing are kinds of this type.

Strength

Yoga can help us in upgrade our life really that might be its most noticeable quality. It upgrades our determination power and it will enhance performance in general life and sports activites. Strength can

make a big difference in your body. We can find this type of exercise in lifting weights, using a resistance band with your own body weight.

Balance

Balance execrcises help prevent falls, a public problrm in older adults. Many lower- body strength exercise also will improve youe balance. This type can be noticeable in standing on one foot, heel-to -toe flexibility Flexibility exercises stretch your muscles and can help your body stay limber. Being flexible gives you more freedom of movement for other execises as well as for your everday activites. Some examples for that in sholder and upper arem stretch, calf stretch and yoga.

Benefits of exercise

Regular exercise makes the heart stronger and the lungs fitter, enabling the cardiovascular system to deliver more oxygen to the body with every heartbeat and the pulmonary system to increase the maximum amount oxygen that the lungs can take in. Exercise lowers blood pressure, slightly decreses the levels of total and low-denisty lipoprotein (LDL) cholesterol (BAD CHOLESTEROL)< and increses the level of high- density lipoprotein (HDL) cholesterol (GOOD CHOLESTEROL). These helpful effects decreses the risk of heart attack, stroke, and coronary artery disease. Exercise makes muscles stronger,allowing people to do tasks that they otherwise might not be able to do orto do them more easily.

Reduce stress and anxity

Stress relief is one of the most common mental benefits of exercise. Regular exercise can help to manage physical and mental stress. Exercise also increses concentrations of norepinephrine, a chemical that can moderate the brains response to stress, being active greatly causes a reduction in stress levels. Areboic and anaerobic physical training helpful for overall health. God quality sleep can reduce stress. Physical exercise can help people with anxiety disorders calm down .

Remove toxins

Yoga helps in expelling toxins from the body through pranayama. It sanitizes the body and blood.

Improve self- confidence

Physical fitness can boost self- esteem and improve positive self- image. Regardless of weight size, gender, or age, exercise can quickly elevate a persons perception of his or her attractiveness,that is self-worth . it has been proved that in less time of aerobic exercise and resistance training method definitely will help to improve self- image . even if you will take your workout outside and start ecercising in the great outdoors can also increase self-esteem even more.

Improve concentration

It implies focusing on an assignment. It is vital in general and sports life. If the concetration power is strong then an athlete can give better performance. A few games luke archery shooting depend on fixation control. Yoga helps in enhancing concentration force of brain. Which improve the proficiency of work.

Improve internal orangs efficiency pranayama and asana enhance the working productivity of pur body's internal organs like stomach related framework, immune framework, respiratory framework and so on

Conclusion

Yoga is extremely essential in our life: it is enhancing our living standard. By adapting yoga is our life we can remain strong by eliminating the danger of general medical issues.yoga is the best and free treatment

for skin, digestion, joint torment issues etc. it can save ass from diabetes, pulse issues, obesity. Thus yoga is helping us from antagonist impact of medications. Competition in sports is expanding day by day. Players confront such a large number of issues like anxiety, pressure, concentration, fear, obesity, and sleeping disorder. These issues impact performance of games individual and impact of these issues can be reduced with assistance of yoga.

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STUDY OF INTERVAL TRAINING ON CARDIO-VASCULAR ENDURANCE

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Abstract

The present study observed the effect of Interval Training on the Cardio-vascular Endurance of athletes. The main purpose of the study is to find out the effect of interval training on cardiovascular endurance. The age of the subjects ranged between 18-25 years. To collect the data Harvard Step test was employed. The subjects were selected by using a simple random sampling method. This study was delimitated to 20 male athletes. The findings of the study were an insignificant difference observed between the pre-test and post-test of the control group also a significant difference was observed in Cardio-vascular Endurance.

Keywords*: Interval Training, Cardio-vascular Endurance.*

Introduction: Exercise improves the respiratory system and the heart by increasing the amount of oxygen that is inhaled and distributed to body tissue. Many research reviews demonstrated that physical activity interventions are effective for increasing cardiovascular fitness. There are many benefits of cardiorespiratory fitness. It can reduce the risk of heart disease, lung cancer, type 2 diabetes, stroke, and other diseases. Cardiorespiratory fitness helps improve lung and heart conditions and increases feelings of well-being.

Statement of the Problem: The problem is stated as, "Study of Interval Training on Cardiovascular Endurance of athletes".

Purpose of the Study: The purpose of the study is to find out the effects of interval training on the cardiovascular endurance of athletes.

Hypothesis: Researchers hypothesized that there might be a significant effect of interval training on the cardiovascular endurance of athletes.

Delimitations: The study was delimited to male students only. The age of the subjects ranged between 18-25 years. The study was also delimited to 20 athletes. Also, the study was delimited to cardiovascular endurance only.

Methodology: The subjects selected for the study were those who participated in collegiate tournaments by using a simple random sampling method. A total of 20 athletes were selected as subjects. Based on pre-test means researcher formed two homogeneous groups namely the control group, and the experimental group after six weeks of training data were again collected on the cardio-vascular endurance of athletes. In interval training, the zig-zag run, jogging, fast run, stair climbing, etc are the exercises that were included, and also Harvard Step Test was administrated to measure the Cardiovascular endurance of athletes.

Analysis of Data: To determine the significant difference in the means on the cardio-vascular endurance of athletes between the groups as well as within the groups between the pre-test and post-test means of experimental and control groups 't'-test were employed. To find out the significant difference, the level of

significance was set at 0.05 level. The findings of the statistical analysis have been shown in the following tables.

Table 1: Summary for Cardio-Vascular Endurance of Control and Experimental Groups of athletes.

		Mean	SD	MD	SE	t
Control	*Pre-test*	76.14	1.74	0.14	0.70	0.200@
	Post-test	76.28	1.39			
Experimental	*Pre-test*	76.08	1.35	1.81	0.61	2.946*
	Post-test	77.90	1.40			
Post-test	*Control*	76.28	1.39	1.62	0.62	2.596*
	Experimental	77.90	1.40			

@ Not significant at 0.05 Tab $t_{0.05\,(18)} = 2.100$

* Significant at 0.05 Tab $t_{0.05\,(9)} = 2.262$

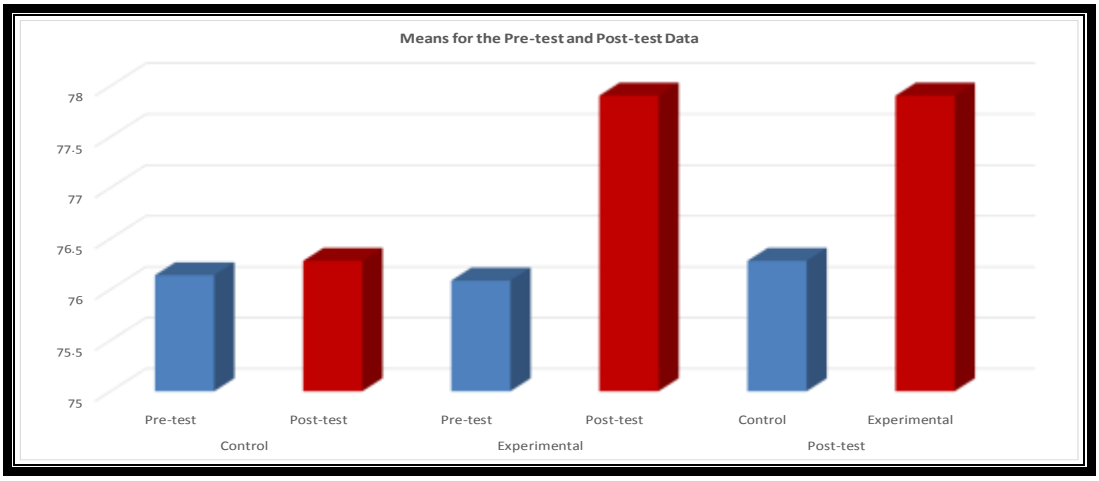

Figure-1: Showing Means for the Pre-test and Post-test Data on Cardio-Vascular Endurance.

Discussion on Findings: The significant difference was found in Cardio-vascular endurance between the pre-test and post-test of the control and experimental group but insignificant in the control group because interval training increased the cardio-vascular endurance capacity of the experimental group of athletes. There was no additional training given to the Control group hence insignificant differences were observed.

Testing of Hypothesis: The findings show the significance in both the experimental group's pre and post-test of both groups, hence the hypothesis is accepted.

Conclusion: On the basis of findings and statistical analysis, it can be concluded that an insignificant difference was observed between the pre-test and post-test of the control and experimental group in Cardio-vascular Endurance.

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OPTIMISING THE BOWLING ABILITY OF ELITE CRICKET BOWLERS WITH SPECIAL REFERENCE TO ANTHROPOMETRIC AND BIOMECHANICAL CHARACTERISTICS

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Abstract

The purpose of the study was Optimising the Bowling Ability of Elite Cricket Bowlers with Special Reference to Anthropometric and Biomechanical Characteristics. For this study twenty-five male cricket players who represented Tami Nadu Cricket Association's League Matches in various districts in Tamil Nadu 2022 were selected as subject. Height, weight, arm length, leg length, selected anthropometric variables and Stride Length, knee angle and Height of the ball release were selected as biomechanical variables for this study. Playing ability as an independent variable. Anthropometric and biomechanical factors influencing elite bowler's performance was calculated by using Pearson's product moment correlation. For testing hypothesis, the level of significance was set at 0.05.

***Keywords**: Anthropometric, Biomechanics, Medium pace bowlers, Performance analysis, TNPL.*

Introduction

Cricket, which was once primarily played in England during the summer, is now played all over the world, with particular popularity in Australia, India, Pakistan, the West Indies, and the British Isles.

Cricket is a bat-and-ball sport played by two opposing sides (teams) of 11 players each. The oval field has a rectangular "pitch" in the centre that is 22 yards (20.12 metres) by 10 feet (3.04 metres). There are two rows of three sticks each at each end of the ground, known as wickets. Each wicket features horizontal pieces called bails at the top. As the teams alternate between batting and bowling, each turn is referred to as a "inning" (pitching). Each team has one or two innings, depending on the length of the game, with the goal of scoring the most runs. To force the bails to fall, the bowlers strive to hit the wicket with the ball while delivering it with a straight arm. There are several methods for dismissing or removing the batter. A bowler completes a "over" by throwing six balls at one wicket, followed by six balls in the opposite direction from another player on his team. The batters defend their pitch. When two batsmen are on the field at the same time, the striker batter attempts to hit the ball away from the wicket. A hit could be offensive or defensive in nature. A defensive hit may safeguard the wicket, but the batsmen will have no time to go to the other wicket. To force the bails to fall, the bowlers strive to hit the wicket with the ball while delivering it with a straight arm. There are several methods for dismissing or removing the batter. A bowler completes a "over" by throwing six balls at one wicket, followed by six balls in the

opposite direction from another player on his team. The batters defend their pitch. When two batsmen are on the field at the same time, the striker batter attempts to hit the ball away from the wicket. A hit could be offensive or defensive in nature. A defensive hit may safeguard the wicket, but the batsmen will have no time to go to the other wicket. If a ball lands on the ground before reaching the boundary, it scores four points; if it lands in the air, it earns six points (a fly ball). The team with the most runs at the end of the game wins. If neither team completes their assigned number of innings within the allotted time, the game is declared a tie. Scores of hundreds are common in cricket.

Science's study of biological systems, particularly their structure and function, is known as biomechanics. This field of research uses techniques from mechanics, In the 20th century, biomechanics research gained increasing recognition.

Performance analysis is a specialised field that gives coaches and athletes unbiased data to better analyse performance. Systematic observation, which gives accurate, trustworthy, and comprehensive information on performance, serves as the foundation for this procedure. By offering visual feedback, performance analysis can strengthen the coaching process. Although analysis tests have greatly improved players' performance and knowledge of movement, the analysis activities that coaches must complete are primarily of a qualitative character.

Statement of the Problem

The purpose of the study was to Optimising the Bowling Ability of Elite Cricket Bowlers with Special Reference to Anthropometric and Biomechanical Characteristics.

Methodology

The objective of the study was to Optimising the Bowling Ability of Elite Cricket Bowlers with Special Reference to Anthropometric and Biomechanical Characteristics. Twenty-five male cricket players who represented Tamil Nadu Premier League were selected as subjects for this study. Since the players had been trained for a considerable period of time, they were considered skilled and their technique was treated as stabilized. Optimising the Bowling Ability of Elite Cricket Bowlers with Special Reference to Anthropometric and Biomechanical Characteristics was calculated by using Pearson’s product moment correlation. For testing hypothesis, the level of significance was set at 0.05.

Findings

Optimising the Bowling Ability of Elite Cricket Bowlers with Special Reference to Anthropometric and Biomechanical Characteristics

Variables	Mean	Std. Deviation
Coaches rating	72.360	3.8175
Height	175.800	5.6125
Weight	70.320	8.5767
Arm Length	79.400	3.9896
Leg Length	95.880	3.7563
Knee Angle	159.072	3.2669
Delivery Stride Length	1.1596	.09791
Height of the Ball Release	2.2268	.10403

Descriptive statistics: Table – 1

In order to find out the prediction of the Bowling Ability of Elite Cricket Bowlers, multiple regression analysis was performed using the predictor variables of anthropometric variables and biomechanical variables. From the table – 1, it was found that mean values.

Table -1 - Mean and Standard Deviation (± SD) Values of Optimising the Bowling Ability of Elite Cricket Bowlers with Special Reference to Anthropometric and Biomechanical Characteristics.

Table 2 - shows that inter – correlation optimising the Bowling Ability of Elite Cricket Bowlers with Special Reference to Anthropometric and Biomechanical Characteristics.

Variables	Height	Weight	Arm Length	Leg Length	Knee Angle	Delivery Stride Length	Height of the Ball Release
Height	1.000	.144	.720	.851	.022	-.081	.215
Weight		1.000	.208	-.075	.110	-.182	.259
Arm Length			1.000	.707	.011	-.155	.298
Leg Length				1.000	-.253	-.146	.126
Knee Angle					1.000	.390	.368
Delivery Stride Length						1.000	-.174
Height of the Ball Release							1.000

Table – 2 - shows that there was a strong correlation ($r \geq 0.7$) exists between the Bowling ability versus arm length and ($r \geq 0.8$) exits between the Bowling ability versus height of the ball release. These factors ended up being significant traits that affected medium-pace bowlers overall in cricket in terms of bowling skill. Each variable provided not just a precise assessment of the anthropometric traits of medium-pace bowlers, but also information about how the height of ball release affects bowling efficiency. The best linear regression models for predicting the bowling prowess of the medium pace bowlers were next tested in broad classes using stepwise selection. Only the variable in each model that met the cut-off requirements of likelihood of F < equal to or less than 0.001, 0.01 and 0.05 level significance was listed.

Table 3 - Stepwise Regression Analysis of Optimising the Bowling Ability of Elite Cricket Bowlers with Special Reference to Anthropometric and Biomechanical Characteristics.

		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	2.646	6.305	
	Arm Length	.878	.079	.918
2	(Constant)	-12.514	6.543	
	Arm Length	.805	.067	.841
	Height of the Ball Release	9.422	2.566	.257

Table – 3 - shows the regression analyses for medium pace bowlers in cricket. Among the anthropometric variable, Arm length scores accounted for 77 %. The height of the ball release scores 87 % of R^2 value these are the values are greater than the table value so it significant at the selected level of 0.05.

Discussion on findings.

The calculated correlation coefficient for a set of anthropometric factors as of publication. In medium pace bowling, only the subjects' arm length had a discernible impact on their performance. Height of the ball release has a major impact on player performance in medium-pace bowling, according to biomechanical considerations. The factors that have a strong overall association with performance must have influenced the subject's performance in medium tempo bowling. The presence of other factors does not rule out the possibility that those factors impacted performance. The performance benefits from their presence. The null hypothesis is denied, but the hypothesis is accepted for other factors since the results showed a significant association between a few chosen biomechanical and anthropometric variables and players' performance in medium pace bowling.

Conclusions

Bases on the analysis and within the limitations of the present study the following conclusions can be drawn.

1. In anthropometric variable arm length has shown positive effect on the performance of cricket player in medium pace bowling
2. In biomechanical variable only height of the ball release shown relationship of cricket player in medium pace bowling.

Recommendations

Based on the conclusions drawn in this study, the following recommendations are made.

1. The results may be used by physical Education Teacher while selecting the cricket players.
2. While selecting Players the variables such as arm length and leg length may be kept in mind as the factors contributing to the performance of players of in medium pace bowling.
3. The results of the study may be helpful to the Physical Education Teachers and coaches to evaluate the performance of their players.
4. The results of the study may be used by the cricket players for self-evaluation of their performance.
5. Similar studies may be conducted by using sophisticated equipment’s and subjects of different level and sex.

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A STUDY OF EFFECT OF INTEGRATED EXERCISE TRAINING MODULE ON AGILITY OF VOLLEYBALL PLAYERS OF MUMBAI

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Abstract

Context:

Motor Fitness Components include power, speed, balance, coordination, accuracy, and agility. Reaction time is also considered by some to be a component of motor fitness; however, some also contend that it is a type of speed, i.e. "reaction speed ". Improvements in endurance, stamina, strength, and flexibility come about through conditioning / training. Training refers to activity that improves performance through a measurable organic change in the body. Concurrently, improvements in coordination, agility, balance, and accuracy are developed through practice. Practice refers to activity that improves performance through changes in the nervous system. Power and speed are adaptations of both training and practice. These study results help to interpret that the Integrated Exercise Training were useful in improving Motor Fitness Components Time of Volleyball Players. The improvement has been recorded in Motor Fitness Components by decreased time in seconds of the Volleyball players.

Aims

To compare the adjusted mean scores of Agility of state level Volleyball players of the Integrated Exercise Training Group and Control Group by taking Pre- Agility as co-variate.

To compare the adjusted mean scores of Balance of state level Volleyball players of

Keywords: *Volleyball, Motor Fitness Components (Agility), Integrated Exercise Training*

Introduction

INTEGRATED TRAINING

Integrated training takes the best of all types of training and puts it together into one useable format. There are many benefits to be had from different types and styles of training. Unfortunately, most people do not experience enough variety in their exercise programs and they miss out. Here is a partial list of exercise components that can be sampled and included into almost anyone's fitness routine; cardio (long, slow training, medium intensity intervals, high intensity intervals and more), weight training, balance training, plyometrics, speed-agility-quickness training, core training, body weight training and so on. One can draw from; rehabilitation principles, yoga, pilates, sports conditioning, tai-chi, martial arts, dance, power lifting or any other discipline. So don't get caught in a rut or miss experiencing the entire spectrum of benefits of an integrated and varied exercises program. Just start slow and keep adjusting all aspects of your program every 4-6 weeks to get the most out of your program (Beard, 2021).

Integrated training refers to a training program that incorporates or integrates multiple types of exercise together into a single program. An example of an integrated training program is one that includes

flexibility, core work, balance training, resistance training, and cardio respiratory exercises together into a single workout session or routine (National Academy of Sports Medicine, 2021

MOTOR FITNESS COMPONENTS

Fitness in motor skills is essential in activities such as volleyball, basketball, racquetball, golf, hiking, soccer, and water skiing. Good skill-related fitness also enhances overall quality of life by helping people cope more effectively in emergency situations. The components of motor skill-related fitness are agility, balance, coordination, power, reaction time, and speed (Werner W. K. Hoeger, 2009):

1. **Agility:** the ability to change body position and direction quickly and efficiently. Agility is important in sports such as basketball, soccer, and racquetball, in which the participant must change direction rapidly and at the same time maintain proper body control.

Objectives of the study

The integrated exercise training module coupled with proper implementation of Motor Fitness, Psychological Parameters and Skills could help the Volleyball players to demonstrate better overall performance. This could also help them in reducing the stress level decrease anxiety during the matches especially in very crucial situations. Further no advance researches have been conducted so far on this 14 topic. The benefits of this research will help future Volleyball players to improve their performance; hence it has a social relevance

OBJECTIVES OF THE STUDY

Objectives of the research are as follows

- To compare the adjusted mean scores of Agility of state level Volleyball players of the Integrated Exercise Training Group and Control Group by taking Pre- Agility as co-variate.

HYPOTHESIS

H01: There is no significant difference in the adjusted mean scores of Agility of state level Volleyball players of the Integrated Exercise Training Group and Control Group by taking Pre-Agility as co-variate.

Methodology

Setting and Design

To see the efficacy of Integrated Exercise Training Module researcher will conduct the experiment. The experiment will be planned on the basis of the principles of a parallel group-experimental design, which considers pre-test, treatment and post-test. The researcher will conduct test of Psychological Parameters i.e. Stress before Pre-test & after Post test

Non-Equivalent Control Group Design

The subjects in the experiment were divided into two groups one experimental group and one control group; each group consisting of 30 subjects. Experimental group was given Integrated Exercise Training for the period of 12 weeks.

The researcher will select 60 (n-60) Volleyball players from Mumbai. They will be divided into two group's i.e. experimental group and control group. Both the groups will be pre-tested, after pre-testing the subject of the experimental group will undergo 2 weeks training programme, whereas the controlled group did not receive any special training

SELECTION OF VARIABLES

B INDEPENDENT VARIABLE

Integrated Exercise Training programme is superset training which combination of Exercise and Meditation is

Motor fitness Components

The following criterion measures were included to record the reading of test items.

Variables	Test	Unit
Agility	4 x 10 shuttle run	Time in second

Treatment

The following specific training for 12 weeks training

Sr. No.	Exercise
1.	Push-Ups
2.	Lateral Dumbbells Lunge
3.	Ladder Drill Exercise
4.	Medicine Ball Throw
5.	Foot Ankle Hops
6.	Lateral Cone Hops
7.	Lateral Jump with Single Leg
8.	Depth Jump
9.	Figure of 8 Exercise
10.	Squat Jump
11.	Box Drill
12.	Medicine Ball Scoop Throw
13.	Om Chanting
14.	Meditation

STATISTICAL PROCEDURE

The data was analyzed using the following statistical techniques: Descriptive statistics was used to process the data. One Way ANCOVA (Analysis of Covariance) was applied.

GROUP WISE COMPARISON OF ADJUSTED MEAN SCORES OF SPEED

4.2.2 GROUP WISE COMPARISON OF ADJUSTED MEAN SCORES OF AGILITY

The Objective was to compare adjusted mean scores of Agility of Volleyball

Players of Integrated Exercise Training Group and Control Group by considering their

Pre-Agility as covariate. Here Integrated Exercise Training Module was Independent Variable. Pre-Agility was one Covariate and Post-Agility was the Dependent Variable. Thus, the data were analysed with the help of One Way ANCOVA and the results are given in Table 4.2.

Table 4.2: Summary of One Way ANCOVA of Agility of students by taking their Pre- Agility as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Integrated Exercise Training	1	80.70	80.70	366.17	p<0.01
Error	59	13.00	0.22		
Total	**61**				

From Table 4.2, it can be seen that the adjusted F-Value is 366.17 which is significant at 0.01 level with df= 1/59. It indicates that the adjusted mean scores of Agility of Volleyball Players of Integrated Exercise Training Group and Control Groups differ significantly when their Pre-Agility was taken as Covariate. Thus, the null hypothesis that there is no significant difference between adjusted mean scores of Agility of Volleyball Players of Integrated Exercise Training Group and Control Group by considering their Pre-Agility as covariate is rejected. Further, the adjusted mean scores of Agility of students of Integrated Exercise Training Group is 12.14 which is significantly lower than those of Control Group whose adjusted mean score of Agility is 14.43. It may, therefore, be said that Agility of Volleyball Players treated through Integrated Exercise Training was found to be significantly superior to Control Group when groups were matched in respect of their Pre-Agility Time. The result also has been graphically presented in Figure 4.2.

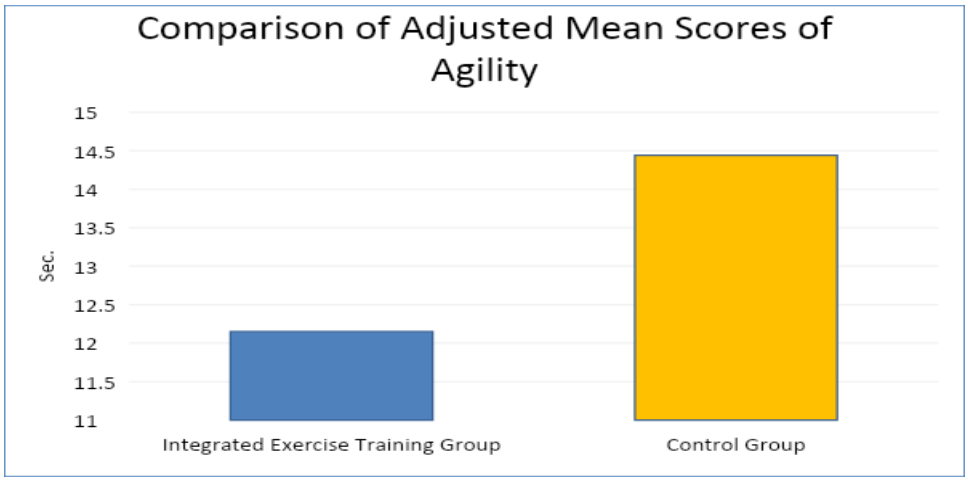

Figure 4.2: Group wise comparison of Adjusted Mean Scores of Agility of Volleyball Players

Results

Motor Fitness

A) Treatment Wise Comparison of Adjusted Mean Scores of Agility

The adjusted mean scores of Agility of Volleyball Players of Integrated Exercise **Training Group and Control Group, as obtained from ANCOVA test revealed that** –

The adjusted mean scores of Agility of Volleyball Players of Integrated Exercise Training Group and Control Groups differ significantly when their Pre- Agility was taken as Covariate (Fy.x= 15.33, df=1/59, p<0.01). The adjusted mean score of Agility of students of Integrated Exercise Training Group is 12.14which is significantly higher than those of Control Group whose adjusted mean score of Agility is 14.43 Thus, the overall performance in adjusted Mean Scores of both the Integrated Exercise Training Group and Control Groups of Volleyball Players were not equal.

These results help to interpret that the Integrated Exercise Training were useful in improving Agility of Volleyball Players. The improvement has been recorded in Agility by reduced scores of the Volleyball players.

Conclusion : Integrated Exercise Training was useful in improving Motor Fitness Componnts such as, Agility of volleyball players aged 12 to 16 years in Mumbai.

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COMPARISON OF BODY MASS INDEX, MUSCULAR STRENGTH, FLEXIBILITY AND WELLBEING OF SCHOOLS STUDENTS OF AIDED AND UNAIDED OF MUMBAI

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Abstract

Few people do practice in daily life for sound mind and sound body. During the Pandemic (Covid 19) it was not possible for schools to organize physical activities. This study aims to compare the Body Mass Index, Flexibility, Muscular Strength and Psychological Wellbeing of students of Aided and Unaided schools of Mumbai City. The researcher conducted a survey on various Aided and Unaided school students situated in Dadar city. Around 200 school students aged 12-15years (100 students from Aided schools and 100 students from unaided schools) were selected for the research. The test included for the present study were , measuring height and weight for BMI, sit and reach test for Flexibility, Standing Broad Jump test for Muscular Strength and a questionnaire for testing Psychological Wellbeing.

Keywords: *BMI, Flexibility, Muscular Strength, Wellbeing, Aided, Unaided*

INTRODUCTION

Regular physical activity is an essential for normal growth and development. Through physical activity children become fitter and healthier. The programme of physical education is intended not only to achieve physical fitness but also optimum organic health, emotional stability, social adaptability to take proper decisions and develop skills that will enable a child to participate in various activities. In India, children become far less active as they move through adolescence and it is found that obesity is increasing among children. Without physical education and sports, this cannot be achieved. Buildup of sound body leads to the best spirit, the sportsman spirit true of the term. Physical Education, which is an integral and vital part of education at every level of education system, helps not only the development of a healthy body but also prepare the learner to face harsh realities of life and meet the challenges. One of the major objectives of physical education is obviously to promote fitness or health in rise with population. The decline in fitness during the middle age years have been positively correlated with the decrease in amount of physical activity.

Objectives

To compare the mean scores of BMI of students of aided and unaided schools of Mumbai city

To compare the mean scores of Muscular Strength of students of aided and unaided schools of Mumbai city

To compare the mean scores of Flexibilities of students of aided and unaided schools of Mumbai city

To compare the status of Psychological Well-being of students of aided and unaided schools of Mumbai City

Hypothesis

Ho1 : There is no significant difference in mean scores of Body Mass Index between students of aided and unaided schools of Mumbai city.

Ho2 : There is no significant difference in mean scores of muscular strengths between students of aided and unaided schools of Mumbai city as measured by standing broad jump.

Ho3 : There is no significant difference in mean scores of flexibilities between students of aided and unaided schools of Mumbai city as measured by sit and reach test.

Ho4 : There is no significant difference in mean gain scores of psychological well-being between students of aided and unaided schools of Mumbai city as measured by a questionnaire

Methodology

The data on Body Mass Index, Flexibility, Muscular Strength and Psychological Wellbeing of aided and unaided schools of Mumbai city.

Data Analysis

data is analyzed by using independent sample 't' test. The comparison of Mean scores between Aided and Unaided school students was done by independent sample 't' test. The data is presented, analyzed and interpreted in the following manner.

Table 1: Mean, SD, N and t-value of Muscular Strength

Test	Mean	SD	N	t-value		Remarks
Unaided School Students	5.81	1.64	100	2.20*	OR	P>0.05
Aided School Students	5.32	1.50	100			

Table 1 revealed that the t-value is 2.20 which is significant at 0.05 level with df =198. It indicates that mean scores of Muscular Strength of Aided and Unaided School students differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Muscular Strength of Aided and Unaided Schools is rejected. The mean scores of Muscular Strength of Unaided School Students is 5.81 which is significantly higher than aided School Students which is 5.32. It may therefore be said that Muscular Strength of Unaided School Students is superior to Aided School Students.

Table 2: Mean, SD, N and t-value of Body Mass Index

Test	Mean	SD	N	t-value		Remarks
Unaided School Students	1.55	.31	100	2.22*	OR	P>0.05
Aided School Students	1.45	.27	100			

Table 2 revealed that the t-value is 2.22 which is significant at 0.05 level with df =197. It indicates that mean scores of Body Mass Index of Aided and Unaided School students differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Body Mass Index of Aided and Unaided Schools is rejected. The mean scores of Body Mass Index of Unaided School Students is 1.55 which is significantly higher than Unaided School Students which is 1.45. It may therefore be said that BMI of Unaided School Students is superior to Aided School Students.

Table 3: Mean, SD, N and t-value of Flexibility

Test	Mean	SD	N	t-value		Remarks
Unaided School Students	4.11	2.22	100	0.94*	OR	p>0.05
Aided School Students	3.81	2.26	100			

Table. 3.2 revealed that the t-value is 0.94 which is not significant at 0.05 level with df =198. It indicates that mean scores of Flexibility of Aided and Unaided School students do not differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Flexibility of Aided and Unaided Schools is not rejected. The mean scores of Flexibility of Aided School Students is 3.81 which is significantly not higher than Unaided School Students which is 4.11. It may therefore be said that Aided School Students and Unaided School Students are equal.

Table 4: Mean, SD, N and t-value of Psychological Wellbeing

Test	Mean	SD	N	t-value		Remarks
Unaided School Students	188.17	25.85	100	3.66*	OR	P<0.05
Aided School Students	175.07	24.62	100			

Table. 4 revealed that the t-value is 3.66 which is significant at 0.05 level with df =198. It indicates that mean scores of Psychological Wellbeing of Aided and Unaided School students differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Psychological Wellbeing of Aided and Unaided Schools is rejected. The mean scores of Psychological Wellbeing of Unaided School Students is 4.11 which is significantly higher than Aided School Students which is 3.81. It may therefore be said that Psychological Wellbeing of Unaided School Students is superior to Aided School Students.

Conclusion

In case of school students(boys) there is significant difference between Muscular Strength, BMI and Psychological Wellbeing. On, the contrary, there is no significance difference in Flexibility between Unaided and Aided school students.

It indicates that all the schools provide freedom to learn and enjoy new experiences. Both the Unaided and Aided schools gives liberty to students to be more imaginative, sensitive, Appreciation for art, emotion, adventure, unusual ideas, variety of experiences and most Importantly to be unique.

Schools teaching methodology follow certain set of curriculum which let students to enjoy human interactions and to be enthusiastic, talkative, assertive and gregarious. Apart from this, they tend to work and study in such situation which involves large social gatherings. Activity based learning is widely followed which develop a tendency of self-discipline, Act dutifully and aim for achievement. School even which help students to express their Feelings and emotions well are strengthened positive physical, emotional and mental state through learning process.

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COMPARISON OF JOB SATISFACTION OF PROFESSIONAL AND NON-PROFESSIONAL VOLLEYBALL PLAYERS OF MUMBAI

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Abstract

A worker in a job are not machine, but contributors to production. The happier people are within their job, the more satisfied they are said to be. Thus, job satisfaction describes how content an individual is with his or her job. It is not the same as motivation. It is job design whichenhances job satisfaction and performance. The other influences on satisfaction are the management style and culture, employee involvement, empowerment and autonomous work groups. There is considerable impact of the Non-professional volleyball players for nature of hiswork and the level of overall Job satisfaction. Professional volleyball players are more satisfiedin their job than the Non-professional volleyball players recruited through volleyball game. There is aspect such a feeling of the sense of achievement and independence autonomy. Job satisfaction scale e is a combination of field of Psychology, Education and Sociology to providethe comparison of the subjects. The main objective of the study was to compare the Mean Scoresof Professional Volleyball Players and Non-Professional Volleyball Players of Mumbai. It wasa Comparative Study based on Descriptive Research. The data was collected from the selected professionals volleyball players and non-professional volleyball player of Mumbai had selectedas sample for the present, who are employed in bank, railway, police, companies, Mb.P.T., R.C.F. And volleyball club's in Mumbai through questionnaires filled by the volleyball players.The scores were allotted according to the answers submitted by the teachers and the analysis was done through Independent Sample t-Test. The results of professionals volleyball players and non-professional volleyball player Job satisfaction scale was significant (in which the t-value was 0.23, $p<0.05$ level with $df=88.47$). The Job satisfaction of professional's volleyball playersis more than non-professional volleyball players.

INTRODUCTION

Humans have encountered many issues in every career, and most productive research has produced a number of solutions as one of the necessary jobs. Since the beginning of time, peoplehave been operating at a stress level that is ideal for producing the wonders that the world has witnessed. The stress factor is very erratic; depending on how it varies, the output of the work may also alter, either increasing or decreasing. As a result, one of the most crucial elements toconsider, especially in all fields, is job happiness.

Objective:

To Compare mean scores of Job satisfaction of Professional volleyball and non- professional volleyball players of Mumbai.

Hypothesis:

H01: There is no Significant Difference in Mean Scores of Job satisfaction of Professional andnon-professional volleyball players of Mumbai.

Methodology

The Scores of volleyball players were collected through to the Questionnaire Job Satisfaction Scale by Dr. T S Nanjundeswaraswamy.

SAMPLE

The 50 professionals and 50 non-professional volleyball player, who are employed in bank,railway, police, companies, MB.P.T. R.C.F. And volleyball club's in Mumbai has selected as sample for the present study.

CRITERION MEASURES

Variable – Job Satisfaction

Tested with – Job satisfaction scale Questionnaire developed by Dr. T S Nanjundeswaraswamy, J S S Academy of Technical Education, Bangalore, India.

The data were analyses with help of **Independent Sample t-Test** method of statistical techniques.

RESULT

The Mean Scores of Job Satisfaction of Professional and Non-Professional Volleyball Player Job satisfaction scale Questionnaire, as obtained from Independent Sample t-Test, revealed that

Table -1: Mean, SD, N and t-value of Job satisfaction

Test	Mean	SD	N	t-value		Remarks
Professional Volleyball Players	**165.22**	**17.36**	**50**			
Non-Professional Volleyball Players	**164.26**	**24.41**	**50**	**0.23***	**Or**	**p>0.05**

The table-1 revealed that the t-value is 0.23 which is not significant at 0.05 level with df =88.47. It indicates that mean scores of Job satisfaction of Professional and Non-ProfessionalVolleyball Players Group do not differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Job satisfaction of Professional and Non-ProfessionalVolleyball Players Group is not rejected. The mean scores of Job satisfaction of Professional Volleyball Players is 165.22 which is significantly higher than Non-Professional Volleyball Players which is 164.26. There is significant difference in mean scores of Job Satisfaction of Professional and Non-Professional Volleyball Players. The study shows that job satisfaction professional volleyball player found to be significantly higher as compared to non-professional volleyball player.

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EFFECT OF SELECTED YOGIC EXERCISES FOR THE PROMOTION OF THE PHYSICAL FITNESS AS MEASURED BY AAHPER YOUTH FITNESS FOR BOYS OF THE AGE GROUP 14 TO 16 YEARS

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Abstract

Man has made tremendous progress in almost every walk of life. Things once considered impossible has been achievable, due to scientific development. Yogic Breathing exercises helps to force out the air build-up in lungs and which helps to increase the oxygen level and strengthens the diaphragm. The researcher has conducted a study on selected yogic exercises for the promotion of the Physical Fitness as measured by AAHPHER Youth Fitness as measured by AAHPHER Youth Fitness Test for Boys of the Age Group 14 TO 16 Years been undertaken. The research scholar conducted an experiment by divided into two group one experimental group and one control group, each group consisting of 20 subjects. Training Programme was carried on the period of six weeks. The study finding showed that the implementing Yogic exercises showed a remarkable improvement in shuttle Run,50 Yard Dash ,600 yard run/walk, pull ups, sit up and standing broad jump. Yoga exercises can be considered as an integral part of physical fitness training as well as coaching.

***Keywords**: Yogic Exercises*

INTRODUCTION

Exercise is the planned, structured, repetitive, and purposeful movement of the body which is designed to improve or maintain physical fitness e. g. pushups, squats, running, etc. All the above factors should be considered to get the benefit of any exercise. When exercising, the body needs additional energy as the muscles need to do the extra work and on the other hand, Yoga is a very ancient discipline. In modern time school going children are driven to the life style which includes excessive homework, cut throat competition causing stress, heavy school bag causing back problem. Yoga makes the organ of the body active in their functioning and has good effect on internal functioning of the human body.

METHODLOGY

The research scholar conducted an experiment by divided into two groups' one experimental group and one control group, each group consisting of 20 subjects. Training Programme was carried on the period of six weeks. The study finding showed that the implementing Yogic exercise resulting improvement in shuttle run,50-yard dash ,600 yard run/walk, pull ups, sit up and standing broad jump.

Objectives of the study

- To discover whether general physical fitness as measure by AAHPER Test can be improved with the selected Yogic exercises.

- To evaluate the effect of selected Yogic exercises on the various physical fitness components as described by AAHPER

Hypothesis

The null hypothesis sought to be tested were as under: -

HO1 : There is no significance difference in adjusted mean scores of 50-yard dash of school students of Experimental Group and Control Group by taking pre 50-yard dash as covariate.

HO2 : There is no significance difference in adjusted mean scores of 600 yard run/walk of school students of Experimental Group and Control Group by taking pre 600 yard run/walk as covariate.

HO3 : There is no significance difference in adjusted mean scores of pull ups of school students of Experimental Group and Control Group by taking pre pull ups as covariate.

HO4 : There is no significance difference in adjusted mean scores of sit up of school students of Experimental Group and Control Group by taking pre sit up as covariate.

HO5 : There is no significance difference in adjusted mean scores of standing broad jump of school students of Experimental Group and Control Group by taking pre standing broad jump as covariate.

Research Methodology and Analysis

Study Design & Sample

The experiment considered as experimental group which was compared with a parallel control group. The sample of 40 male subjects was selected at random from Hiranadani Foundation School, Pawai, Mumbai of the age group of 14 to 16 years.

Results

Development of selected variables : As seen from the table the improvement for 50-yard Dash is -0.30, 600 Yard run is- 9.12, Shuttle Run is -0.26, Pull ups is + 2.35, and Sit up is +1.70 but there is no significant difference for shuttle run and standing Broad Jump

The Comparison of group mean gain in selected variables : The mean changes in the scores of the tests of the experimental and control group after completing experimental period of six weeks is presented in Table 1. The individual items are seen statistically 50 yards dash, the difference is -0.30, in standing broad jump the difference is +0.11, in 600 yard -9.12 and Pull ups is +2.35, Shuttle Run is -0.26 and Sit up is +1.70.

Shuttle Run : The comparison of mean changes in the shuttle run of the control and the experimental group before and after yogic training are presented. The mean difference of control group is -0.26 which is not significance the means difference of experimental group are -0.32 which is shown after training. The ‘t‘ value of control group is 0.2386 and the; t; value of experimental group is 1.1812 thus the null hypothesis is rejected.

50 Yard Dash : The mean changes in the 50 yard of the control group and experimental group before and after yogic training., mean difference of experimental group of -0.24, control group is not significant experimental group is significant

600 Yard Run Walk : The comparison of mean changes in 600 yard Run / Walk OF THE control group and experimental group before and after yogic training. The score is presented in second and minutes. The difference of control group is -0.47 and the mean difference of the experimental group are -9.59, Control group is non– significant and experiment group is significant.

Pull ups : The mean difference control group is -0.15 and the experimental group is +2,20. Control group is non-significant.

Sit Ups : The mean changes in sit up of the control group and experimental group before and after Yoga Training Period. The men difference of Control group is 0,50 it indicates that it is non –significant and mean difference of the experimental group is 2.20.

Standing Broad Jump : The difference within the control group and experimental group it will be seen that the mean difference of the control group is 0.09 and the mean difference of the experimental group is 0.20, Experimental is significant. 50 yards Dash, 600 Yard Run /Walk. Pull Ups, Sit Ups and Standing Broad jump are significant at 0.1 level. But the result of Shuttle run shows non- significant. Gharote and Ganguly studied on the effect of Yogic exercise for physical fitness.

The results have been presented in table 1 and Table 2.

Table 1. Comparing of Mean Gain

Pull-ups	Control Experiment	Counts	6.50+1.20 6.10+1.12	6.35+1.14 8.30+1.22	-0.15 +2-20	0.3797 0.3799	0.3950 5.7909	P> 0.5 P-<0.1
50 Yards Dash	Control Experiment	Sec	8.40+0.17 8.25+0. 18	8.46+0.19 8.01+0.12	+0.06 -0.24	0.0585 0.0496	1.0256 4.8380	P> 0.5 P-<0.1
Sit up	Control Experiment	Counts	13.30+2.15 12.40+2.06	13.80+1.64 14.60+1.85	+0.50 +2.20	0.6203 0.6351	0.8061 3.4640	P> 0.5 P-<0.1
Standing B.J	Control Experiment	Feet/ Inch	3.00+0.26 2.99+0.22	3.09+0.30 3.19+0.21	+0.09 +0.20	0.0910 0.0697	0.9890 2.8694	P> 0.5 P-<0.1
Shuttle Run	Control Experiment	Sec	15.76+0.77 15.72+0.84	15.70+0.78 15.40+0.83	-0.06 -0.32	0.2514 0.2709	0.2386 1.1812	P> 0.5 P-<0.1
600 Yards run	Control Experiment	Min/ Sec	137.30+6.05 140.15+5.22	136.87+6.13 130.56+5.98	-0.47 -9.59	1.9758 1.8210	0.2378 5.2663	P> 0.5 P-<0.1

Table 2. Mean Gain in Selected Variables between Group

Variable	Group	Score Unit	Mean Gain	Difference	S.E	"t"	Level of Significance
Pull-ups	Control Experiment	Counts	-0.15 +2.20	+2.35	0.3896	6.0318	P<0.1
50 Yards Dash	Control Experiment	Sec	+0.06 -0.24	-0.30	0.0555	5.4054	P<0.1
Sit up	Control Experiment	Counts	+0.50 +2.20	+1.70	0.6441	2.6393	P<0.1
Standing B.J	Control Experiment	Feet/inch	+0.09 +0.20	+0.11	0.0832	1.3221	P>0.5
Shuttle Run	Control Experiment	Sec	-0.06 -0.32	0.26	0.2681	0.9697	P>0.5
600 Yards run	Control Experiment	Min/sec	-0.47 +9.59	-9.12	1.9494	4.6784	P<0.1

CONCLUSION

Within the limit of the present study it may be concluded that selected training of yogic exercise contributes to improvement in 50 Yards Dash, 600 Yard/Walk, Pull Ups, Sit Up and Standing Broad Jump.

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EFFECT OF FOOTBALL TRAINING PROGRAMME ON SELECTED MOTOR FITNESS COMPONENTS OF STUDENTS OF MUMBAI CITY

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Abstract

There is a great scope and need for research in Physical Education for applying Football The present study aimed at collecting scientific evidence about the effect of Football Training Programme for the development of Motor Fitness of students. Aims: The view of literature does not indicate any studies to investigate the effect of Football Training Programme for the development of Motor Fitness of students. 20 School Boys were randomly assigned to experimental (n=20) and control (n=20) groups. Experimental group was given football training program for the period of eight weeks. The control group has not undergone any training programme. At the baseline and after training intervention Endurance, Cardiovascular Endurance, Power, Speed, Agility were used to assess the levels of Motor Fitness. Data were analyzed by using One Way ANCOVA test. The results revealed that the football training was found helpful to improve the selected Motor Fitness Components and reduce the Stress level of the school students. The findings help to conclude that the football training was found helpful to improve the selected Motor Fitness Components and reduce the Stress level of the school students.

Introduction

Football is a game of constant action and requires continuous adaptation to changing situations by the team as whole, as well as by individual players. Although it is a team game, there is ample room for players to display their brilliance through individual performance with the ball as well as through team play involving improvisations and tactical knowledge. As in most other sports, the skills of football can be practiced in an area of any size and on almost any type of surface**.** Football played by millions of people all over the world and watched by billions on television, football is a relatively young sport. But it is also true games involving kicking a ball have been enjoyed for thousands of years virtually round the globe. The ancient Romans played a ball game called harpastum that was played with a modern football-sized ball. Cuju, a very similar game to modern football was played in ancient China, while the indigenous Australians enjoyed a game called woggabaliri that involved kicking a game as well. But while the roots of football cannot be determined, the birthplace of the modern sport can

Objective of the Study

To compare the adjusted mean scores of Muscular Endurance and Cardiovascular Endurance of School Boys of Football Training Group & Non-Football Training Group by considering Pre Muscular Endurance and Cardiovascular Endurance as a Covariate.

Hypothesis of the Study

H_{01}: There is no significant difference in adjusted mean scores of Muscular Endurance and Cardiovascular Endurance of School Boys of Football Training Group & Non-Football Training Group by considering Pre-Muscular Endurance and Cardiovascular Endurance as a Covariate.

Methodology

A sample of forty (n=40) boys were randomly selected for the study of age ranging between 12-14 years of Mumbai city.

Statistics:

Comparison of group was done with the help of One Way Analysis of Covariance ANCOVA.

Results

The mean achievement in Muscular Endurance and Cardiovascular Endurance due to Football Training Programme, as obtained from ANCOVA test, revealed that –

Summary of One Way ANCOVA of Muscular Endurance by taking Pre-Muscular Endurance as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Group	1	156.06	156.06	23.61	p<0.01
Error	37	244.53	6.61		
Total	39	1798.40			

There was no significant difference in adjusted mean scores of Muscular Endurance of Students of Football Training Group and Non-Football Training Group by taking Pre-Muscular Endurance as covariate (Fy.x=23.61, df=1/39, p<0.01). Therefore, the adjusted mean scores of Muscular Endurance of Football Training Group is 35.18 which is significantly higher than that of Non-Football Training Group where adjusted mean score of Muscular Endurance is 30.22. Thus, Football Training was found to be effective in improving Muscular Endurance of Students of than Non-Football Training Group where Pre-Muscular Endurance was taken as covariate.

Summary of One Way ANCOVA of Cardiovascular Endurance by taking Pre-Cardiovascular Endurance as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Group	1	250.73	250.73	157.80	p<0.01
Error	37	58.79	1.59		
Total	39	501.75			

There was significant difference between adjusted mean scores of Cardiovascular Endurance of Students of Football Training Group and Non-Football Training Groups differ significantly when Pre-

Cardiovascular Endurance was taken as covariate (Fy.x=157.80, df=1/39, p<0.01). Therefore, the adjusted mean scores of Cardiovascular Endurance of Football Training Group is 39.90, which is significantly higher than that of Non-Football Training Group where adjusted mean score of Cardiovascular Endurance is 34.85. Thus, the Football Training was found to be effective in improving Cardiovascular Endurance of Students of Football Training Group than Non-Football Training Group where Pre-Cardiovascular Endurance was taken as covariate.

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EFFECT ON DANCE ON HEALTH-RELATED PHYSICAL FITNESS COMPONENTS OF INTELLECTUALLY DISABLED STUDENTS

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Abstract

The purpose of this study is to measure the effect of dance (aerobic) on Cardio vascular Endurance and Muscular Endurance of intellectually disabled students. For this study Experimental and control group were selected from St. john the Baptish Special school , Thana . Total fifty (50) intellectually disabled students were taken and was equally divided into 2 groups . With the help of purposive sampling techniques. 300 yard run and walk test and bent knee sit-ups was explain and demonstrated to the subjects. From both the group pre and post data collected. The collected data was analyses with the help of independent sample 't' test (spss-statistical package for social science)the result of muscular endurance was significant at 0.05 level and 't' value was -4.83, (p<0,05)and the result of cardio vascular endurance 't' value was -1.69 which is not significant at 0.05 level . it was concluded that the training module was useful to students with intellectually disabled students for enhancing their muscular endurance and very lace improvement found in cardio vascular endurance .

Keywords- *Cardio Vascular endurance, Muscular Endurance, Intellectually Disabled, Aerobic Dance.*

INTRODUCTION –

Physical fitness and health are the integral part of human life, fitness and wellness of a person are connected to each other. Dance is a form of exercise and it is one of the best way to loose fat , increase muscle tone and to improve the quality of your life to help you to feel better, look better and also relive stress. Dancing is generally consider an art because there are specific steps or foot movement that need to be observe and followed when one is dancing to a certain type of music. "Aerobic " means literally "with oxygen" in opposition to " anaerobic" , which means without or with little oxygen . It is a good way to utilize time, an even better way to loose weight an excellent way to keep the body fit, the aim is behind the aerobics is to increase the bodys intake of oxygen and dance aerobic is an amazing and exiting way to do so. Aerobic dance is whole some exercise and has several benefits for all ages.

OBJECTIVES

- To compare the adjusted Mean Scores of Cardiovascular Endurance of Students of Intellectually Disable Students of experimental group and control group by taking pre-Muscular Endurance as Covariate.
- To compare the adjusted Mean Scores of Muscular Endurance of Students of Intellectually Disable Students of Experimental group and control group by taking pre-Muscular Endurance as Covariate.

HYPOTHESES

- There is no significant difference in mean gain score of Cardiovascular Endurance as measured by 300yard run and walk test between experimental group and control group.
- There is no significant difference in mean gain scores of Muscular Endurance as measured by bent knee sit-ups test.

METHODOLOGY

This study was made to investigate the usefulness of aerobic dance for enhancement of health related physical fitness of intellectually disable students. The test marks of students were collected as par pre training and post training. Some of the aspects related to the methodology as under;

SAMPLE

The students were selected from St. John the Baptish special school, Thana. The sample size was fifty (N-50). Twenty five (n-25) students were selected for experimental group and twenty five (n-25) for control group. After the collection of data, Independent Sample 't' test method (spss method) technique was used for data analyses.

RESULT

The objective was to compare adjusted mean scores of cardiovascular endurance and muscular endurance of intellectually disabled students of experimental group and control group by taking Pre-cardiovascular endurance and muscular endurance as covariate.

- In comparison of mean score there was no significant difference in cardiovascular endurance as measured by 300yard run and walk test.
- In comparison of mean score there was no significant difference in muscular endurance as measured by Bent knee sit-ups test.

. **Table 1 Comparison of Mean Gain of Control and Experimental Group**

Variable	Group Compared	Mean Gain	Mean Difference	STD Err Mean Gain	't'	Sig
Muscular Endurance	Control v/s Experimental	0.16 3.36	-3.20	0.33 0.57	-4.83	.111 P<0.05
Cardiovascular Endurance	Control v/s Experimental	-0.60 7.20	-0.56	0.16 0.29	-1.69	.798 P>0.05

- Table 1. revealed that the mean gain in case of Muscular Endurance for Expt. Group is 3.36 and for control group it is 0.16 the t- value is 4.83 which is not significant. Therefore, the null hypothesis sought 'There is no significant difference in mean gain scores of Muscular Endurance as measured by bent knee sit-ups test is rejected.
- Table 1. Also revealed that the mean gain in case of Cardiovascular Endurance for Expt. Group is 7.20 and for control group it is 0.60 the t- value is 1.69 which is significant. Therefore, the null

hypothesis sought There is no significant difference in mean gain score of Cardiovascular Endurance as measured by 300yard run and walk test between experimental group and control group is rejected

CONCLUSION

The training module was useful in improving muscular endurance and cardiovascular endurance of students with intellectual disability.

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A STUDY OF EFFECT OF HIGH INTENSITY INTERVAL TRAINING PROGRAMME ON THE BASIS OF POST SKILL PERFORMANCE ON HEART RATE RECOVERY OF JUDO PLAYERS OF MUMBAI

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Abstract

The purpose of the study was to determine the effect of HIIT Training on the basis of post skill performance on Heart Rate Recovery of Judo Players of Mumbai. This study is conducted to determine the effect of HIIT Training on the basis of post skill performance on Heart Rate Recovery of Judo Players of Mumbai. To compare the adjusted mean scores of post skill performance Heart Rate Recovery of judo players of Experimental Group and Control Group by taking pre post-skill performance Heart Rate Recovery as co-variate. Seventy female students aging 16 to 18 years were randomly assigned to experimental (n=35) and control (n=35) groups. The experimental subjects underwent HIIT training; five days in a week for twelve weeks whereas control group didn't participated in the HIIT training. At the baseline and after training intervention Heart Rate Recovery test through pulse count were conducted to assess the levels of Heart Rate Recovery. Data were analyzed by using One Way ANCOVA test. The results revealed that HIIT Training does not significantly decrease Heart Rate Recovery. The findings conclude that HIIT Training does not improve Heart Rate Recovery among female students of age 16 to 18 years.

***Keywords**: High Intensity Interval Training (HIIT) and Heart Rate Recovery*

INTRODUCTION

High Intensity Interval Training also termed as HIIT is a specific form of interval training with short bursts / periods of intense exercises combined with shorter recovery periods until too much exhausted to continue. It is to be done at near maximum intensity. It consists of sets and an individual practicing HIIT needs to push oneself to the max during every set. HIIT routines involves bodyweight work (example: squats) or added weights (example: medicine ball, etc.). It is effective on multiple fronts such as improved strength, endurance, improved metabolism, getting shredded, etc. HIIT can be done anywhere and at any place. Though there is no universal HIIT session duration, these sessions typically last for 20 to 45 minutes varying on individual participant's fitness levels. It consists of warming up, repetitions of HIIT exercises, recovery periods and cooling down. The number of repetitions and duration of each exercise depends on the exercise and its intensity. The common formula involves a 2 ratio 1 (2:1) of work / exercise to recovery periods. For example: 20 seconds of burpees with 10 seconds of recovery period/ break repeated to 8 sets. These 8 sets repeated to 5 sets or 6 sets depending on the participant's fitness capacity. It is considered to be the best workout in the least amount of time. Judo is a combat sport. Judo (柔道 jūdō, meaning gentle way) was created as a physical, mental and moral pedagogy in Japan, in 1882, by Jigoro Kano. It was evolved from traditional martial arts and 'jujitsu' which later got categorized as modern martial arts and

an Olympic sport. Judo is an individual sport in which two opponents compete against each other with a prime objective to throw the opponent to the ground on the back, immobilize with a hold, or force an opponent to surrender with a joint lock or a choke. A judo practitioner is called a judoka. Judo performance deals in great demand of physical power and great mental discipline. Judo offers students code of ethics that is a way of living and being. HIIT would prove to be an effective means to fulfill the physiological and physical demands required from a judo player. HIIT may also improve Heart Rate Recovery.

Objective of the Study:

- To compare the adjusted mean scores of post skill performance Heart Rate Recovery of judo players of Experimental Group and Control Group by taking pre post-skill performance Heart Rate Recovery as co-variate.

Hypothesis of the Study:

H_{01}: There is no significance difference in adjusted mean scores of Heart Rate Recovery of judo players of Experimental Group and Control Group by taking pre post skill performance Heart Rate Recovery as co-variate.

Methodology

A sample of sixty (n=70) female students of aging 16 to 18 years were identified as subjects from Lords Universal Junior College of Commerce & Science, Goregaon (W) 400104. After the data collection Comparison of group was done with the help of One Way Analysis of Covariance ANCOVA.

Results

Effect of High Intensity Interval Training on Heart Rate Recovery.

There was no significant difference between adjusted mean scores of Heart Rate Recovery of College Students (Girls) of High Intensity Interval Training Group and Non-High Intensity Interval Group by taking Pre Heart Rate Recovery as covariate (Fy.x.=3.543, df=1/69, p>0.05). Therefore, the adjusted mean scores of Heart Rate Recovery of College Students (Girls) of High Intensity Interval Training Group is 87.376. This does not differ significantly than that of Non-High Intensity Interval Training Group where adjusted mean score of Heart Rate Recovery is 86.396. Thus, the overall performance scores of both the groups High Intensity Interval Training Group and Non-High Intensity Interval Training Group of Heart Rate Recovery were equal.

This result helps to interpret that the effect of High Intensity Interval Training was not helpful in reducing the Heart Rate Recovery of College students (Girls).

Conclusion

The result of the study helps to conclude that the High Intensity Interval Training was not found helpful to improve the Heart Rate Recovery of College students (Girls).

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SPECIFIC TRAININGPROGRAMME ON AGGRESSION OF KABADDI PLAYERS

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Abstract

There is a great scope and need for research in Physical Education for applying For Specific Training Programme for reduction of Aggression of students. The present study aimed at collecting scientific evidence about the effect of Specific Training Programme for reduction of Aggression of students. The view of literature does not indicate any studies to investigate the effect ofSpecific Training Programme for the reduction of Aggression of students. 20 School Boys were randomly assigned to experimental (n=20) and control (n=20)groups. Experimental group was given Specific training program for the period of eight weeks. The control group has not undergone any training programme. Data were analyzed by using One Way ANCOVA test. The results revealed that the Specific training was found helpful to reduce theAggression level of the school students.

Kywords: *Aggression, Specific Training*

INTRODUCTION

There has been a gradual but significant change in the trends of the game since the past 50 years. What was once considered a game of brawn is not so now. The introduction of mats, shoes, new techniques & changes in rules has made the sport more interesting and advantageous to skilled players who are now able to defeatheavier players with better skills & techniques.

Sport specific training is simply fitness and performance training designed specifically for athletic performance enhancement. Training programs for athletic performance enhancement could include such areas as strength, speed, power, endurance, flexibility, mobility, agility, mental preparedness (including goal setting), sleep, recovery/regeneration techniques and strategies, nutrition, rehabilitation, pre-habilitation, and injury risk reduction. A general program should include all of these components and a more specific program may only include a few,depending upon the athlete's specific needs (based on strengths, weaknesses and/or imbalances) and the demands of the sport they participate in. (http://www.finishfirstsports.com/sports-specific-training.html)

Aggression is a disorganising emotional response. It is due to frustration based on emotional disturbances and hosility. Environment is a cogent factor in arousing aggression. The latter, once aroused, may lead to hostile and destructive bahaviour. It is, in a sense, manisfestation of a self-assertive disposition and use of some kind of force. If the aggressor’s responses are evoked by stimuli in the situationquite often, he would show impulsive or expressive acts of behaviour. He may hurt his victim.

Objectives of the Study:

- To Compare Adjusted Mean Scores of aggression of School Boys of Kabaddi Training Group and Control Group By Taking Pre Aggression As Co-variate.

Hypotheses of the Study:

H_{01}: There is no significant difference in adjusted mean scores of aggression of Kabaddi players of Specific Training group and Controlgroup by taking pre - aggression as covariate.

Method

A sample of forty boys were randomly selected for the study of age ranging between 12-14 years were identified as subjects from St Antonio Da-silva High School, Dadar, Mumbai.

Research Design: (Pre-test and Post-test control group design)

The design of the experiment had been planned in three phase's viz., Phase – I: Pre-test, Phase – II: Training or Treatment, and Phase – III: Post-test. The subjects in theexperiment were divided into two groups, i.e. Group 'A' Experimental group and Group 'B' Control group; each group consisted of 20 subjects. Experimental group was given Specific training program for the period of eight weeks.

Selected Variable: Aggression

Treatment:

The specific Specific training was considered as independent variable for the presentstudy were: ***Squat Jump, Power Medicine Ball Over and Under throw, High knee, Butt Kick, Skipping, T Balance, Vrukshasana, Ball Dribbling, Figure of Eight, Zig-Zag Run, Ball Drop Drill, Lying on the ground and run drill***

Comparison of group was done with the help of One-Way Analysis of CovarianceANCOVA.

Results

Effect of Specific Training Programme on Aggression

There was no significant difference between adjusted mean scores of aggression of School Boys of Specific Training Group and Control Group by taking Pre Aggression as Covariate ($F_{y.x}$= 6.18 df=1/39,$p<0.05$). Therefore, the adjusted mean scores of aggressions of School Boys of Specific Training Group is 175.63 which is significantly lower than that of Control Group where adjusted mean Scores of Aggression of Control Group is 188.72. Thus, the overall performance scores of both the groups Specific Training Group and Control Group of Aggression were not equal.

These results help to interpret that the effect of Specific Training Programme were useful in reducing Aggression.

Conclusion

The result of the study helps to conclude that the Specific training was found helpfulto reduce Aggression of the school students.

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BODY IMAGE AND EATING DISORDER ON PERSONALITY TRAITS OF PRE-ADOLESCENCE BOYS

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Abstract

The body image of a preadolescent influences his or her eating habits which also determines his or her psychological behavior in various aspects. A change in eating habit can create positive effect on personality as well as his or her body image if it is identified at an early stage. Researcher conducted the study on one thousand two hundred (n=1200) boy's students of age 13 – 15 years were selected from various SSC, CBSE, ICSE Board schools of Navi Mumbai region was pulled as sample. For collection of data, standardized Questionaire from Experts such as Personality Traits, Professor R.D.Helode, Body Image शरीर की छवि: संशोधितस्व-आंकलनमापनी *Dr C.D Helode and Dr Ajay Karkare and eating Disorders EDI Questionnaire [Dr.Agashe and Karkare 2007] were used. The data of all the variables were primarily processed for descriptive statistics. Further, by using IBM SPSS-22 Software the data were analyzed by employing Linear Regression Analysis (Analysis of Variance). The Results revealed that Body image was a predominant factor in predicting personality dimensions in lonely boys, whereas a poor predictor in personality dimensions of Neuroticism boys. Eating disorder was a predominant factor in predicting personality dimensions in Extrovert boys, where as a poor predictor in personality dimensions of Neuroticism boys. It was also revealed that It was concluded that joint contribution of Body image and Eating disorder was found to be a poor predictor of personality dimensions of Neuroticism boys at 13.82%, whereas body image and eating disorder was found to be an equal and week predictor of personality dimension of Extrovert boys at 36.09%. Hence it is concluded that body image and eating disorder was found a higher predictor of personality dimension of lonely boys at 37.26%.*

INTRODUCTION

In the current scenario Physical health and mental well-being plays the crucial role for every individual around in the society. Across all age group everyone is conscious about how he or she looks. Well-being of a person depends upon the eating and water drinking habits of a person. Parents of modern age are very keen about their child's appearance. Abnormal body weight, dietary concerns, unusual behavior, abnormal weight gain and unhealthy weight loss are most important concerns among school going children. Eating disorders are among the most common psychi-atric disorders in modern generation students. Eating disorder is affecting millions of students and young generation worldwide. There is a common culture that focuses on weight loss and body image. Sometimes, this unhealthy eating behavior leads to eating disorders such as anorexia nervosa (characterized to refusal to eat), bulimia (consumption of more food than most of the other people) and binge eating disorders. Early detection and treatment improves or can bring adequate changes in health, fitness, personality as well as body image.

OBJECTIVE

- To study the individual contribution of Body image in predicting Personality Dimension Extrovert, Neuroticism and lonely of Boys School Students.
- To study the individual contribution of Eating Disorders in predicting Personality Dimension Extrovert, Neuroticism and lonely of Boys School Students.
- To study the joint contribution of Body image and Eating Disorders in predicting Personality Dimension Extrovert, Neuroticism and lonely of Boys School Students.

HYPOTHESIS

There is no significant individual as well as joint contribution of Body Image and Eating Disorders in predicting Personality Dimension Extrovert, Neuroticism and lonely of Boys School Students.

METHODOLOGY

The following methodological steps were taken in order to conduct the present study

Sample

To conduct the study Total One thousand two hundred (n=1200) boys school students of age 13 – 15 years were selected through simple random sampling method from various SSC, CBSE, ICSE Board schools of Navi Mumbai region.

Table of Sample Selected

GENDER	SSC	CBSE	ICSE	TOTAL
BOYS	400	400	400	1200

Result

Table 1: Contribution of Eating Disorder in predicting Personality Traits of Extrovert, Neuroticism and Lonely Boys

Personality Traits	Percentage Contribution of Eating Disorder in boys
Extrovert	17.83%
Neuroticism	6.14%
Lonely	15.92%

Results presented in table 1 revealed that eating disorder was a highest predictor in extrovert boys at 17.83%, as compared to Neuroticism at 6.14% which was the poor predictor than lonely boys at 15.92%.

Table 2: Contribution of Body Image in predicting Personality Traits of Extrovert, Neuroticism and Lonely Boys

Personality Traits	Percentage Contribution of Body Image in Boys
Extrovert	18.26%
Neuroticism	7.68%
Lonely	21.34%

Results presented in table 2 revealed that Body Image was a highest predictor in Lonely Boys at 21.34%, as compared to Extrovert at 18.26% which was the poor predictor than Neuroticism at 7.68%.

Table 3: Joint contribution of Body Image and Eating Disorder in predicting Personality Traits of Extrovert, Neuroticism and Lonely Boys.

Personality Traits	% Contribution of Body Image in boys	% Contribution of Eating Disorder in boys
Extrovert	18.26%	17.83%
Neuroticism	7.68%	6.14%
Lonely	21.34%	15.92%

Results presented in table 3 revealed that Body Image and Eating Disorder was a highest predictor in Lonely boys at 21.34% and 15.92% as compared to Extrovert Boys at 18.26% and 17.83% which was the poor predictor than Neuroticism boys at 7.68% and 6.14%.

CONCLUSION

It was concluded that joint contribution of Body image and Eating disorder was found to be a poor predictor of personality dimensions of Neuroticism boys at 13.82%, whereas body image and eating disorder was found to be an equal and week predictor of personality dimension of Extrovert boys at 36.09%. Hence it is concluded that body image and eating disorder was found a higher predictor of personality dimension of lonely boys at 37.26%.

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EFFECT OF INTEGRATED TRAINING MODULE ON FLEXIBILITY OF STUDENTS WITH LEARNING DISABILITY AGED 12 TO 16 YEARS

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Abstract

The main purpose of the study was to study the effect of integrated training module on flexibility of students with learning disability. The experimental design was selected for the study. For said study Students with learning disabilities aged 12 to 16 years boys were selected from centers of learning disabilities located Mumbai those who was studying in the various schools in the Mumbai areas. Total size of sample was Fifty-Nine (N=59) boys students selected for the study. From SVDD Secondary English Medium School, Ghatkopar, Twenty five (N=25) students were selected for Experimental Group and Thirty four (N=34) students selected from C.E.S. Michael High School, Kurla for Control Group. Pre and post data was collected for Health related physical fitness components for students with learning disability aged group 12 to 16 years. The collected data was analyses with help of One Way Anocova. The result of flexibility (Fy.x=7.98,df 1/56 ,p<0.01), was found significant difference in adjusted mean scores. There for the Integrated training was useful to increased the performance of flexibility.

Keywords- *learning disability, flexibility, Integrated module*

Introduction

Learning disability is one of the problems faced by students in early aged. There were many types of disabilities and learning disability is one of the phases of the same. In this phase of problem, students were suffering the problems in writing,listing, reading, reasoning and problem related numbers in day to day learning process due that their academic performance is poor compared to other normal students in the class.

Learning disability

There are many sorts of disabilities: social disabilities (like autism and Asperger's syndrome), physical disabilities, cognitive disabilities, genetic abnormalities that affect quite one aspect of one's life and learning disabilities.(Nagpal, p. 2014)

National Joint Committee for Learning Disabilities in USA defined, "Learning disability is a generic term that refers to heterogeneous group of disorders manifested by significant difficulties within the acquisition and use of listing, speaking, reading, writing, reasoning, or mathematical abilities." (Dunn, p. 1995)

Health related physical fitness of learning disable students

Health related fitness means fitness required for obtaining good health. Fitness components like muscular strength and endurance, flexibility, cardiovascular endurance and body composition considered as health related physical fitness in fitness norms. The score of the all fitness components represent the fitness level

separately for all. Students with learning disability having very average or below average fitness according to pilot study. In the present study researchers made the training schedule which shows the positive changes in the health related physical fitness on experimental training group. Integrated training module was benefited students with learning disability for improving fitness aspects.

The objective of the study

- To compare the adjusted Mean Scores of Flexibility of Students with Learning Disability of Integrated Training Group and Non-Integrated Training Group by taking Pre-Flexibility as Covariate.

Hypothesis of the study

H01: There is no significant difference in the adjusted Mean Scores of Flexibility of Students with Learning Disability of Integrated Training Group and Non-Integrated Training Group by taking Pre-Flexibility as Covariate.

Methodology

Sample

The learning disable students were selected from Mumbai located school. Students with learning disabilities aged 12 to 16 years boys students were selected from two schools located in Mumbai areas. Total size of sample was Fifty-Nine (N=59) boys students selected from SVDD Secondary English Medium School, Ghatkopar, Twenty five (N=25) students were selected for Experimental Group and Thirty four (N=34) students selected from C.E.S. Michael High School, Kurla for Control Group

Result

COMPARISON OF ADJUSTED MEAN SCORES OF FLEXIBILITY

The Objective was to compare adjusted mean scores of Flexibility of Students with Learning Disability of Integrated Training Group and Control Group by taking Pre- Flexibility as Covariate. Here Integrated Exercise Training Module was Independent Variable. Pre-Flexibility was one Covariate and Post-Flexibility was the Dependent Variable. Thus, the data were analysed with the help of One Way ANCOVA and the results are given in Table 1.

Table 1: Flexibility of students by taking their Pre-Flexibility as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Integrated Exercise Training	1	12.28	12.28	7.98	p<0.01
Error	56	86.15	1.54		
Total	**59**				

From Table 1, revealed that the adjusted F-Value is 7.98 which is significant at 0.01 level with df= 1/56. It indicates that the adjusted mean scores of Flexibility of Students with Learning Disability of Integrated Exercise Training Group and Control

Groups differ significantly when their Pre-Flexibility was taken as Covariate. Thus, the null hypothesis that there is no significant difference between adjusted mean scores of Students with Learning Disability of Integrated Training Group and Control Group by taking Pre-Flexibility as Covariate is rejected. Further, the adjusted mean score of Flexibility of students of Integrated Exercise Training Group is 32.66 which

is significantly higher than those of Control Group whose adjusted mean score of Flexibilityis 31.74. It may, therefore, be said that Flexibility of Students with Learning Disability treated through Integrated Exercise Training was found to be significantly superior to Control Group.

Conclusion

Integrated Training Module is to be effective for improving Flexibility of studentswith learning disabilities Integrated Training group than students with learning disabilities non- Integrated control group when their pre Flexibility was taken as covariate. The improvement has been recorded in Flexibility of students with learningdisability age group 12 to 16 years with help of the integrated training module.

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COMPARISON OF FLEXIBILITY OF STUDENTS DWELLING IN SLUM AREA AND NON-SLUM AREAS IN GREATER MUMBAI

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Abstract

The purpose of the study was to compare the Flexibility of Students Dwelling in Slum area and Non-Slum Areas in Greater Mumbai. To achieve the purpose of the study 4151 School Students were taken randomly selected from schools of Greater Mumbai in which 2105 Students Dwelling in Slum area and 2046 Students Non-Slum Areas of Greater Mumbai was taken as sample. To measure the level of Flexibility as Health Related Physical Fitness components among Students Dwelling in Slum area and Non-Slum Areas and Sit and Reach Test was administered. The collected data was statistically analyzed by applying Independent Sample t-test. The findings of the study was directs that the variable Flexibility t-value is 51.59 which is significant at 0.01 level with df=4149 among Students Dwelling in Slum area and Non-Slum Areas. Finding of this study shows that Flexibility between Students Dwelling in Slum area and Non-Slum Areas fund to be differ where Students Dwelling in Slum area was having greater Flexibility in compared to Students of Non-Slum Areas.

***Keywords**: Health Related Physical Fitness, Flexibility, Sit and Reach, Slum Area, Non-Slum Areas*

INTRODUCTION

People usually live in slum areas connected to the city. According to Government sources, the Slum Population of India has exceeded the total population (India Guide, 2015). Modern industrialization and explosion of growth in human population jeopardizes the homeostasis of healthy life and peaceful living. This, in turn, disturbs Public health that has become a burning problem among the world wide nation. From 1950 to1968 the population of slums increased 18%, in the 1970s they had a huge surge and by 1980 slum dwellers were half of the entire city's population. Despite the fact that the city underwent slum clearance, implemented by the Municipal Corporation in 1954, the BMC (Bombay Municipal Corporation) reported today slum dwellers make up 60% of Mumbai's population that is approximately 7 million people. Eventually spread into the areas neighboring Byculla, such as: Mahim Creek, Parel, Dadar and Matunga, Sion and wherever else they can find space, even on roads. The conditions in the slums are terrible, this affects the growth and development of children. Growth and development of children is a natural process but there are many factors that contribute for growth and development. Normal growth of a child's height, structure, outlooks, organic functions etc. depends upon heredity and its nutrition, nature of learning, attitude, behavior, emotion, personality etc. have common base mostly on the environment. This indicates the gravity of health condition of the children living in slum areas. It was therefore felt necessary to undertake a research project to find Health Related Physical Fitness and Performance Related Fitness of the students dwelling in Non-Slum and Slum areas in Greater Mumbai.

OBJECTIVE OF THE STUDY

- To compare Mean Scores of Flexibility of Non-Slum Area Group and Slum Area Groups

HYPOTHESIS OF THE STUDY

H01: There is no significant difference in Mean Scores of Flexibility of Non-Slum Area Group and Slum Area Groups

METHODOLOGY

The study was comparative in nature under the heading of Descriptive Research. The researcher personally collected data along with his assistants on Health Related Physical Fitness component Flexibility of Students Dwelling in Slum area and Non-Slum Areas in Greater Mumbai.

SELECTION OF THE SAMPLE

The sample of 4151 School Students were taken from Greater Mumbai where Students Dwelling in Slum area were 2105, and 2046 Students were from Non-Slum Areas of Greater Mumbai was taken as sample. The researcher has taken the Flexibility Test of Health Related Physical Fitness component and collected data of the same.

SELECTION OF VARIABLES AND TOOLS

Variable	Test	Unit of Measurement
Flexibility	Sit and Reach	Centimetre Meter

STATISTICAL PROCEDURE

In order to compare the variables among the students dwelling in Non-Slum Area and Slum Area of Greater Mumbai, independent sample t-test was appropriately used for the data analysis with the help of SPSS (Statistical Package for Social Sciences).

COMPARISON OF MEANSCORES OF FLEXIBILITY

Objective of the present study was to compare Mean Scores of Flexibility of Non-Slum Area Group and Slum Area Groups. The data were analyzed with the help of t-Test and results are given in table below.

Table: Mean, SD and N of Flexibility

Group	Mean	SD	N	Remarks
Non-Slum Area	**1.35**	**1.45**	**2046**	
Slum Area	**5.73**	**3.57**	**2105**	**p<0.01**

From the table above it can be seen that the t-value is 51.59 which is significant at 0.01 level with df=4149. It indicates that mean scores of Flexibility of Slum Area Group and Non-Slum Area Group differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Scores of Muscular Strength of Non-Slum Area Group and Slum Area Groups is rejected. The mean scores of Flexibility of Slum Area Group is 5.73 which is significantly higher than Non-Slum Area Group which is 1.35. It may therefore be said that Slum Area Group was found superior as compared to Non-Slum Area Group. The result is also graphically represented in figure below.

CONCLUSIONS

It is concluded that in case of Flexibility Slum Area Students were found significantly superior to Non-Slum Area Students.

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EVALUATION OF PSYCHOLOGICAL STATUS OF ADOLESCENT CHILDREN OF SCHOOLS OF MUMBAI

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Abstract

In today's society, it is very likely that the majority of people experience psychological problems which defines as a mental condition in which the qualities of a state are relatively persistent even though the state itself can be effective. The psychological status of children is declining these days and problems are quite common and sometimes severe which leads to anxiety, stress and depression. The study provides the insight into the psychological status of adolescent children of SSC, CBSE and ICSE schools of Greater Mumbai. The researcher intended to know whether there were any differences or similarities in the Pschological Status between SSC, CBSE and ICSE Schools Students of Mumbai. Total 3000 {1000 SSC (500 boys + 500 girls), 1000 CBSE (500 boys + 500 girls) and 1000 ICSE (500 boys + 500 girls)} schools students were selected as sample for the research study. The study was survey in nature under the heading of Descriptive Research. The questionnaire used Anxiety, Depression and Stress Scale (ADSS-BSPSA) by Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhaya and Amitabh. The data was analyzed by using 3X2 Factorial ANOVA (Analysis of Variance) by IBMM SPSS-22 Software. It was found that there is a significant difference found in SSC, CBSE and ICSE Board Schools and Gender on Anxiety, Stress and Depression. ICSE Schools Students found to have low anxiety and depression in compare to SSC and CBSE School Students. In case of CBSE and ICSE, it was found to have low stress in compare to SSC Board School.

Keywords: *Psychological Status, Anxiety, Stress, Depression, SSC Board Schools, CBSE Board Schools and ICSE Board Schools.*

INTRODUCTION

Education in a true sense that helps the individual to be responsible grown up and free, to flower greatly in love and goodness. That is what we should be interested in, and not in shaping the child according to some idealistic pattern **(Krishnamurti, J 1953)**.

Adolescence is the time of transition, where the individual is fuller of doubt than certainty. It is the period between childhood and adulthood. The **World Health Organization (WHO)** considers "adolescence" as the period between 10-19 years of age, which generally encompasses the time from the onset of puberty to legal age of majority.

Greater Mumbai region has various types of secondary schools and each has their own curriculum design. Boards like CBSE, SSC and ICSE have their specific pattern of working and that affect psychological Status of School Students. In adolescent period children should maintain health which helps in overcoming their struggle with their body changes, mood swings, emotional changes and social issues. Therefore, the study puts light into the Psychological Status of Adolescent Children of Various Board Schools.

METHODOLOGY

Under this heading selection of subjects, collection of data, tools of the study, administration of the test and statistical procedure have been described.

SELECTION OF SUBJECT

Total 3000 {1000 SSC (500 boys + 500 girls), 1000 CBSE (500 boys + 500 girls) and 1000 ICSE (500 boys + 500 girls)}schools students were selected as sample for the research study. The study was survey in nature under the heading of Descriptive Research. The inventory used in collecting the data was suitable and reliable for SSC, CBSE and ICSE schools children of Mumbai.

ADMINISTRATION OF TEST

Questionnaires were distributed to SSC, CBSE and ICSE School Students. Instructions were given to them before filling up the questionnaire by the researcher.

TOOLS OF THE STUDY

The questionnaire used is Anxiety, Depression and Stress Scale (ADSS- BSPSA) by Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhaya and Amitabh. The questionnaire is valid for 14 to 70 years of age. The scale comprises of 48 items divided into 3 subscales are as follows-

1. Anxiety Subscale – It comprises of 19 items covering various symptoms that are the manifestation of anxiety.
2. Depression Subscale – It consists of 15 items representing the different symptoms of depression.
3. Stress Subscale – It is a scale having 14 items and they are covering the symptoms that people experience in the state of stress.

COLLECTION OF DATA

Data was collected through administration of Anxiety, Depression and Stress Scale for obtaining the scores of Psychological Status among SSC, CBSE and ICSE School Students. The analysis of the data collected by the researcher is done by using 3X2 Factorial ANOVA (Analysis of Variance).

RESULTS AND DISCUSSIONS

Table-1 shows the summary of 3X2 Factorial Design ANOVA of Anxiety

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Types of Schools	2	126.47	63.23	4.74	p<0.01
Gender	1	167.94	167.94	12.60	p<0.01
Types of Schools* Gender	2	66.03	33.01	2.48	p>0.05
Error	2993	39891.73	13.33		
Corrected Total	2998				

Table-1 reveals that the F-value for Types of Schools is 4.74 which is significant at 0.01 level with df=2/2993 it means that the mean score of Anxiety of the Three School differs significantly. So there was a significant difference between Schools on the Anxiety of School Students. Thus, the Null Hypothesis that there is no significant difference between schools on the Anxiety of Students is rejected. Also, it can be seen that the F-value for Schools is 12.60 which is significant at 0.01 level with df=1/2993 it means that the mean score of Anxiety of the Boys and Girls differs significantly. So there was a significant

difference between Gender on Anxiety of School Students. Thus, the Null Hypothesis that there is no significant difference between Gender on Anxiety of School Students is rejected. Further the mean scores of Anxiety of Boys is 4.31 which is significantly lower than that of Girls Anxiety is 4.79. It means, therefore be said that the Boys are having less Anxiety compare to Girls. The F-value of the interaction between Anxiety level of Schools and Gender is 2.48 which is not significant at 0.05 level with df=2/2993. It may therefore be said that the Schools and Gender were found to have not significantly difference in Anxiety level so there was a no significant effect of interaction between Schools and Gender on the Anxiety of Students. Thus, the Null Hypothesis that there is no significant effect of interaction between Types of Schools and Gender on the Anxiety of Students is not rejected. In order to know the effect trend of interaction between Schools and Gender the Graph has been plotted.

Table-2 shows the summary of 3X2 Factorial Design ANOVA of Stress

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Types of Schools	2	280.78	140.39	13.65	p<0.01
Gender	1	108.09	108.09	10.51	p<0.01
Types of Schools* Gender	2	16.99	8.49	0.83	p>0.05
Error	2993	30778.51	10.28		
Corrected Total	2998				

Table-2 reveals that the the F-value for Types of Schools is 13.65 which is significant at 0.01 level with df=2/2993 it means that the mean score of Stress of the Three School differs significantly. So there was a significant difference between Schools on Stress of School Students. Thus, the Null Hypothesis that there is no significant difference between schools on Stress of School Students is rejected. Also, the F-value for Schools is 10.51 which is significant at 0.01 level with df=1/2993 it means that the mean score of Stress of the Boys and Girls differs significantly. So there was a significant difference between Gender on Stress of School Students. Thus, the Null Hypothesis that there is no significant difference between Gender on Stress of School Students is rejected. Further the mean scores of Anxiety of Boys is 3.69 which is significantly lower than that of Girls Anxiety is 4.06. It means, therefore be said that the Boys are having less Stress compare to Girls. the F-value for the interaction between Stress level of Schools and Gender is 0.83 which is not significant at 0.05 level with df=2/2993. It may therefore be said that the Schools and Gender were found to have not significantly difference in Stress level so there was a no significant effect of interaction between Schools and Gender on the Stress of School Students. Thus, the Null Hypothesis that there is no significant effect of interaction between Types of Schools and Gender on the Stress of School Students is not rejected. In order to know the effect trend of interaction between Schools and Gender the Graph has been plotted.

Table-3 shows the summary of 3X2 Factorial Design ANOVA of Depression

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Types of Schools	2	151.75	75.88	7.86	p<0.01
Gender	1	143.98	143.98	14.91	p<0.01
Types of Schools* Gender	2	106.077	53.04	5.49	p<0.01
Error	2993	28895.49	9.65		
Corrected Total	2998				

Table-3 reveals that the F-value for Types of Schools is 7.86 which is significant at 0.01 level with df=2/2993 it means that the mean score of Depression of the three School differs significantly. So there was a significant difference between Schools on Depression of School Students. Thus, the Null Hypothesis that there is no significant difference between schools on Depression of School Students is rejected. Also, the F-value for Schools is 14.91 which is significant at 0.01 level with df=1/2993 it means that the mean score of the Depression of the Boys and Girls differs significantly. So there was a significant difference between Gender on Depression of School Students. Thus, the Null Hypothesis that there is no significant difference between Gender on Depression of School Students is rejected. Further the mean scores of Depression of Boys is 2.51 which is significantly lower than that of Girls Depression is 2.95. It means, therefore be said that the Boys are having low Depression compare to Girls. The F-value for the interaction between Depression level of Schools and Gender is 5.49 which is significant at 0.01 level with df=2/2993. It may therefore be said that Schools and Gender were found to have significantly difference in Depression level so there was a significant effect of interaction between Schools and Gender on the Depression of School Students. Thus, the Null Hypothesis that there is no significant effect of interaction between Types of Schools and Gender on the Depression of School Students is rejected. In order to know the effect trend of interaction between Schools and Gender the Graph has been plotted.

CONCLUSION

The result and finding of the study can be concluded as follows:

In case of Psychological Status, there is a significant difference found in SSC, CBSE and ICSE Board Schools and Gender on Anxiety of school students where ICSE has low anxiety compare to SSC and CBSE Board Schools and boys have a low anxiety level compare to girls. Further, there is no significant difference found in the interaction on Anxiety level between Type of Schools and Gender where SSC and ICSE have low anxiety in boys and ICSE found low anxiety in girls. Moreover, there is a significant difference found in SSC, CBSE and ICSE Board Schools on Stress of school students where CBSE and ICSE have low stress compare to SSC Board School, but no significant difference found in CBSE and ICSE. Further, there is a significant difference found in Gender on the Stress of School Students where boys have low stress compare to girls, but there is no significant difference found in the interaction on Stress level between Type of Schools and Gender where, CBSE and ICSE have low anxiety in both boys and girls. Lastly, there is a significant difference found in SSC, CBSE and ICSE Board Schools and

Gender on Depression of school students where ICSE has low depression compare to SSC and CBSE Board School and boys have a low depression compared to girls. Further, there is a significant difference found in the interaction on Depression between Type of Schools and Gender where ICSE found to be low in Depression in both boys the and girls.

It indicates that the school environment plays an effective role in enhancing psychological status. The school programs like personality development programs, counseling to address psychological issues in the school itself which help in eradicating psychological problems like anxiety, stress and depression.

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A STUDY OF EFFECT OF HOLISTIC FITNESS TRAINING PROGRAMME ON SPIRITUAL BELIEF AND INVOLVEMENT OF SECONDARY SCHOOLS MALE STUDENTS OF MUMBAI

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Abstract

The purpose of the study was to determine the effect of Holistic Fitness Training Programme on Spiritual Belief and Involvement of Secondary Schools Male Students of Mumbai. The review of related literature does not show any studies to find the effectiveness of effect of Holistic Fitness Training Programme in improving Spiritual Belief and Involvement of Secondary Schools Male Students. A sample of Sixty (n=60) Secondary Schools Male Students age ranged from 13-17 years was identified as subjects from Shri. Sarvajanik Balmandir School, Abhyudaya Nagar, Kalachowki, Mumbai 33. Further they were randomly divided into two equal groups i.e. experimental and control group with equal number of subjects. Experimental group (Holistic Fitness Training Group (n=30)) and Control group (Control Group (n=30)). The design of the study was Non-equivalent Control Group Design. The experimental subjects, along with day to day activity underwent through Holistic Fitness Training Programme consist of Resistance (Weight Training), Dance Aerobic and Yogic Exercises for six days in a week except holiday for 08 weeks. The collected data was analyses with help of One Way ANCOVA. The results revealed that the adjusted F-Value 3285.18 of Spiritual Belief which is significant at 0.01 level with df= 1/60 and the adjusted F-Value 5357.70 of Spiritual Involvement which is significant at 0.01 level with df= 1/60 reveals the effect of Holistic Fitness Training Programme helped to improving Spiritual Belief and Involvement of Secondary Schools Male Students. The findings conclude that the Holistic Fitness Training Programme was found helpful to improve Spiritual Belief and Involvement of Secondary Schools Male Students.

Keywords: *Holistic Fitness, Spiritual Belief, Spiritual Involvement, Resistance Exercises, Aerobic Exercises, Yogic Exercises, Secondary Schools Male Students*

INTRODUCTION

The Holistic principle which recognizes that every part of your physical body is connected to, and interacts with, every other part. It also recognizes complex interactions between your physical body and your emotions, mind and spirit. Using a variety of training tools and principles, Holistic Fitness Training programs provide a fresh, well-rounded approach to long-term success and satisfaction.

Hence, so far as the theme of the proposed investigation is concerned the researcher has take in to consideration the necessity of integrated, harmonious and balanced approach towards the process of promoting fitness of the people instead of fragmented lopsided development. The new training module developed by the researcher explored all possibilities of gathering data for establishing the holistic fitness of the subjects under investigation.

Since 1990's the subject of spirituality has dramatically increased in prominence as an important area of research in various professions such as medicine, psychology, organizational behaviour etc.

A well known definition of the word 'spirituality' in scientific literature is "Spirituality is a quality that

goes beyond religious affiliation that strives for inspiration, reference, meaning and purpose even in those who do not believe in any God". The spiritual dimension tries to be in harmony with the universe, strives for answers about the infinite, and comes into focus when the person faces emotional stress, physical illness or death (Murray & Zetner, 1989). Travelbee (1971) states that spirituality strives for meaning and purpose in existence. It inspires, motivates and hopes, directing the individual towards the values of love, truth, beauty and creativity (Obrien, 1985). Spirituality is the way you find meaning, hope, comfort and inner peace in life. Many people find spirituality through Religion but same do find it in Music, Art or in connection with Nature.

Spirituality is a way of life which helps an individual to live a physically and emotionally healthy life. Religious and spiritual beliefs are important in reducing stress and used as a coping strategy in general (Elliot and Eisdorfer 1982, Lazarus and Folkman 1984, Cohen and Syme 1985). Individuals do find a need to relate and find meaning in adverse conditions like illness, grief and death of loved ones. Yates et al (1981) reported that patients in terminal stages of lung cancer relied strongly on their belief during final months of life.

METHODOLOGY

Design of the Study

Non-Equivalent Control Group Design were used. The subjects in the experiment was divided into two groups one experimental group and one control group; each group consisting of 30 subjects. The experimental groups, along with day to day activities underwent through Holistic Fitness Training Programme consist of Resistance (Weight Training), Dance Aerobic and Yogic Exercises for six days in a week except holiday for 08 weeks.

Selection of Sample

Sixty (n=60) Secondary Schools Male Students age ranged from 13-17 years was identified as subjects from Shri. Sarvajanik Balmandir School, Abhyudaya Nagar, Kalachowki, Mumbai 33.

- Experimental group (Specific Training Group): n=30
- Control group (Non Specific Training Group): n=30

Research Design: (Non-equivalent groups design)

The design of the experiment had been planned in three phases' viz., Phase – I: Pre-test, Phase – II: Training or Treatment, and Phase – III: Post-test. Holistic Fitness Training Group i.e. (Experimental Group) was given specific training programme for the period of six weeks. The total training programme of the experimental group of 12 weeks, 6 days in a week i.e. Monday to Saturday except on holiday, in the evening session for 1 hour.

Selected variables:

A. Dependent Variables

- Spiritual Belief
- Spiritual Involvement

B. Independent Variables

- Holistic Fitness Training Programme

Holistic Fitness Training Programme is the combination of Resistance Training (Weight Training), Dance Aerobic Exercise and Yogic Exercises.

Tools/ Instruments

The following criterion measures were included to record the reading of test items.

Dependent Variable	Test	Criterion Measures
Spiritual Belief and Involvement	Spiritual Belief Scale by Dr. Hemant Deshmush and Dr. (Mrs.) Neelam Deshmush, 2012.	Scores

The Spiritual Belief Scale is a 36 item questioner that assesses the 2 dimensions which can be completed by adding the score of the Spiritual Belief and Spiritual Involvement item number of the questionnaire. Out of 30 statements,16 are related to spiritual belief and 14 are related to spiritual involvement.

• Spiritual Belief	1,5,6,7,9,10,12, 13, 15,20,21,24,25,27,28,30
• Spiritual Involvement	2,3,4,8, 11, 14, 16, 17, 18, 19,22,23,26,29

Treatment

The subject was exposed to Holistic Fitness Training Programme for a period of 60 minutes, except Sunday and holiday and the training was personally supervised by the investigator with the help of Fitness, Aerobics and Yoga Instructor who strictly followed the instructions of the investigator. The experiment group completed 08 weeks of Holistic Fitness Training Programme, six times per week and each training programme two days respectively. Participants were urged to adjust exercise intensity measure it regularly to insure that they were exercising at the prescribed intensity. The instructor demonstrated variations in programme's exercise to accommodate for individual differences in fitness levels; therefore, all participants were able to exercise within the recommended intensity.

Training Schedule

Holistic Fitness Training Programme

Day	Training	Duration
Monday	Resistance Training	60 Minutes
Tuesday	Aerobic Training	60 Minutes
Wednesday	Yoga Training	60 Minutes
Thursday	Resistance Training	60 Minutes
Friday	Aerobic Training	60 Minutes
Saturday	Yoga Training	60 Minutes

STATISTICS

Since, there were two groups for this experimental researcher has decided to compare the adjusted mean

scores of Spiritual Belief and Involvement by taking Pre and Post Test of Specific Training Group and Control Group in order to see the effectiveness of treatment. One way ANCOVA was appropriately used for the data analysis.

RESULT AND DISCUSSION

I. TREATMENT WISE COMPARISON OF MEAN SCORES OF SPIRITUAL BELIEF

The Objective was to compare the adjusted mean scores of Spiritual Belief of School Boys of the Holistic Fitness Training Group and Control Group by taking Pre- Spiritual Belief as Covariate. Here Holistic Fitness Training Programme was Independent Variable. Pre- Spiritual Belief was one Covariate and Post- Spiritual Belief was the Dependent Variable. Thus, the data were analysed with the help of One Way ANCOVA and the results are given in Table 1.

Table 1: Summary of One Way ANCOVA of Achievement of students by taking their Pre-Spiritual Belief as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Holistic Fitness Training	1	15714.94	15714.94	3285.18	$p<0.01$
Error	57	272.66	272.66		
Total	60				

From Table 1, it can be seen that the adjusted F-Value is 3285.18 which is significant at 0.01 level with df= 1/60. It indicates that the adjusted mean scores of Spiritual Belief of School Boys of Holistic Fitness Training Group and Control Groups differ significantly when their Pre- Spiritual Belief was taken as Covariate. Thus, the null hypothesis that there is no significant difference between adjusted mean scores of Spiritual Belief of School Boys of the Holistic Fitness Training Group and Control Group by taking Pre- Spiritual Belief as Covariate is rejected. Further, the adjusted mean score of Spiritual Belief of students of Holistic Fitness Training Group is 70.90 which is significantly higher than those of Control Group whose adjusted mean score of Spiritual Belief is 37.50. It may, therefore, be said that Spiritual Belief of School Boys treated through Holistic Fitness Training was found to be significantly superior to Control Group when groups were matched in respect of their Pre-Spiritual Belief.

II. TREATMENT WISE COMPARISON OF MEAN SCORES OF SPIRITUAL INVOLVEMENT

The Objective was to compare the adjusted mean scores of Spiritual Involvement of School Boys of the Holistic Fitness Training Group and Control Group by taking Pre- Spiritual Involvement as Covariate. Here Holistic Fitness Training Programme was Independent Variable. Pre-Spiritual Involvement was one Covariate and Post- Spiritual Involvement was the Dependent Variable. Thus, the data were analysed with the help of One Way ANCOVA and the results are given in Table 2.

Table 2: Summary of One Way ANCOVA of Achievement of students by taking their Pre-Spiritual Involvement as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Holistic Fitness Training	1	18300.10	18300.10	5357.70	p<0.01
Error	57	194.69	3.42		
Total	60				

From Table 2, it can be seen that the adjusted F-Value is 5357.70 which is significant at 0.01 level with df= 1/60. It indicates that the adjusted mean scores of Spiritual Involvement of School Boys of Holistic Fitness Training Group and Control Groups differ significantly when their Pre- Spiritual Involvement was taken as Covariate. Thus, the null hypothesis that there is no significant difference between adjusted mean scores of Spiritual Involvement of School Boys of the Holistic Fitness Training Group and Control Group by taking Pre- Spiritual Involvement as Covariate is rejected. Further, the adjusted mean score of Spiritual Involvement of students of Holistic Fitness Training Group is 63.57 which is significantly higher than those of Control Group whose adjusted mean score of Spiritual Involvement is 28.50. It may, therefore, be said that Spiritual Involvement of School Boys treated through Holistic Fitness Training was found to be significantly superior to Control Group when groups were matched in respect of their Pre- Spiritual Involvement.

CONCLUSION

The above result helps to conclude that:

- Spiritual Belief of School Boys treated through Holistic Fitness Training was found to be significantly superior to Control Group when groups were matched in respect of their Pre-Spiritual Belief.
- Spiritual Involvement of School Boys treated through Holistic Fitness Training was found to be significantly superior to Control Group when groups were matched in respect of their Pre- Spiritual Involvement.

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A STUDY OF EFFECT OF SPECIFIC TRAINING PROGRAMME ON SKILL PERFORMANCE OF ROPE MALLAKHAMB PLAYERS OF MUMBAI

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Abstract

The purpose of the study was to determine the effect of Specific Training Programme on Skill Performance Score of Rope Mallakhamb Players Aged 12 To 18 Years. The review of related literature does not indicate any studies to evaluates the effectiveness of Specific Training programme in improving Skill performance score of Rope Mallakhamb Players. A sample of Sixty (n=60) Rope Mallakhamb players age ranged from 12-18 years was identified as subjects from Mallakahamb Sangh Andheri area of Greater Mumbai. Further they were randomly divided into two equal groups i.e. experimental and control group with equal number of subjects. Experimental group (Specific Training Group (n=30)) and Control group (Non Specific Training Group (n=30)). The design of the study was Non-equivalent Control Group Design. The experimental subjects, along with day to day Mallakhamb training underwent through Specific Training programme for six days in a week except holiday for 12 weeks. The collected data was analyses with help of One Way ANCOVA. The results revealed that the adjusted F-Value is 3285.18 which is significant at 0.01 level with df= 1/60 and effect of Specific training programme helped to improving skill performance score of Rope Mallakhamb Players aged 12 to 18 years. The findings conclude that the Specific Training was found helpful to improve Skill Performance of Rope Mallakhamb Players Aged 12 To 18 Years.

Keywords- *Rope Mallakhamb, Rope Mallakhamb Players, Skill Performance, Specific Training*

INTRODUCTION

The present study was conducted for evaluating the components like skill performance of rope Mallakhamb girls players in Mumbai region. Rope Mallakhamb is indoor or sometime outdoor sports which are performed by girls on cotton rope. In these sports various set of yogic asanas and acrobatic elements are performed on rope without tying knots to the rope. The player is continuously performing set of elements against the gravitational force, so they required more strength, endurance and power to perform this gracefully. (Gaikwad & Satam, 2006)

A set of Skill Performance of Rope Mallakhamb consist of 18 elements for girls. Competitor has to perform set in 90 seconds. Set consists of elements which are categorized as "A" set elements, "B" set elements and "C" set elements. In the optional set 10 points are divided as follows: Difficulty-3.80 points, Combination-1.60 points, Execution-4.40 points, Originality-0.20 points. A" set elements has 0.20 points, "B" set elements has 0.40 points and "C" set elements has 0.60 points. In total there are 10 points.

To improve the Skill Performance of Rope Mallakhamb the specific training scheduled had been prepared with guidance of experts and training had provided for twelve weeks. Specific Training is a Superset Training Method which was combination of Station Training and Set Training in the form of Circuit

Training. A superset involves two exercises that stress two opposing muscles or muscle areas (i.e., an agonist and its antagonist). For exan1ple, an athlete performs 10 repetitions of the barbell biceps curl exercise, sets the bar down, then goes over to the triceps push- down station and performs 10 repetitions (Heyward, 2006).

The objective of the study was to compare the adjusted Mean Scores of Skill Performance of Rope Mallakhamb Players of Specific Training Group and Control Group by taking Pre-Skill Performance as Covariate. To achieve this objective null hypothesis was sought that H0: There is no significant difference in the adjusted Mean Scores of Skill Performance of Rope Mallakhamb Players of Specific Training Group and Control Group by taking Pre-Skill Performance as Covariate. To fulfill the criteria of the present study researcher set some delimitations like the study was delimitated to the Rope Mallakhamb Players aged 12 to 18 years of Mumbai. The study was delimitated to the Specific Training Programme consist of Super set training in the form of Circuit Training. The study was be delimitated to the skill performance of Rope Mallakhamb Players.

METHODOLOGY

Design of the Study

Non-Equivalent Control Group Design were used. The subjects in the experiment was divided into two groups one experimental group and one control group; each group consisting of 30 subjects. The experimental groups, along with day to day Mallakhamb practice underwent through Specific Training programme for six days in a week except holiday for 12 weeks.

Selection of Sample

Sixty (n=60) Rope Mallakhamb players age ranged from 12-18 years was identified as subjects from Mallakhamb Sangh Andheri area of Greater Mumbai.

- Experimental group (Specific Training Group): n=30
- Control group (Non Specific Training Group): n=30

Research Design: (Non-equivalent groups design)

The design of the experiment had been planned in three phases' viz., Phase – I: Pre-test, Phase – II: Training or Treatment, and Phase – III: Post-test. Specific Training Group i.e. (Experimental Group) was given specific training programme for the period of six weeks. The total training programme of the experimental group of 12 weeks, 6 days in a week i.e. Monday to Saturday except on holiday, in the evening session for 1 hour.

Selected variables:

C. Dependent Variables

- Rope Mallakhamb Performance:

D. Independent Variables

Specific Training programme is Superset training which is combination of Station training, Set Training and Circuit Training.

Tools/ Instruments

The following criterion measures were included to record the reading of test items.

Dependent Variable	Test	Criterion Measures
Rope Mallakhamb Performance	Competitor has to perform set in 90 seconds. Set consists of elements which are categorized as: "A" set elements, "B" set elements and "C" set elements	Scores

Treatment

The following Specific training for 12 weeks training

A. Upper Body Training

Chest Press	Triceps overhead Extension
Lat pull Down	Wrist Curl
Dumbbells Fly	Dumbbell Hamer Curl
Bent Over Row	Triceps Kick Back
Shoulder side raise with Dumbbells	Seated Dumbbell Presses
Front Raise with Dumbbells	Barbell Shrugs
Dumbbell Bicep Curl	Abdominal Crunches

B. Lower Body Training

Leg Curl	Hyper Extension
Leg Extension	Calf Raise
Squats	Cardio
Lunges	

STATISTICS

Since, there were two groups for this experimental researcher has decided to compare the adjusted mean scores of Rope Mallakhamb Performance by taking Pre and Post Test of Specific Training Group and Control Group in order to see the effectiveness of treatment. One way ANCOVA was appropriately used for the data analysis.

RESULT AND DISCUSSION

Treatment wise Comparison of Adjusted Mean Scores of Skill Performance of Rope Mallakhamb Players Aged 12 To 18 Years

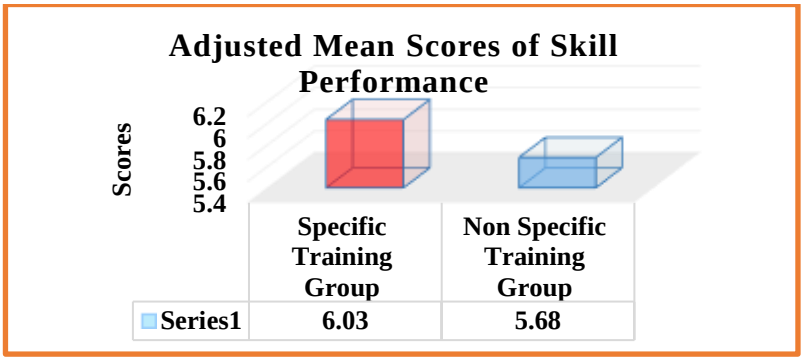
The objective of present study was to compare the adjusted Mean Scores of Skill Performance of Rope Mallakhamb Players of Specific Training Group and Control Group by taking Pre-Skill Performance as Covariate. The data were analyzed with the help of One Way ANCOVA and results are given in table below.

TABLE: Summary of One Way ANCOVA of Skill Performance by taking Pre-Skill Performance as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Group	1	1.82	1.82	63.62	p<0.01
Error	57	1.63	0.03		
Total	59				

From above table it can be seen that the adjusted F-value is 63.62 which is significant at 0.01 level with df=1/57 when Pre-Skill Performance was taken as covariate. It shows that the adjusted Mean Scores of Skill Performance of Rope Mallakhamb Players of Specific Training Group and Control Group differ significantly when Pre-Skill Performance was taken as Covariate. Thus, the Null Hypothesis that there is no significant difference in the adjusted Mean Scores of Skill Performance of Rope Mallakhamb Players of Specific Training Group and Control Group by taking Pre-Skill Performance as Covariate is rejected. Further the adjusted mean score of Skill Performance of Specific Training Group is 6.03 which is significantly higher than that of Control Group where adjusted mean score of Skill Performance is 5.68. It may, therefore, be said that Specific Training Group was found to be effective in improving Skill Performance of Rope Mallakhamb Players than Control Group where Pre-Skill Performance was taken as covariate and also shown in the following figure.

FIGURE: Treatment wise Comparison of Adjusted Mean Scores of Skill Performance



CONCLUSION

The above result helps to conclude that the Specific Training was found helpful to improve Muscular Strength and Cardiovascular Endurance of Rope Mallakhamb Players aged 12 to 18 years.

ACKNOWLEDGEMENT

The investigators are grateful to the students who willingly participated in this study. They are also thankful to the authorities of college who gave permission to conduct this experiment.

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EFFECT OF YOGIC PRACTICES ON MUSCULAR STRENGTH OF STUDENTS OF MUMBAI CITY

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Abstract

The present paper focuses to study the relevance of yoga on health. Normal healthy volunteers with age between 12 to 14 years' boys of the Holy Name High School. Variable – Muscular Strength, the response was collected from 50 respondents out of them 25 as control group and 25 as yoga practice group. Test was carried out for the muscular strength variable. to compare the adjusted mean scores of pre-test and post-test of Yogic Practices group and control group in order to see the efficacy of experimental treatment, one way ANCOVA was appropriately used for the data analysis. The study showed significant improvement in the yoga group in the muscular strength domain compared to control group. With this the easy and regular practice of yoga can improve muscular strength in individual physical fitness.

INTRODUCTION

At the present time your life has become more hectic than it is ever. As a result, you are not only deprived of physical exercise but also proper rest, relaxation, and recreation. Leading a busy life, you tend to spend very little time even on cooking and eating your food. That makes you go in for processed, inorganic, canned foods and drinks which have already lost most of their natural nutritive value. This creates for you a host of physical and mental problems.

Today's generation lives fast lifestyle under tremendous stress. Every student should be physically, mentally fit and socially healthy. Not only the student who is healthy and fit be able to enjoy life in true sense but also be able to serve society and thus country.

Your weakness, body pains, constipation, headaches, abnormal blood pressure, diabetes, poor eyesight, may be a result of your leading a chair-borne and wheel borne life coupled with eating refined foods. However I am fully confident of being able to convince you further that yoga is not only capable of relaxing you but also of providing definite lasting solutions to chronic disorder like headache, cold, gastric trouble, backache, diabetes and arthritis.

Significance of Study

- This study may contribute further study by way of providing results as well as designed yoga module for the promotion of the Health Related Physical fitness and Mental Health of School Students.
- The findings of the present study may be helpful to the professionals in the field of physical education, sports and sports sciences.
- The study may benefit students in learning and practicing yoga as a part of their daily activity.

Objectives of the Study

- To compare the adjusted mean scores of muscular strength of the Yogic practices group and Control group by taking the Pre muscular strength as covariate.

Concepts of Yoga Practices (Nimbalkar, 2007)

There are eight principal parts or limbs of yoga namely **Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi.** These parts are closely inter-linked with each other. Those who wish to practice Yoga should bear in mind the truth that the benefits of yoga aspirant gets the result of the cumulative effect of all these parts.

❖ Yama- It means the rules to be observed by the yoga aspirant while living in society such as Ahimsa, Satya, Asteya, Brahmacharya,Aparigriha.

❖ Niyama- It means the observances which prove helpful in personal development of yoga aspirant. For personal wellbeing and progress five niyamas such as Shocha, santosh, Tapa, Swadhyaya, Ishwara pranidhana.

❖ Asanas- They have a special significance for the maintenance of the health of body and mind and as a preparatory practice for pranayama. While in yogic asana one should experience pleasure both physical and mental.

❖ Maximal contraction power of the muscles is known as muscular strength.

Hypothesis of t Study

Ho1:- There is no significant Difference in adjusted mean score of muscular strength of school student's yogic practices group and control group by taking pre muscular strength as covariate.

Delimitations

1. The study was delimitated to school students aged 14 to 16 years.
2. The study was delimitated to develop Health Related physical fitness and Positive Mental Health.
3. The study was delimitated to selected Asanas, Kriyas, Pranayama and Meditation.
4. The study was delimitated to short term training program of 8 weeks only.

SELECTION OF SUBJECT OR SAMPLE

Subjects was drawn randomly from The Holy Name High School COLABA MUMBAI. 50 students will be serving as subject as subject of the study their age ranged between 14-16 years. The 50 students divided in to two groups i.e.

Group A – Experimental Group (n=25)
Group B – Control Group (n=25)

INDEPENDENT VARIABLES

The specialized Yoga training programme was considered as the independent variable for the present study which include training the:-

- Uttanapadasana
- Naukasana
- Setubandhasana

- Viparita Naukasana

RESULTS AND INTER PRETATION

STATISTICAL PROCEDURES USED AND ITS JUSTIFICATION

Since there were two groups for this experimental study viz. experimental group and control group, wherein the researcher has decided to compare the adjusted mean scores of pre-test and post-test of Muscular strength group and with control group in order to see the efficacy of yogic practice, One way ANCOVA was appropriately used for the data analysis.

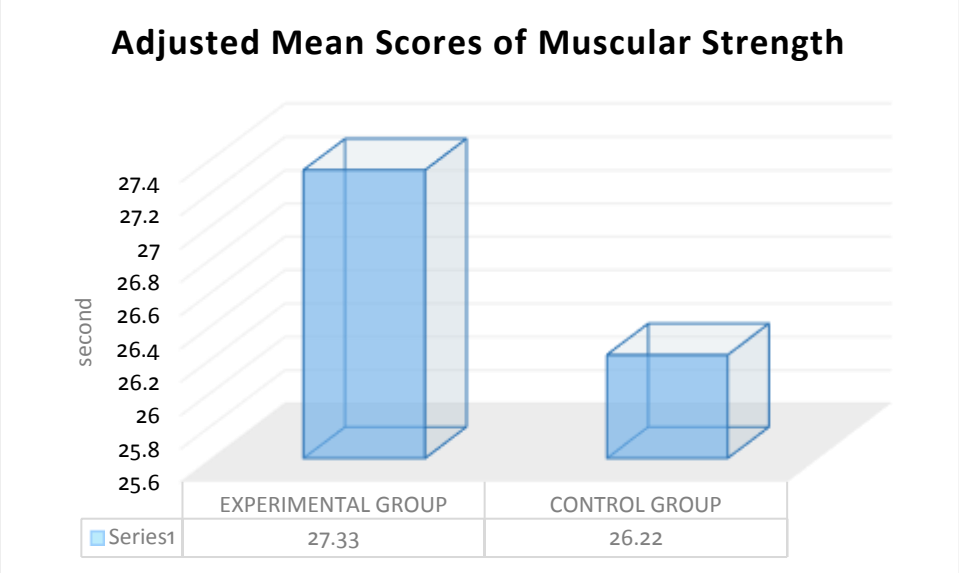
RESULTS ON MUSCULAR STRENGTH

The objective was to compare the adjusted mean scores of muscular strength of the Yogic practices group and Control group by taking the Pre muscular strength as covariate. The data were analyzed with the help of One Way ANCOVA and results are given in Table 1

Table 1 -: Summary of One Way ANCOVA of Muscular Strength by taking Pre-Muscular Strength as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Treatment	1	15.31	15.31	26.53	p<0.01
Error	47	27.12	0.58		
Total	49				

It can be seen that the adjusted F-value is 26.53 which is significant at 0.01 level with df=1/47 when Pre-Muscular Strength was taken as covariant. It shows that adjusted mean scores of Muscular Strength of Yogic Practices Group and Control Group differ significantly when Pre-Muscular Strength was taken as covariate. Thus, the Null Hypothesis Ho1 there is no significant Difference in adjusted mean score of muscular strength of school student's yogic practices group and control group by taking pre muscular strength as covariate is rejected. Further the adjusted mean score of Muscular Strength of Yogic Practices Group is 27.33 which is significantly higher than that of Control Group where adjusted mean score of Muscular Strength is 26.23. It may, therefore, be said that Yogic Practices Group Module was found to be effective in improving Muscular Strength of Yogic Practices Group than Control Group where Pre-Muscular Strength was taken as covariate.



Comparison of Adjusted Mean Scores of Muscular Strength between Yogic Practices Group and Control Group

FINDINGS

Muscular Strength-: The yogic training group, there is significant difference in the level of muscular strength of the students of Holy name school, Colaba.

CONCLUSION

The yogic training group, there is significant difference in the level of muscular strength of the students of Holy name school, Colaba.

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A COMPARATIVE STUDY OF MENTAL HEALTH OF TAEKWONDO AND KARATE PLAYERS OF MUMBAI SUBURBANS

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Abstract

The aim of the researcher was to compare the mental health of Taekwondo and Karate players of Mumbai Suburban's. Total 100 players were selected as sample for the study by using Convenient Sampling. The objective of the researcher was too compare the Mean Scores of mental health of taekwondo and karate players. It was a Comparative survey, so the date was analyzed by t-test. The results revealed that the mental health of taekwondo players was significantly higher than karate players

Keywords: *Mental Health*

INTRODUCTION

A Mental health is "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community", according tothe World Health Organization (WHO). Mental health includes subjective well- being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential, among others. From the perspectives of positive psychology or holism, mental health may include an individual's ability to enjoy life and to create a balance between life activities and efforts to achieve psychological resilience. Culturaldifferences, subjective assessments, and competing professional theories all affect how one defines "mental health". Some early signs related health problems are sleep irritation, lack of energy and thinking of harming yourself or others.

OBJECTIVES OF THE STUDY:

- To compare mean scores of self-acceptance of taekwondo and Karate players.
- To compare mean scores of ego strength of taekwondo and karateplayers.
- To compare mean scores of philosophies of life of taekwondo andkarate players.
- To compare mean scores of positive mental health of taekwondo andkarate players

METHODOLOGY

The study was to compare the mental health of taekwondo and karate players of Mumbai suburban's therefore the researcher had selected players from different Academy which are located in Mumbai suburban by using Convenient Sampling.

DESIGN OF THE STUDY

Basically the study was survey in nature under the heading of descriptive research. The researcher personally visited to the selected academy's along with assistance and collect the data by using questionnaire of positive mental health Dr.C.D Agashe on mental health.

SAMPLE

A sample of 100 players from Academy of Mumbai suburban's were selected for the study. Total Number of Clubs: - 17Number of Academy researcher selected: - 10The researcher will use convenient sampling.50 players for taekwondo and 50 players for karate for the research study .

RESULTS AND DISCUSSION:

RESULTS ON SELF-ACCEPTANCE

Group wise comparison of mean score of self - acceptance

The second objective was to compare Mean Score of self- acceptance of taekwondo and karate players The data were analysed with the help of t-Test and results are given in Table

Treatment wise mean, sd, n and t-value of self- acceptance

Group	Mean	SD	N	t-value		Remarks
Taekwondo Players	**7.52**	**2.05**	**50**	**2.16**	**OR**	**p>0.05**
Karate Players	**6.58**	**2.29**	**50**			

From Table 4.2 it can be seen that the t-value is **2.16** which is not significant at 0.05 level with df=98. It indicates that mean scores of self- acceptance of taekwondo and karate players. do not differ significantly. Thus, the Null Hypothesis that thereis significant difference in Mean Score of self- acceptance of taekwondo and karate players Groups is rejected. The mean scores of self-Acceptance of Taekwondo Players is **7.52** which is significantly higher than Self-Acceptance of karate players which is **6.58.** It may therefore be said that Self-Acceptance of Taekwondo and karate players are not equal.

RESULTS ON EGO- STRENGTH

Group wise comparison of mean scores of ego- strength

The third objective was to compare Mean Score of ego –strength of taekwondo and karate players The data were analysed with the help of t-Test and results are given in Table.

Treatment wise mean, sd, n and t-value of ego- strength

Group	Mean	SD	N	t-value		Remarks
Taekwondo Players	**7.00**	**2.37**	**50**	**3.10**	**OR**	**p>0.05**
Karate Players	**5.74**	**1.77**	**50**			

From Table 4.3 it can be seen that the t-value is **3.10** which is not significant at 0.05 level with df=**98**. It indicates that mean scores of EGO STRENGTH of taekwondo and karate players. do not differ significantly. Thus, the Null Hypothesis there is significant difference in Mean Score of ego strength oftaekwondo and karate players Groups is rejected. The score of Ego Srenghnth of karate players is **7.00** which is significantly not higher than Taekwondo players which is **5.74** It may therefore be said that Taekwondo players and karate payers Players Group are not equal.

RESULTS ON PHILOSOPHIES OF LIFE

Group wise comparison of mean scores of philosophies of life

The four objective was to compare Mean Score of philosophies of life taekwondo and karate players The data were analysed with the help of t-Test and 0results are given in Table

Treatment wise mean, sd, n and t-value of philosophies of life

Group	Mean	SD	N	t-value		Remarks
Taekwondo Players	**7.58**	**2.07**	**50**	**5.16**	**OR**	**p>0.05**
Karate Players	**5.64**	**1.64**	**50**			

From Table 4.4 it can be seen that the t-value is 5.16 which is not significant at 0.05 level with df=98. It indicates that mean scores of philosophies of life of taekwondo and karate players. do not differ significantly. Thus, the Null Hypothesis that is significant difference in Mean Score of philosophies of life of taekwondo and karate players Groups is rejected. The mean scores of philosophies of life of Taekwondo Players is **7.58** which is significantly higher than Karate players which is **5.64**. It may therefore be said that taekwondo Players Group and Karate players Group are not equal.

GROUP WISE COMPARISON OF MEAN SCORES OF MENTAL HEALTH

The fifth objective was to compare Mean Score of mental health taekwondo and karate players The data were analysed with the help of t-Test and results are given in Table

TREATMENT WISE MEAN, SD, N AND T-VALUE OF MENTAL HEALTH

Group	Mean	SD	N	t-value		Remarks
Taekwondo Players	**21.98**	**5.19**	**50**	**4.44**	**OR**	**p>0.05**
Karate Players	**17.76**	**4.27**	**50**			

From Table 4.1 it can be seen that the t-value is 4.44 which is not significant at 0.05 level with df=98. It indicates that mean scores of MENTAL HEALTH of taekwondo and karate players. do not differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of PHILOSOPHIES OF LIFE of taekwondo and karate players Groups is rejected. The mean scores of mental health of Taekwondo players group is **21.98** which is significantly higher than mental heakth of karate palyers Group which is **17.76**. It may therefore be said that mental Health of Taekwondo and

karate players group are not equal.

CONCLUSION:

The analysis in interpretation of the data collected by the researcher the following finding may conclude: In the following study Self –Acceptance of Taekwondo players if higher than Karate players. Ego of Taekwondo players if higher than Karate players. Philosophies of life of Taekwondo players if higher than Karate players. Mental Health Taekwondo players if higher than Karate players.

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A COMPARATIVE STUDY OF MENTAL HEALTH OF ATHLETES AND NON-ATHLETES OF MUMBAI SUBURBAN

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Abstract

The purpose of the study was to compare the Mental Health of school going Athletes and Non- Athletes of Mumbai Suburban. To achieve the purpose of the study, 200 students from 10 different schools were selected from the region of Mumbai Suburb. 10 Athletes and 10 Non-Athletes were randomly selected from each of the 10 pre-determined schools. Since the study was a ccomparative study, the method used for the research was Survey Method using Questionnaires of Positive Mental Health by Dr.C.D.Agashe and Dr.R.D.Helode. The findings of the study sumed up to a conclusion that there was significantly No difference in the mean scores of Mental Heath of Athletes and Non -Athletes of Mumbai Suburban, which can be seen that the t-value is 0.48 which is not significant at 0.05 level with d f = 198. The mean scores of Total Positive Mental Health of Athletes is 17.25 which is significantly not higher than Non-Athletes which is 16.93. It may therefore be said that Athletes and Non-Athletes are similar.Thus, the Null Hypothesis had to be accepted.

Keywords: *Positive Mental Health, Athletes, Non-Athletes, Mumbai Suburban, School Students.*

INTRODUCTION

Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood. Keeping mental and physical health is one of the most important tasks in humans' life. Health and security are two gifts that if humans do not lose them will not understand the value of them. Nowadays the subject of mental health is deeply popularized among the specialists of behavior and social science.

OBJECTIVES OF THE STUDY

- To compare the mean scores of Positive Mental Health between Athletes and Non-Athletes of Mumbai Suburban.

HYPOTHESIS OF THE STUDY

- H_O1: There is no significant difference between the mean score of Positive Mental Health Between Athletes and Non-Athletes group of Mumbai Suburban.

METHODOLOGY

Basically, this piece of research was survey in nature, accordingly the Researcher decided to collect data from 10 schools from Mumbai suburban area. Ten schools were selected randomly from the list of schools. n=10 athlete ant n=10 nonathlete students were randomly selected from 10 schools (n=100 athlete and

n=100 nonathlete. After selection of the sample, positive Mental Health Inventory prepared by Dr. C. D .Agashe and Dr. R. D. Helode was given to the sample for data collection. Then collected data were analyzed by using standard statistical technique 't' Test and results are presented below.

RESULT ON MENTAL HEALTH

Result on mental health is presented below with the help of Table and data from the table are interpreted logically.

Table-01 Group wise Mean, SD, N and t-value of Mental Health

Group	Mean	SD	N	t-value	Remarks
Athletes	**17.25**	**3.79**	**100**	**0.48***	**p>0.05**
Non-Athletes	**16.93**	**3.53**	**100**		

Significant at 0.05

From the Table-01 it can be seen that, mean scores of Athlete group is 17.25 and mean score of non-Athletes is 16.93. t-value is 0.48 which is not significant at 0.05 level of significance. It indicates that, in case of Positive Mental Health Athlete group and Non-Athletes groups are more or less similar to each other.

CONCLUSIONS

It is concluded that in case of Positive Mental Health Athlete group and Non-Athletes groups are more or less similar to each other.

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CURRENT SCENARIO OF COVID IN INDIA – A SCIENTIFIC APPROACH

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Abstract

As we know, more than 2,50,000 people have been infected worldwide by Coronavirus, which originated in China in December 2019 and claimed the lives of over 20000 people (WHO). in March 2020 in India, 1127 cases of Coronavirus found out of these 27 deaths were noted, and 97 cases were recovered. This was a horrible condition. During the pandemic, World Health Organization declared that developing a vaccine for Coronavirus would take 12 to 18 months; however, the WHO was helpless to suggest an effective treatment for Coronavirus. While the whole world was battling a pandemic of unprecedented proportions, 43 pharmaceutical and biotech companies worldwide have launched their most significant ever research and development initiative to find the vaccine that can contain the novel coronavirus. Among these pharmaceutical majors are India's Zydus Cadila and Serum Institute. India's Bharat Biotech develops the first vaccine for Coronavirus with the collaboration of the Indian Council of Medical Research (ICMR) - the National Institute of Virology (NIV). Indian Government put efforts into developing Covid-19 Vaccines and developed modern Health Facilities throughout India and save the lives of Indian citizens. Current scenario of Covid in India, the Indian Government published in January 2023, it can be realized that the active ratio of Corona Virus is .0047% and the death ratio is 1.01%.

Keyward: *Covid in India, Government of India, Current Scenario, Bharat Biotech, Covid-19 Vaccines*

PREAMBLE

Print News, Electronic News, and U-Tubers reported that, since China relaxed the Corona restrictions, Corona has wreaked havoc across the country. As a result of the destruction caused by Corona in China, most countries have begun to take precautions. The extent of havoc that Corona is wreaking in China can be gauged from the fact that most of the hospitals are full of elderly patients, cremation grounds are overcrowded, and many pharmacies have run out of medicines for fever. If the news is authentic, this time is again horrible to us.

As we know, more than 2, 50,000 people have been infected worldwide by Coronavirus, which originated in China in December 2019 and claimed the lives of over 20000 people (WHO). in March 2020 in India, 1127 cases of Coronavirus found out of these 27 deaths were noted, and 97 cases were recovered. This was a horrible condition. During the pandemic, World Health Organization declared that developing a vaccine for Coronavirus would take 12 to 18 months; however, the WHO was helpless to suggest an effective treatment for Coronavirus.

While the whole world was battling a pandemic of unprecedented proportions, 43 pharmaceutical and biotech companies worldwide have launched their most significant ever research and development initiative to find the vaccine that can contain the novel coronavirus. Among these pharmaceutical majors are India's Zydus Cadila and Serum Institute (Jaykumar, 2020).

According to the International News Agency BBC News, CNN, MSNBC News ACB News and the national news agency ABP News, the United States gave the first shot of the experimental COVID-19 vaccine to a forty-three-year-old Jennifer Haller of Seattle in a human trial process on March 16. Other 45 healthy adult volunteers aged 18 to 55 were exposed within the next six weeks for an open-label trial for the same, stated US National Institutes of Health (NIH) (Neergaard, Carla, & Johnson, 2020).

Scientists from the University of Oxford opened their COVID-19 vaccines for clinical trial recruitments as part of a "Rapid Vaccine Response" to the coronavirus pandemic. The trial, a collaboration between the university's Jenner Institute and Oxford Vaccine Group clinical teams, will recruit up to 510 volunteers who received either the experimental COVID-19 vaccine or a control injection for comparison (economic times, 2020). The first stage clinical trial for the vaccine was started in Wuhan on March 16 after the authority's approval (Varma, 2020).

India's Bharat Biotech develops the first vaccine for Coronavirus with the collaboration of the Indian Council of Medical Research (ICMR) - the National Institute of Virology (NIV). The current scenario of covid vaccination in India is up to date 2,20,12,80,212 Vaccination Doses have been given to the citizens (Government of India , 2023).

SUMMARY OF THE SCIENTIFIC APPROACH

The purpose behind conducting the review on the Current Scenario of Covid in India with the Scientific Approach is too aware the citizens of the country regarding some news about the Corona wreaking havoc in China.

Challenges of the Indian Government

- Control the occurrence of thousands of deaths.
- Vaccination of Indian citizens
- Development of more effective Health Facilities
- Training of health care workers
- WHO's Guidelines for Prevention/Control of COVID 19

BODY OF THE SCIENTIFIC APPROACH

The said pandemic has become a challenge to the Government of India. The Indian Government made a satisfactory effort to control the Coronavirus. The Indian Government has prepared itself to fight against the Coronavirus with the help of the State Government, Municipal Authorities, and Many NGOs, and developed medical facilities to fight against the Coronavirus. Data in the following table of the current scenario of Covid in India is evidence of the Indian Government's efforts against Coronavirus.

Authors Understanding

The author analyzed the collected information and interpreted that as countries from Italy to Iran, from Sweden to South Africa struggle to contain the virus, it is more important than ever to turn to expert advice from institutions such as the World Health Organization, which have No effective treatment and confirmed vaccine to protect ourselves from Covid-19 a pandemic. But the Indian Government put efforts into

developing Covid-19 Vaccines and developed modern Health Facilities throughout India and save the lives of Indian citizens. In Table 'No.01 Current scenario of Covid in India, the Indian Government published in January 2023, it can be realized that the active ratio of Corona Virus is .0047% and the death ratio is 1.01%.

State/UTs	Total Cases	Active	Discharged	Deaths	Active Ratio	Discharge Ratio	Death Ratio
Maharashtra	81,36,74823	1337	79,88,19830	1,48,417	0.00%	98.17%	1.82%
Kerala	68,28,73568	1,4104	67,55,76262	71,5632	0.02%	98.93%	1.05%
Karnataka	40,72,19450	26148	40,31,62598	40,308	0.01%	99.00%	0.99%
Tamil Nadu	35,94,4879	864	35,56,35213	38,049	0.00%	98.94%	1.06%
Andhra Pradesh	23,39,071	4	23,24,334	14,733	0.00%	99.37%	0.63%
Uttar Pradesh	21,28,1342	399	21,04,46211	23,633	0.00%	98.89%	1.11%
West Bengal	21,18,6443	592	20,97,0535	21,532	0.00%	98.98%	1.02%
Delhi	20,07,2577	30	19,80,7067	26,521	0.00%	98.68%	1.32%
Odisha	13,36,569	862	13,27,2782	9,205	0.01%	99.30%	0.69%
Rajasthan	13,15,52711	714	13,05,8037	9,653	0.01%	99.26%	0.73%
Gujarat	12,77,5945	361	12,66,5156	11,043	0.00%	99.13%	0.86%
Chhattisgarh	11,77,759	73	11,63,6063	14,146	0.00%	98.80%	1.20%
Haryana	10,56,6335	42	10,45,8775	10,714	0.00%	98.98%	1.01%
Madhya Pra.	10,54,9222	61	10,44,1401	10,776	0.00%	98.98%	1.02%
Bihar	8,51,4042	131	8,39,0882	12,3031	0.00%	98.55%	1.45%
Telengana	8,41,3928	622	8,37,2196	4,111	0.01%	99.50%	0.49%
Punjab	7,84,2363	273	7,64,920	19,289	0.00%	97.54%	2.46%
Assam	7,46,100	0	7,38,065	8,035	0%	98.92%	1.08%
J & K	4,79,4325	223	4,74,6252	4,785	0.00%	99.00%	1.00%
Uttarakhand	4,49,4164	333	4,41,6306	7,7531	0.01%	98.27%	1.73%
Jharkhand	4,42,5731	31	4,37,239	5,331	0.00%	98.79%	1.20%
Himachal Pra.	3,12,6697	194	3,08,4373	4,213	0.01%	98.65%	1.35%
Goa	2,59,0882	81	2,55,0673	4,013	0.00%	98.45%	1.55%
Mizoram	2,38,964	0	2,38,238	726	0%	99.70%	0.30%
Puducherry	1,75,54110	307	1,73,5363	1,975	0.02%	98.86%	1.13%
Manipur	1,39,924	2	1,37,773	2,149	0.00%	98.46%	1.54%
Tripura	1,08,034	0	1,07,094	940	0%	99.13%	0.87%
Chandigarh	99,353	5	98,167	1,181	0.01%	98.81%	1.19%
Meghalaya	96,784	1	95,159	1,624	0.00%	98.32%	1.68%
Arunachal Pra.	66,891	1	66,594	296	0.00%	99.56%	0.44%
Sikkim	44,319	0	43,820	499	0%	98.87%	1.13%
Nagaland	35,986	0	35,204	782	0%	97.83%	2.17%
Ladakh	29,4141	21	29,181	231	0.01%	99.21%	0.79%
Dadra, Nagar aveli, Daman, and Diu	11,591	0	11,587	4	0%	99.97%	0.03%
Lakshadweep	11,415	0	11,363	52	0%	99.54%	0.46%

Andaman and Nicobar	10,747	5	10,613	129	0.05%	98.75%	1.20%

CONCLUSION

Indian Government put efforts into developing the Covid-19 Vaccine and controlling the active ratio of Corona Virus and death ratio.

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STATUS OF PHYSICAL WELL-BEING OF PHYSICAL EDUCATION TEACHERS AND ACADEMIC TEACHERS

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Abstract

Well-being is a positive outcome that is meaningful for people and for many sectors of society and teachers. Teachers are always undergoing tremendous stress to create an engaging learning experience. "learning-objectives" involves many stages. At each stage, a teacher gets involved and strives to deliver to the best of his ability. In a performance-driven world, it becomes increasingly stressful to fulfil the demands of students while ticking all the deliverables in a limited timeframe. Teaching method of Physical Education and Academic subjects are different, therefor it can realise that whether physical education teacher have positive lifestyle than the academic teacher. This piece of research was conducted to compare positive lifestyle of Physical education Teachers and Academic subject Teachers. Present study was comparative survey in nature and data was collected from various schools of Powai area of Mumbai. Total 100 (n=100) teachers were pulled to for the research study. Out of them n=50 was physical education teachers and n=50 other subject teachers. Data was collected with the help of questionnaire prepared by Dr. Ashok K. Kalia. Obtained data was compared by using standard statistical technique 't' test. It was found that the Mean Scores of Physical Well-being of Physical Education teachers and Academic Teachers were found similar to each other. Hence it can be found that the positive lifestyle of academic teacher cannot be considered as less good as compare to the positive lifestyle of physical education teacher.

Keyword: *- Well-Being, Physical Education Teachers, Academic Teachers*

INTRODUCTION

Well-being is a positive outcome that is meaningful for people and for many sectors of society, because it tells us that people perceive that their lives are going well. Good living conditions (e.g., housing, employment) are fundamental to well-being. Tracking these conditions is important for public policy. However, many indicators that measure living conditions fail to measure what people think and feel about their lives, such as the quality of their relationships, their positive emotions and resilience, the realization of their potential, or their overall satisfaction with life—i.e., their "well- being." Well-being generally includes global judgments of life satisfaction and feelings ranging from depression to joy. Teaching is a remarkably rewarding pursuit if one can enable and empower learners. However, it is also about being a confident and committed teacher with a sound balance of a healthy mind and a healthy body. Teachers undergo tremendous stress to create an engaging learning experience. Creating a sound teaching plan and finally achieving the "learning-objectives" involves many stages. At each stage, a teacher gets involved and strives to deliver to the best of his ability. In a performance-driven world, it becomes increasingly stressful to fulfil the demands of students while ticking all the deliverables in a limited timeframe.

METHODOLOGY

Basically, the present study was comparative survey in nature. The researcher visited to selected 21 schools of Powai to collect the data. Total 100 subject was selected to collect data. Out these 100 subjects, n=50 were Physical Education teacher and n=50 were Academic Teacher. Questionnaire prepared by Dr. Ashok K. Kalia was used to collect the data.

DATA ANALYSIS

The objective was to compare Mean Score of Physical Well-being of Physical Education teachers and Academic Teachers hence obtained data was decoded with the help of manual of the questionnaire and analyzed with the help of standard statistical technical 't'test by using SPSS software which was available in the laboratory of B.P.C. A's college of Physical Education, Wadala Mumbai-31., and the results are given in Table-1.

Table-1 Group wise Mean, SD, N and t-value of Physical Well-being.

Test	Mean	SD	N	t-value	Remarks
Physical Education Teacher	**5.58**	**1.80**	**50**	**0.12***	**p>0.05**
Academic Teacher	**5.62**	**1.63**	**50**		

From Table-1 it can be seen that the mean score of Physical Well-being is of Physical Education Teacher is 5.58 whereas the mean score of Physical Well-being of Academic Teacher is 5.62 and t-value of 0.12 which is not significant at 0.05 level of significance. The obtained results are shows that the mean scores of Physical Well-being of Physical Education Teacher and Academic Teacher are more less similar to each other.

CONCLUSION

In case of Physical Well-being, Physical Education teachers and Academic Teachers were found similar to each other. Hence it can be found that the positive lifestyle of academic teacher cannot be considered as less good as compared to the positive lifestyle of physical education teacher.

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EFFECT OF INTEGRATED TRAINING PROGRAMME ON AGGRESSION OF JUNIOR NATIONAL KABADDI PLAYERS OF GUJARAT STATE

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Abstract

According to Psychology, aggression describes any behavior or act aimed at harming a person or animal or damaging physical property. Since Kabaddi is a body contact game, there are more chances for a player to get excited or loose temper with opponents. Sometimes the referee's decision may also result in the player loosing his cool especially when he feels that the decision is not justified and not in his favor. Aggression is the important factor that significantly affects the performance of an individual or team. Integrated training module is designed to involve aspects like psycho-physical variable for enhancement of skill for junior National kabaddi players of Gujarat state which help to boost their performance at compaction level. Through Integrated training aggression is channelized into assertiveness of mind, and character is encouraged. The purpose of the study was to determine the "Effect of Integrated Training Programme on Aggression of Junior National Kabaddi Players of Gujarat State". The objective of the study was to compare the adjusted Mean Scores of Aggression of Junior National Kabaddi Players of Integrated Training Group and Control Group by taking Pre-Aggression as Covariate. Sixty female Junior National Players of Gujarat State were assigned to experimental (n=30) and control (n=30) groups. The experimental group underwent Integrated training; six days a week for 12 weeks, whereas control group didn't participate in the Integrated Training Programme. At the baseline and after training intervention Aggression test through questionnaire by M. K. Sultania were conducted to assess the aggression. Data were analyzed by using One Way ANCOVA test. The result revealed that Integrated Training Programme did not help to reduce Aggression.

Keyword: *Aggression*

Introduction:

Kabaddi is perhaps the only combative sport in which attack is an individual attempt while defense is a group effort. Yoga, the Indian science to control body and mind through meditation and self-control plays an integral part of Kabaddi.

According to Psychology, aggression describes any behavior or act aimed at harming a person or animal or damaging physical property. Since Kabaddi is a body contact game, there are more chances for a player to get excited or loose his temper with opponents. Sometimes the referee's decision may also result in the player loosing his cool especially when he feels that the decision is not justified and not in his favor. Aggression is the important factor that significantly affects the performance of an individual or team. Integrated training module is designed to involve aspects like psycho-physical variable for

enhancement of skill for junior National kabaddi players of Gujarat state which help to boost their performance at compaction level. Through Integrated training aggression is channelized into assertiveness of mind, and character is encouraged. In this piece of research, the researcher intends to see the "Effect of Integrated Training Programme on Aggression of Junior National Kabaddi Players of Gujarat State".

Aim:

This study is conducted to determine the effect of Integrated Training Programme on Aggression of Junior National Kabaddi Players of Gujarat State.

Objectives:

To compare the adjusted Mean Scores of Aggression of Junior National Kabaddi Players of Integrated Training Group and Control Group by taking Pre-Aggression as Covariate.

Hypotheses:

H01: There is no significant difference in the adjusted Mean Scores of Aggression of Junior National Kabaddi Players of Integrated Training Group and Control Group by taking Pre-Aggression as Covariate.

Methodology:

Selection of Sample

Sixty female Junior National Players of Gujarat State were assigned to experimental (n=30) and control (n=30) groups.

Research Design

The design of the experiment has been planned in three phases' viz., Phase-I: Pre-test, Phase-II: Training or Treatment and Phase-III: Post-test. The subjects in the experiment were divided into two groups, i.e. Group A: Experimental (Integrated Training Group and Group B: Control Group; each group consisted of 30 subjects. The experimental group underwent Integrated training; six days a week for 12 weeks, whereas control group didn't participate in the integrated training programme.

Dependent Variable

Psychological Variable: Aggression

Tools/Instruments

The following criterion measure was included to record the score of Aggression.

Sr. No.	Variable	Tools	Test	Score
1	Aggression	Questionnaire	Aggression Inventory Questionnaire by M. K. Sultania– 2005	Score in numbers

Training Schedule

The integrated training was considered as independent variable for the present study which included the following aspects:

Days	Direction	Physical Load	Set	Repetition
Monday	Muscular Strength	Floor Press - 5kg Dumbbells Goblet Squat - 10kg Dumbbells Front Press - 5kg Dumbbells Lunges - 5kg Dumbbells Romanian Deadlift - 10kg Dumbbells	1	6
	Speed	80m 60m 50m		4 3 3
	Power	Medicine Ball Throw Clap Push up Box Jump	1	8 5 50
Wednesday	Agility	Shuttle Run Single foot in each square Two feet in each square Jumping Jack feet Single Foot Hops Zig zag cone drill Side touch cone drill,W cone drill		3
	Mobility	Lateral cross Hurdle drills Front cross Hurdle drills Front & Back cross Hurdle drills Over and Under Hurdle drills		3
Friday	Muscular Endurance	Modified Push Up Mountain Climbers Burpee Jump Sumo Squat Plank Stair running High Knee,Rope Skipping	1	20 30 sec 30 sec 20 30 sec 30 sec 30 sec

Days	Direction	Exercise	Set	Time	Rest	Rep
Tuesday, Thrusday, Saturday	Yoga	Swastikasana	1	10 sec	10 sec	6
		Ardha Padmasana	1	10 sec	10 sec	6
		Brahma Mudra	1	10 sec	10 sec	6
		Parvatasana	1	10 sec	10 sec	6
		Vajrasana	1	10 sec	10 sec	6
		Ardha Halasana	1	10 sec	10 sec	6
		Bhujangasana	1	10 sec	10 sec	6
		Ardha Shalabhasana	1	10 sec	10 sec	6
		Naukasana	1	10 sec	10 sec	6
		Pawan muktasana	1	10 sec	10 sec	6
		Vakrasana	1	10 sec	10 sec	6

		Utkatasana	1	10 sec	10 sec	6
		Anuloma-Viloma Pranayama	1	10 sec	10 sec	6
		Breath Meditation	1	10 sec	10 sec	6
		Chanting of OM	1	10 sec	10 sec	6

Statistics

Comparison of Integrated Training group and Control group was done with the help of One Way Analysis of Covariance (ANCOVA).

Result and Discussion of the study

TREATMENT WISE COMPARISON OF ADJUSTED MEAN SCORES OF AGGRESSION

The adjusted F-value is 0.305 which is not significant at 0.05 level with df=1/57 when Pre-Aggression was taken as covariate. It shows that the adjusted Mean Scores of Aggression of Junior National Kabaddi Players of Integrated Exercise Training Group and Control Group do not differ significantly when Pre-Aggression was taken as Covariate. Thus, the Null Hypothesis that there is no significant difference in the adjusted Mean Scores of Aggression of Junior National Kabaddi Players of Integrated Exercise Training Group and Control Group by taking Pre Aggression as Covariate is not rejected. Further the adjusted mean score of Aggression of Integrated Exercise Training Group is 132.90. This does not differ significantly than that of Control Group where adjusted mean score of Aggression is 130.70. It may, therefore, be said that Integrated Exercise Training Group was not found to be effective in reducing Aggression of Junior National Kabaddi Players than Control Group where Pre Aggression was taken as covariate.

CONCLUSION

The result of the study helps to conclude that the Integrated Training among Junior National Kabaddi players of Gujarat State was not found to be effective in reducing Aggression.

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A STUDY OF SCOPE AND NEED OF THE SPORTS MANAGEMENT

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Abstract

Yoga plays a vital role in sports. In yoga, Asana, Pranayama, Suryanamaskara, Meditation and kayotsarga are usually performed by sportspeople for various Sports purposes. Yoga improves their concentration. It helps develop physical fitness and is also good for relaxation and rehabilitation after injury. One of the far-reaching benefits of yoga is the uncanny sense of awareness that it develops in the practitioner of an impending health disorder or infection. This in turn enables the person to take pre-emptive corrective action

INTRODUCTION

More and more people are discovering how yoga can be used to improve sports performance—from increasing focus, flexibility, and balance to preventing common injuries and improving functional strength. The training program for young sportsman can be planned by integrating a few static yoga poses into an existing fitness schedule.

The Eight Limbs of Yoga:

Yoga is composed of many layers, all of which can be used as a powerful technique to Enhance sportsman performance. These layers are known as the eightfold discipline or the eight "limbs" of yoga. These eight limbs form the main principles of yoga, as follows:

Yama means universal ethics.

Niyama means personal ethics.

Asana refers to posture.

Pranayama means breath regulation.

Pratyahara refers to the withdrawal of the senses.

Dharana refers to inner focus or concentration.

Dhyana means meditation or observation, mindful awareness.

Samadhi refers to absolute enlightenment or "Nirvana."

Sportsmen can benefit from all these principles with lesser or greater importance to one limb over the other that can be specific to the athlete's objective in enhancing athletic performance. Fitness professionals teaching yoga generally focus on asana (postures for stretching), pranayama (breathing control), Dharana (inner focus), and dhyana (relaxation and meditation)

Most sportsmen often have mental issues. Becomes more popular in the final circumstances of the game. another forgets the knowledge of the body, commits so many errors, is predisposed to injuries while still risking harm to many people.

The participant make errors in Badminton, table tennis, basketball and shuttle-ball games. The shuttle/ball comes out of court/field. You have to do a little bit of Ujjayi Pranayama correctly. In this field of research Dr. Halls is worth investing.

Overconfidence is one of the otherwise recurring problems for any group. Self-confidence is essential as compared to this, although over-confidence can be harmful to teams. Until some sports occur, yoga training may help to fix that. The physical exercise will be followed by intellectual conditioning.

Teams also bring damage to others and sometimes deliberately commit fouls. Yogic behavior restraints such as yamas-niyamas etc. could be adapted to correct the sportsmen's intentional foul play. Coaches will focus on yamas-niyamas, bringing the coaching philosophy into account.

Since physical education and athletics are diverse topics they may gain from adopting concepts and yoga exercise practices. There are also Non-conventional approaches. The basic principle is clear mind in a body of speech. Body teaches the body's muscles, and soul. These approaches are now common, too.

a. Physically (practice): Mental conditioning Improves the quality of economical energy use in action.

b. Psychologically (Imagination): professional preparation increases attention, good vision, emotional awareness of teammates/coaches/pain, learning to eliminate old mistakes and fear of failure.

BENEFITS AND YOGA IN SPORTS

Today sports are not just a physiological phenomenon, and are a strong interaction of the mind and body. It is day by day becoming more competitive and looked upon as a career option for monetary gains, and a desire to win at any cost. So the changing face of the sports scene today seeks important solutions. A sportsman mostly needs basic qualities. The Basic qualities -- of fitness & Yoga in sports. 1.Speed 2.Balance 3. Flexibility 4. Mind 5. Meditation 6.Strength, & Stamina.

Improved Strength

Routine and regular practice of the different yoga asanas has helped me develop power and raise lean muscle mass. Most specifically about many underutilized muscle classes in my preferred sporting activities of swimming, riding and running. Such improvements have improved core body flexibility and dramatically impeded overuse injury by improving the muscles that are protective yet otherwise underdeveloped across the most utilized muscles, providing a more integrated and usable total strength.

Balance

I have also been very agile as a swimmer. Yet, traditionally, my performance is bad. Yet my agility and posture have vastly strengthened due to a daily yoga practice. What does it matter? Good posture and agility ensures greater influence of how I shift my body, which in effect contributes to improved technique and form — the brass ring any competitor spends a lifetime mastering, whether it's a swimming motion, a golf drive, a running pass and a jump shot or a wrestling shift.

Flexibility

Yoga also increases strength of the joints and muscles, and is important for the general physiological soundness of the body. In a single gesture or sequence of motions, increased joint and muscle pliancy transforms into a wider range of motion, or an improvement in output latitude. For instance, a swimmer with supple shoulder and hip joints is capable of catching and pulling more water than a more narrow

range of motion swimmer. The effect is greater forward motion per stroke, as well as improved muscle activity. In addition, because of the change in total force that can be applied for each step, this improved range of motion allows a greater capacity to adapt a single muscle group to power. And although there is some debate over the advisability of "over" stretching (especially for runners), I remain a massive supporter, realizing that the harder I try to preserve my stability (something that declines with age), the less probable I would experience an overuse injury.

Free You're Mind

A significant advantage of yoga practice is the opportunity to build a tension free mind. Regular exercise is used as a method for improving breath management, helping to enhance attention and concentrating, allowing for quick thought and effective decision taking. A useful weapon in every sports environment. In any sport, mental practice will teach you how to gain control of your emotional states, so that excitement and anxiety do not impede your performance.

CONCLUSION:

From the above discussion, it has been clear that yoga helps improve sports performance and reduces the chances of injuries in players by making stronger muscles, more flexible joints and ligaments, focused concentrated and calm mind. Yoga plays a pivotal role in cultivating stronger and healthier mind and body connections which helps the sports person in performing better than best in their respective sport. Thus yoga should be an important part of the training schedule of a player.

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A STUDY OF BENEFITS OF YOGA IN SPORTS PERFORMANCE

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I have also been very agile as a swimmer. Yet, traditionally, my performance is bad. Yet my agility and posture have vastly strengthened due to a daily yoga practice. What does it matter? Good posture and agility ensures greater influence of how I shift my body, which in effect contributes to improved technique and form — the brass ring any competitor spends a lifetime mastering, whether it's a swimming motion, a golf drive, a running pass and a jump shot or a wrestling shift.

Flexibility

Yoga also increases strength of the joints and muscles, and is important for the general physiological soundness of the body. In a single gesture or sequence of motions, increased joint and muscle pliancy transforms into a wider range of motion, or an improvement in output latitude. For instance, a swimmer with supple shoulder and hip joints is capable of catching and pulling more water than a more narrow range of motion swimmer. The effect is greater forward motion per stroke, as well as improved muscle activity. In addition, because of the change in total force that can be applied for each step, this improved range of motion allows a greater capacity to adapt a single muscle group to power. And although there is some debate over the advisability of "over" stretching (especially for runners), I remain a massive supporter, realizing that the harder I try to preserve my stability (something that declines with age), the less probable I would experience an overuse injury.

Free You're Mind

A significant advantage of yoga practice is the opportunity to build a tension free mind. Regular exercise is used as a method for improving breath management, helping to enhance attention and concentrating, allowing for quick thought and effective decision taking. A useful weapon in every sports environment. In any sport, mental practice will teach you how to gain control of your emotional states, so that excitement and anxiety do not impede your performance.

CONCLUSION:

From the above discussion, it has been clear that yoga helps improve sports performance and reduces the chances of injuries in players by making stronger muscles, more flexible joints and ligaments, focused concentrated and calm mind. Yoga plays a pivotal role in cultivating stronger and healthier mind and body connections which helps the sports person in performing better than best in their respective sport. Thus yoga should be an important part of the training schedule of a player.

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EFFECTS OF HATHA YOGA TRAINING ON THE HEALTH-RELATED PHYSICAL FITNESS

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Abstract

The purpose of the study is to determine the effects of hatha yoga training on Health Related Physical Fitness variables including muscular Strength, Agility, Power, Speed and Cardiovascular Endurance. Thirty randomly selected male students of Nirmala foundation of B. Ed. College, Goregaon, Mumbai volunteered to participate in the study. Subjects were assigned into two groups: A (experimental: n-15) and B (control: n-15). The subjects from Group A were subjected to an 8-week hatha yoga training programme. Each yoga session consisted of 10 minutes of pranayama's, 40 minutes of asanas and 5 minutes of supine relaxation in savasana. The subjects were evaluated pre and post of the 8-week training program. t-test was used to assess the between-group differences for dependent data to assess the Post-Pre differences. Results indicated that the Health Related Physical Fitness variables including muscular Strength, Agility, Power ($p<0.01$) and Speed ($p<0.05$) significantly improved in group A compared with the control one. There was no significant improvement found in experimental group for cardiovascular endurance. These findings indicate that regular hatha yoga practice can elicit improvements in the some of the variables of Physical Fitness and may contribute to enhance health status.
Keywords: *Hatha yoga, Agility, Power, Speed, cardiovascular endurance.*

1. Introduction

Yoga is the oldest system of personal development encompassing body, mind, and spirit. The word yoga is derived from the Sanskrit root Yuj, which means to join or to yoke. In philosophical terms, yoga refers to the union of the individual self with the universal self (Hadi 2007). Yoga is an ancient Indian practice, first described in Vedic scriptures around 2500 B.C., which utilizes mental and physical exercises to attain samadhi, or the union of the individual self with the infinite (Lidell ;1983). Hatha Yoga has become increasingly popular in western countries as a method for coping with stress and as a means of exercise and fitness training (Schell et al; 1994). Hatha yoga is an ancient practice that was developed to promote physical health as well as an awareness of one's true nature. It consists of a series of postures, called asanas, and various breathing exercises, called pranayama, which encourage balance between the physical, mental/emotional, and spiritual aspects of a human being. In short, hatha yoga promotes health. Like other forms of yoga, hatha yoga is purported to quiet the mind and focus the concentration; however, of all the yoga traditions, the importance of physical fitness is emphasized most in hatha yoga(Worthington;1982, Zorn;1968).Yoga has been practiced for thousands of years. It is based on ancient theories, observations

and principles of the mind-body connections. Substantial research has been conducted to look at the health benefits of yoga – yoga postures (asanas), yoga breathing (pranayama) and meditation. These yoga practices might be interacting with various somatic and neuro-endocrine mechanisms bringing about therapeutic effects (Malhotra and Singh ;2002). Yoga is traditionally believed to have beneficial effects on physical and emotional health (Gilbert C. ;1999). The overall performance is known to be improved by practicing yoga techniques (Upadhyay et al ;2008) and their effects on physical functions were reported (Hadi 2007). Yoga practices can also be used as psycho-physiological stimuli to increase the secretion of melatonin which, in turn, might be responsible for perceived well-being (Harinath et al;2004). Yoga may be as effective as or better than exercise at improving a variety of health-related outcome measures (Ross and Thomas; 2010)

2. Methodology

2.1. Subjects:

Thirty randomly selected male aged 21 – 24 years, volunteered to participate in the study. All were doing Bachelor degree in education. They were randomly assigned into two groups: A (experimental N=15) and B (control N=15). Selection of Variables and Tests:

The Subjects were tested on the following physical fitness variables. Physical fitness variables /Test

- Muscular Strength / Sit-ups Test
- Agility /Shuttle Run Test
- Power /Standing Broad jump Test
- Speed /50 yard dash Test
- Cardiovascular Endurance /600 yard run and walk Test

2.2. Training Intervention

The subjects from Group A were underwent to a 8-week yogic exercises training programme except Saturday and Sunday. Each yoga session consisted of 10 minutes of pranayamas, 15, 40 minutes of asanas, (yoga postures), and 5 minutes of relaxation in savasana. The pranayamas consisted of anulom vilom, kapal bathi alternate nostril breathing while maintaining the padmasana position.The asanas introduced in this study included the following poses:

- Vakrasana
- Vidalasana
- Pascimottanasana
- Maha mudra
- Vrksasana
- Virabhadrasana
- Trikonasana

The asanas focused on the quality and ease of breath, isometric muscular contractions, flexibility, balance, and concentration. Each yoga session ended with 10 minutes of savasana to relax and cool down.

2.3 Data Analysis:

Values are presented as mean values and SD. The paired t' test was used to compare parameters within groups. Data was analyzed using SPSS Version 16.0.

3. Results

Table- 1: Mean, SD and t –test values of muscular Strength and agility of experimental group and control group during Pre Test and Post Test.

Variables	Experimental (A) N: 15		t-test	Control Group (B) N: 15		t-test
	Pre	Post		Pre	Post	
Muscular Strength	19.8±0.54	21.73±1.9	9.37**	20.53±1.95	20.33±1.98	0.54
Agility	12.78±0.28	12.38±0.97	4.77**	13.85±0.38	13.79±0.38	0.65

**Significant at 0.01 level

Table No.1 showed the mean ±S.D. and 't' values of Physical Fitness variables of experimental group and control group. The mean ±S.D of muscular strength of pre-test of experimental group and post-test of experimental group was19.8±0.54 and 21.73±1.9 respectively, whereas the mean ±S.D of muscular strength of pretest of control and posttest of control group was 20.53±1.95 and 20.33±1.98. The "t" value in case of experimental group was 9.37 and for control group it was 0.54. The mean ±S.D of agility of pretest of experimental group and posttest of experimental group was12.78±0.28 and 12.38±0.97 respectively, whereas the mean ±S.D of agility of pretest of control and posttest of control group was 13.85±0.38 and 13.79±0.38. The "t" value in case of experimental group was 4.77 and for control group it was 0.65. Thus it may be concluded that 8-week of hatha yoga training programme showed significant improvement in muscular strength and agility at ($p<0.01$) level. There was non-significant deference found in control group in both variables.

Table- 2: Mean, SD and t –test of power, speed and cardiovascular endurance of experimental group and control group during Pre Test and Post Test.

Variables	Experimental (A) N: 15		t-test	Control Group (B) N: 15		t-test
	Pre	Post		Pre	Post	
Power	1.96±2.4	2.4 ±8.81	11.88**	1.87±9.59	1.9 ±0.11	0.87
Speed	6.93±8.32	6.73±0.34	2.42*.	7.04±0.37	7±0.42	1.36
Cardiovascul rEndurance	1.58±4.9	1.53±0.14	2.02	1.86±0.27	1.86±0.27	0.33

**Significant at 0.01 level *Significant at 0.05 level

Table-2 showed the mean ±S.D. and't' values of physical fitness variables of experimental group and control group. The mean ±S.D of power of pretest of experimental group and posttest of experimental group was 1.96±2.4 and 2.4 ±8.81 respectively, whereas the mean ±S.D of power of pretest of control and posttest of control group was 1.87±9.59 and 1.9 ±0.11. The "t" value in case of experimental group was 11.88 and for control group it was 0.87 .The mean ±S.D of speed and cardiovascular endurance of pretest of experimental group and posttest of experimental group were 6.93±8.32 and 6.73±0.34 and 1.58±4.9 and 1.53±0.14 respectively, whereas the mean ±S.D of speed and cardiovascular endurance of pretest of control and posttest of control group were 7.04±0.37 and7±0.42 and 1.86±0.27 and 1.86±0.27. The "t" value in case of experimental group was for speed 2.42*.and for cardiovascular endurance 2.02. For control group it was 1.36 for speed and 0.33 for cardiovascular endurance. Thus it may be concluded that 8-week of hatha yoga training programme showed significant improvement in power ($p<0.01$) and speed ($p<0.05$). There was non- significant deference found in experimental group for cardiovascular endurance. For each of the chosen variable, the results pertaining that there were non-significant deference found in control group.

4. Discussion

The study was conducted to find out the effects of hatha yoga training on health-related physical fitness variables. The statistical analysis of data collected on thirty subjects indicated that there were significant improvement in all the variables (except cardiovascular endurance).This study shows that 8 weeks of regular hatha yoga practice, a tradition that has existed for at least 4500 years and is now becoming increasingly popular in the United States, (Hewitt; 1978, Schell et al; 1994) can have significant benefits in improving the health-related aspects of physical fitness. We found significant increases in muscular

strength, agility, power and speed. There were no significant changes in cardiovascular endurance. Studies have shown that yoga practice can lead to improvements in hand-grip strength (Madanmohan et al; 1992), 5muscular endurance (Ray et al; 1986) and agility (Bal and Kaur; 2009).7 Practitioners credit yoga for everything from improving their strength, respiration and fitness levels to "opening energy channels." Yoga asana are psychophysical practices to culture body and mind. Yoga practices are known to significantly improve health status, and reduce stress and anxiety (Ross and Thomas; 2010). Furthermore, the positive results of this study indicate that hatha yoga is a form of physical activity that would meet the objectives of current recommendations to improve physical fitness and health (Surgeon; 1996). Yogasanas training programme showed significant improvement in agility level. The findings is supported by the study conducted by Galantino et al. (2004) to evaluate a possible design for a 6-week modified hatha yoga protocol to study the effects on Twenty-two participants (M = 4; F = 17), between the ages of 30 and 65 with chronic low back pain showed improved balance and agility. The researcher Recommendations with Use Hatha Yoga exercises because of its clear and positive impact on improving the health-related physical fitness variables.

5. Conclusion

The results of this investigation indicate that 8 weeks of hatha yoga practice can significantly improve multiple health-related aspects of physical fitness in young, healthy, predominantly male subjects. More specifically, yoga training can increase strength, agility, muscular power and speed. However, in the present study, hatha yoga did not have a significant effect on endurance. These data provide more evidence to support the beneficial effect of Hatha Yoga for improving the health-related physical fitness variables.

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EFFECT OF YOGA ON THE CONCENTRATION OF THE SECONDARY AIDED AND UN-AIDED SECONDARY SCHOOLS OF MUMBAI

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Abstract

Memory is the mental processes of acquiring and retaining information for later retrieval and the mental stores system that enables these processes. Concentration means wholeness unity, equilibrium. It is the focusing of attention upon a particular object. The processes of concentration of attention and memory are the main factor in learning. Studies have found that Yoga exercises benefits both concepts. The main aim of the present investigation was to examine the effects of Yoga practices on secondary school student's concentration. 150 secondary school students (each 50 respondents from Government, Aided and Unaided Schools of South Mumbai) were randomly selected. Yoga exercises consisting of Pranayama, prayer and value orientation programmers were administered on selected respondents for six weeks. The post-tested for their performance on concentration of attention and memory. Results showed that pre-test and post-test produced and exhibited higher concentration of attention and memory. It has been suggested on the basis of these observations that Yoga practices and exercises should be a regular part of the high school curriculum

***Keywords**: Yogic Practices, Concentration, Secondary*

INTRODUCTION

Yoga is a fantastic system to maintain physical, mental, emotional and spiritual health. It is a "science", which provides a logical step-by-step process for a new understanding us and of the universe around. That is why our considered the ancient seers and including meditation as practice of part of educational process to keep the child sound in all aspects physically, mentally and spiritually.

Concentration means wholeness unity, equilibrium. It is the focusing of attention upon a particular object. Memory is an ability to recall or remember past events or previously learnt information or skills. The process of concentration of attention and a power of recalling (memory) are the major factors in learning. Improvement in concentration and memory has been reported in several yogic studies. Yoga is an ancient Indian science and way of life that includes not only physical movements and postures but also regulates breathing and meditation. It appears that following Yoga practice, the participants were better able to focus their mental resources, process information quickly, more accurately and also learn, hold, and update pieces of information more effectively.

The presence of Yoga in main stream in Indian culture has grown dramatically during past 15 years. Yoga is a mind–body practice that combines physical postures, breathing exercises, and meditative practices, with the goal of unifying the physical, mental, and emotional selves. Research has proven that regular

practice of yoga helps in the development of the body, mind, and spirit, leading to healthier and more fulfilling life (Ray, et al, 2001). A part from the achieving physical health, yoga can maintain cognitive control, specifically in the area of attention and memory (Heriza, 2004; Oken et al, 2006). Studies have been conducted to analyze the effect of yoga practices on attention – concentration and memory (Anantharaman&Kabir, 1984).

The science of yoga is a powerful stream of knowledge, which enables the practitioners to achieve radiant physical health, serene mind and continuous spiritual uplift and creates the ability for harmonious social living. The processing of sensory information at the thalamic level is facilitated during the practice of pranyama. Yoga breathing through a particular nostril increased spatial memory scores. "OM Mediation has been shown to cause mental alertness. Meditation energizes the pre-frontal lobes of the human brain and in time, the limbic system becomes harder to arouse. This results in behavioral changes including better ego, integrity, fewer minor psychological problems, less depression and anxiety and better social skills.

OBJECTIVES OF THE STUDY

1. To study the effect of Yoga on the concentration of the secondary school students.
2. To study the effect of Yoga on the government, Aided and unaided secondary school students.

HYPOTHESIS OF THE STUDY

1. There is no significant difference between mean score of pre- test and post-test effect of yogic practices of concentration of Boys and Girls for secondary school students.
2. There is no significant difference between mean score of pre- test and post-test effect of yogic practices of concentration of Government, Aided and Unaided secondary school students.

METHOD OF THE STUDY

To observe the effect of Yoga exercises on the concentration of secondary school students, this entire study was depended on Experimental Method. Among this Experimental Method, a "complete experimental simple equivalent group pre-test and post-test experiment design" was applied for data collection.

IMPORTANCE OF THE STUDY

The benefits of yoga for students can be manifold. Yoga makes students limber and flexible, helping them remain fit. Some particular asanas like sun salutations or surya namaskars increase the blood flow to the brain, helping the brain to function better. Regularly practicing poses also helps students to concentrate better and train the body to do things unconsciously.

DATA ANALYSIS AND INTERPRETATION

Table-1: Demographic profile of the respondents.

Variable		No. of Respondents	Percentage of Respondents
Gender	Boys	75	50.00
	Girls	75	50.00
Management	Government	50	33.33
	Aided	50	33.33
	Unaided	50	33.33

The above table-1and graph shows that demographic profile of the samples. This profile can be classification of two components. The first component Gender can be classification Boys and Girls. Out of 150 students 75(50%) of boys and 75(50%) of girls. The second component type of school management, out of 150 students 50(33.33%) of government school students and 50(33.33%) of Aided school and 50(33.33%) of students in private unaided school students to be selected for collection of primary data.

HYPOTHESIS TESTED

H1 : There is no significant difference between mean score of pre-test and post-test effect of yogic practices of concentration about Boys and Girls for secondary school students.

Table-2: Mean, Standard Deviation and t-values of pre-test and post-test of boys & girls.

Variable		Gender	No .of respondents	Mean	SD	t-value
Yogic Practice of Concentration	Pre-Test	Boys	75	9.04	2.04	**3.81**
		Girls	75	8.96	1.24	
	Post-test	Boys	75	11.23	1.96	**7.26**
		Girls	75	12.48	2.33	

The above table-2 depicts mean, standard deviation and t- values of pre-test and post-test for boys and girls for secondary school students. Pre-test mean score of boys 9.04 and 8.96 of girls. In post-test mean scores boys & girls of 1.96 and 2.33. So therefore rejected by the null hypothesis. Therefore there is significant difference between mean score of pre-test and post- test effect of yogic practices of concentration about Boys and Girls for secondary school students.

H2: There is no significant difference between mean score of pre-test and post-test effect of yogic practices of concentration about Government, Aided and Unaided secondary school students

Table-3: Mean, Standard Deviation and t-values of pre-test and post-test of Government, Aided and Unaided secondary school students.

Variable	Type of Management	No .of respondent	Mean	SD	t-value	
Yogic Practice of Concentration	Pre-Test	Government	50	8.64	2.36	4.41
		Aided	50	7.10	0.68	
		Unaided	50	9.32	1.46	
	Post-test	Government	50	10.22	1.96	6.49
		Aided	50	9.67	2.01	
		Unaided	50	12.88	0.87	

The above table-3 and graph depicts mean, standard deviation and t-values of pre-test and post-test for government, aided and unaided secondary school students. Pre-test mean score of government, aided and unaided 8.64, 7.10 and 9.32. In post- test mean scores government, aided and unaided of 10.22, 9.67 and 12.88. So therefore rejected by the null hypothesis. Therefore there is significant difference between mean score of pre-test and post-test effect of yogic practices of concentration about government, aided and unaided secondary school students.

RESULTS OF THE STUDY

1. There is significant difference between mean score of pre- test and post-test effect of yogic practices of concentration about Boys and Girls for secondary school students.
2. There is significant difference between mean score of pre- test and post-test effect of yogic practices of concentration about government, aided and unaided secondary school students.

EDUCATIONAL IMPLICATIONS OF THE STUDY

1. The present study has a great importance to parents, teachers, educationists, counselor, therapists and all those who are concerned with the well-being of secondary school students.
2. It provides direction to teachers and taught both in solving the problems of students regarding concentration.
3. The present study develops interest among educationists, researchers and teachers to implement yogic practices at each level of education and scheduling of such training in the curriculum.

CONCLUSION

It is evident from the results that the students who were exposed to yoga practices exhibited enhanced improved Concentration. After analyzing the data by carrying out the statistical treatment and the findings, the following conclusions can be drawn:

Significant difference was shown between pre-test and post- test between 9th and 10th standard students, between yogic practices to improve the concentration of curricular and co- curricular activities for secondary school students.

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A STUDY OF EFFECT OF JUDO TRAINING PROGRAMME ON ACHIEVEMENT MOTIVATION OF STUDENTS OF MUMBAI CITY

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Abstract

Judo means ("gentle way") is a modern Japanese martial art a system of unarmed combat, and now primarily a sport. Judo is not only a training of body and mind, but also a way of human formation. The main objective of the study was to compare the adjusted mean scores of Achievement motivation of the Judo Training Group and Control Group by taking Pre-Achievement motivation as covariate. Non-equivalent control group study had been taken for collection of data. The judo training group was known as experimental group and non-judo training group was known as control group in the study. In methodology, before training pre and after training post data were collected from students. The total score of score then were compared with One Way ANCOVA analysis. The results of Achievement Motivation (Fy.x=12.34, df 1/57, p<0.01) was significant. The Judo Training Programme was useful for improving Achievement Motivation of students of Mumbai city.

***Keywords**: Judo, Judo Training Programme, Achievement Motivation, School Students*

INTRODUCTION

Principally, judo is an individual competition in which the players are divided by gender and by weight category. It is a dynamic, physically demanding sport that requires complex skills and tactical excellence for success. The main principle of judo is 'maximum efficiency with minimum efforts'. Judo training programme is one of the best way to improve one's physical and mental potential. In order to get the best out of student one should create and use achievement motivation as a drive to perform well. It may also help in improving in one's academic performance.

RATIONALE OF THE STUDY

The present study was conducted on students of mumbai city aging 13 to 15. Nowadays it is being observed that students are more involving in digital world, thus in order to improve their physical as well as mental abilities this reseasrch was conducted.

DEFINITION

Achievement Motivation: Achievement motivation is the need for excellence and significant accomplishment, despite what rewards may be offered after the achievement has been met. Measured by Achievement motivation scale in scores by (Prof. Pratibha Deo and Dr. Asha Mohan)

OBJECTIVE OF THE STUDY:

 To compare the adjusted mean scores of Achievement motivation of the judo Training Group and Control Group by taking Pre-Achievement motivation as Covariate.

HYPOTHESIS OF THE STUDY:

H0: There is no significant difference in the adjusted Mean Scores of Achievement motivation of the Judo Training Group and Control Group by taking pre-Achievement motivation as Covariate.

METHODOLOGY

The methodology was main course of the study. The present research was experimental types which provide pre and post data quantitatively. The test marks of students were collected as per Pre training and Post Training.

Design of the Study

Non equivalent control group study had been taken for collection of data. The experimental design had two groups' experimental group and control group. The Judo training programme was designed with the help of experts. After a pilot study certain changes were implemented with guide and experts. The training schedule were prepared and conducted for six weeks on students of age group 13 to 15 years. There were holiday on Sunday and holidays for training. During eight weeks training were conducted daily sixty (60) minutes.

Sample

The students were selected from Mumbai city aged 13 to 15 years. Students were selected from SSL English School, Parel. Total size of Sixty (60) boys students were selected from the above school. Further they were divided into two groups, Experimental group (N=30) and control group (N=30).

There were two types of variables for experimental design. Independent and Dependent Variables were basically required for conducting any Experimental design. Independent Variable was also known as Discontinues and Dependent Variables known as Continues variable. The present study was tested Skill Related Physical fitness and achievement motivation component by various following reliable tests according to the standard. All the test were standardized, the test were used for the data collection referred by the book entitled a practical Approach to Measurement and evaluation written by Kansal, D.K. (2012) In the following table were selected dependent variables and their tests as per reliability and validity for present study.

A. Independent Variable (Judo Training Programme)

The training was consisting of Six week judo training programme

B. Dependent Variable

 Achievement Motivation.

Criterion Measures

- Variable – Achievement Motivation
- Teste – Achievement Motivation Questionnaire by (Deo P, Mohan A, 2011)

Training Schedule

The six week training schedule was prepared with guidance by Guide and expert. The following training were arranged step by step for one hour.

WEEK	**1 & 2**				**3 & 4**				**5 & 6**			
LOAD	**55% - 65%**				**65%-75%**				**55%-65%**			
EXERCISE	**REP**	**TIME (min)**	**REST** (min)	**SET**	**REP**	**TIME**	**REST**	**SET**	**REP**	**TIME**	**REST**	**SET**
Ukemis												
Mai ukemi	12	1	1	1	16	1	1	1	12	1	1	1
Ushiro ukemi	12	1	1	1	16	1	1	1	12	1	1	1
Hidare yoko ukemi	12	1	1	1	16	1	1	1	12	1	1	1
Migi yoko ukemi	12	1	1	1	16	1	1	1	12	1	1	1
Mae mawari ukemi	12	1	1	1	16	1	1	1	12	1	1	1
Nage Waza												
O-Goshi	10	2	1	2	15	2	1	2	10	2	1	2
O-Soto gari	10	2	1	2	15	2	1	2	10	2	1	2
Ippon-Seoi nage	10	2	1	2	15	2	1	2	10	2	1	2
O-Uchi gari	10	2	1	2	15	2	1	2	10	2	1	2
Morote-Seoi nage	10	2	1	2	15	2	1	2	10	2	1	2
Katame waza												
Kesa-Gatame	1	30 sec	30 sec	5	1	35 sec	25 sec	5	1	30 sec	30 sec	5
Yoko-Shiho gatame	1	30 sec	30 sec	5	1	35 sec	25 sec	5	1	30 sec	30 sec	5
Kami-Shiho gatame	1	30 sec	30 sec	5	1	35 sec	25 sec	5	1	30 sec	30 sec	5

PROCEDURE OF THE STUDY

Pre-test:- Before the actual administration of the pre-test the subject were oriented about the testing by giving the detailed explanation about the testing procedures as well as by explaining do's & don'ts of the tests.

Training phase:-The total judo training programme of the experimental group was of 6 weeks, 5 days in a week i.e. Monday to Friday except on holiday, in the afternoon session 1 hour. The control group were not given any training in these 6 weeks.

Post-test:- After judo training programme ended the post test was scheduled, and date was collected the same way as it was collected in pre test, with the help of reliable and valid tool.

STATISTICAL PROCEDURE

The collected data was analyzed by One Way Analysis of Covariance (ANCOVA) method of statistical technique.

RESULT OF THE STUDY

Treatment wise comparison of adjusted mean scores of Achievement Motivation by taking Pre-Achievement Motivation as Covariate

The objective of the present study was to compare adjusted mean scores of Achievement Motivation of Students of Judo Training Group and Control Group by taking Pre- Achievement Motivation as Covariate. The data were analyzed with the help of One Way ANCOVA and results are given in table below.

Table: Summary of One Way ANCOVA of Achievement Motivation by taking Pre-Achievement Motivation as Covariate

Source of Variance	Df	SSy.x	MSSy.x	Fy.x	Remark
Treatment	1	571.826	571.826	12.341	P<0.01
Error	57	2641.223	46.337		
Total	59				

From above table it can be seen that the adjusted F-value was 12.341 which was significant at 0.01 level with df=1/57 when Pre-Achievement Motivation was taken as covariate. It shows that adjusted mean scores of Achievement Motivation of Judo Training Group and Control Group differ significantly when Pre- Achievement Motivation was taken as covariate. Thus, the Null Hypothesis that there is no significant difference in adjusted mean scores of Achievement Motivation of Students of Judo Training Group and Control Group by taking Pre-Achievement Motivation as covariate is rejected. Further the adjusted mean score of Achievement Motivation of Judo Training Group is 131.06 which higher than that of Control Group where adjusted mean score of Achievement Motivation is 124.83. It may, therefore, be said that Judo Training was not found to be effective in improving Achievement Motivation of students than Control Group where Achievement Motivation was taken as covariate.

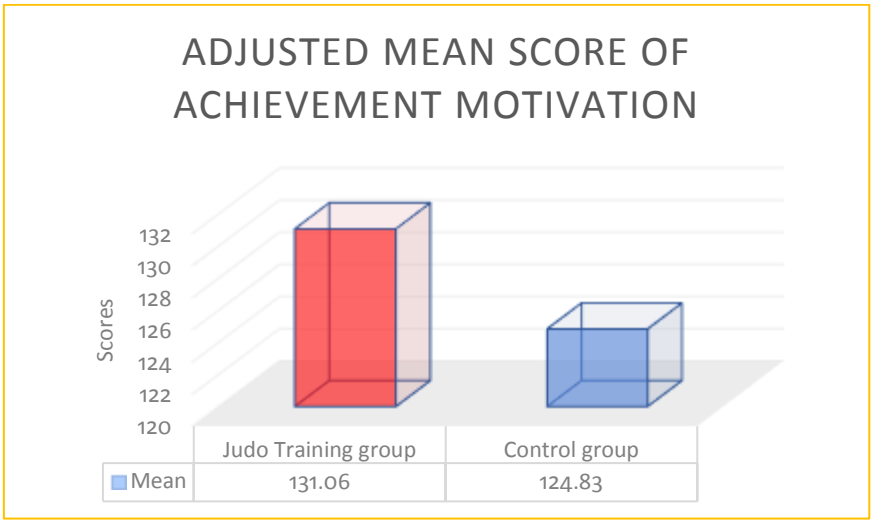

Figure: Comparison of Adjusted Mean Scores of Achievement Motivation between Judo Training Group and Control Group

CONCLUSION

The above result helps to conclude that the Judo Training was helpful in increasing the Achievement motivation level of School students where pre-Achievement Motivation was taken as covariate.

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A COMPARATIVE STUDY OF AGGRESSION OF SOFTBALL AND CRICKET PLAYERS OF MUMBAI

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Abstract

The aim of the researcher was to compare the aggression of Softball and Cricket players of Mumbai. Total 100 players were selected as sample for the study by using simple random Sampling. The objective of the researcher was too compare the Mean Scores of Aggression of Softball and Cricket players . It was a Comparative survey, so the date was analyzed by t-test. The results revealed that the Aggression of Softball players was significantly higher than Cricket players

Keywords: *Aggression*

INTRODUCTION

"Aggression "refers to a range behaviour that can result in both physical and psychological harm to yourself, others, or objects in the environment. Aggression centers on hurting another person either physically or mentally.

Personality, a characteristic way of thinking, feeling, and behaving. Personality embraces moods, attitudes, and opinions and is most clearly expressed in interactions with other people. It includes behavioral to characteristics, both inherent and acquired, that distinguish one person from another and that can be observed in people's relations to the environment and the social group.

Although other fields of psychology examine many of the same functions and processes, such as attention, thinking, or motivation, the personologist places emphasis on how these different processes fit together and become integrated so as to give each person a distinctive identity, or personality

Therefore, both of these variables are amongst the prime psychological attributes of players of various games.

Hence, I will be conducting research on the softball players and cricket players to find out the relative differences between the two. (Softball player and Cricket player)

HYPOTHESIS OF THE STUDY:

- H01: To compare mean scores of Aggression of Softball and Cricket players.

METHODOLOGY

The study was to compare the aggression of softball and cricket players of Mumbai. therefore the researcher had selected players from different schools which are located in Mumbai suburban by using Probability Sampling Method.

DESIGN OF THE STUDY

The present study is Comparative survey in nature under the heading of Descriptive Research. The Researcher was personally visited the selected Schools and Collected the data filled by the Male Softball & Cricket Players of Mumbai..

SAMPLE

A total sample size of Hundred (n=100) Players were selected. n=50 players of Softball and n=50 players of Cricket of Mumbai Sub technique for collecting data Researcher adopted. systematic Random Sampling under the head of Probability Sampling Method..

VARIABLE AND TEST

After reviewing of the available sport literature and discussion with the experts the following are the psychological variables selected for the present study.

Aggression Scale

RESULTS AND DISCUSSION:

RESULTS ON AGGRESSION

GROUP WISE COMPARISON OF MEAN SCORES OF AGGRESSION

The first objective was to compare Mean Scores of Aggression of Softball Players Group and Cricket Players Groups. The data were analyzed with the help of t-Test and results are given in Table 4.1.

TABLE 4.1: Comparison of Mean, SD, N, df and t-value of Aggression of Softball and Cricket Players

Group	Mean	SD	N	t-value	df	Remarks
Softball Players	174.16	19.68	50	2.87**	98	P<0.05
Cricket Players	165.04	10.92	50			

**Significant at 0.05

From Table 4.1 it can be seen that the t-value is 2.87 which is significant at 0.05 level with df=98. It indicates that mean scores of Aggression of Softball Players Group and Cricket Groups differ significantly. Thus, the Null Hypothesis that there is no significant difference in Mean Scores of Aggression of Softball Players Group and Cricket Players Groups is rejected. The mean scores of Aggression of Softball Players is 174.16 which is significantly higher than Cricket Group which is 165.04 It may therefore be said that Softball Players Group is found superior Cricket Group.

CONCLUSION:

The analysis in interpretation of the data collected by the researcher the following finding may conclude: The Aggression of Softball Players is higher than Cricket Players.

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EFFECT OF PROGRESSIVE RESISTANCE AND AEROBIC EXERCISE PROGRAMMES ON SELECTED MORPHOLOGICAL CONSTITUENTS OF PHYSICALLY UNDERGROWN SCHOOL CHILDREN

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Abstract

Physical education in school has become sports-focused highlighting the students performance in sports only. The real aim of physical education for the development of health and fitness of the students at mass level, has been diverted towards sports where the attention is being given to a limited students for winning medals. Since the attention of Physical education has been delimited to some students in schools for sports, the number of low-fit and under-grown students has become the majority. As stated earlier, different schedules of exercise and training are available for improving health and fitness of healthy students, but such schedules for low-fit as well as under-grown students is meager at school level. Therefore, the present investigation entitled, "Effect of Progressive Resistance and Aerobic Exercise Programmes on Morphological Constituents of Physically Undergrown School Children" has been undertaken. The present experiment considers these objectives are, to identify the low-fit as well as under-grown school children from some of the schools of Palghar district and to prepare appropriate training schedules of 'progressive resistance' and 'aerobic exercise' suitable for the low-fit and under-grown school children. 165 Low-fit students in the age group 12-15 years were identified from the National English school, Virar. Sixty boys (N=60), The duration of experiment was for the period of 8 weeks. The 'Parallel Group Design' was followed to conduct the experiment. Data were analyzed by using Descriptive statistics and significance of differences between and within group was evaluated with the help of Factorial ANOVA followed by Scheffe's Post Hoc test. The results help to interpret that although both the training stimuli indicate improvement, the 'Aerobic Exercise' could reveal significantly better effects than the 'Progressive Resistance Exercise' in improving the ability of Cardiovascular Endurance among the selected Low-fit / under grown schoolboys.

***Keywords**: Low fit/Under grown, Overweight, Aerobic Exercise, & Morphological Constituents*

Introduction

In this age of space and automatization, we know that our normal work activities do not provide appropriate exercise which our bodies, our muscles, and our heart and lungs require, if they are to continue to function efficiently and effectively. Today's life has given us maximum comfort, but it leads our life towards several health hazards. Similar observations are evident in case of school children. Various

investigators (Kuntzleman & Reiff, 1992; Sallis & McKenzie, 1991) revealed that unfit or low-fit, under-grown and over-weight children exhibit early signs to Coronary-artery disease including high Blood Pressure and adverse Blood Lipid profiles. This, in fact, is a serious outcome of our present lifestyle. Therefore, research in this direction for school children is the need of the day"

The present experiment considers the following objectives:

- To identify the low-fit as well as under-grown school children from some of the schools of Palghar district ,
- To prepare appropriate training schedules of 'progressive resistance' and 'aerobic exercise' suitable for the low-fit and under-grown school children

The researcher formulated the following hypothesis which were tested satisfactorily

H1: There would be significant improvement in selected 'Selected morphological constituents' of low-fit children.

Method

Based on a survey, 165 Low-fit students in the age group 12-15 years were identified from the National english school, Virar, Thane. All the selected subjects were randomly assigned into three groups, viz., Group-A, Group-B, and Group-C. Each group consisted of 20 subjects. Group-A received 'progressive resistance exercise' training, Group-B underwent a training in 'aerobic exercise', whereas Group-C was treated as control. The training on 'progressive resistance exercise' was imparted based on the methods as suggested by Colson & Collison (1983) and 'aerobic exercise' training was given based on method as suggested by Masley (1982).

Statistical Analysis

Data were analysed by using Descriptive statistics and significance of differences between and within group was evaluated with the help of Factorial ANOVA followed by Scheffe's Post Hoc test.Following variables of the Health Related Physical Fitness Test were measured as follows:

Variables Selected and Tools Used

Low-fitness as well as under-grown status of the subjects before and after experiment were evaluated with the help of some standard morphological tests:

Measurement of Morphological Variables

Variables	Tools used
Age (yrs.)	Date of birth certificate from the school record.
Height (cm.)	Wall-fixed-meter scale.
Weight (kg.)	Weighing Machine.
Skinfolds	
Biceps Skinfold (mm.)	Skinfold Caliper
Triceps Skinfold (mm.)	Skinfold Caliper.

Subscapular Skinfold (mm.)	Skinfold Caliper.
Suprailiac Skinfold (mm.)	Skinfold Caliper.

Results

Results on Biceps Skinfold

The measure of Biceps Skinfold (assessed by Skinfold Caliper) due to training in different stimuli (Progressive Resistance Exercise and Aerobic Exercise), as obtained from Scheffe's Post Hoc test, revealed that - although both the training stimuli indicate similar results, the 'Progressive Resistance Exercise' was proved to more useful in reducing Biceps Skinfold level among the selected Low-fit / under grown school boys.

Results on Triceps Skinfold

The results on the measure of Triceps Skinfold (assessed by Skinfold Caliper) due to training in different stimuli (Progressive Resistance Exercise and Aerobic Exercise), as obtained from Scheffe's Post Hoc test, revealed that - Although both the training stimuli indicate similar results, the 'Progressive Resistance Exercise' was proved to be more useful in reducing Triceps Skinfold level among the selected Low-fit / under grown school boys.

Results on Subscapular Skinfold

The mean score of Subscapular Skinfold (assessed by Skinfold Caliper) due to training in different stimuli (Progressive Resistance Exercise and Aerobic Exercise), as obtained from Scheffe's Post Hoc test, revealed that - although both the training stimuli indicate similar results, the 'Progressive Resistance Exercise' was proved to more useful in reducing Subscapular Skinfold level among the selected Low-fit / under grown school boys.

Results on Suprailiac Skinfold

The results on the measure of Suprailiac Skinfold (assessed by Skinfold Caliper) due to training in different stimuli (Progressive Resistance Exercise and Aerobic Exercise), as obtained from Scheffe's Post Hoc test, revealed that, although both the training stimuli indicate similar results, the 'Progressive Resistance Exercise' was proved to more useful in reducing Suprailiac Skinfold level among the selected Low-fit / under grown school boys.

CONCLUSION

Although there were some limitations, the present experiment could draw the following conclusion:

- Significant gain in morphological Elements was evident significantly in almost all the experimental groups as compared to the control one.
- The training interventions viz., Progressive Resistance Exercise and Aerobic Exercise, were found useful for the Low-fit / Under grown School students to improve their level of fitness in facilitating growth as indicated by morphological profiles.

- 'Aerobic Exercise' Programme was superior to the Progressive Resistance Exercise training in improving fitness level.
- 'Progressive Resistance Exercises' training schedule was found more effective in improving morphological Elements of the Low-fit / under grown schoolboys.

CONTRIBUTION TO THE KNOWLEDGE

- The survey report of this study revealed that a majority of the students of the urban school is lying in the range of Low-fitness level. Morphological evaluation also revealed that the students are not only belonging to Low-fit range, but their body size, shape, weight, body composition and blood constituents revealed improper growth. Although we know, the school students are the future of the nation, nobody takes care about the Low-fit / under grown status. Present investigation indicates that major research programmes are necessary to assess the orderly growth, health, and fitness status of school population.
- Moreover, a significant portion of the school students had poor level of physical growth (e.g., under weight, less fat, lower morphological profiles), which in fact can limit their development leading to suffer from various disorders in future life. In this case, Progressive Resistance Exercise training that suggested in this piece of research is found appropriate.

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NORMS OF HEALTH RELATED PHYSICAL FITNESS FOR SECONDARY STUDENTS OF INTERNATIONAL SCHOOLS

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Abstract

According to current thinking, Health related physical fitness is concerned with the development of those qualities that after protection against disease and frequently are associated with physical activity. For e.g. certain physiological and psychological factors offend affected by physical activity are thought to cause some degenerative disease. Thus, health related physical fitness is important to everyone. Today's public health problems becoming severe during 2000 A.D. Recently, the American Academy of Physical Education (Malina 1987the American Academy of Pediatrics Committee on Sports Medicine and School Health (1987) and American College of Sports Medicine (1988) have revealed that – At least 40% of American adults are extremely sedentary (Caspersen et al. 1986) and Sedentary behaviour contributes substantially to the epidemic of cardiovascular and other chronic disorders (Stephens et al. 1985). To maintain as well as improve the status of Health of children is the prime aim of Physical Education and Sports. Surprisingly, there were no standardized norms of Health Related Physical Fitness available at present for Secondary School Children, On the basis of literature reviewed and the researcher's professional experience, it has been hypothesized that: 'Health-Related Physical fitness Test 'has a sufficient degree of reliability and validity, along with the acceptable norms. So that the major finding was Health Related Physical Fitness were normally distributed, as assessed by Kolmogorov-Smirnova test for a large group (p > .05). It can, therefore, be said that the distribution of scores of Health Related Physical Fitness is nearly normal.

***Keywords**: Norms, HRPF, School Students.*

Introduction

Much of the attraction of sport comes from the wide variety of experiences and feeling that result from participation – joy, anguish, success, failure, exhaustion, pain, relief and a feeling of belonging. Sport can bring money, glory, status and goodwill. However, sport can also bring tragedy, grief and even death. Norms, thus provide a full range of normal value and help to identify the abnormal values, if any, as the abnormal values will lie outside the norms. Secondly, norms of health related physical fitness components help to evaluate the relative status within the normal range in terms of average, below average, above average, etc. Hence, norms provide a standard scale of references that forms basis judgment. According to current thinking, Health related Physical fitness is concerned with the development of those qualities that offer protection against disease and frequently are associated with Physical activity. For example, certain Physiological and Psychological factors often affected by physical activity are thought to cause some degenerative disease. Thus Health Related Physical Fitness is important to everyone.

OBJECTIVES OF THE STUDY

- To establish the norms of the Health-Related Physical Fitness for the Secondary School Students.
- To measure the Health-Related Physical Fitness of School Children aged 11-13 years of International schools.
- To suggest some guidelines to the concerned professionals in the context of assessing, classifying and understanding the Health-Related Physical Fitness of School Children in International School.
- To find out the reliability and validity of developed norms.

HYPOTHESIS OF THE STUDY

Researcher's professional experience, it has been hypothesized that:

HO1 'Health-Related Physical fitness Test 'will have sufficient degree of reliability and validity, along with the acceptable norms.

Method

Procedures

The research design followed, here, is a Survey-cum-normative research. This piece of research was conducted to establish Age wise Norms of the Physical Fitness Tests for the school students studying at standards IX and X (ages 14 and 15yrs.) in Ahmednagar District. A standard procedure was employed for this study. All the students, aged 11 to 13 years, studying in the International schools of Greater Mumbai represent the population. Considering the stratified random sampling, students belonging to 11 to 13 years of age from International Schools of Greater Mumbai were attended for data collection.

A five components of Health Related physical fitness as AAHPERD is to be administered to the subjects. The test is composed of the following test items:

Event wise Test Items

Sr.	Test Items	Test	Unit
1.	Muscular Strength	Pull Ups	Count/Min
2.	Muscular Endurance	Bent Knee Sit Ups	Count/Min
3.	Cardio-Vascular Endurance	Harvard Step Test	Fitness Index
4.	Flexibility	Sit and Reach Test	Centimeter
5.	Body Composition	Skin Fold Calliper	Fitness Index

The procedure of standardization and development of norms of Physical Fitness Test' was be followed by two stages: Stage I: involves formation of test-items, determination of content validity, first try-out, and second try-out to get a 'preliminary form' of developing Norms.

Stage II: includes establishment of final norms, test's reliability and validity.

The data were analyzed using the following statistical techniques: The reliability of the Preliminary form of the test was determined by split- half method of correlation.

Results : The result revealed that the preliminary form of the test consisted of many test- items and all these items were found reliable and the reliability coefficients were accepted at the 0.01 level of

confidence. Moreover, the preliminary form of the test was also found valid. To get more accuracy in construction of the norms in physical fitness, Researcher ensures that the preliminary form of the test was more concise and the test was then administered on the large sample. Prior to establishing the norms, normality of the data on each test item was tested with help of Kolmogorov-Smirnova test. Amazingly, all the data of test items were found normal and then they were processed for establishing the norms. The hypothesis was further tested regarding the reliability and validity of the new formed test norms. The result revealed that the hypothesis as formulated in the thesis has been retained statistically at the 0.01 level. Thus, the test norms were found reliable and valid to measure the Students physical fitness. Merely, establishing the norms does not have value until the norms are graded. In this study, the researcher has formulated the grades on the basis of Likert's five-point scale. Now the new test battery as developed and standardized in this study got a full form to be administered to assess physical fitness of any children in the age group 11 to 13 years belonging to the Greater Mumbai District.

Contribution to Knowledge

This study would contribute to the literature of Indian sports with special reference to Physical Fitness in providing the scientific process and norms for objective assessment and evaluation of the fitness level of the School Students of Greater Mumbai. Sports scientists would get a proper insight for developing a nation-wise norm for evaluating physical fitness of School Students who can fly with glamour in international sports. This could be an additional contribution of knowledge to the sports literature.

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EFFECT OF YOGIC MUDRAS TRAINING PROGRAMME ON MENTAL HEALTH

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Abstract

Practice of yoga not only helps to keep mind strong and supple but also incorporate mental activities, and disciplines that help develop attention and concentration, and stimulate the creative ability that are latent within human body. From this study researcher want to know the effect of yogic practises- Mudras on the Physical Education Female Teachers. Researcher selected total 40 Professional Physical Education Female Teachers students of B.P.C.A College (Wadala) as a sample for this research study. Each group consisted 20 students. Experimental group received Mudras practice for a period of 6 weeks. Control group did not participate in Mudras practice. Mudra is the Yogic Exercises which are Experimental factors. Mental Health is the psychological factor. The Researcher used to give some Mudras practices to the sample. To know the difference of before and after yogic exercise of the samples the Researcher Used Mental Health Inventory (C.D. Agashe and Dr. R.D. Helode) to measure Mental health. After the collection of data the researcher analyzed the data with the help of 't' test and the results obtained, In case of Mental Health we observed that Experimental Group of Physical education students showed good results as compared to Control. The above result helps us to conclude that the Mudras training was found helpful to improve the practitioner to develop awareness of the currents of vital Energy (Prana) within the subtle body and eventually to gain control over these forces.

***Keywords**: Mudras, Mental Health*

INTRODUCTION:

In spite of the increased awareness of people towards health, the young generation is lacking in physical fitness and essential personality traits. They find it increasingly difficult to face the challenges arising out of increasing competition, peer pressure and material world. (G.S.Sahay, 2009).

Practice of yoga not only helps to keep mind strong and supple but also incorporate mental activities, and disciplines that help develop attention and concentration, and stimulate the creative ability that are latent within human body. (Kumar, 2012)

Rishis and sages in their meditation discovered that the whole universe is composed of five elements and hence all matter and creatures are composed of those five elements called Pancha Mahaboota-s. They are fire, space, wind, earth and water. The Rishis logically proved that the balance of these five elements in human beings establishes health whereas imbalance of these five elements causes disease. They also discovered to balance these five elements through the various gestures of fingers which are called – **'Hasta Mudras'**. (Chiplunkar, 2008)

Mudra is Sanskrit word for **seal, mark**, or **gesture**. The word 'Mudra' to the root 'Mud' meaning- joy and 'dravya' meaning – to draw forth the 'Satchit ananda' which is talent in all of us, meaning that Mudras give a sense of well being and happiness. Mudras are a characteristic term coming from the Tantric

literature and have several meanings. It means i) Bodily Posture with a gesture ii) Peculiar position of hands and fingers iii) Parched Grains iv) A Woman associate in Tantrika sadhana v) Control of certain organs and senses that help in concentration.. Each of these Mudras set up a different link between energy centers and has a correspondingly different effect on the body, mind and Prana. (Chiplunkar, 2008)

AIMS: The aim of the Research was to study, "The Effect of Yogic Mudras training Programme on Mental Health of Professional Physical Education Female Students

SELECTION OF SAMPLE: The study was conducted on physical education teachers. Total 40 Professional Physical Education Female Teacher students of B.P.C.A College (Wadala) were taken for this research study. Before the selection of the subjects the researcher insured that the selected subjects should be between age group 20-25 years.

GROUP	NO. OF STUDENTS
EXPERIMENTAL GROUP	20
CONTROLLED GROUP	19
TOTAL	39

MATERIALS AND METHODS: For the period of 6 weeks, 6 days per week except Sunday and holiday. The experimental group underwent Mudras Practice. After conducting the Mudras training programme for 6 week, post-test was taken.

This Experimental study was conducted in three phases.

Phase I ---------- Pre-test

Phase II ---------- Yogic Practice

Phase III---------- Post test

DEPENDENT VARIABLES: The tools used in the present study were Questionnaire. Two questionnaires for two Variables i.e. one for Mental Health and the other for Anxiety were used.

No.	Variables	Questionaire	Unit
1	Mental Health	C.D. Agashe and Dr. R. D. Helode	Points

INDEPENDENT VARIABLES:

No.	Mudras		
	Deep Breathing (worming-up)		
1	Jnana Mudra	7	Vayu Mudra
2	Akash Mudra	8	Shoonya Mudra
3	Pruthvi Mudra	9	Surya Mudra
4	Varun Mudra	10	Linga Mudra
5	Prana Mudra	11	Bramha Mudra

6	Apana Mudra	12	Yogmudra

The researcher used the **Yogic Training Intervention (Sharma, 2004)- Training Program Scheduled of 6thweeks yoga** for experimental group training. Each day 60 min-90 min training given by the researcher to the Experimental group.

STATISTICAL ANALYSIS USED:

As per the guidelines and the key directions of the questionnaires the collected data of Experimental Group and Controlled Group were Compared and analyzed the data by using 't' test - SPSS software.

RESULTS: After the collection of data the researcher analyzed the data and the results obtained have been summarized as under -

- **Treatment wise comparison of adjusted mean scores of TOTAL MENTAL HEALTH of the Experimental and Control Group**. The data was analysed with the help of t-test and the t-value is 5.844 which is significant at 0.01 level with df=1/58. It indicates that adjusted Mean Scores of Mental Health of the Experimental and Control Groups differs significantly. Further the adjusted Mean scores of Mental Health of the Experimental and Control groups is 5.24 and 0.52 respectively It may, therefore, be said that the Experimental Group was found to have significantly higher positive Mental Health in comparison to Control Group.

CONCLUSION: From the observation of the data following conclusions can be draw-

- In case of Mental Health, we observed that Experimental Group Physical education students showed good results in Total Mental Health as compared to Control Group.
- The above result helps us to conclude that the Mudras training was found helpful to improve the practitioner to develop awareness of the currents of vital Energy (Prana) within the subtle body and eventually to gain control over these forces.
- Within the limitation of the study, it could be concluded that Mudras should be practiced more to achieve Physical and Psychological benefits.

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BEHAVIOURAL PROBLEMS OF SCHOOL STUDENTS OF GREATER MUMBAI

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Abstract

Behavioural issues are often a cause for concern for parents and teachers and may be the first presentation of an underlying developmental or medical problem. It is important to thoroughly evaluate the presenting behavioural problem, including the social and environmental settings that may be triggering such behaviour in the child. Hence, these type of issues among students should not be neglected.

Introduction

Recently it has been noticed that Students misbehaviours such as disruptive talking, chronic avoidance of work, interfering with teaching activities etc. are major issues in teaching learning process. Behaviourist have a different approach to studying or understanding the why and what of human behaviour. Generally, they would not believe in the role of genetics, heredity, biological factor, hormones, neurotransmitters and /or nature as influencing behaviours. They would insist or all behaviours are learned within the context of an environment that has been favourable for the acquisition that behaviour. Therefore, it is their strong belief that appropriate environmental manipulation can indeed alter any or all behaviours, True to their spirit of attempting to understand human behaviour from a different perspective.

Behaviourists view that all behaviours can be classified for convenience in understanding into: -

(a) Skill Behaviours; and

(b) Problem Behaviours

Sometimes they are distinguished as desirable-undesirable behaviours, positive-negative behaviours, adaptive-maladaptive behaviours, asset-deficit behaviours, good-bad behaviourist etc.

Behavioural problems in children are a relatively common occurrence but are a concern for parents. Such problems are often a reflection of the child's social stressors, environment and developmental state. Although a majority of behavioural problems are temporary, some may persist or are symptomatic of neurodevelopmental disorders or an underlying medical condition. Initial management of behaviour problems often involves helping parents to learn effective behaviour strategies to promote desirable behaviours in their children. This article highlights a general approach to evaluating and treating behavioural problems in children in the primary care setting. Sleep problems, eating disorders, and other

emotional and developmental disorders, such as autism spectrum disorder and attention deficit hyperactivity disorder, are not within the scope of this article.

OPERATIONAL DEFINITIONS

The term 'Problem Behaviour' refers to any or all observable and measurable action which are negative and maladaptive undesirable, or problematic for the individual or to others around. It can be potential source of harm to self or other. They maybe likely source of danger for the child or people around, age inappropriate for the age or developmental level of the child, socially deviant cause great strain on caregiver, interfere in teaching and learning new skill behaviour or in the performance of already learned old skill behaviours in a child (Venkatesan, 2004). Example of problem behaviours are hits others, screams feet, roll on floor, pulls objects from other, sucks thumb, hoards unwanted things, bangs head, does not sit at one place for required length of time etc.

- **Violent:** violence can be defined as the use of physical force with the intent to injure another person or destroy property, while aggression feelings or behaviour.
- **Temper Tantrums**: Temper Tantrums are unpleasant and disruptive behaviour or emotional outburst.
- **Misbehaviour:** To behave badly. To behave in an inappropriate way.
- **Self-Injurious behaviour:** Self-injurious behaviour is where a person physically harms themselves.
- **Hyperactivity:** The condition of being abnormally or extremely active.
- **Rebellious Behaviour:** Refusing to obey rules or authority or to accept normal standards behaviour, dress, etc.
- **Antisocial behaviour:** Antisocial behaviour is any conduct that has caused, or likely to cause, harassment alarm or distress to any person.
- **Fear:** An unpleasant emotion caused by the belief that someone or something is dangerous, likely to cause pain or a threat

Factors Contributing to Behavioural Problems in Children.

Child- related Factors

- Developmental delays/Disorder
- Nutritional deficiency
- Chronic medical illness
- Medications
- Poor sleep

Environmental Factors

- Moving house/ school
- Disadvantaged background
- Lack of Stimulation

Family –Related Factors

- Insecure parent-child Attachment
- Household Stress
- Harsh Parenting, neglecting or Child abuse
- Parental Separation

Conclusion

Behavioural issues are often a cause for concern for parents and teachers and may be the first presentation of an underlying developmental or medical problem. It is important to thoroughly evaluate the presenting behavioural problem, including the social and environmental settings that may be triggering such behaviour in the child. Hence, these type of issues should not be neglected.

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YOGA AND PHYSICAL FITNESS

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Abstract

Fostering cognizance about fitness in the community is very cardinal for people, need to discern the mileage of fitness. Real fitness embrace of various intermediary like endurance, body composition, flexibility, muscle fitness and the aptness to achieve mental relaxation. Fitness is the mother of sports. More fit the sportsman better the performance. Yoga could be manoeuvre to nurture general fitness. Yoga is contemplating as one of the pre-eminent exercises for physical fitness, and poignant and piritual prosperity. Yoga is a stratagem to dominance and foster the psyche and figure to expand pronounced health, tune of psyche and self-acknowledgement. Fitting cognizance and delineate one can achieve the archetypal plumb to subsistence physical fitness. Yoga also succour in ameliorate the mind, the healthy mind can shepherd to exceptional physical fitness, and a fit body shepherd to a healthy life. All forms of exercise are cardinal for the body. Exercise is an imperative wedge of a healthy lifestyle, bestow to the longevity and your physical fitness. A well-rounded fitness program embraces aerobic, strength, core balance and flexibility training. The right aggregate of it keep us in fettle, tweak longevity. Yoga is so much spare than simple stretches, and it's certainly not just for flexibility. Embracing yoga along with cardiovascular and strength training succor players fit in all of these components as well as diminish stress. The epitome intent of yoga is, however, to alleviate the individual to transcend the self and procure erudition.

***Keywords**: Yoga, Physical Fitness*

YOGA

Yoga is a facet of a better living. It fortifies eminent or coherence in work, and a outstrip steer over mind and inclination. Yoga today has flatter increasingly amateur, not so much for the spiritual benefits but for the physical perk. Through yoga one can achieve both physical and mental consonance. Yoga is the coalition of the body through different positions, postures, and poses. The conceptual milieu of yoga has its origins in ancient Indian philosophy. There are numerous contemporary schools or types of yoga, each having it retain distinct accentuation regarding the reciprocal placate of physical postures and exercises (asanas), breathing techniques (pranayama), deep relaxation, and meditation practices that plough cognizance and ultimately more sagacious states of consciousness. Yoga is positing to have concoct in India during the Golden Age, nearly 26,000 years ago. The veritable Sanskrit word, when subdued down, means "to control", "to yoke" or "to unite". The word has also been deciphering to mean "joining", "uniting" and "union". The union is made betwixt the self and the spirit. If you prod deeper, you can interpret about how yoga is worn in conjunction with meditation. Yoga is proficient for aggrandize health

and vitality and tackle many diseases. It not only initiate fitness and vigour to the physical body, but also saddle our will and emotions to tweak our power of perusal, sagacity and shrewdness.

PHYSICAL FITNESS:

Physical fitness is a paramount stipulation cardinal a frisky and healthy lifestyle. It does not just foster the endurance and strength of the body, but it also ameliorates the person's lifestyle. Physical fitness can be gruelling to succour, especially with the shear and stresses of synchornic lifestyles, having scant fate for recreation and most of all, exercise. If you are physically fit, it will beneath the peril of various health-related muddle like obesity, heart problems and hypertension. Aside from edifice strong muscles, physical fitness stimulate wellness as well as emotional solidity. Moreover, a revamp functioning of heart, lungs and various body organs is certain. For a lot of people, physical fitness chiefly inculpates exercising regularly, but there is clique of physical fitness components that should be contemplate. While exercise is an exuberant component of physical fitness, diet as well as the environment is also some few elements that play an eloquent role. Aside from these, there are some eminent physical fitness components, which are predominantly employed in health and fitness. Fitness is the calibre of an individual to accomplish the physical demands of daily activities and recreational athletics and still have the energy to cope with the provocation of life. The five components that mould up physical fitness, how we can exceed them and the benefits they bring to our lives. The five components of fitness are cardiorespiratory fitness, muscular strength, muscular endurance, flexibility and body composition.

Cardiorespiratory Fitness: Cardiorespiratory is defined as the health and function of the heart, lungs, and circulatory system. Cardiorespiratory fitness is the ability of the body to sustain prolonged activity. orthodox activity such as running, walking, biking, swimming or functional activity sustained over a duration of time will enhance cardiorespiratory fitness.

Muscular Strength: Is characterized by the maximal force muscle(s) can foster without a time limit of a enumerate movement.

Muscular Endurance: The aptness to perform repeated muscular endeavour and prolong fatigue into a enumerate task or activity.

Flexibility: Defined as the range of motion around specific joints. Flexibility depends on many **variables:** age, gender, body composition, behavioural habits are just a few. Inadequate flexibility can lead to loss of power and potential injury.

Body Composition: Body Composition concerns to the ratio between the amount of lean tissue (bone, muscle, organs) and body fat that a person bolster on his or her body. High percentages of body fat have been linked to metabolic disease, low energy, and compromised emotional health. Optimal levels of all 5 of these components are inexorable for an individual to meet their fitness needs and to deliver a comprehensive exercise program for any activity or sport. All of these components may be attuning to any activity or sport discrete to an individual's goals and desideratum.

BENEFITSOF YOGAFOR PHYSICAL FITNESS

Yoga is about fabricate balance, strength, flexibility and relaxation in the body through a series of postures, movements and breathing patterns. Yoga practice proffer many physical and mental benefits, offering improved circulation, flexibility, respiration, energy, and more. While all exercise renders physical benefits, yoga is unique. Not only does it bestow preventative mental and physical benefits, but it also teaches breath awareness—called pranayama—along with a variety of breathing techniques to help maintain energy, strength, and relieve stress. Experts have long publicized the advantages of yoga for your mind and body, and there are many great reasons yoga has become so popular
for maintaining physical and mental wellbeing.

- Improves athletic performance
- Energy level increases
- Endocrine function normalizes
- Immunity increases
- Improves circulation, massages internal organs
- Enhances physical balance
- Creates overall body flexibility
- Improves flexibility and core strength
- Enhances sensory acuity, menta focus, concentration
- Helps to balance and manage emotions
- Increases life's force energy

Yoga is an art which tether our body, mind and soul together and makes us strong and peaceful. Yoga is inexorable because it keeps us fit, helps burst stress and perpetuate out overall health. A healthy mind can concentrate well and do everything.

CONCLUSION:

Yoga is a multifaceted spiritual tool with augment fitness and well-being as one of its efficacious sequels. The components of yoga which are very customarily pertain for fitness benefits are asanas, pranayama and meditation. In the context of asanas, yoga resembles more of a physical fitness, which may marshal to the perception that yoga is another calibre of physical exercise. Yoga in physical fitness is as important as other think, it helps us in discrete ways and distinct levels in a men life. Improving our staging by daily yoga practicing in order to perform a fitness action efficiently and effectively, a person needs to have a high degree of assemblage and bedrock with a mind that is serene and steer. Yoga can succour a physical fit individual to have evenness of mind and ascendancy of their thoughts even during stress and/or adversity. Yoga gives us solace form countless affliction at the physical level. The enactment of the postures ( ) strengthen the body and erect a feeling of wellbeing. From the psychological view point, yoga grinds the sage and aid in congregation; it steadies the inclination and invigorate a tender.

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THE APPLICATION OF YOGIC ASANAS IN PREVENTION OF SPORTS INJURIES

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Abstract

Every athlete in his sporting career experiences sports injuries. The main aim of the athlete is to recover fast and join the practice. Yoga is a boon such situation. A physiological, psychological, and metaphysical are strength by the practice of Yoga. One of the objectives of Yoga is acquiring a profound spiritual insight and tranquilly while focusing on the Divine soul. Yoga not only aids in maintaining calmness of mind, but it also enhances cognitive and concentration, which will enhance the performance level of the athlete in the competition. The research scholar has enlisted few yoga postures which will allow the athlete to boost the performance, cure sports injuries and get relief from pain. Athletes are aware that sports injuries are part and parcel of the any sports. Practicing yoga can help to keep sports injuries at bay. Yoga practice is a blending of active and passive stretching, especially beneficial for avoiding sports injuries. It can be concluded that regular practice of Yoga will train the body to gain strength, speed and reduce injury.

Keywords: *Yoga asanas, sports injuries and prevention.*

Introduction

When an athlete gets injured during that phase health professional give their expert advice and focus on prevention of strategies which assist the athlete to recover faster and join the practice. Yoga and be adept by athletes better than non-athlete. Athletes injure themselves, suffer illness, or endure some form of trauma at a significantly higher rate than nonathletic (Hootman et.al 2007). Yoga explicitly aims at establishing a more optimal overall psychophysical state (New YorK, North Point Press, 1999). Regular yoga practices adjourn the onset of sports injuries. Gore (2004) in his book Anatomy and Physiology of Yogic Practices has detailed variations between yoga and exercise. Eccentric strengthening was applied to strengthen hamstrings. Arnason et.al. (2008) have earlier used this program and have found that the eccentric training with Nordic lowers combined with warm-up stretching appears to reduce the risk of hamstring injuries in elite soccer players.

With the help of Yoga practice serious sports injuries can be prevented or treated well than drugs. Sports injuries can be treated without undergoing surgery or intake of expensive medicine just by performing certain yoga asanas. Few yoga asanas are listed below to avoid or aggravating the sports injuries:

- **Feet:** An inflammation of the plantar fascia, which connects the heel bone to the toes and runs along the sole of the foot, is among the most common sports injuries. Constant foot strikes and tightness in the Achilles tendon, ankles and calf muscle can set up tension in the plantar fascia; eventually result in micro tears and Inflammation. Problem related to Knee, hip and back pain can be noted.

Area of Injury: Plantar Fasciitis

Figure: 1 Plantar Fasciitis

Prominent in Sport: Running and jumping events, soccer, football & volleyball players.
Symptoms: Discomfort in the sole of the foot and heel

- **Asana to perform:** Sole Stretch (Sulabha Padangustasana)

Technique: Sit on the toes with knees apart. Thighs parallel to the ground. Rest buttocks on the heels, spine erect and chin parallel to the ground. Place palms on knees. Close eyes and maintain that posture for 30 to 90 seconds with normal breathing.

Figure: 2 Sole Stretch (Sulabha Padangustasana)

Area of Benefits: Aims at the sole of the foot especially the connective tissues and the muscles. Stretch the calf muscle, toes and even the arch of the foot.

- Asana to perform: Reclining Hand-to-Big-Toe Pose (Supta Padangustasana)

Technique: Be in supine position; place a long piece of material on the heads of metatarsal bones of the right foot and without applying pressure on the vertebra. Raise the right leg upward. Without lifting your head and shoulder and grab the long piece of material by both the hands as shown in the figure. Other leg is straight on the ground. Try to be in this position for 1 to 2 minutes.

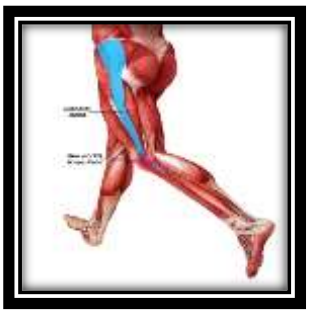
Figure: 3 Reclining Hand-to-Big-Toe Pose (Supta Padangustasana)

Area of Benefits: Aims at the hamstrings and outright line of tissue which covers back of the hip, thigh, and calf and sole of the foot when tight in the muscle are observed.

- Knee: The hip muscle that is joined to the iliotibial (IT) Band become tense, generating pressure near the band. The IT band may deprive the ability to glide over the other muscles in the thigh, which hinders the knee movement and causes pain.

Area of Injury: Illotibial Band syndrome

Figure: 4 Illotibial Band



Prominent in Sport: Running, soccer, basketball and tennis players.

Symptoms: Outer knee pain resulting swelling. Sever pain in the outer calf, outer hip or thigh, and cracking sounds while performing any knee movement.

- Asana to perform: Standing Forward bend, variation (Uttanasana)

Technique: Standing forward bend and cross left ankle over your right. Knees slightly bent, fold forward and rest your hands on the floor. Hold the movement for five breaths. Repeat the posture with the other leg.

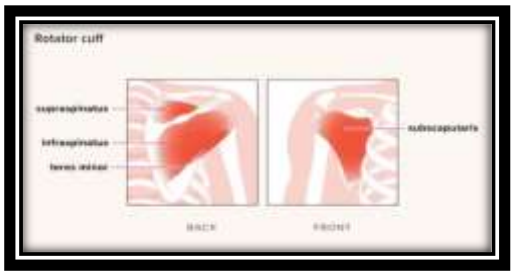
Figure: 5 Standing Forward bend, variation (Uttanasana)

Benefits: Stretch the muscles of the hips, hamstring and thighs. Pressure is noted on the IT band, which results in minimizing the friction and pain.

- Shoulders: The shoulder rotates due to rotator cuff which is comprises of subscapularis, infraspinatus, teres minor and supraspinatus muscles and their tendons. The tendons of these muscles become weak owing to a traumatic injury or repeated motion.

Area of Injury: Rotator Cuff Inflammation or Tear

Figure: 6 Subscapularis, Infraspinatus, Teres Minor and Supraspinatus Muscles



Prominent in Sport: Swimmers, volleyball, golfers, and tennis players.

Symptoms: The rotator cuff involves subscapularis, infraspinatus, teres minor and supraspinatus muscles and their tendons. Mainly the pain is sensed over the top of the shoulder, but it can spread to the other part of shoulder joint, as well as shoulder blade or the armpit.

- **Asana to perform:** Gomukhasana

Technique: Sit on the floor, legs stretched out. Fold the right leg. Keep knee on the floor and heel near the perineum. Fold the left leg and put on right leg, knee touching each other. Take the left hand above the head and fold the same. Take right hand behind the back. Hold both hands at the back, fingers interlocking each other's. If the shoulders muscles are tight and interlocking is a problem. Grab a towel if

hands are not touching each other. Keep chin parallel to the ground. Repeat the same action with the opposite leg and hands.

Figure: 7. Gomukhasana

Benefits: Strengthens back & neck muscles by stretching the rotator cuff of the shoulder. Improving the flexibility of knee joints, elbow & shoulder joints almost every part of the body. Recovery of shoulder movement as the range of motion increases.

Conclusion: The practice of yoga is not new in various conditions especially when speed recovery is need. The research scholar has made an attempt to figure out few yogic practices which can reclaim the athlete. Yoga has proved to have an upper hand to manage pain, function mobility, and better quality of life. Benefits of asanas can prevented injury, and enhance sports performances. Yoga, in nutshell is to promote overall well-being through asanas and athletes can take adopt it in their day to day practice to enhance performance and refrain sports injuries.

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कबड्डी खेळातील समस्या...

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"कबड्डी हा एक प्राचीन भारतीय खेळ आहे आणि तो भारतात जवळपास सर्वत्र खूप लोकप्रिय आहे. हा सांघिक खेळ असून साधारणपणे एक कबड्डी सामना दोन संघांमध्ये खेळला जातो. कबड्डी हा खेळ हू तु तू आणि चेंडू गुड्डू या नावाने सुद्धा ओळखला जातो. त्यामध्ये प्रत्येकी सात खेळाडू असतात तसेच बांगलादेशाचा सुद्धा राष्ट्रीय खेळ म्हणून ओळखला जातो. प्रथम 2004 मध्ये कबड्डी विश्वचषक खेळला गेला त्यानंतर आजपर्यंत सर्व कबड्डी विश्वशतकात भारत हा संघ विजयी ठरला आहे."

कबड्डी खेळासाठी मैदानाची आवश्यकता असते परंतु शहरातल्या भागात बदलत्या राहणीमानामुळे व जीवनशैलीमुळे मैदाने संपुष्टात आली आहे. कबड्डी हा खेळ कमी खर्चाचा आहे त्यामुळे मध्यम वर्गीय समाजातील माणसे जास्तीत जास्त प्रमाणात या खेळामध्ये आपले नाव लौकिक करत आहेत. तसेच ग्रामीण भागाकडे पाहिले गेले तर तिकडे मैदाने उपलब्ध आहेत त्यामुळे ग्रामीण भागातील मुलांना सुधा कबड्डीची आवड निर्माण होत आहे व त्यांना खेळ खेळण्याची संधी मिळत आहे परंतु शहरासारख्या भागात मैदाने कमी असल्यामुळे कबड्डी खेळ कुठे खेळावा हे प्रश्नचिन्ह निर्माण होत येत आहे.

बदलत्या पिढीनुसार कबड्डीचा विकास होऊ लागला आहे प्रो-कबड्डी मुळे कबड्डीला एक वेगळीच दिशा मिळाली आहे सर्व सामने हे मॅटवर खेळले जातात. परंतु त्यासाठी लागणारे इंनडोर स्टेडियम हे मुंबईसारख्या शहरात खूप कमी प्रमाणात उपलब्ध आहे. मातीत खेळणाऱ्या खेळाडूंना मॅट वर खेळणे थोडे अवघड जात आहे मॅटवरचा सराव नसल्यामुळे त्यांच्या हालचालींमध्ये व व त्यांची कौशल्य सादरीकरणांमध्ये अडचण निर्माण होत आहे.

मॅटमुळे कबड्डी मधील खेळाडूंना भरपूर प्रमाणात दुखापतीला सामोरे जावे लागत आहे. तसेच प्रगतशील खेळामुळे मॅटवरील दुखापती मध्ये सुद्धा वाढ होत आहेत मातीतील खेळ व

मॅटवरील खेळ यामध्ये खुपचं साम्य असल्यामुळे सध्याच्या परिस्थितीनुसार सर्व कबड्डीचे सामाने हे मॅटवर खेळवले जातात. सराव करिता मॅट उपलब्ध नसल्यामुळे आणि जिल्हास्तर, राष्ट्रीय, आणि आंतरराष्ट्रीय स्तरावरचे सामने हे मॅटवर असल्यामुळे खेळाडूंना तिथे दुखापत होते व दुखापत मोठ्या प्रमाणात झाल्यामुळे खेळाडूंना पुढील आयुष्य हे धोक्याचे निर्माण होते. त्यामुळे खेळाडूंचे नुकसान होत आहे हा मोठा प्रश्नचिन्ह खेळाडू पुढे पडला आहे.

दुखापत झालेल्या खेळाडूंना त्यांची दुखापत कव्हर करण्यासाठी कबड्डी असोसिएशन ने कबड्डीतील खेळाडूंसाठी मेडिक्लेमची सुविधा, तज्ञ डॉक्टर व तसेच उत्तम दर्जाचे फिजिओथेरपिस्ट यांची नेमणूक करणे खूप गरजेचे आहे की जेणेकरून खेळाचा विकास होईल आणि त्यांची दुखापत लवकरात लवकर रिकव्हर होऊन ते उत्तम दर्जाच्या खेळाचे सादरीकरण लवकरात लवकर करतील. सध्याच्या परिस्थितीत खेळाडूंची दुखापत ही मोठी समस्या उद्भवत आहे.

कबड्डी खेळाडूंना उत्तम दर्जाचे प्रशिक्षण देणे खूप गरजेचे आहे त्यासाठी त्यांना उत्तम दर्जाच्या प्रशिक्षकांचे आयोजन करायला हवेत. एन आय एस प्रशिक्षक, छत्रपती पुरस्काराचे मानकरी व अर्जुन पुरस्काराचे मानकरी असणारे प्रशिक्षक लाभले तर निश्चितच या खेळाचा विकास झाल्याशिवाय राहणार नाही परंतु खंत एकच आहे की यासारखे उत्तम दर्जाचे प्रशिक्षणासाठी प्रशिक्षक त्यांना लाभत नाही म्हणून आपल्या खेळाचा विकास व आपल्या खेळाडूंचा दर्जा वाढत नाही. प्रशिक्षकांना त्यांच्या शिक्षणानुसार व त्यांच्या अनुभवानुसार त्यांचे मानधन व त्यांचा भत्ता देणे सुद्धा गरजेचे आहे खेळाडूंचा विकास होण्यासाठी आणि कबड्डीचा प्रसार होण्यासाठी त्यांना उच्च दर्जाचे प्रशिक्षण देणे खूप खूप महत्त्वाचे आहे.

कबड्डी हा खेळ जास्तीत जास्त मध्यमवर्गीय समाजातील मुले व मुली जास्त प्रमाणात खेळ खेळतात मध्यमवर्गीय समाज असल्यामुळे त्यांना आर्थिक पैशाची झळ ही नेहमी त्यांना सोसावी लागत असते परंतु त्यावरही ती मात करून चांगल्यातला चांगला खेळ दाखवून आपले भविष्य उजळण्याची तयारी करत असतात. खेळाडूंना घरामधून आर्थिक पाठबळ नसल्यामुळे खूप सारे खेळाडू या महाराष्ट्रातल्या रांगड्या खेळापासून दुरावत चालली आहे.

कबड्डीचे व्यवस्थापन ही सर्वात महत्त्वाची बाब आहे परंतु शालेय स्तरावर, विद्यापीठ स्तरावर त्यांच्या खूप सार्‌या समस्या निर्माण होत आहेत. खालच्या स्तरावर कबड्डी ची मैदानी चांगल्या प्रकारे देखरेखी खाली ठेवत नसतात त्यामुळे खेळाडूंचे मोठे नुकसान होत असते. तसेच जिल्हा पातळीवर, राष्ट्रीय पातळीवर, आंतरराष्ट्रीय पातळीवर सुद्धा या समस्यांना सामोरे जावे लागत असते तिथे खेळाडूंना राहण्याची सोय, जेवणाची सोय, मैदानाची पाहणी न करणे अशा बऱ्याच काही समस्यांना सामोरे जावे लागते.

हे सर्व लक्षात घेता खेळाडूंना नोकरीची संधी मिळणे सुद्धा खूप महत्त्वाचे आहे. राष्ट्रीय आंतरराष्ट्रीय स्तरावर जे खेळाडू खेळ खेळतात त्यांच्या खेळण्यातून आपल्या संघाला प्राविण्य मिळवून देतात अशा खेळाडूंना सुद्धा कायमस्वरूपी नोकरी मिळणे खूप गरजेचे आहे. युवा खेळाडूंना सुद्धा कंत्राटी पद्धतीवर नोकरी मिळणे खूप महत्त्वाचे आहे. उत्तम दर्जाचा खेळ खेळून सुद्धा योग्य वेळेत नोकरी मिळत नाही म्हणून खेळाडूंचे आर्थिक दृष्ट्या खच्चीकरण होत आहे व त्यांचे मोठे नुकसान होत आहे त्यामुळे हे सर्व खेळाडू या खेळापासून लांब जात आहे ही मोठी समस्या भेडसावत आहे.

आपल्या सर्वांनाच माहित आहे की खेळा मध्ये राजकारण आले की खेळाचा दर्जा हा नेहमी संपुष्टात येत असतो. राजकारण्यांनी कोणत्याही खेळामध्ये हस्तक्षेप करू नये. राष्ट्रीय आंतरराष्ट्रीय स्तरावर निवड चाचणीच्या वेळी ह्या राजकारणी माणसांमुळे चांगल्या खेळाडूचे नुकसान होत असते. खेळाडूची निवड ही त्यांचे कौशल्य बघून व त्यांची आपल्या संघाला होणारी मदत यावरून खेळाडूची निवड होणे गरजेचे आहे.

कबड्डी असोसिएशन मधील कमिटी मधील वाद, आप आपसातील वाद, इगो व इतर काही समस्यांमुळे खेळाडूंचे निवड चाचणीमध्ये व त्यांच्या खेळामध्ये नुकसान होत असते. या समस्यांना सामोरे जाऊन खेळाडूंचे मानसिक संतुलन बिघडत जाते व त्याचे दुष्परिणाम त्यांच्या खेळावर होत जातात त्यामुळे खेळाडूचा विकास व त्या खेळाचा प्रसार खुंटला जातो.

सर्वात महत्वाचे म्हणजे कबड्डी खेळाचा दर्जा उच्च स्तरावर नेण्यासाठी खूप काही बदल करणे गरजेचे आहे राष्ट्रीय, आंतरराष्ट्रीय स्तरावरून कबड्डी ही ऑलिंपिक स्तरावर घेऊन जाणे हे

ध्येय असणे आवश्यक आहे त्यासाठी आपल्याला आपल्यासमोर आलेल्या अनेक समस्या सोडून त्यांचे निवारण करणे गरजेचे आहे.

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COMPETING AGAINST DOPING

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Abstract

Sport is thought of as an activity that is governed by a set of rules and is engaged in competitively. Doping can be split up into physical methods, such as blood doping and the use of performance enhancing drugs. Performance enhancing drugs can be categorized into Anabolic Androgenic Steroids, Stimulants.Diuretics, and Beta Blocker etc. In Males testicular atrophy, breast enlargement, reduction of sperm production, premature baldness.In females masculination, excessive hair growth on face and body, deepening of voice, abnormal menstrual cycle, reduced breast size.Increase Heart Rate, Blood Pressure, palpitation, Cardiac irregularities.Loss of Balance and co-ordination. Scientific Coaching must be given to Sports Persons to achieve the high level performance.The good diet and recovery will be given to Sports Persons.Education of Doping must be given to the sports persons.The rules of World Anti Doping Agency must be followed for Coaching by Coaches.An effective anti doping program must incorporate educational components in addition to testing. Education needs to be collaborative and pro active and include athletes, coaches, managers, governing bodies and health care professionals.Key words: Doping, Anabolic steroids, stimulants etc

Introduction:

Sport is thought of as an activity that is governed by a set of rules and is engaged in competitively. While Doping is the idea of using banned natural or synthetic substance for the purpose of enhancing performance in sports. The use of performance enhancing drugs is a form of cheating that is quite wide spread and common in today's modern sports. Doping in sports refers to the use of prohibited substances that may give an athlete an artificially improvement in their natural ability over other competitors. The fundamental principles of fair play and sporting ethics are violated. High skilled athletes are not rewarded for hard work but instead those associated with banned substances are recognized for their achievements.Sports goes beyond a measure of athletic excellence and the winning of trophies and medals.Sport is an integral thread in the fabric of society and enriches our daily lives. Most of us have a favourite sport we play or follow with a passion be it soccer, rugby, swimming,cricket, athletics, basket ball etc. Sport also teaches us about honest endeavour, commitment and fair play. True Winners are those who achieve their goals through talent, skill, training, motivation and rising to all the challenges their

sports present. Increasingly however a "win at all costs" ethos that undermine the very integrity of sport has entered the arena and a new game is at stake the dangerous and sometimes deadly game of doping.

Doping in sport is not a new phenomenon. In Ancient Rome gladiators dranks herbal infusions to strengthen them before chariot races and going into battle. Almost two millennia later the first documented report in the medical literature was published in 1865 in the British Medical Journal citing expulsion of a swimmer from a Amsterdam canal race, for taking a unnamed performance enhancing drugs. The first doping death occurred in 1886 in cycling.

Doping in sport will always raise concern, as it is the integrity of the competition being questioned. As long as the importance and rewards of athletic excellence become greater there is an irresistible urge for athletes to resort to drugs to gain an edge. Amateur Athletes have the opportunity to receive college scholarships and elite athletes can earn tens of millions of dollars and many more through prize money and commercial endorsements. The lure to success is great and the temptation to gain any advantage will increasingly linger.

The need for education

Performance enhancement may be attained fairly through good dietary nutrition and effective training and recovery programs. The role of protein is often overestimated. Fatigue is often due to either dehydration or depletion of carbohydrate stores or both.The role of carbohydrate and fluid intake has been overlooked. A rich carbohydrate diet after each exercise session will promote endurance and recovery. Athletes require good dietary advice from early on in their career and this should be part of undergraduate sports curricula; coaches require a parallel education in dietetics.

Athletes suffer the same cross-section of chronic diseases e.g. asthma, diabetes and common ailments e.g. headache, cold, 'flu, hay-fever, as the general population and so a balance is needed to have a range of medicines that may be used for treatment of all conditions while maintaining a level playing field. All athletes are aware of the risks of taking medicines near or during competition and for their own benefit should always ensure that the medicines they are taking are permitted by their governing body, as regulations may vary from sport to sport.Education of prescribers GPs, hospital physicians and medical officers should be aware of medicines permitted, restricted and prohibited in sports, in accordance with IOC guidelines.

DISCUSSION:

In the early 1900s, the most popular doping agent was a cocktail of alcohol and strychnine. The use of strychnine was superseded by amphetamine, following its development in the 1930s. In 1960, the Danish cyclist, Kurt Jensen, died after overdosing on amphetamine in an attempt to seek competitive advantage and the search for control measures began. Methods of anti-doping control were first pioneered in the 1960s, by Arnold Beckett, an academic pharmacist with a specialist interest in sports pharmacy, based at Kings College London (formerly Chelsea College). It was however the televised death of the British

cyclist Tommy Simpson, while under the influence of amphetamine during the 1967 Tour de France, that proved the catalyst for implementation of official anti-doping control systems and the banning of amphetamine in international sport. Cycling has long since been a harbinger for systematic doping and as one top cyclist explained "it is impossible to finish in the top five of a Tour de France without doping". In 1968, the International Olympic Committee (IOC) published the first banned list of drugs and implemented the first formal drug testing programme at the Montreal Olympics.

In the last three decades a number of names have joined the cheaters' hall of fame inclulding Ben Johnson (stanozolol), Dan Mitchell (testosterone), Lindford Christie (nandrolone), Olga Yegorova (erythropoietin) and Andrea Raducan (pseudoephedrine), to name a few. Johnson was abusing stanazolol and other agents for years with the help of fringe practitioners, before testing positive at the Seoul Olympics is 1988. In the UK, many were shocked by the Lindford Christie saga, however he first tested positive in 1988, at the start of his career, for the banned stimulant pseudoephedrine; not surprisingly he has now lost the contract for whiter than white whites

The pharmacy department at Kings College remains a focus for drug testing and now houses one of the world's leading drug testing laboratories, headed by Professor David Cowan, it is the only IOC accredited anti-doping control laboratory in the UK, and it is to this laboratory all Irish urine samples are sent for analysis.

It is not just athletes who are involved in the doping games, however, Coaches, managers, team doctors and fringe practitioners have all been implicated. Eric Rykaert, medical officer of the Festina cycling team, was prosecuted for possession of erythropoietin in 1999. The Australian swimming team coach for the 2000 Sydney Olympics, Gennadi Touretski was found in possession of stanozolol; interestingly this discovery was made following the arrest of two heroin addicts who burgled his home. But perhaps the most sinister of all, is the publication last year of the book "Faust's Gold" which takes an in-depth look at the systematic doping machine implemented by the German Democratic Republic (GDR) in the 1970s.The GDR regime involved the state, sports federation officials, coaches and sports physicians and activities were encouraged by the secret police. Many of the athletes were given performance enhancing agents without their knowledge..However, it is not only the East Germans who were involved in such dubious practices. The US cycling team bought into the practice of blood doping and during the 1984 Los Angeles (LA) games, a professor of medicine, no less, supervised the transfusion of non cross-matched blood from families of cyclists in an LA hotel room, hardly an aseptic environment 4 in the same games, 86 athletes tested positive for anabolic steroids; interestingly 9 of these positive test results disappeared from the laboratory.

Doping and detriment to health

Doping not only contravenes the spirit of fair competition, it can be seriously detrimental to health. Elite athletes who turn to doping take the greatest risks which seem to pale in contrast to their burning desire

for gold. Anabolic steroids affect cardiovascular and mental health and are associated with an increased risk of neoplasm's. Dietary supplements containing ephedrine alkaloids' have been linked to serious health risks including hypertension, tachycardia, stroke, seizures and death. This finding has lead to the recall of ephedrine containing supplements in the USA and Canada. Deaths under the influence of drugs and combinations thereof are not uncommon in sports. The peptide hormones or so called "sports-designer drugs" are thought to be the most dangerous, although the combination of amphetamines, anabolic steroids or antihypertensive combined with intense exertion in athletes are just as hazardous. America's dream girl Florence Griffith Joyner. "Flo-Jo", and the Cuban runner Chelimo both died from cardiovascular events at 38 years of age. Natural causes or doping? We will never know. President Bill Clinton said of Flo-Jo "we were dazzled by her speed, humbled by her talent and captivated by her style".

How prevalent is doping.

Accurate data on the prevalence of doping is difficult to accrue as it is not financially feasible to screen all athletes. Selection for doping is usually random e.g. medal winners, team captains, goal scores, the number on a shirt or bib, or athletes who show a sudden or unexpected improvement in personal bests and world placing. The true incidence of doping tends to be more widespread than anti-doping control data would suggest. Several surveys have revealed alarming statistics.In a British Olympic Survey in 1996, 48% of athletes agreed doping was a problem; of these 86% stated it was most prevalent in track and field events. In 1989, an Australian Senate Standing committee Report concluded that 70% of athletes who had competed internationally had taken drugs. One study found that men and women participating in sport are more likely to abuse drugs towards the end of their career. In India the elite sports persons in Weight Lifting,Athletics,Swimming, was caught in Doping.

Doping is not just a symptom of elite competition, it is also prevalent in amateur sports and school sports. In France, the incidence of deliberate doping in amateur sport is 5-15%. 10 In 1993, the Canadian Centre for Drug-Free Sport estimated that 83,000 children between the ages of 11 and 18 years had used anabolic steroids in the previous 12 months.4 In a more recent American study, prevalence of anabolic steroid use in teenagers was 4-12% for boys and 0.5-2% for girls; in addition to school sports performance, males used anabolic to enhance physical appearance.11 In France, the incidence of adolescent doping is estimated at 3-5%, males again more commonly implicated.10.

The scale of drug use in body builders is thought to significantly exceed that of the elite athlete.12 Body builders use combinations of domestic, foreign and veterinary medicines to create "successful training programmes". In an American study, 54% of male body builders were abusing anabolic steroids.2 Androgenic anabolic changes are particularly marked in the female body builder who would otherwise only be exposed to trace levels of testosterone.The most commonly abused group of drugs are stimulants, followed by anabolic steroids. Alcohol is one of the most widely used drugs in the athletic population as a whole; it is implicated in sports injury and poor physiological performance and should be avoided by the serious athlete.

How to athletes obtain banned drugs?

Athletes may obtain banned medicines from physicians, pharmacists, retail outlets, health and lifestyle magazines, gymnasiums, coaches, family members, fellow athletes, the internet and the black market. Banned drugs, including anabolic steroids, are widely advertised in lifestyle magazines and gymnasiums and there are no controls on mail order and internet sales.

Family members are another source of banned medicines. Diuretics are banned in all sports and beta-blockers in control sports e.g. archery, shooting etc.. nandrolone while Mr de Bruin was banned for using testosterone some years prior to his wife's ban.

Types of Doping.

Doping can be split up into physical methods, such as blood doping and the use of performance enhancing drugsPerformance enhancing drugs can be categorized into the following types;

1. Anabolic Androgenic Steroids.
2. Stimulants.
3. Diuretics, to help lower body weight,
4. Blood doping agents, such as Erythropoietin.
5. Beta Blockers.

Effects of Doping:

1. In Males testicular atrophy, breast enlargement, reduction of sperm production, premature baldness.
2. In females masculination, excessive hair growth on face and body, deepening of voice, abnormal menstrual cycle, reduced breast size.
3. Increase Heart Rate, Blood Pressure, palpitation, Cardiac irregularities.
4. Loss of Balance and co-ordination.
5. Increase the risk of heart attacks.

RECOMMENDATIONS:

1. Scientific Coaching must be given to Sports Persons to achieve the high level performance.
2. The good diet and recovery will be given to Sports Persons.
3. Education of Doping must be given to the sports persons.
4. The rules of World Anti Doping Agency must be followed for Coaching by Coaches.
5. An effective anti doping program must incorporate educational components in addition to testing. Education needs to be collaborative and pro active and include athletes, coaches, managers, governing bodies and health care professionals.

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ROLE OF MENTAL TRAINING WITH "IMAGERY AND NLP" PRACTICES TO GET THE PEAK PERFORMANCE IN PLAYERS

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Abstract

It is always a challenging situation for a sports person to face national and international competitions. It's because the result in the field is unpredictable. It is common not to be successful, irrespective of practice sessions, having great coaches' supervision, successful player's suggestions, having great belief in self to perform well. In addition to training the body, sportsperson needs mental training to perform well in the field. The brain the top portion of the body where training is deposited, energies are channelized should be trained to excel along with the body it is housed. Slowly the coaches, players started realizing the role of counseling for players in enhancing the performance not only after the injury to recover but also in regular sports performances.

Without giving the psychological training to be tough, mental picture of best performance to happen in the competition and taking the challenge in the competitions, one can't say the training of a athlete or a player is finished. Apart from the training on skill, technique and physical fitness the mental toughness and visualization of best version of a player is a must to the players. It is proved by many a times by international athletes, many times Olympic medalist Michel Phelps, tennis player roger Federer, tiger woods etc., practicing visualization is the key in their success. This paper deals with one of the most effective methods i.e., imagery and NLP visualization, how they helps the players to give the peak performance in the competitions.

Keywords*: imagery, visualization, performance*

Introduction:

Among sport performers and coaches, imagery is a popular and well-accepted strategy for enhancing various aspects of performance. The importance of this strategy is reflected in anecdotal reports of successful athletes. Descriptive research also suggests that imagery is frequently used by the best athletes. In their study of the elements of success, Orlick and Partington (1988) found that 99 per cent of Canadian Olympic athletes surveyed reported using imagery as a preparation strategy. Furthermore, higher-level athletes or those with more experience typically report greater use of the strategy than their lower-level or less-experienced counterparts (e.g. Barr and Hall, 1992; Cumming and Hall, 2002a, 2002b; Hall et al., 1998; salmon et al., 1994). Not surprisingly, imagery has become a widely researched topic within the field of sport psychology as evidenced by numerous published studies, in sports psychology books, the chapters in (e.g. Callow and Hardy, 2005; Moran, 2004; Murphy et al., 2008) an entire book (Morris et al., 2005), and the introduction of a journal devoted to publishing imagery research in the physical domain (Journal of Imagery Research in Sport and Physical Activity.

Since the beginning of time man has been intrigued by his ability to see, with his eyes closed, the same detailed images that reflect the reality he sees with his eyes open. Man has been mystified by the power the mental image possesses to affect the body, mind and matter in the outside world. For thousands of years, man has intuitively known that whatever he can vividly create in his mind will, like magic, manifest itself into a concrete reality. Until recently, man has not had the knowledge to logically and scientifically explain the power of this phenomenon. Without such knowledge, this power has been ascribed to superstition, the occult and coincidence.

Visual images and sensory impressions generated by the brain are holographic in nature. Every image and impression is composed of electromagnetic energy that consists of matter. Vividness and sensory detail increase the energy and power of the visualized image. In essence, what one visualizes is real. The body and mind interpret visual images and sensory impressions as reality and react to them accordingly.

Other most important tool available for the sports fraternity to improve the performance is NLP method helps to influence the human mind in such a way that it starts to manage the internal states of the mind. The state of mind of the individual is an essential factor in bringing out his or her best performance. A lot of sports performers spend a lot of their time focusing on improving their fitness and technical ability and often the mental element is neglected, even at world class level.

Invoking of states in the mind can help bring out the best in a player. Coaches generally know their players very well and therefore have an idea about what is the best thing to bring out the peak performance in a player. The use of NLP has had a significant impact in the area of sports performance. People like Michael Jordan, Tiger Woods, Andre Agassi, Greg Norman, Jimmy White, Michael Vaughan are among many highly successful sports performers who use NLP techniques consistently to achieve excellent results.Michael Phelps is already the most decorated Olympian of all time with 22 medals to his name including 18 gold medals. he is using the power of guided imagery to prepare for success.

II. **Methods to empower the players to perform better in the competitions:**

1. **Mental Imagery:** Imagery is a mental practice that has been widely used for the acquisition of sporting skills.
2. **NLP visualisation: Neuro linguistic programming:** Neuro-Linguistic Programming (NLP) is an approach for changing thoughts, feelings, and behavior

1. Mental Imagery:

Imagery (veerender, 2022) is described as an experience that mimics real experience, and involves using a combination of different sensory modalities in the absence of actual perception. White and Hardy explained that "we can be aware of 'seeing' an image, feeling movements as an image, or experiencing an image of smell, taste or sounds without experiencing the real thing", Another commonality among definitions is the notion that individuals are self-aware and conscious during the imagery experience (Richardson, 1969). For example, White and Hardy distinguished imagery from dreaming because the individual is awake and conscious when imaging.

Recent studies in neuroscience have shown that when we imagine ourselves doing a particular habit it activates many of the same regions in our brain as when we are physically doing that same habit. And one recent study found that when experienced pianists practice playing a new song in their heads, it improves their performance and accuracy.

In this way, visualizing in our mind's eye can be an effective way to *prepare* ourselves for a situation before it plays out in the real world.

When athletes imagine themselves performing a certain way, they are mentally preparing themselves to act that same way once they step onto the field. For example, a golfer or basketball player will often visualize their shot before actually attempting it.

All successful athletes make use of mental imagery in one form or another. They are masters at seeing their success in their mind before they make it into a reality.

Mental imagery can be especially effective for injured players who aren't capable of physical practice but still want to keep their instincts sharp. Another way a lot of athletes mentally prepare themselves these days is by watching lots of video footage of themselves, especially comparing their good performances vs. bad performances. Video footage can be a great aid to creating effective mental imagery.

2. Neuro-Linguistic Programming: NLP stands for Neuro-Linguistic Programming. Neuro refers to your neurology; linguistically refers to language; programming refers to how that neural language functions. In other words, learning NLP is like learning the language of your own mind!.

Visualization is much more than a random daydream or just "seeing" yourself succeed. It is an extremely focused intention for improving personal performance. Let's make this simpler with an example.

Have you ever tried to communicate with someone who didn't speak your language, and they couldn't understand you? The classic example of this is when someone goes out to a restaurant in a Foreign country and they think they ordered chicken, but when the food shows up, it turns out they actually asked for a duck. This is the kind of relationship that most of us have with our own unconscious mind. We might think we are "ordering up" more money, a happy, healthy relationship, peace with our family members, and being able to stick to a healthy diet…but unless that's what shows up, then something is probably getting lost in translation. In NLP (Meisam Savardelavar et al.,), we have a saying: the *conscious mind is the goal setter,* and the *unconscious mind is the goal-getter.* Your unconscious mind is not out to get you–rather, it's out TO GET FOR YOU whatever you want in life. However, if you don't know how to communicate what you want properly, it will keep bringing something you never wanted out of the kitchen. Neuro-Linguistic Programming is like a user's manual for the brain, and taking an NLP training is like learning how to become fluent in the language of your mind so that the ever-so-helpful "server" that is your unconscious will finally understand what you actually want out of life.

How this NLP works:

NLP is often proposed as a study of the way in which human beings structure their perceptions, it creates a framework that can be used to analyze study, reprogram, and program a person's behaviour, lifestyle and attitude. Body posture, breathing, gestures towards the eyes, ears, body, eye movements and language patterns are all elements that are used to trigger the unconscious mind in NLP.

High-achievers and peak performers think, act and feel differently from average people. They have superior mental strategies in place that help them learn faster and better and perform to their potential more often(veerender c.,icsm2018). Neuro-Linguistic Programming (NLP) was created by Richard Bandler and John Grinder in the 1970's.

Here's what you can learn from NLP:

- Change negative thinking to positive

- Stop self-limiting thinking patterns
- Increase energy
- Remove mental blocks
- Powerful visualization techniques
- Drop unwanted habits
- Create instant rapport
- Improve communication
- Remove unwanted, negative emotions
- Create smart learning and retention strategies

NLP sports psychology(veerender c,2018, lap lambert publishing) is based on the concept of bringing out the peak performance in an individual by improving their coordination and mental concentration. NLP for sports(veerender c, 2017, 2018)utilizes the five senses which are *auditory, visual, kinesthetic, gustatory and olfactory senses*. By utilizing these five senses to influence the mind this can help to enhance the performance of the individual. NLP for sports provides a method where a person can perceive the world around them in a certain way and with the use of sensory-based language, it is the best way to influence the human mind. When it comes to team work and coordination in sports, use of certain words that represent a sensation can give sports people that extra edge that is required to win. –

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EFFECT OF HILL RUNNING AND CIRCUIT TRAINING FOR DEVELOPMENT OF ENDURANCE AMONG WOMEN VOLLEY BALL PLAYERS A.P.

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Abstract

The Purpose of the study is to find the Aerobic Fitness among Women Volley Ball Players of A.P.. The Women Volley Ball players are between the age group 19 to 22 years. The Sample for the Study consists of 30 Women Volley Ball Players of KVR Govt College for Women, Kurnool. The Sample is divided into the three equivalent groups of 10 members each as two Experimental groups i.e. Circuit Training Group (n = 10) and Hill running training group (n = 10) and a control group (n= 10). Circuit Training Group and Hill running Training Group given training alternate day for six weeks and control Group will be given general training. The 12 min cooper Test run were conducted Pre and Post Test to determine the aerobic fitness.In 12 Min Run Cooper Test the Hill running Group has Performed better than Circuit training Group and Control Group and improved in endurance. Key Words: endurance, Hill Running, Circuit Training , volley balletc.

Introduction:
Circuit Training is developed by the Scientist Morgan R.E. and Adamson G.T. at University of Leeds in the year 1957. This is Resistance to develop the motor abilities such as strength, Speed and endurance. **Circuit training** is a exercise "circuit" which consists of prescribed exercises which includes for the upper body, lower back, abdomen and Lower body. It can be done with own body Weight and using the resistance exercises such as Barbells, Medicine Balls etc.
Dr. Pradeep Kumar Lenka (2019) studied the Effect of Resistance Training and Circuit Training on selected Physical and Physiological Variables Among College Male Boxing Players Thirty male Boxers were selected from Jivan Jyoti Trust Education Society who have represented an inter collegiate tournament. It has proved that Resistance Training and circuit Training is helpful for development of Physical and Physiological variables among boxers.

Methodology:
The Sample for the Study consists of 30 Women Volley Ball Players of KVR Govt College for Women, Kurnool. The Sample is divided into the three equivalent groups of 10 members each as two Experimental groups i.e. Circuit Training Group (n = 10) and Hill running training group (n = 10) and a control group (n= 10). Circuit Training Group and Hill running Training Group given training alternate day for six weeks and control Group will be given general training. The 12 min cooper Test run were conducted Pre and Post Test to determine the aerobic fitness

Results and Discussion:

Table 1: Comparison of statistical results among all groups of Volley Ball Players in 12 Min Run i.e. Cooper Test.

Name of the Group	Statistical tool	Cooper12min run		
		pre test	post test	M.I
Hill Running group	Mean	1891.83	2178.5	11.98
	Sd	100.85	107.28	
Circuit training group	Mean	1865.00	2018.3	6.48
	Sd	88.94	78.44	
Control group	Mean	1848.33	1793.33	-2.34
	Sd	883.86	86.07	

It shows the Pre Test Mean 12 Min Run Cooper Test of Hill Running Group is 1891.83 , Circuit Training 1865.00 and Control Group is 1848.33 and Post Test Mean 12 Min Run Test of Hill running Training Group is 2178.50 , Circuit Training 2018.30 and Control Group is 1793.33.

In 12 Min Run Cooper Test there is a significant difference between the Hill Running Training Group than Circuit training Group and Control Group.

Recommendations:

Volley Ball is an aerobic activity with addition an aerobic demands in activity. The Aerobic Fitness plays a important role to play the sport efficiently for longer period. The aerobic, or lower intensity training, will help build the Volley Ball Player for a long match. When training to improve the aerobic system, using intervals to improve the anaerobic threshold is helpful. .The following suggestions are made for the benefit of players, coach's academicians and sports scientists. The researcher makes a suggestion on the part of the coach to use the above said development of Circuit and Hill running training programs for Volley Ball Players

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EFFECT OF SELECTED YOGIC EXERCISES ON HOLISTIC HEALTH AMONG TSMS VOLLEYBALL PLAYERS

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Abstract

The aim of the study was to find out the effect of selected yogic exercises on holistic health among volleyball players of Telangana State Model School. To achieve the purpose of this study, 90 volleyball players in the age group of 14 to 17 years those who have participated in school level games taken as subject. The selected 90 subjects were divided into three equal groups of thirty, each as two experimental groups and one control group. Group 'I' underwent Yogasana and Group 'II' underwent Pranayama along with Surya Namaskaras and group III acted as control group who are not participate any training. The selected physical related variable such as Abdominal Muscular strength was assessed before and after training period. Sit up test which was used to conduct the pre-test and post-test for measuring the physical variable such as Abdominal Muscular strength. The results of the study were found that there was a significant difference due to the Yogasanas and Pranayama along with Surya Namaskaras when compared with the control group.

Keywords: *Pranayama, Surya Namaskaras, Holistic health.*

INTRODUCTION

Volleyball game played by two teams, usually of six players on a side, in which the players use their hands to bat a ball back and forth over a high net, trying to make the ball touch the court within the opponents' playing area before it can be returned. To prevent this a player on the opposing team bats the ball up and toward a teammate before it touches the court surface that teammate may then volley it back across the net or bat it to a third teammate who volleys it across the net. A team is allowed only three touches of the ball before it must be returned over the net. Yoga has all kinds of benefits for volleyball athletes, which is so many players who have reached the highest level of the game work it into their routine, whether it is in the morning after they wake up, before or after practice or as a part of meditation in the evening.

METHODOLOGY

The purpose of the study to find out the effect of selected yogic exercises on holistic health among volleyball players of Telangana state model school students. To achieve the purpose of the study, ninety volleyball players randomly selected from Telangana state model school, Chegunta, Medak were selected as subject for this study. They play volleyball at school level competitions. Their age ranged between 14 to 17 years. They were further divided into three equal groups of thirty namely (experimental) group I

Yogasana, (experimental) group II Pranayama along with Surya Namaskara and group III act as control group. The group I underwent Yogasana and group II Pranayama along with Surya Namaskaras group III underwent control group. The Yogasana and Pranayama along with Surya Namaskaras group participated the training for a period of three days in a week for six weeks to find out the outcome of the training exercises and the control group did not participate in any training program. The variable to be used in the present study was collected from all subjects before they have to treat with the respective treatments. After completion of treatment they were tested again as it was in the pre-test on all variables used in the present study. This test was assumed as post-test. The analysis of data on Abdominal Muscular strength have been examine by ANACOVA for each variables separately in order to determine the difference if any among the groups at pre and post-test.

TABLE 1: C**OMPUTATION OF ANALYSIS OF COVARIANCE OF ABDOMINAL MUSCULAR STRENGTH**

(Scores in counts)

Test	Asana group	Pranayama group	Control group	Source of variance	Sum of square	DF	Mean square	F ratio
Pre-test	26.40	25.06	26.25	Between	1.756	2	.878	.070
				Within	1091.3	87	12.24	
SD	4.58	2.71	3.04	Between	1690.6	2	845.4	50.185
Post-test	33.13	35.80	25.56					
				Within	1465.6	87	16.84	
SD	2.648	5.88	2.97	Between	1708.7	2	854.43	58.937
ADJUSTED POST TEST	33.06	35.97	25.62					
				Within	1246.7	86	14.497	

Table F ratio at 0.05 level of confidence for 2 and 87 degrees of freedom = 3.10, 2 and 86 of DF also 3.10
*significant at 0.05

The above table 1 shows that there is a significant difference in Abdominal Muscular strength among the two groups such as Yogasana group and Pranayama along with Surya Namaskaras group. Since the calculated 'F' value required being at 0.05 level of confidence for 2 and 87 degrees of freedom = 3.10, 2 and 86 of DF also 3.10, but the calculated values of Abdominal Muscular strength post and adjusted post-test 'F' value are 50.185 and 58.937 respectively. Which are the higher than the table value. Since the obtained 'F' ratio is found significant.

Pre-test mean and SD scores of sit ups of Yogasana group were the 26.40, and 4.58. Pranayama along with Surya Namaskaras group was 25.06, and 2.71 and control group was 26.30, and 3.04. The obtained F value on the scores of pre-test means.070 was lesser than the required F table of value, which proved that the random assignment of the subjects were successful and their score in sit ups before the training were equal and there was no significance differences.

The post test means showed difference due to 6 weeks of Yogasana group, Pranayama along with Surya Namaskaras and control group mean and SD values recorded were 33.13 and 2.64, 35.80, and 5.8 and 31.50 & 5.95 respectively.

As shown above table the obtained F value on the scores of post-test means 50.185 was GREATER than the required F table of value, of 3.10 to be significant at 0.05 levels. Taking into consideration of the pre-test means and post-test means adjusted post-test means were determined and analysis of covariance was done and the obtained F value 58.937 was greater than the table value of 3.10 and hence it was accepted that the Yogasana practice group and Pranayama along with Surya Namaskaras were significantly difference the sit ups of the subjects.

Since significant differences were recorded, the results were subjected to post hoc analysis using BONFERRONI POST HOC TEST. The results were presented in the below table.

TABLE 2: BONEFERRONI POST HOC TEST MEAN DIFFERENCES IN ABDOMINAL MUSCULAR STRENGTH AMONG THREE GROUPS

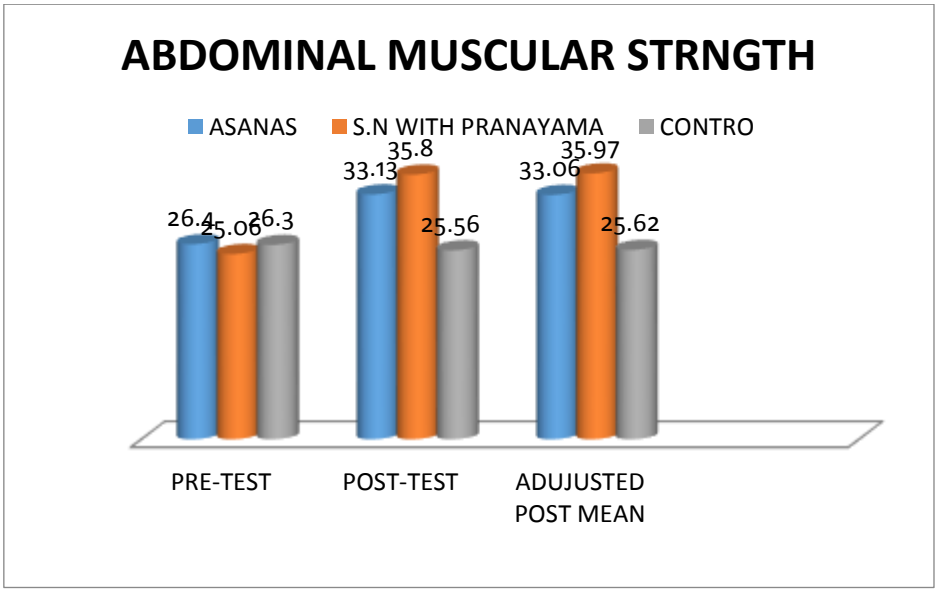
MEANS			**Mean Difference**	**Sig P-value**
Yogasana group	Pranayama along with Surya Namaskaras group	Control group		
7.442	10.347		2.905	.000.
7.442		2.904	4.538	.000
	10.347	2.904	7.443	.000

*significant at 0.05

The above tables mean difference values are showing that they are significant. The mean difference values comparisons were .2.905, 4.538 and 7.443 which are significant at the 0.05 level of confidence. According to the comparison of these three groups the Pranayama along with Surya Namaskaras group has improved significantly more than the asana group and control group. The Asana group has improved significantly than the control group. There was a significant difference between the Yogasana group and control group, Pranayama along with Surya Namaskaras and control group, and Yogasana and Pranayama along with Surya Namaskaras groups.

The ordered adjusted means were presented through bar diagram for better understanding of the results of this study below figure.

FIGURE 1: BAR DIAGRAM SHOWING THE PRE, POST AND ADJUSTED POST-TEST VALUE OF ASANAS, PRANAYAMA ALONG WITH SURYA NAMASKARAS AND CONTROL GROUPS ON ABDOMINAL MUSCULAR STRENGTH



*Significant at 0.05

DISCUSSION ON THE FINDINGS OF SIT UP TEST

The results presented in the 1st figure showed that the obtained adjusted means on Abdominal Muscular strength among Yogasana group was 33.068 followed by Pranayama along with Surya Namaskaras group with the mean value of 35.973 and control group mean value of 25.626. The difference among pre-test scores post-test scores and adjusted mean scores of the subjects were statistically treated using ANCOVA and F value obtained were on pre-test score was .070, 50.185 and 58.937 respectively. It was found that obtained F value on pre-test score was not significant at 0.05 level of confidence as the obtained value was lesser than the required table value and post-test Scores was significant at 0.05 level of confidence as the value was greater than the required table F value of 3.10. The Bonferroni post hoc test proved that due to six weeks training to the Yogasana group and Pranayama along with Surya Namaskaras group there was significant improvement in Abdominal Muscular strength than control group and the difference were significant at 0.05 levels. The Pranayama along with Surya Namaskaras group proved to be more effective as compared to both the groups. The asana group was second more effective as compared to the control group. Finally the Abdominal Muscular strength was improved between the experimental groups namely Yogasana group and Pranayama along with Surya Namaskaras group during the course of six weeks training program.

CONCLUSION

The results of the study showed that the experimental group improved in Abdominal Muscular strength and their holistic health significantly after the six weeks' yogic exercises among Telangana state model school volleyball players of Chegunta, Medak

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ASPECTS OF YOGA IN RELATION TO POSTURE AND WELL- BEING

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YOGA AND BODY POSTURE

The individual's physical capabilities and limitations: Each person's body is unique, and individuals will have different levels of flexibility, strength, and balance. It is important to be mindful of one's own physical abilities and limitations when practicing yoga and to modify poses as needed to ensure proper alignment. One of the main aspects of yoga is the focus on proper body posture. In yoga, proper body posture is known as "alignment." Alignment refers to the way in which the body is positioned in each yoga pose. It is important to maintain proper alignment in yoga because it helps to ensure that the body is properly supported and balanced, which can help to prevent injuries and improve overall physical comfort. Proper alignment in yoga also helps to improve the flow of energy throughout the body. This is because each yoga pose is designed to stretch and strengthen specific muscle groups, which helps to increase circulation and improve the functioning of the body's systems. In addition to the physical benefits of proper alignment, it is also believed that maintaining proper body posture in yoga can have mental and emotional benefits as well. For example, good posture can help to improve self-confidence and self-esteem, and it can also help to reduce stress and improve overall well-being. Yoga is a practice that involves physical postures, breath control, and meditation. Proper body posture in yoga is known as "alignment" and refers to the way in which the body is positioned in each yoga pose. Maintaining proper alignment in yoga is important for several reasons: it helps to prevent injuries, improves overall physical comfort, increases circulation and improves the functioning of the body's systems, and can have mental and emotional benefits such as improved self-confidence and reduced stress. With practice and awareness, it is possible to improve one's body posture and alignment in yoga, which can lead to greater physical comfort and well-being. There are many different factors that can influence body posture in yoga, including the type of yoga being practiced, the individual's physical capabilities and limitations, and the environment in which the yoga is being practiced. Some common factors that can affect body posture in yoga include: The type of yoga being practiced: Different styles of yoga place different demands on the body and may require different body postures. For example, some styles of yoga, such as Ashtanga and Bikram, are more physically demanding and may require more strength and flexibility. Other styles, such as Yin and Restorative, are gentler and may focus more on relaxation and rest.

YOGA AND MENTAL HEALTH

There is a strong connection between yoga, mental health and well - being. Yoga is a practice that involves physical postures, breathing techniques, and meditation, and it has been shown to have numerous benefits

for mental health. One way that yoga may benefit mental health is by reducing stress and anxiety. Yoga involves the practice of mindfulness, which involves paying attention to the present moment and letting go of negative thoughts and feelings. This can help individuals to feel more calm and centred, and may help to reduce symptoms of stress and anxiety.

Yoga may also help to improve mood and decrease symptoms of depression. Some research has found that regular yoga practice can lead to an increase in serotonin levels, which is a neurotransmitter that is associated with feelings of happiness and well-being. In addition, the physical activity and social support that often come with participating in a yoga class can also contribute to improved mood. Yoga may also have benefits for individuals with conditions such as post-traumatic stress disorder (PTSD) and obsessive-compulsive disorder (OCD). Some research has found that yoga can help to reduce symptoms of these conditions, such as flashbacks, intrusive thoughts, and anxiety. In addition to these mental health benefits, yoga may also have a number of other benefits for overall physical health. It can improve flexibility, strength, and balance, and may also help to reduce pain and improve sleep.

Overall, the evidence suggests that yoga can be a useful tool for improving mental health and wellbeing. It is important to note, however, that yoga should not be used as a replacement for traditional mental health treatment. If you are struggling with mental health issues, it is important to seek help from a qualified mental health professional. Yoga is a holistic practice that involves physical postures, breathing techniques, and meditation. It has the potential to bring about significant changes in an individual's lifestyle.

One way that yoga may change an individual's lifestyle is by promoting a sense of mindfulness and present-moment awareness. Through the practice of yoga, individuals may learn to pay more attention to their thoughts and feelings, and to cultivate a sense of calm and inner peace. This can lead to a greater sense of self-awareness and self-acceptance, and may also help individuals to make healthier choices in their daily lives. Yoga can also have social and community-building effects. Many people practice yoga in group classes, and this can provide a sense of connection and support. In addition, the values and philosophy of yoga, such as non-judgment and compassion, may spill over into other areas of an individual's life and relationships. Regular yoga practice can also lead to a greater sense of discipline and structure in one's daily routine. Setting aside time for yoga practice can help individuals to prioritize their physical and mental health, and may also encourage them to be more mindful and present in other areas of their lives.

Conclusion: Yoga is a holistic practice that can have a profound impact on both physical and mental well-being. From a physical perspective, yoga has a number of benefits. These physical benefits can contribute to a greater sense of overall well-being and may also have a positive impact on other areas of an individual's life. These physical benefits can translate into a more active and healthy lifestyle, and may also contribute to a greater sense of well-being. Overall, the practice of yoga is an integral part of physical and mental well-being. It can help individuals to feel more balanced, centred, and at peace, and may also have a positive impact on overall physical health. With the many benefits that it offers, it is no wonder that yoga has become such a popular practice around the world.

PSYCHOLOGICAL FACTORS RELATED TO WOMEN PARTICIPATION IN SPORTS

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Abstract

Now it is very interesting to see the role of Indian women in sports has been quite appreciable and we celebrate it as well. They have combated all odds and conquered challenges to play for the nation. There are women who have taken firmed pathways, struggled hard and stood for the country internationally. Attitudes regarding female sport participation are changing, as there are females who have made sport part of their daily lives. Participation in sport and physical activity can provide a wide range of physical, psychological and social benefits for women and girls. Studies of women's and girls' experiences of sport suggest that positive experiences can contribute to a sense of empowerment for participants.

INTRODUCTION

Women and girls' decisions to engage and participate in sport, active recreation and physical activity is heavily influenced by a complex value system which fluctuates according to age and the life stage of the individual. Women who begin sports younger in life are more likely to continue being active as they get older. Although there are more women involved in the realm of sports, females face societal challenges associated with the male hegemony of sport, including issues of identity, media coverage, fan support, and opportunities such as in the job market of coaching and broadcasting (Mean & Kassing, 2008, Krane et al., 2004). There are also issues of disparities in availability of forums to disseminate the expertise of women in the field compared to their male counterparts. Research suggests two ways in which physical activities can contribute to mental health in girls. Firstly, there is fairly consistent evidence that regular activity can have a positive effect upon girls' psychological well-being; indeed, some studies indicate that girls may respond more strongly than boys in terms of short-term benefit. Secondly, research has indicated that physical activity can contribute to the reduction of problematic levels of anxiety and depression. Evidence is beginning to be gathered for exercise as a treatment for clinical depression, with studies finding that physical activity is as effective a treatment as anti-depressants, and psychotherapy. Similarly, a variety of nonclinical studies have found that higher levels of activity were related to lower rates of depression. A position statement of the International Society of Sport Psychology drew out numerous mental health benefits of physical activity from the research literature, including reduced state anxiety, neuroticism and anxiety, mild to moderate depression, and various kinds of stress. Studies of women's experiences of sports participation have suggested that they can contribute to a more generalised feeling of empowerment. In many settings, adolescents may be encouraged to view their bodies as sexual and

reproductive resources for men, rather than sources of strength for themselves. Physical activities may help them develop a sense of ownership of their bodies and access the types of activity experiences traditionally enjoyed by boy. This may be because participation augments girls' self-esteem, or because being an athlete carries with it a strong public identity. Some female athletes report having a stronger sense of identity and self-direction – what Talbot calls 'being herself through sport'. Whatever the reasons, increasing the numbers of girls' participating in sports and physical activities does seem to open up routes through which they can acquire new community affiliations and begin to operate more openly and equally in community life. In doing so, girls' participation can challenge and change social norms about their roles and capabilities .Participation of women in sports is increasing year after year .With this enhancement in female participation in sports , there is also renewed interest in the psychological characteristics of the female athletes and the effects of athletics on women . The various psychological traits of women athletes are

- **Gender Role Orientation** : It is an established fact that there has been an increase in the level of women's participation in the types of sports that have been traditionally limited to only males , e.g., wrestling , weightlifting , kick boxing , body building , etc . However , many sports have been still considered inappropriate for women . For a long time it was considered that women should not take part in athletics because of the potentially harmful masculinising effects of sports .
- **Competitiveness :** It is evident that in the field of sports , both men and women are competitive in their own fields . In fact, women are more goal oriented and perform magnificently in artistic activities such as gymnastics . However , a number of research studies indicate that females who take part in sports are more competitive in comparison to the females who do not participate in sports .
- **Confidence** : Due to social pressures, women tend to have less confidence than men . Participation in sports , competitive environment , awards and recognitions increase confidence levels of sportspersons . However, a significant difference may exist between sportswomen and non-sportswomen.
- **Self-esteem**: Most of the research studies indicate that training plays a vital role in performance. Self -esteem improves with good performance. In the field of sports, intensive training helps in enhancing self-esteem. Research studies also show that those people who engage in sports have high self-esteem in comparison to non-participants
- **Aggression** : Aggression is a forceful , goal- directed action that maybe verbal or physical . Participation in sports has many positive aspects which usually involve aggressive behavior. Various studies of aggression show that athletes who participate in contact sports, i.e., football players, judos or wrestlers are more aggressive than the athletes who participate in less contact sports. However, females who participate in contact sports show more aggression in comparison to females who do not participate in sports at all.

CONCLUSION

Girls and women participation has increased in sports globally but this increase participation has brought into focus the need to better understand the psychology of female athletes. The psychologist needs to explore various non-physical factors which are psychological factors that contribute to athletic success of female athletes.

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CONTEMPORARY ISSUES OF GOOD GOVERNANCE IN NATIONAL SPORTS FEDERATIONS IN SRI LANKA: EXAMINATION OF THE INITIAL PHASE

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Abstract

The concept of good governance (GG) had been introduced by the International Olympic Committee (IOC) in 2008 to increase the efficiency and effectiveness of the administrative and managerial mechanism of the sport organization. However, there are inevitable factors expected outcomes are to be reach in national sport organizations in Sri Lanka. This study therefore aimed to examine the use of good governance process in the administration of National Sport Federations in Sri Lanka (NSF SL). This study used qualitative methodology while using formal and informal discussions, interviews, and web observations. Purposive sampling method has been used by this research. By organizing all the transcriptions and used thematic analysis. The thematic analysis was conducted in two stages. In the first stage, the details recorded from the interviews were summarized. In the second stage, the summarized description was divided into sub-themes and the research data was analyzed. While selecting the sample following factors were taken into consideration. Such as being a sports official, having more than ten years of service, being a retired sports official, having experience in sports administration, being associated with national sports associations for administrative work.

The status of good governance practices in ten NSFs in SL were examined. The findings of the study indicated that the organizational level GG practices varied from one national federation to another, majority of the NSF's SL lack proper document management systems, lack of performance evaluation system, lack of responsibility individuals due to their voluntary basis service, absence of use of new technologies. In this research was not considering the micro level and individual. Therefore, if the research is carried out considering these two aspects while conducting future research, it will be possible to identify good governance issues covering all aspects.

Key Words: *Good governance, National Sport Federations, International Olympic Committee, thematic analysis, administration*

A COMPARATIVE STUDY OF AGILITY OF BADMINTON AND KHO-KHO PLAYERS OF MUMBAI CITY

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Abstract

Teenagers are our strength. This strength is increasing through various games practicing in various clubs. Motor fitness is sometimes referred to as skill-related fitness. Today fitness industry has standardised what is safe and unsafe and defined which workout gives the best result. To days daily life is fast, people want to be faster with time. So they are taking much precaution about their health Therefore, by going through all the concepts and studies it was seem that the present study "A comparative study of Agility of Badminton and Kho-Kho players of Mumbai" was taken.The data collected was be analysed by independent sample t-test. The research scholar has conducted a comparative survey on club Players of Mumbai city by taking sample (n=100) and conducted Agility test by measuring 4X10 Shuttle run. The study findings showed that It can be seen that the t-value is 4.98 which is significant at 0.05 level with df=98. It indicates that mean scores of Agility of Kho-Kho Players and Badminton Players differ significantly.

Keywords: *Motor fitness, Agility*

INTRODUCTION

The neuromuscular components of fitness, which enable a person to perform successfully at a particular motor skill, game, or activity. Motor fitness is sometimes referred to as skill-related fitness. Today fitness industry has standardised what is safe and unsafe and defined which workout gives the best result. To days daily life is fast, people want to be faster with time. So they are taking much precaution about their health

Definitions

Ones controlled ability to change body position and direction rapidly and accurately

Objective of the study:

To compare the mean scores of agility of Badminton and Kho- Kho players

Hypothesis –

- $H_0$1: There is no significance difference between the mean score of agility of Badminton and Kho-Kho players of Mumbai

METODOLOGY

DESIGN OF THE STUDY

The study is survey in nature under the heading of descriptive research. The researcher personally goes to the selected clubs along with his assistance and collect the data on Agility of Badminton and Kho-Kho players.

SAMPLE

There are 35 Kho-Kho clubs in Mumbai and in which only 10 clubs has players aged 15-17years, On an average there are 13 players in these clubs and from these 10 clubs I was be taking a sample size of (n=50) from 5 clubs amongst these 10 clubs as per my convenience leading it to convenient sampling technique under the head of non-probability sampling.

There are 20 Badminton clubs in Mumbai and in which only 10 clubs has players aged 15-17years, On an average there are 08 players in these clubs and from these 10 clubs I was be taking a sample size of (n=50) from 5 clubs amongst these 10 clubs as per my convenience leading it to convenient sampling technique under the head of non-probability sampling.

VARIABLE AND TEST

Motor fitness variable

1) Agility

CRITERION MEASURES

Variable	Test	Unit
Agility	Shuttle run test (10x4 yards)	Sec

STATISTICAL PROCEDURE

The data collected was be analyzed by independent sample t-test by using SPSS Software.

RESULTS

GROUP WISE COMPARISON OF MEAN SCORES OF AGILITY

The first objective was to compare Mean Score of Agility of Kho-Kho Players and Badminton Players. The data were analyzed with the help of t-Test and results are given in Table 1.1

TABLE 1.1: Treatment wise Mean, SD, N and t-value of Agility

Test	Mean	SD	N	t-value		Remarks
Kho-Kho Players	**10.89**	**0.81**	**50**			
Badminton Players	**11.76**	**0.94**	**50**	**4.98****	**OR**	**p<0.05**

*Significant at 0.05

From Table 1.1 it can be seen that the t-value is 4.98 which is significant at 0.05 level with df=98. It indicates that mean scores of Agility of Kho-Kho Players and Badminton Players differ significantly. Thus, the Null Hypothesis that is significant difference in Mean Score of Balance of Kho-Kho Players and Badminton Players is rejected. The mean scores of Agility of Badminton Player Group is **11.76** which is

significantly higher than Kho-Kho Player Group which is **10.89**. It may therefore be said that Kho-Kho Player Group and Badminton Player Group are different.

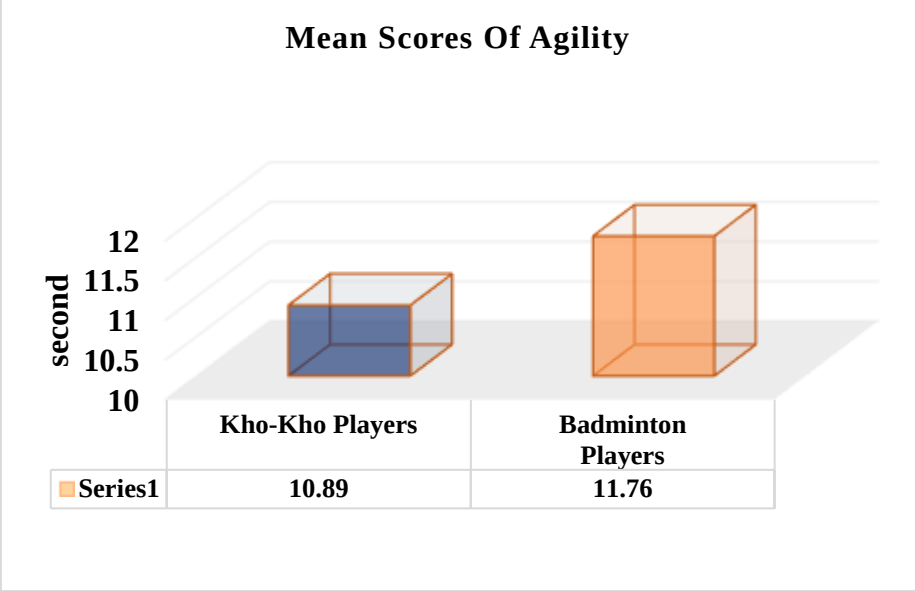

Figure 1.1 Comparison of Mean Scores of Agility between Kho-Kho Players and Badminton Players

CONCLUSION

In case of agility as measured by 4x10 m shuttle run it is observed that the Kho-Kho players is superior as compare to Badminton player

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A COMPARATIVE STUDY OF JOB SATISFACTION OF PROFESSIONAL AND NON-PROFESSIONAL VOLLEYBALL PLAYERS OF MUMBAI

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Abstract

The aim of the researcher was to compare the power of karate and kickboxing players of Mumbai suburban. Total 100 players were selected as sample the study by using simple convenience sampling. The objective of the researcher was tt compare the mean scores of power of karate and kickboxing players. It was a comparative study, so the date was analyzed by t- test. The results revealed that the power of karate players was significantly equal to kickboxing players

***Keywords**: Power*

INTRODUCTION

"Power" refers to a One's ability to produce maximum muscular strength (force) in short time.

Power is the ability to perform strength-based movements quickly. Power is an important component of fitness that is used in many dynamic sports activities.

It has the power to inspire. It has the power to unite people in a way that little else does. It speaks to youth in a language they understand. Sport can create hope where there was only despair.

Power is a combination of speed and muscular force. A football linebacker uses power to blast through a line of men. A gymnast uses power during a performance on the rings and uneven bars. Measure your power by throwing a heavy object or lifting weights.

Hence, I will be conducting research on the karate players and kickboxing players to find out the relative differences between the two (Karate player and Kickboxing players)

Objective of the study:

- To compare the mean scores of power of kickboxing and karate players of Mumbai Suburban

Hypothesis of the study:

H01: There is no significance difference in mean scores of **Power** of kickboxing and karate players of Mumbai Suburban.

METHODOLOGY

The methodology was main course of the study. The present research was of comparative type which provided Comparison of the Scores. The Scores of karate and kickboxing players were collected according to the test. Some of the aspects related Methodology as under;

DESIGN OF THE STUDY

This study is a Comparative in nature under the heading of Descriptive research. The researcher was personally visited the selected clubs and collected the data filled male karate and kickboxing of Mumbai suburban

SAMPLE

A total sample size of hundred (n=100) players were selected. n=50 players of karate n=50 players of kickboxing of Mumbai suburban for collection data researcher adopted. Systematic convenience sampling under the head of probability sampling method.

VARIABLE AND TEST

After reviewing of the available sport literature and discussion with the experts theFollowing are the motor fitness components variables selected for the present study.

Power

RESULTS AND DISCUSSION:

RESULTS ON POWER

GROUP WISE COMPARISON OF MEAN SCORES OF POWER

The first objective was to compare Mean Score of Power of Karate and Kickboxing boys Players. The data were analysed with the help of t-Test and results are given in Table 4.1.

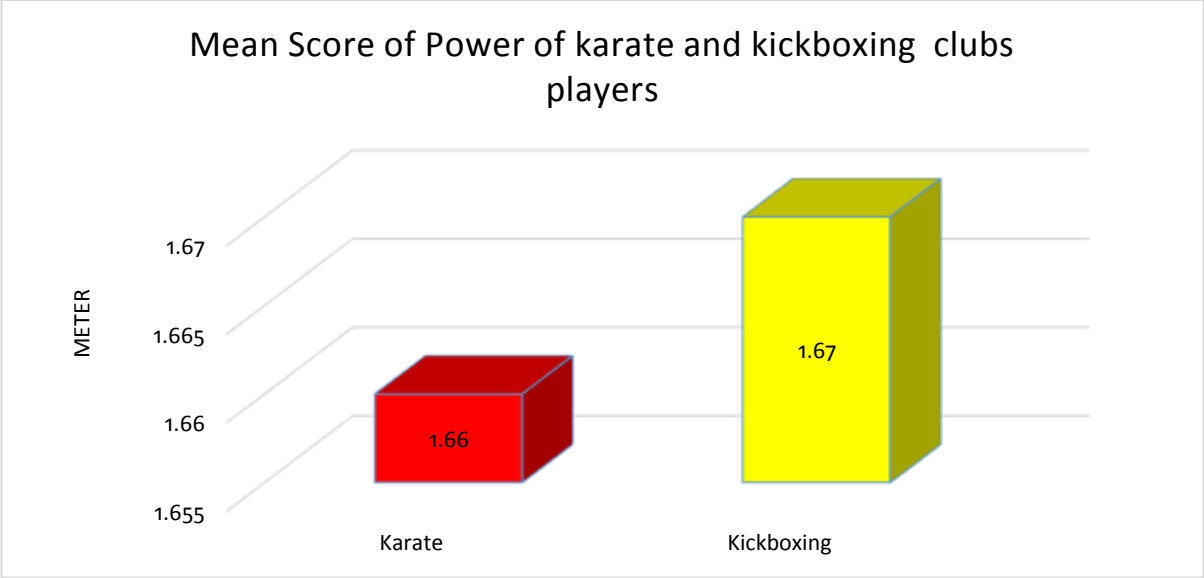
TABLE 4.1: Group wise Mean, SD, N and t-value of power of club players

Test	Mean	SD	df	N	t-value	Remarks
Karate	**1.66**	**0.22**	**98**	**50**		
kickboxing	**1.67**	**0.22**		**50**	**0.35**	**p>0.05**

*Significant at 0.05

From Table 4.1 it can be seen that the mean score of karate player is **1.66** and kickboxing is **1.67** with df= 98.t-value of power of players is 0.35 which is not significant at 0.05 level. It indicates that both the group are more or less similar to each other Thus, the Null Hypothesis that is no significant difference in Mean Score of Power of Karate and Kickboxing players is not rejected.

4.2.1 Comparison of mean score of power between karate and kickboxing club's players



CONCLUSION

Through the results and findings the study is concluded as_

- In case of power – karate and kickboxing male players are equal

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DEVELOPMENT OF FLEXIBILITY THROUGH YOGA OF D.ED. COLLEGE GIRLS AGE 18 TO 20 YEARS

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Abstract

Sixty College girls from D.Ed. was selected randomly for this study. The subject's age group was ranging from 18 to 20 years. All the selected college girls were then again randomly assigned into two equal groups, viz.,one experimental group and the other control group. Group A received daily morning one hour Yoga training, while Group B was treated as control. The design was planned in three phases. Phase-I: Pretest, Phase -- II:Training or Treatment, and Phase-III: Post test. The statistical study revealed that in the pre test of flexibility, the mean difference was 3.6000 and the 't' values of pre test was 2.588 which were not significant (p>0.05). But in case of post test of of flexibility the mean difference -5.0333 and the 't' values of post test was -2.074 which were significant (p<0.05). It suggestss that flexibility of control group and experimental group was significantly different. This experimental study also suggests that, daily Yoga practice helps to improve flexibility of D.Ed College girls.

Keyword: - *Yoga, Flexibility*

INTRODUCTION

The heavy educational burden almost all time students spend more time of a day to complete their school curriculum, homework and tuition classes. It helps to develop the student's academic ability but it's not help to develop the student's physical fitness. So The students of schools are today facing a lot of problems related to their health and fitness day. In our country ample of ways are available to prepare fit to students. Yog one of them, it is an ancient Indian activity. The literature reveals that regular and proper yogic practices help to solve many health problems not only yoga improves academic achievement but also improves muscular ability. Yoga is that system which is directly related with the human psycho physiology and Anatomy, yoga means the experience of oneness or unity with inter being. Yoga integrates physical poses and breathing techniques to stretch the body, breath and mind to improve endurance, strength, balance and flexibility.

So this is the best way to enhance or improve health related fitness of the students through yoga practice. Flexibility is an important component of health-related fitness, because lack of flexibility can cause functional problems and disorders, yoga be an acceptable form of physical activity for enhancing health

related fitness. There is a need for further research that is interventional and controlled with the supervised yoga exercise. Therefore, the researcher has undertaken this study entitled "Development of Flexibility through Yoga of D- Ed college girls aged 18 to 20 years" with the objective, to measure the flexibility through yoga of college girls aged to 18 to 20 years.

HYPOTHESIS OF THE STUDY:

• H01: The yoga training programme will improve flexibility among D.Ed college girls.

METHODOLOGY

Sixty College girls (n=60) from Oriental Junior College of Education, Sector-2 Sanpada, Navi Mumbai were selected randomly for this study. The subject's age group was ranging from 18 to 20 years. All the selected college girls were then again randomly assigned into two equal groups, viz., one experimental group (Group An 30) and one control group (Group B; no 30). The researcher made sure that the entire subjects were ready to go through the experimental requirements of this research project. The investigator herself expounded in details and significance of this project to the participating college girls. Experimental Design is adapted to this investigation. Group A received daily in morning one hour 'Yoga training, while Group B was treated as control. The design of the experiment has been planned in three phases. Phase-E Pretest, Phase II: Training or Treatment and Phase III: Post test. In pre and post test. Flexibility is measured by sit and rich test After reviews of various literature of Yoga, the following independent variables were select for this investigation, which is presented in table No. 1.

Table No. 1 Independent variables

Dhanurasana	**Pashchimatana**
Halasana	**Ardha-matsyendravana**
Sarvangasana	**Yoga-mudrasana**
Vakrasana	**Viprikarni**
Chakrasana	**Ardha-Shalabhasana**
Shalabhasana	**Shavasana**
KRIYA	**Kapalbhati**
PRANAYAMA	**1. Ujjayee** **2. Anulome Vilom**

ANALYSIS OF THE DATA

As per the research design the collected data is analyzed by employing with standard statistical technique't' test. Further the result have been interpreted and discussed logically to conclude this investigation by Table.

Table 2 (Independent Sample 't' Test) Group viz., N, Mean, Standard Deviation, Mean deference and 't' value of flexibility.

Group	N	Mean	Std. Deviation	Mean Deference	't'	Sig.	Remark
Flexibility pre 'B'	30	9.8000	4.62676	3.6000	2.588	**.0621**	p>0.05
'A'	30	6.2000	6.05378				
Flexibility post 'B'	30	9.5000	4.02364	-5.0333	-2.074	**.009***	p<0.05
'A'	30	14.5333	12.67017				

***Significant at 0.05 level**

'B' = Control group

'A' = Experimental group

RESULT OF FLEXIBILITY:

It is seen from the table-2, in case of pre test of Flexibility, (sit and rich test) the mean scores of control and experimental group were 9.8000 (SD 4.62676) and 6.2000 (SD 6.05378) respectively, whereas, the mean difference was 3.6000 and the 't' values of pre test was 2.588 which were not significant (p>0.05). It reflects that the mean score of pre test of Flexibility of control group and experimental group was do not differ significantly. This result indicates that the pre-test means of yoga training group and Control group in Flexibility were more or less similar. But in case of post test of Flexibility, the mean scores of control and experimental group of post test were 9.5000 (SD 4.02364) and 14.5333 (SD 12.67017) respectively, where the mean difference is -5.0333 and the 1 values of post test was -2.074 which is significant (p<0.05). It reflects that the mean score of post test of Flexibility of control group and experimental group was differ significantly. This result helps to interpret that the Yoga practice were effective in improving Flexibility of the school girls in Navi Mumbai. In this context the null hypothesis Ho. 1 that "There is no significant difference in mean score of Flexibility of control and experimental group" is rejected.

DISCUSSION:

In case, pre test of Flexibility, the mean difference was 3.6000 and the 't' values of pre test was 2.588 which were not significant ($p>0.05$). It reflects that the mean score of pre test of Flexibility of control group and experimental group was do not differ significantly. But in case of post test of Flexibility the mean difference is. -5.0333 and the 't' values of post test was- 2.074 which is significant ($p<0.05$). It reflects that the mean score of post test of Flexibility of control group and experimental group was differ significantly. The result reveals that, the subject of Experimental group (Yogic practices group) could show higher score in Flexibility as measured by modifies sit ups performance in 60 Sec., than the control group. Thus, the mean gain in Flexibility has increased significantly in experimental group as compared to control group so Yogio practices warrants a statistically significant effect to increase the Flexibility of Junior College girls which rejects the null hypothesis There was no significant difference in mean gain score of Flexibility as measured by Sit and rich test of control and experimental www.g groups due to specific Yogic Practices has been rejected.

CONCLUSION:

This experimental study suggests that, daily Yoga practice helps to improve Flexibility of D.Ed College girls.

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A COMPARATIVE STUDY OF GENERAL MOTOR ABILITIES OF KABADDI AND KHO – KHO FEMALE PLAYERS OF THANE DISTRICT

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Abstract

General motor ability is define as one's inherent potential to perform vigorous motor activities with best speed, strength, endurance, flexibility, agility and quick reaction time. Historically, the objective may have been described in terms of the development of organic vigor or physical development. The aim of the researcher was to compare the general motor abilities of Kabaddi and Kho – Kho female players of Thane District. Total 80 players were selected as sample for the study by using Convenient Sampling. The objective of the researcher was too compare the Mean Scores of Muscular Strength and Balance of Kabaddi and Kho – Kho female players. It was a Comparative survey, so the date was analyzed by t-test. The results revealed that the Muscular Strength of Kho – Kho female players was significantly not higher than Kabaddi female players and the Balance of Kabaddi female players was significantly not higher than Kho – Kho female players.

INTRODUCTION

General motor ability has been considered as one's level of ability in a wide range of activities. The level of motor abilities is of prime importance for learning of various activities and perfection of different skill traditionally motor abilities have been viewed as combination of factors that are basic to all movement. A motor skill is a function that involves specific movements of the bodies muscles to perform a certain task. In order to improve performance in sports, motor fitness preparation of the sports person plays an important role and lays a strong foundation for all other aspects of sports performance. The fitness of a sports person is the sum total of several motor abilities namely; strength, speed, endurance, flexibility, agility and coordination. These motor abilities and their complex form are the basic prerequisites for human motion.

Objective of the Study:

- To compare the Mean Scores of Muscular Strength of Kabaddi and Kho – Kho female players of Thane District.
- To compare the Mean Scores of Balance of Kabaddi and Kho – Kho female players of Thane District.

Hypothesis of the Study:

$H0_1$:There is no significant difference in the Mean Scores of Muscular Strength of Kabaddi and Kho – Kho female players of Thane District.

$H0_2$: There is no significant difference in the Mean Scores of Balance of Kabaddi and Kho – Kho female players of Thane District.

METHODOLOGY

The study was to compare the general motor abilities of kabaddi and kho – kho female players of thane district, therefore the researcher had selected players from different clubs which are located in Thane distrcit by using Convenient Sampling.

DESIGN OF THE STUDY

Basically the study was survey in nature under the heading of descriptive research. The researcher personally visited to the selected Clubs along with her assistance and necessary data was collected on selected general motor ability components of kabaddi and kho – kho female players of thane district.

Sample

A sample of 40 Kabaddi players and 40 Kho – Kho players from clubs of Thane district were selected for the study.

	Kabaddi Clubs	**Kabaddi Players**	**Kho-Kho Clubs**	**Kho-Kho Players**
Total Clubs	32 Clubs	384 Players	9 Clubs	108 Players
Population	15 Clubs (Aged 17-19 years)	180 Players (Aged 17-19 years)	6 Clubs (Aged 17-19 years)	72 Players (Aged 17-19 years)
Sample	5 Clubs	40 Players	4 Clubs	40 Players

- The students admitted in the Clubs of Thane District is selected as subjects for the present study.
- There are total 32 Clubs of Kabaddi in Thane District, and in which only 15 clubs of Kabaddi has female players aged 17 – 19 years. On an average there are 12 players in these each clubs and from these 15 clubs of Kabaddi I will be taking a sample size of (n = 40) from 5 clubs amongst these clubs as per my convenience leading it to convenient sampling technique under the head of non-probability sampling.
- There are total 9 Clubs of Kho – Kho in Thane District, and in which only 6 clubs of Kho – Kho has female players aged 17 – 19 years. On an average there are 12 players in each clubs and from these 6 clubs of Kho – Kho I will be taking a sample size of (n = 40) from 4 clubs amongst these clubs as per my convenience leading it to convenient sampling technique under the head of non-probability sampling.

Criterion measures

Sr. No.	**Dependent Variable**	**Test**	**Units**
1.	Muscular Strength	Medicine Ball Through	Distance in meters
2.	Balance	Stork Stand Test	Time in sec

Results and Discussion:

Treatment wise Mean, SD, N and t-value of Muscular Strength

Test	Mean	SD	N	t-value		Remarks
Kabaddi	**3.18**	**0.51**	**40**			
Kho-Kho	**2.92**	**0.30**	**40**	**2.72****	**OR**	**P<0.05**

*Significant at 0.05

From Table it can be seen that the t-value is 2.72 which is significant at 0.05 level with df=78. It indicates that mean scores of Muscular Strength of Kabaddi Group and Kho-Kho Groups differ significantly. Thus, the Null Hypothesis that is significant difference in Mean Score of Muscular Strength of Kabaddi Group and Kho-Kho Groups is rejected. The mean scores of Muscular Strength of Kabaddi is **3.18** which is significantly higher than Kho-Kho Group which is **2.92**. It may therefore be said that Kabaddi Group and Kho-Kho Group are different.

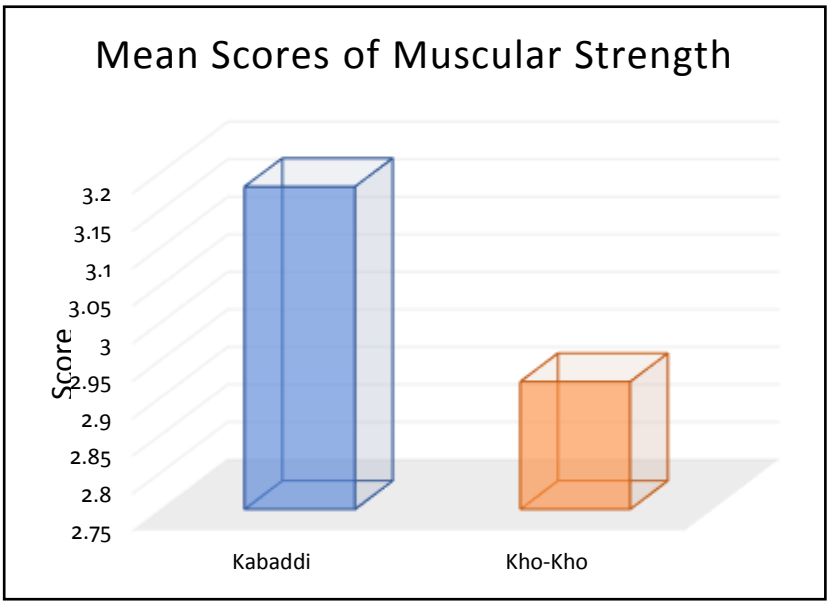

Figure Comparison of Mean of Muscular Strength of Kabaddi and Kho-Kho Players

Treatment wise Mean, SD, N and t-value of Balance

Test	Mean	SD	N	t-value		Remarks
Kabaddi	**5.23**	**1.66**	**40**			
Kho-Kho	**5.65**	**1.89**	**40**	**1.04***	**OR**	**p>0.05**

*Significant at 0.05

From Table it can be seen that the t-value is 1.04 which is not significant at 0.05 level with df=78. It indicates that mean scores of Balance of Kabaddi Group and Kho-Kho Groups do not differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Balance of Kabaddi Group and Kho-Kho Groups is not rejected. The mean scores of Balance of Kabaddi is **5.23** which is significantly not higher than Kho-Kho Group which is **5.65**. It may therefore be said that Kabaddi Group and Kho-Kho Group are equal.

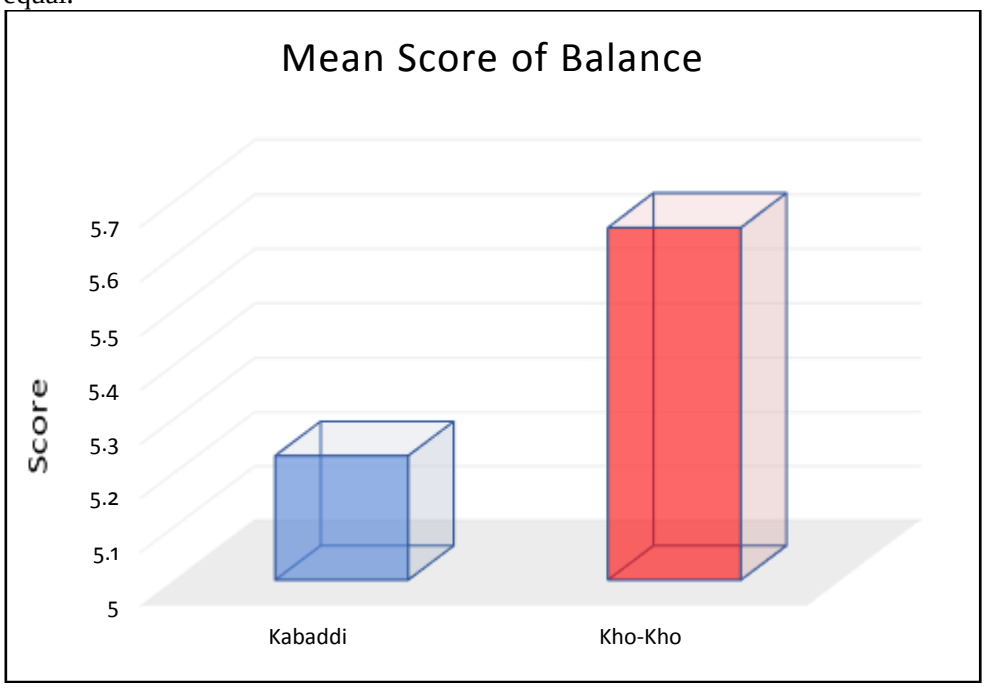

Figure Comparison of Mean of Balance of Kabaddi and Kho-Kho Players.

Conclusion:

The analysis in interpretation of the data collected by the researcher the following finding may conclude: The study show that Muscular Strength of Kho -Kho female players was significantly not higher than Kabaddi female players.

The study show that Balance of Kabaddi female players was significantly not higher than Kho – Kho female players.

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IMPLEMENTATION OF SOFT SKILL AND CORE COMPETENCIES FOR LIBRARY PROFESSIONALS WITH SPECIAL REFERENCE TO PHYSICAL EDUCATION LIBRARIES

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Abstract

Keeping up with significant changes and trends in library and information science and higher education poses substantial challenges for all types of libraries. As traditional information keepers, Librarians must be aware of the implications of these developments and develop technological and managerial skills that will allow them to effectively use the information and meet the dynamic information needs of their institutions. Many librarians need more confidence due to an ever-increasing amount of information technology. Academic librarians and libraries' which include physical education libraries roles, have transformed from traditional learning to the advancement of information and communication technologies. Because of this changing environment, library professionals require special skills, competencies, and basic librarianship skills and practices. This paper attempts to describe a concise explanation of soft skills, beginning with the definition of soft skills, various types of soft skills, and soft skills required for LIS professionals. It also covers the competencies and skills required of an academic library professional in the digital era, with particular reference to physical education libraries.

Keywords *– Soft Skills, Core Competencies Academic Libraries, Use of Library Resources, Physical Education Libraries*

INTRODUCTION:

The importance of librarians is highlighted by the changing environment of the library and information profession, which requires constant adaptability and flexibility. To meet this need, they must ensure that their knowledge, competencies, and skills are appropriate for the needs of the community they serve. Similarly, employers must provide library and information professionals opportunities to update their skills, knowledge, and competencies. Librarians need a wide range of skills and competencies depending on the type of library.

Today's most difficult challenge confronting the library profession is preparing employees to use technology effectively. However, being a master of technology alone is not enough for a library professional in an academic library. In addition to technical and professional skills, they must have various other skills such as business and management, teaching, leadership, soft skills, competencies, And so on. In response to advancements in information technology, many competency studies in library and information studies have been conducted in recent years.

Most of these studies were concerned with the common competencies required of LIS professionals. The Special Libraries Association (SLA) conducted one of the significant studies on competencies, entitled

Competencies for Special Librarians of the Twenty-First Century, revised edition, June 2003. The SLA identified two types of competition.

These are two essential core competencies for any library or information professional:

1. Professional competencies

Professional competencies about special librarians' knowledge of information resources, information access, technology, management, and research, as well as their ability to apply this knowledge as the foundation for providing library and information services. Professional competencies are also made up of four significant competencies; each backed up by specific skills.

(a) Managing Information Organizations.

(b) Managing Information Resources.

(c) Managing Information Services.

(d) Applying Information Tools and Technologies.

2. Personal competencies

Personal competencies are a set of skills, attitudes, and values that enable librarians to work efficiently, to be good communicators, to focus on continuous learning throughout their careers, to demonstrate the value-added nature of their contributions, and to survive in a new field of work.

Depending on the library type and nature of the role, librarians require a wide range of skills. Hard skills are represented effectively through soft skills. The boundary between hard skills and soft skills is ambiguous. Your high qualifications can only define part of your personality. Having the necessary qualifications leads to efficient management. Here are some of the traditional stern and soft skills that employers look for in potential candidates:

•Examples of librarian's hard skills: Familiarity with information management systems, awareness of library collection development and management, experience in cataloging, budgeting, and accounting, and proficiency in spreadsheets and database operations.

•Examples of librarian's soft skills: Effective communication skills, punctuality, critical thinking, time management, interpersonal skills, customer service, and organizational skills.

Library professionals also require some technological competencies

TECHNOLOGICAL COMPETENCIES

As technology has saturated all library operations and services levels of library operations and services, the academic library professional must anticipate changing user expectations and be adaptable. When it comes to learning and implementing new skills and levels of awareness,

Listed below are some .of the basic technology competencies

Essential for an academic librarian:

(a) Knowledge about relevant developments in information

technology like e-mail and Internet, web search strategies.

(b) Skills in ~asic computer hardware, troubleshooting, and networking.
(c) Knowledge of software applications operating systems.
(d) Automation of library services and their management.
(e) Familiar with web tools like blogs, social networking RSS feeds, etc.

III. SOFT SKILLS

In this study, the primary goal is to concentrate on the soft skills and competencies needed by library professionals to increase the library's visibility and efficacy.

A) HOW DO YOU DEFINE SOFT SKILLS?

A) DEFINITION:-

The group of personality traits, social graces, linguistic proficiency, personal routines, friendliness, and optimism that more individuals exhibit to varying degrees are known as "soft skills.". Soft skills were first referred to in 1972. These abilities include problem-solving, effective teamwork, and inspiring others. A group of strategies and tactics known as "soft skills" allow you to shape other people's behaviour to advance your well-informed self-interests. We are unable to define soft skills specifically. "desirable qualities for certain forms of employment that do not depend on acquired knowledge: common sense, the ability to deal with people, and a positive, flexible attitude" (Soft Skills 2018.) In general terms, Soft skills are a collection of many skills and abilities, including interpersonal, communication, motivation, listening, leadership, decision-making, presentation, negotiation, reading, writing, and stress management. As a result, some of the soft skills necessary by library professionals working in academic libraries to fulfill the main aim of libraries and information centers are as follows:

I. Effective Communication skills
i. Listing Skills
ii. Speaking Skills
iii. Reading Skills
iv. Writing Skills
II. Interpersonal skills
III. Presentation skills
IV. Problem-Solving Skills
V. Evaluation of Library Services
VI. Strong Work Ethic
VII. Positive Attitude
VIII. Marketing Skills
IX. New Technology's Adaptability

NEED OF SOFT SKILLS & CORE COMPETENCIES IN PHYSICAL EDUCATION LIBRARIES CONTEXT

Sports and physical education are an integral part of the learning process and need to be included in the evaluation of performance. A. These libraries are vibrant and productive organizations, that strive to keep pace with a global, dynamic, and technology-enabled information environment to meet the expectations of its users. Any physical education library's main goal is to promote the development of new knowledge by collecting, arranging, and disseminating library resources. It offered arrange of services including reference and consultation, membership and circulation, document delivery, resource sharing, information alert service, user awareness programmes. For providing such information services to its users, library professionals should have employees with "soft skills" and "core copletencies". It has improved the modern library setting, as has the usage for library professionals with technology skills and other knowledge and experience. Today's librarians must be trained in skills that bridge the gap between user preferences, satisfaction, and expectations, while also ensuring a balance between user and librarian perspectives on services. (2018) (Mwaniki). Even though librarians face challenges in terms of new and emerging skills, the most important aspect of this change is the ability to adapt existing skills, many of which are obsolete. Traditional Librarianship abilities and the ability to be adaptable.

CONCLUSION:-

LIS is one of the challenging professions in this information technology era. Librarians play a vital role in spreading information to library users. In libraries, library professionals face challenges due to development of advancement of information and communication technology and management technologies. To manage change, librarian professionals have some of the crucial competencies and soft skills which are very much required to satisfy the user who is discussed above. Various soft skills training programmes are available for library professionals at universities and institutions in India to enhance the employability of younger generations. These programmes also offer guidelines on how instruction in soft skills may be measured to make it more effective. The time has come for library professionals to recognize the value of soft skills and personalities in developing their profession so they can effectively convey their expertise to patrons and management.

Furthermore, soft skills are critically important to the "front line" library staff who are dealing with patrons who are sometimes angry, upset, and aggressive; these professionals will need command of soft skills to remain calm, listen, and know when and how to request additional assistance when necessary without further alarming the patron (Saunders 2015a).

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EFFECT OF HANDBALL TRAINING PROGRAMME ON STRESS OF STUDENTS OF THANE DISTRICT

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Abstract

Stress plays a significant role in the training of sports participants as coaches have no control on it. To better cope with stressful situations, close monitoring is required of stress levels before, during, and after training and competitions is recommended. The main objective of the study was to compare the adjusted Mean Scores of Total Stress of Students with Handball Training Group and Non-Handball Training Group by taking Pre Total Stress as Covariate. It was non-equivalent control group study had been taken for collection of data. The Handball Training Group was known as experimental group and Non-Handball Group was known as control group in the study. In methodology, before training pre and after training post data were collected from students. Study was conducted in three phases' viz., Pre-test, Treatment and Post- test. After the collection of data the researcher analyzed the data by using one way ANCOVA. The Handball Training Programme decreases Stress such as, Pressure, Physical Stress, Anxiety, Frustration and Total Stress has been decreased significantly as a result of Treatment given to the Students of Thane District of Handball Training Group and Non-Handball Training group.

Keywords: *Total stress, pressure, physical stress, Anxiety, Frustration*

INTRODUCTION:

Definitions

Stress is considered to be a key factor affecting mental health, and high level of stress is associated with depression and suicidal attempts (Nolen- Hoeksema, 2004) One recent study found that adolescents who engaged in suicide ideation were more likely to have experienced negative life events in the past years than adolescents who did not engage in suicide ideation (Liu and Tein, 2005).

Sarason and Sarason (2005) has enumerated the factors that increase stress, and the risk of illness as follows: -

Inability to adapt to changes in environmental demands.

Inability to handle strong feelings and emotions, and to express them realistically.

Inability to interpret demands, constraints and opportunities correctly.

Inability to form rewarding, lasting interpersonal ties, particularly love relationships.

After extensive review of literature, four dimensions were included in this scale and this scale consists of 40 items which measures the following four dimensions:

(a) Pressure-It involves expectations or demands that one behave in a certain way. Adolescents feel several types of pressure such as to do well in academics, to gain the approval of parents, peers, appearance, personal identity, etc.

(b)Physical Stress-Over the long time, stress can lead to diminished health or illness and is reflected in frequent headaches, fatigue, monotony, muscular tension, elevated heart rate, etc.

(c) Anxiety-An unpleasant emotional state accompanied by physiological arousal along with the cognitive elements of apprehension, guilt, and a sense of impending disaster. Responses to stress include adaptation, psychological coping such as stress management, anxiety and depression.

(d) Frustration-It occurs in any situation, in which the pursuit of some goal is thwarted.

STATEMENT OF THE PROBLEM:

The researcher considered it to be appropriate to do a study on the specified topic that was entitled as – "Effect of Handball Training Programme on Stress of Students of Thane District"

OBJECTIVES OF THE STUDY:

1. To compare adjusted mean scores of Pressure of students of Handball training group and Non-Handball Training group by taking pre pressure as covariate.
2. To compare adjusted mean scores of Physical Stress of students of Handball training group and Non-Handball Training group by taking pre physical stress as covariate.
3. To compare adjusted mean scores of Anxiety of students of Handball training group and Non-Handball Training group by taking pre anxiety as covariate.
4. To compare adjusted mean scores of Frustration of students of Handball training group and Non-Handball Training group by taking pre frustration as covariate.
5. To compare adjusted mean scores of Total Stress of students of Handball training group and Non-Handball Training group by taking pre total stress as covariate.

RESEARCH METHODOLOGY:

A sample of 50 (n=50) male students were selected belonging to D G Junior College of Science and Commerce, Thane(W), these students were divided into two equal groups. (i.e 25- Training Group and 25- Non-Training) The criterion measures for the study were comparison of the following psychological variable i.e Stress:

Pressure, Physical Stress, Anxiety, Frustration, Total Stress. The Handball training was design with help of experts. After a pilot study certain changes were implemented with guide and experts. The training schedule were prepared and conducted for eight weeks on students with age group 17 to 19 years. There were holiday on Sunday and holidays for training. During eight weeks training were conducted daily sixty (60) minute.

FINDINGS:

The purpose of this study is the effect of Handball Training Programme on Stress of students of Thane District. The researcher studied the Stress level of 50 Students (N = 25 Training group and N = 25 Non-Training Group) of D. G. Junior College Students aged 17 to 19 years. The researcher analyzed the data with the help of one-way Analysis of Covariance (ANCOVA).

The analysis of the entire data was done to accomplish the objectives of the study. The analysis was done by using SPSS software to check the results of the data analyzed.

The results have been summarized as below -

- There was significant difference between adjusted mean scores of Pressure of Students of Thane District of Handball Training Group and Non-Handball Training group by taking Pre Pressure as Covariate ($F_{y.x}$= 29.32, df=1/47, $p<0.01$). Therefore, the adjusted mean scores of Pressure of Handball Training Group is 3.94 which is significantly lower than that of Non- Handball Training Group which is 4.94. Thus, the overall performance scores of both the groups Handball Training Group **and Non-** Handball Training Group of Pressure were not equal.
- There was significant difference between adjusted mean scores of Physical Stress of Students of Thane District of Handball Training Group and Non-Handball Training group by taking Pre Physical Stress as Covariate ($F_{y.x}$= 5.67, df=1/47, $p<0.05$). Therefore, the adjusted mean scores of Physical Stress of Handball Training Group is 1.19 which is significantly lower than that of Non- Handball Training Group which is 1.58. Thus, the overall performance scores of both the groups Handball Training Group **and Non-** Handball Training Group of Physical Stress were not equal.
- There was significant difference between adjusted mean scores of Anxiety of Students of Thane District of Handball Training Group and Non-Handball Training group by taking Pre Anxiety as Covariate ($F_{y.x}$= 12.05, df=1/47, $p<0.01$). Therefore, the adjusted mean scores of Anxiety of Handball Training Group is 2.63 which is significantly lower than that of Non- Handball Training Group which is 3.25. Thus, the overall performance scores of both the groups Handball Training Group **and Non-** Handball Training Group of Anxiety were not equal.
- There was significant difference between adjusted mean scores of Frustration of Students of Thane District of Handball Training Group and Non-Handball Training group by taking Pre Frustration as Covariate ($F_{y.x}$= 2.18, df=1/47, $p>0.05$). Therefore, the adjusted mean scores of Frustration of Handball Training Group is 1.72 which is significantly lower than that of Non- Handball Training Group which is 1.84. Thus, the overall performance scores of both the groups Handball Training Group **and Non-** Handball Training Group of Frustration were not equal.
- There was significant difference between adjusted mean scores of Total Stress of Students of Thane District of Handball Training Group and Non-Handball Training group by taking Pre Total Stress as Covariate ($F_{y.x}$= 63.35, df=1/47, $p<0.01$). Therefore, the adjusted mean scores of Total Stress of Handball Training Group is 9.53 which is significantly lower than that of Non- Handball Training Group which is 11.55. Thus, the overall performance scores of both the groups Handball Training Group **and Non-** Handball Training Group of Total Stress were not equal.

Discussion of Findings:

- **TREATMENT WISE COMPARISON OF ADJUSTED MEAN SCORES OF PRESSURE BY TAKING PRE PRESSURE AS COVARIATE**

Summary of One Way ANCOVA of Pressure by taking Pre Pressure as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Group	1	12.18	12.18	29.32	p<0.01
Error	47	19.53	0.42		
Total	49				

- **TREATMENT WISE COMPARISON OF ADJUSTED MEAN SCORES OF PHYSICAL STRESS BY TAKING PRE PHYSICAL STRESS AS COVARIATE**

Summary of One Way ANCOVA of Physical Stress by taking Pre Physical Stress as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Group	1	1.64	1.64	5.67	p<0.05
Error	47	13.59	0.29		
Total	49				

- **TREATMENT WISE COMPARISON OF ADJUSTED MEAN SCORES OF ANXIETY BY TAKING PRE ANXIETY AS COVARIATE**

Summary of One Way ANCOVA of Anxiety by taking Pre Anxiety as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Group	1	4.16	4.16	12.05	p<0.01
Error	47	16.21	0.35		
Total	49				

- **TREATMENT WISE COMPARISON OF ADJUSTED MEAN SCORES OF FRUSTRATION BY TAKING PRE FRUSTRATION AS COVARIATE**

Summary of One Way ANCOVA of Frustration by taking Pre Frustration as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark

Group	1	0.16	0.16	2.18	p>0.05
Error	47	3.35	0.07		
Total	49				

- **TREATMENT WISE COMPARISON OF ADJUSTED MEAN SCORES OF TOTAL STRESS BY TAKING PRE TOTAL STRESS AS COVARIATE**

Summary of One Way ANCOVA of Total Stress by
Taking Pre Total Stress as Covariate

Source of Variance	df	SSy.x	MSSy.x	Fy.x	Remark
Group	1	46.54	46.54	63.35	p<0.01
Error	47	34.53	0.74		
Total	49				

Conclusion:

It was concluded that the Handball Training Programme decreases Stress such as, Pressure, Physical Stress, Anxiety, Frustration and Total Stress has been decreased significantly as a result of Treatment given to the Students of Thane District of Handball Training Group and Non-Handball Training group.

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EFFECT OF SPECIFIC TRAINING PROGRAMME ON BALANCE OF ARCHERY PLAYERS OF MUMBAI CITY

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Abstract

Specific Training is one of the best ways to improve the performance of an Archery player by improving one's potential in archery by increasing balance in the parts of one's body which is very much important for Archery. The main objective of the study was to compare the adjusted Mean Scores of balance of Archery Players of specific training group and control group by taking pre balance as co-variate. It was non-equivalent control group study had been taken for collection of data. The Specific training group was known as experimental group and non-Specific training group was known as control group in the study. In methodology, before training pre and after training post data were collected from students. The marks were converted to percentage and analyses with One Way ANCOVA. The results of Balance (Fy.x= 12.54, df 1/57, p<0.05) was significant. The Specific training was useful for improving balance of Archery Players.

INTRODUCTION

Archery is the art, sport, practice, or skill of using a bow to shoot arrows. The word comes from the Latin 'arcus', meaning 'bow'. Historically, archery was used for hunting and combat, now a days it is used as a Sports. Archery is a sport demanding a range of skills from a steady hand, strong shoulders, flexible muscles, a keen eye and a cool disposition.

Specific training for Archery is one of the best ways to improve performance due to the fact that Archery has so many components to it. The specialized training programme is created to improve one's potential in the Archery or in any Target games by increasing balance in the parts of one's body which is very much important for Archery.

In this piece of research, the researcher intends to see the Effect of Specific Training Programme on Balance of Archery Players aged 12-14 years under the topic. Effect of Specific Training Programme on Balance of Archery Players of Mumbai City.

Objectives of the Study

- To compare adjusted mean scores of **'Balance'** of Archery Players of specific training group and control group by taking pre balance as co-variate.

Hypothesis of the Study

H_{01}: There is no significant difference in the adjusted mean scores of balance of Archery Players of specific training group and control group by taking pre balance as co-variate.

METHODOLOGY

The methodology was main course of the study. The present research was experimental types which provide pre and post data quantitatively. The test marks of students were collected as per Pre training and Post Training. The some aspects related methodology as under;

SELECTION OF SAMPLE:

The sample of (n = 60) Archery Players of aging 12 to 14 years were selected from the total population (n = 115) archery players from Adhyayan Archery Academy, Matunga & Swatantra veer Savarkar Archery Academy (Arjuna Sports Archery Academy), Dadar.

There were two types of variables for experimental design. Independent and Dependent Variables were basically required for conduct any Experimental design. Independent Variable was also known as Discontinues and Dependent Variables known as Continues variable. The present study was tested balance component by various following reliable tests according to the standard. These tests are standardized tests which were used for data collection referred from the book entitled Applied Measurement, Evaluation and Sports Selection" written by Kansal, D. K. (1996). (Kansal, 1996)

RESEARCH DESIGN

It was non-equivalent control group study had been taken for collection of data. The experimental design had two groups' experimental group and control group. The Integrated training was design with help of experts. After a pilot study certain changes were implemented with guide and experts. The training schedule were prepared and conducted for six weeks on specific training group age group 12 to 14 years. There was holiday on Sunday and holidays for training. During six weeks training were conducted daily forty (40) minutes.

The design of the experiment had been planned in three phases' viz., phase – I: Pre-test, Phase – II: Training or Treatment, and Phase – III: Post- test.

A. Independent Variable (Specific Training)

The training was included Vrikshasana and wobbling board balance

B. **Dependent Variable:** Balance

Tools/Instruments

The following criterion measure was included to record the reading of Aggression.

VARIABLES	TEST	UNITS
Balance	Stork Stand Test	Sec

Training Schedule:

The specific training was considered as the independent variable for the present study which includes the training:

	Week	**1&2**			**3&4**			**5&6**		
	Intensity	**50-65%**			**65-80%**			**50-65%**		
	Set	**4**			**4**			**4**		
sr.	**Exercise**	**Reps**	**Time**	**Rest**	**Reps**	**Time**	**Rest**	**Reps**	**Time**	**Rest**
1	**Vrikshasana**	2	2 min	30 sec	3	2 min	30 sec	2	2 min	30 sec
2	**Wobbling Board Balance**	2	2 min	30 sec	3	2 min	30 sec	2	2 min	30 sec

STATISTICS:

Comparison of group was done with the help of One-Way Analysis of Covariance ANCOVA.

RESULTS AND DISCUSSION:

Effect of Specific training on Balance

The Adjusted Mean Scores of balance due to Specific Training Programme, as obtained from ANCOVA test, revealed that –

There was significant difference between adjusted mean scores of balance of the Specific Training Group and Control Group by taking when Pre- Balance as covariate ($F_{y.x}$= 12.54, df 1/57, $p<0.05$). The adjusted mean score of Balance of Archery Players of specific training group was 3.00 and Control Group was 2.95. Thus, the overall performance in adjusted Mean Scores of both the Specific Training Group and Control Group of balance were not equal.

This result help to interpret that the Specific training was found effective in improving Balance of Archery Players.

CONCLUSION

The result of the study helps to conclude that the Specific Training was found helpful to improve Balance of Archery Players (Boys).

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CONTRIBUTION OF HIMANI PARAB IN MALLAKHAMB – A CASE STUDY

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Abstract

While change may be achieved by a variety of means, formal studies efficiently carried out provide valuable information regarding the development and growth in specific areas of education. Guess work and biased judgments related to changes and developments are not sufficient. Objective evidence duly recorded is the only framework in which valid judgment can be made. The present study is designed in the following way to investigate the role contribution of Miss. Himani Uttam Parab towards the promotion of mallakhamb and sports in the country of India. A case study on the survey was utilized to collect the data. The collected data has been analyzed based on the information furnished. To trace the development of the activities and achievements of Miss Himani Uttam Parab, which included preparation for and early years of his career and the major phase of his professional life including the participation in teaching, coaching, administrative and research activities as well as his contributions to the literature on Mallakhamb. Primary sources include in Questionnaire and Official records and secondary sources include in published and unpublished materials. Newspaper cutting, journals, articles and interview response by Miss. Himani Uttam Parab in daily, weeklies and fortnightly magazines were obtained and records of performances in the game of mallakhamb searched through the following newspaper, cutting, journals, books, and magazines and For gathering information about Miss.Himani Uttam Parab's life career and contributions to mountaineering sports, articles, reports and unpublished statements, books and journals were also taken into account. She is the person who always stays mentally strong and calm in every situation. Her never give up attitude is the most loveable thing in the field of mallakhamb.

INTRODUCTION

From childhood Himani Parab was a very hardworking and brilliant child.She managed school and sports life perfectly. She started from the age of 5 at Shree Samartha Vyayam Mandir, Dadar. At the age of 10, she played her first state level competition. At the early stage she didn't get many medals, but decided to continue her game. She got a knee injury at age 14, but that did not stop her from practicing, she asked her doctor when she could practice again, as soon as possible. She started getting recognized after her set in 2017, and started receiving medals

The great efforts of Miss.Himani Parab for the game mallakhamb have been prescribed in the present study research.

The case study of Miss.Himani Parab will be useful for mallakhamb players, and especially for young girls. It inspires other people also.

STATEMENT OF THE PROBLEM

In the light of the above discussion as well as since the research scholar is closely associated with the organization known as Shree Samartha Vyayam Mandir, Dadar, Mumbai " 28. Miss. Himani Parab, for more than 11 years and looking into his significant contribution the research scholar felt an urgent need to undertake the present study cited below: "Contribution of Himani Parab in Mallakhamb - A Case Study"

OBJECTIVES

The objectives of the present study are as follows:

- To study the actual contributions made by Miss Himani Uttam Parab for the promotion of Mallakhamb.
- To ascertain a clear picture of the activities made and services rendered by Miss
- Himani Uttam Parab in the field of Mallakhamb.
- To trace the development of the activities and achievements of Miss Himani Uttam Parab, which included preparation for and early years of his career and the major phase of his professional life including the participation in teaching, coaching, administrative and research activities as well as his contributions to the literature on Mallakhamb.
- To study major developments and shifts of emphasis in the fields of Mallakhamb.
- To show by association the influence of the contributions of Miss Himani Uttam Parabto the major developments of the fields of study.

DELIMITATIONS OF THE STUDY

- The study was delimited to the official records and reports available pertaining to the contribution of Miss Himani Uttam Parab to the field of mallakhamb.
- The scope of the study is delimited to only those activities and functions of Miss Himani Uttam Parab related to his contributions to the field of mallakhamb.
- The study was delimited to the information obtained through the questionnaires prepared by the researcher.
- The study was also delimited to the information obtained through the interview conducted by the researcher pertaining to the research problem.
- The present study is delimited to a monocase.
- The study is delimited to the information provided by the subject and family members.

METHODOLOGY

The study was purely a Historical method . The household schedule method along with interview technique was adopted to administer the questionnaires and gather necessary information . The data collected have been analyzed on the basis of information furnished .The present study aims to make an

assessment and analysis of the factors that were responsible for the successful Mallakhamb career of Miss. Himani Uttam Parab with particular reference of his Mallakhamb career , performance and achievements

.**DESIGN OF STUDY**

The present study is designed in the following way to investigate the role contribution of Miss. Himani Uttam Parab towards the promotion of mallakhamb and sports in the country of India. A case study on the survey was utilized to collect the data. The collected data has been analyzed based on the information furnished. The study was purely descriptive in nature based on the survey method. Data was collected by using Primary and Secondary sources which include Interviews and Questionnaire.

PRIMARY SOURCES

- Questionnaire
- Official records

SECONDARY SOURCES

Published materials:

Newspaper cutting, journals, articles and interview response by Miss. Himani Uttam Parab in daily, weeklies and fortnightly magazines were obtained and records of performances in the game of mallakhamb searched through the following newspaper, cutting, journals, books, and magazines.

Unpublished materials:

For gathering information about Miss.Himani Uttam Parab's life career and contributions to mountaineering sports, articles, reports and unpublished statements, books and journals were also taken into account.

CONTRIBUTION

From the primary and secondary sources, the data collected in the form of sentences is being logically interpreted and the Contribution of Miss.Himani Parab is as under _

- Shree Samarth Vyayam Mandir,Dadar.(Daily Coaching Free of Cost) evening 6 to 9 taking many girls and women's practice of Mallakhamb and Fitness training.
- Bombay Scottish School, Dadar. In a week 3 days Monday, Tuesday and Wednesday to practice Yoga and Mallakhamb.
- Invitation for 7th Mallakhamb Project in Germany. They invite her to Munich to impact the Mallakhamb training to German children in the Mallakhamb
- Training camp from 24th August to 15th September 2010. The project has the aim to continue Mallakhamb here. For this they will have a workshop on Mallakhamb organized by the Kreisjugendring Stadt (town government,children exchange program) within the program "Come to India" for children.
- Mumbai Mayor Cup. (Organized) it was national level invitational competition all over India's Mallakhamb Clubs participate in this competition which is held in Shivaji Park, Dadar, Mumbai. Every year this competition is held in the month of April or may.

- Vasantik Camp leader for 7 years which is held in Shivaji Park, Dadar.(minimum 2000 students participate in this camp) This camp is organized

for ten days in the month of march. Men and Women of all age groups from the age of five to ninety years participate in this camp. In this camp basic training is given in sports like Mallakhamb, Gymnastics, Judo, Kho-kho and Volleyball and during these ten days they undergo a physical examination and a test is conducted to determine their physical ability and accordingly they are scored.

- Teaches in various Ashrams Like shradhha nand .(Girgaon, Mumbai)
- Coaching at Karjat for trible students (Weekly) Rope Mallakhamb training for
- some female students from tribal community in Karjat on Saturday and Sunday from 7am to 12.
- Coaching at Maharashtra High school, Dadar.

ACHIEVEMENTS

Miss. Himani Parab has following Achievements:

- Arjuna Award 2021 – Government of India
- Shree Shiv Chhatrapati Award 2018-2019 – Government of Maharashtra
- District Sports Award 2020 – Mumbai City District Sports Office

Sr.No	Competition Name	Association	Achievements
1	International level 1st Mallakhamb World Championships, Mumbai	Vishwa Mallakhamb Federation	Individual Gold Rope short set Gold Rope long set Gold Pole short set bronze Pole long set bronze Team championship gold
2	National Level 2018 Chandigarh	All India University	Individual Gold Individual Bronze Team Gold
3	National Level 2018 Goa	Mallakhamb Federation Of India	Individual Gold Team Gold
4	National Level 2017 Solapur	School Games Federation of India	Team Gold
5	National Level 2017 Satara	Mallakhamb Federation Of India	Team Gold
6	State Level 2019 Pune	Maharashtra Amateur Mallakhamb Association	Team Bronze
7	State Level 2018 Alibaug	Maharashtra Amateur Mallakhamb Association	Individual Gold Team Gold Best Player
8	State Level 2017 Chiplun	Maharashtra Amateur Mallakhamb Association	Team Gold
9	State Level 2017	District Sports Office	Team Gold Individual Bronze

	Amravati		

CONCLUSION

- Miss.Himani Parab winner of first mallakhamb world championship. She is truly a gem of the mallakhamb field.
- From childhood Miss.Himani Parab had self-confidence.
- She likes to exercise on a regular basis and he was aware that to maintain good health.
- She made sure to exercise regularly in the evening.
- Miss.Himani Parab is one of the ideals for the upcoming young generation.
- She is the person who always stays mentally strong and calm in every situation.
- Her never give up attitude is the most loveable thing in the field of mallakhamb.
- All family members of Miss.Himani Parab helped him and supported in his work.

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A STUDY OF EFFECT OF KARATE TRAINING PROGRAM ON SELECTED MOTOR FITNESS COMPONENTS OF BOYS AGED 14-16 YEARS

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Abstract

The aim of the study was to find the effect of Karate training program on motor fitness components of athletes and how much karate training is beneficial in day to day life of every ones. The study included a sample of forty (N=40) boys students was randomly selected from School. Further, they were randomly divided in to two equal groups as Experimental and Control. Then continuously karate training given to experimental group for eight weeks. As a training there were ten Independent variables like Punches, Basic stance, Horse stance, back stance, front thrust Kick, Side Kick, Turning Kick, Outer Kick, Back Kick and Spinning kick selected and three Motor tests were used to access Motor Fitness components. The Karate training efficiency was estimated on the basis of results achieved at a number of contests. Factorial analysis of the basic set of motor variables indicated the presence of three major factors of Agility, Power and Muscular Endurance. Factorial analysis of pooled basic and specific motor variables also pointed to three major factors of Agility, Power, and Muscular Endurance. Regression analysis showed the isolated basic factors to significantly determine both Health related Physical Fitness (HRPF) and Skills Related Physical Fitness (SRPF) of the karate player.

Keywords*: Karate students, Motor Fitness components, Physical efficiency*

Introduction

The art of Karate is a system of combat developed on the island of Okinawa. Karate may allow you to defeat an opponent by the use of striking and kicking. This training requires strenuous physical and mental discipline. Karate helps with the development of a strong character and builds a feeling of respect towards our fellow man. Therefore, the study of Karate may be valuable to all people, male, female, young and old also. Karate is one of the fine sports which help in the development of fitness. It increases Agility, Power and muscular endurance of the individual.

The literal meaning of Karate is "empty hands". The word stands for a method of combat using every conceivable part of the body which can be employed as a weapon: hands, elbows, head, knees, feet's. This system consisted of techniques of blocking or thwarting an attack and counter attacking the opponent by punching, striking or kicking.

Aim of the Study

The aim of the study was to find the effect of Karate training program on selected motor fitness components of athletes and how much karate training is beneficial in day to day life of every ones.

Objectives of the Study

1. To compare the mean score of agility as measured by 4 X 10 shuttle run test of experimental group and controlled group
2. To compare the mean score of Power as measured by standing broad jump test of experimental group and controlled group
3. To compare the mean score of muscular endurance as measured by Bent Knee sit ups test of experimental group and controlled group

Hypothesis of the study

Ho_1 There is no significant difference in mean score of Agility as measured by 4 X10 Shuttle run test between experimental group and control group.

Ho_2 There is no significant difference in mean score of Power as measured by Standing Broad Jump test between experimental group and control group.

Ho_3 There is no significant difference in mean score of Muscular Endurance as measured by Bent Knee sit ups test between experimental group and control group.

Definitions

Agility

Agility means ability to quick and shift movement and ability to quick apprehension of body movement.

Power

Power biological sense is the ability of the nerve muscle system to overcome resistance which can be concentric, eccentric or isometric.

Muscular Endurance

As a physical capacity to maintain movement effect over a prolong period of time.

Sample of the study

As a sample of forty (N=40) boys students was randomly selected from VPM's International School, Airoli, Mumbai. Further, they were randomly divided in to two equal (Homogeneous) groups as Experimental and Control.

Method

The present study was conducted by adopting the experimental method of research. After the receiving the available sports literature and discussion with experts researcher has selected Three physical fitness tests as variables like shuttle run test (4X10) to measure Agility, standing broad jump to measure

Power and Bent knee sit ups to measure muscular endurance. Before starts the study the researcher has conducted Pre-tests of both experimental and control groups.

As a karate training ten Independent variables like Punches, Basic stance, Horse stance, back stance, front thrust Kick, Side Kick, Turning Kick, Outer Kick, Back Kick and Spinning kick were selected and given karate training for eight weeks to only for experimental group.

After the eight weeks of training program the researcher conducted post-test of both experimental Group and control group and collected pre-test and post-data data of three selected physical fitness components.

Analysis of data

Before and after the training the researcher has collected the data for analysis. The data analyzed by using descriptive statistics and 't' test procedure of the techniques, for the same purpose the Statically Package for Social Science (SPSS) software was used.

Result and Discussion of the Study

1. **Comparison of mean gain in Agility between the control and experimental group**

Table 1

Group Compared	N	Mean gain	Mean Difference	't' value	Sig.
Control	20	-.12		.16	.060
Experimental	20	2.49	-2.61	.1	P<0.05

Influence of karate training program on Agility

It is reveled from table 1 that, in case of agility measured by 4X10 shuttle run the mean gain of control and experimental group is -.12 and 2.49 respectively whereas the difference in mean gain is -2.61 which is in favor of same is -2.61 which is significant at .060($p<0.05$) level. This indicates that the training improves the agility significantly.

2. **Comparison of mean gain in Power between the control and experimental group**

Table 2

Group Compared	N	Mean gain	Mean Difference	't' value	Sig.
Control	20	.80		.38	.013
Experimental	20	5.05	-4.25	1.16	P<0.05

Influence of karate training program on Power

It is reveled from table 2 that, in case of power measured by standing broad jump the mean gain of control and experimental group is .80 and 5.05 respectively whereas the difference in mean gain is -4.25 which is in favor of same is -4.25 which is significant at .013($p<0.05$) level. This indicates that the training improves the power significantly.

3. Comparison of mean gain in Muscular Endurance between the control and experimental group

Table 3

Group Compared	N	Mean gain	Mean Difference	't' value	Sig.
Control	20	-.20		1.07	.78
Experimental	20	6.45	-6.65	.61	P<0.05

Influence of karate training program on Muscular Endurance

It is reveled from table 3 that, in case of muscular endurance measured by Bent knee sit ups the mean gain of control and experimental group is -.20 and 6.45 respectively whereas the difference in mean gain is -6.65 which is in favor of same is -6.65 which is significant at .78($p<0.05$) level. This indicates that the training improves the muscular endurance significantly.

Findings

From the above analysis and interpretation of data the following findings may be drawn

- The karate training program improves the agility significantly.
- The karate training program improves the power significantly.
- The karate training program improves the muscular endurance significantly.

Conclusion

The interpretation & analysis of the data, scholar came to the following conclusion karate training for the period of eight weeks is effective to improve the selected motor fitness variables of school boys. It contributes to improve overall aspects of selected motor fitness components of the selected school children's.

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BEHAVIOURAL PROBLEMS OF SCHOOL STUDENTS OF GREATER MUMBAI

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Abstract

Behavioural issues are often a cause for concern for parents and teachers and may be the first presentation of an underlying developmental or medical problem. It is important to thoroughly evaluate the presenting behavioural problem, including the social and environmental settings that may be triggering such behaviour in the child. Hence, these type of issues among students should not be neglected.

Introduction

Recently it has been noticed that Students misbehaviours such as disruptive talking, chronic avoidance of work, interfering with teaching activities etc. are major issues in teaching learning process. Behaviourist have a different approach to studying or understanding the why and what of human behaviour. Generally, they would not believe in the role of genetics, heredity, biological factor, hormones, neurotransmitters and /or nature as influencing behaviours. They would insist or all behaviours are learned within the context of an environment that has been favourable for the acquisition that behaviour. Therefore, it is their strong belief that appropriate environmental manipulation can indeed alter any or all behaviours, True to their spirit of attempting to understand human behaviour from a different perspective.

Behaviourists view that all behaviours can be classified for convenience in understanding into: -
(a) Skill Behaviours; and
(b) Problem Behaviours

Sometimes they are distinguished as desirable-undesirable behaviours, positive-negative behaviours, adaptive-maladaptive behaviours, asset-deficit behaviours, good-bad behaviourist etc.
Behavioural problems in children are a relatively common occurrence but are a concern for parents. Such problems are often a reflection of the child's social stressors, environment and developmental state. Although a majority of behavioural problems are temporary, some may persist or are symptomatic of neurodevelopmental disorders or an underlying medical condition. Initial management of behaviour problems often involves helping parents to learn effective behaviour strategies to promote desirable behaviours in their children. This article highlights a general approach to evaluating and treating behavioural problems in children in the primary care setting. Sleep problems, eating disorders, and other

emotional and developmental disorders, such as autism spectrum disorder and attention deficit hyperactivity disorder, are not within the scope of this article.

OPERATIONAL DEFINITIONS

The term 'Problem Behaviour' refers to any or all observable and measurable action which are negative and maladaptive undesirable, or problematic for the individual or to others around. It can be potential source of harm to self or other. They maybe likely source of danger for the child or people around, age inappropriate for the age or developmental level of the child, socially deviant cause great strain on caregiver, interfere in teaching and learning new skill behaviour or in the performance of already learned old skill behaviours in a child (Venkatesan, 2004). Example of problem behaviours are hits others, screams feet, roll on floor, pulls objects from other, sucks thumb, hoards unwanted things, bangs head, does not sit at one place for required length of time etc.

- **Violent:** violence can be defined as the use of physical force with the intent to injure another person or destroy property, while aggression feelings or behaviour.
- **Temper Tantrums**: Temper Tantrums are unpleasant and disruptive behaviour or emotional outburst.
- **Misbehaviour:** To behave badly. To behave in an inappropriate way.
- **Self-Injurious behaviour:** Self-injurious behaviour is where a person physically harms themselves.
- **Hyperactivity:** The condition of being abnormally or extremely active.
- **Rebellious Behaviour:** Refusing to obey rules or authority or to accept normal standards behaviour, dress, etc.
- **Antisocial behaviour:** Antisocial behaviour is any conduct that has caused, or likely to cause, harassment alarm or distress to any person.
- **Fear:** An unpleasant emotion caused by the belief that someone or something is dangerous, likely to cause pain or a threat

Factors Contributing to Behavioural Problems in Children.

Child- related Factors

- Developmental delays/Disorder
- Nutritional deficiency
- Chronic medical illness
- Medications
- Poor sleep

Environmental Factors

- Moving house/ school

- Disadvantaged background
- Lack of Stimulation

Family –Related Factors

- Insecure parent-child Attachment
- Household Stress
- Harsh Parenting, neglecting or Child abuse
- Parental Separation

Conclusion

Behavioural issues are often a cause for concern for parents and teachers and may be the first presentation of an underlying developmental or medical problem. It is important to thoroughly evaluate the presenting behavioural problem, including the social and environmental settings that may be triggering such behaviour in the child. Hence, these type of issues should not be neglected.

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ASHTANG YOGA PROMOTES TO DEVELOP HEALTH AND SOCIAL AND SPIRITUAL WELLBEING

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Abstract

In present scenario students are suffering from lots of stress and emotional instability. Stress and emotional instability effects on our Health, Social as well as Spiritual wellbeing. The purpose of this paper is to identify significance of Ashtanga Yoga in enhancing Health, Social and Spiritual wellbeing in students. Ashtanga Yoga is the ancient activity which has physiological and psychological benefits. Paper will explain about Ashtanga Yoga and how we can enhance and developed Health, Social and Spiritual wellbeing with the help of Ashtang Yoga.

Keyword:- *Ashtang Yoga, Health, Social And Spiritual Wellbeing***.**

INTRODUCTION

Today yoga is popular globally as a form of exercise or as a part of daily workout but athletics yoga has wider and deeper dimensions to it than what it commonly known as yoga.

The word yoga is derived from Sanskrit root Yuj meaning to yoke or 'Union' or to join, yoga or union is the merging of individual soul with the cosmic or universal soul.

Yoga is a system that benefits the body mind and spirit by teaching self-control, a series of posture and exercise as well as through breathing, relaxation and meditation technique.

Yoga is an efficient method of toning muscles and vital organs is the ideal method of ensuring good health and fitness. It brings a state of homeostasis, which leads towards a well-balanced personality. The major technique of the yoga is, Asanas (Body Postures) Pranayama (Breath Control), Bandha (Physiological Locks) Kriyas (Cleaning Process) and Mudra (Gestures)

The ultimate goal of yoga is self-realization, so that each individual can attain his or her complete physical, emotional, mental and spiritual potential.

ASHTANG YOGA

Ashtanga Yoga was written by Maharshi Patanjali. The Yoga Sutras of Patanhali is a collection of Sanskrit Sutras (aphorisms) on the theory and practice of yoga , 195 Sutras. These sutras are divided into four chapters, they are Samadhi Pada (51 sutras), Sadhana Pada (55 sutras), Vibhuti Pada (55 sutras) and Kaivalya (34sutras). Every attempt to fathom their true meaning is a step closer to enlightenment.

Hatta Yoga starts off with physical postures that eventually lead you to a better meditation practices, whereas Ashtanga yoga first focuses on self, and then moves on to physical postures and meditation.

According to Patanjali a logical sequence of the elements of yoga is the systematic progressive approach towards to profound meditation devoid physical involvement but deep mental concentration. Philosophically it is inter related the elements of yoga with individuals social wellbeing, health, and Spiritual spirit. Before the co- relation of yogic elements and the characteristics of citizens, It is need to know the elements of yoga. According to Patanjali, serially eight elements of yoga are presented here.

Yama (forbearance)
Niyam (Religious Observation)
Asana (Postures)
Pranayama (Suppression of the breathing in a peculiar way)
Pratyahara (Restraint of the senses)
Dharana (Steadying of the mind)
Dhyana (Contemplation)
Samadhi (trance)

Through this logical sequence of elements of yoga following intellectually interpretation, philosophically helps you to understand impressive importance of Ashtang yoga.

CO RELATION OF ASHTANG YOGA AND SOCIAL WELLBEING

Yama and Niyam are the first two elements of yoga is the track for the citizens for Social wellbeing because of according to Patanjali the meaning of Yama is, Ahimsa (Nonviolence), Satya (Truth), Asteya (Control on the senses or mind), Aprigraha (Non-receving), Brahamcharya (Celibacy), and the meaning of Niyamas is. Shauch (Regularly obeying the call of nature or cleanliness), Santosh (Contentment), Tapas (Penance) Swadhyaya (Self Syudy) and Iswar Pranidhana (God-consciousness). This meaning summarize to accomplish human life towards contentedly subsistence. This two elements teaches to every individual should keep control on self- behavior, impress to adopt righteousness and remove a vice.

CO RELATION OF ASHTANGA YOGA AND HEALTH

Health is the foundation of four fold purushartha e.g. Dharma, Artha, Kama, and Moksha Health is the means of all the most sublime aspirations and achievements of mankind. It does not only mean to have a strong body and absence of diseases, but includes balanced mind, controlled senses, intuitive intellect and integrated ego to have perfect evolution of all important faculties (e.g. action, emotion, will and wisdom) of personality into the state o Self-realization.)

A healthy person is not only a boon to himself, but also to his nation and world at large. Health is the foundation head of beauty, courage, tolerance, joy, power, peace, prosperity and creativity so yoga plays an important role on every health. Doing yoga one can definitely achieve a healthy body free of all

disease. In yoga there are eight elements out of which two are for social wellbeing & the rest four elements of yoga are Asana, Pranayama, Pratyahara and Dharana which plays a very important role to develop internal and external organs of each individual. Asnas (postures) are as many for Physical vigour, mental pose and spiritual awakening. It's improving the muscle tone, contraction of muscle for long time and balance. Pranayama (Restraint of the senses) is significantly curative medicinal effect on various physiological functions of the organism it is a part of Upasana or devotion. Purak (Inhalation), Rechak (Exhalation) and Kumbhak (Suppression of the breath) these are the three phases for synchronizing inhalation and exhalation process to such an extent to automatic suppression of the breath.

Pranayama and pratyahara is restrain the sense which are gateway of knowledge and pratyahara bring back the sense to attempt to study mind and Dharana means studying and concentrating mind. After the mini has been steadied, the real contemplation, at this stage there is smooth flow of deep thought neither hampered nor distorted.

CO RELATION OF YOGA AND SPIRITUAL WELL BEING

Dhyana Samadhi these are the two remaining elements of yoga Dhyana starts after the last stage of the Dharana. Dhyana is the smooth flow of deep thought neither hampered nor distorted this state of body and mind can be compard to the smooth flow of water in a stream, which is never disturbed whether the waves are to big or too small. The state of mind which originate in Dharana. Samadhi or profound meditation the higher state of yoga where is neither ought nor nought, neither dark nor light neither pleasure nor pain, Dharana Dhyan and Samadhi together makes Samyana (Restrain or Control) profoun meditation enable the Jiva to merge with Brahma. This spiritual attachment helps to every individual make their life peaceful, satisfactory controlled

CONCLUSION

Daily yogic practices help to improve of every individual's social relationship physical fitness and spiritual spirits.

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A COMPARATIVE STUDY OF WORKPLACE STRESS OF PHYSICAL EDUCATION TEACHERS AND OTHER SUBJECT TEACHERS OF MUMBAI CITY

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Abstract

The purpose of the study was to compare the Workplace Stress of Teachers working in various schools of Mumbai. To achieve this purpose researcher selected sample of 100 subjects randomly from Mumbai City South Zone Educational Division working in CBSE schools in which 50 Physical Education Teacher and 50 Other Subject Teachers selected. To measure the Workplace Stress among Physical Education Teachers and Other Subject Teachers, standardized Workplace Stress Scale was appropriately used to collect the data. The collected data was statistically analyzed by applying Independent Sample t-test. The findings of the study was directs that the psychological variable Workplace Stress t-value was 2.04 which was significant at 0.05 level with df=98 among Physical Education Teachers and Other Subject Teachers. The mean scores of Workplace Stress of Physical Education Teachers Group was 166.78±20.10 which was significantly higher than Other Subject Teachers Group which was 159.08±17.67 Finding of this study shows that Physical Education Teachers are more Stressed in their Workplace than Other Subject Teachers Group.

Keywords*: Psychological Variable, Stress, Workplace Stress, Physical Education Teacher, Other Subject Teachers, CBSE schools*

INTRODUCTION

Dwelling in every occupation, humans have faced lots of problems and finding out the solution has been one of the mandatory tasks that most successful research has resulted in. Since Inception, humans have been working and working at an optimal stress level, which has produced wonders that the world has seen. The stress factor is highly inconsistent, where it may change either to increase or decrease and also make changes in the output of the work, respectively. Therefore, workplace stress is one of the most important factors to be taken into consideration, especially in the teaching field, i.e., in the field of education.

RATIONALE OF THE STUDY

The present study was conducted on the Workplace Stress of Physical Education Teachers and Other Subject Teachers in Mumbai city. As in many rumors were spread that the Workplace Stress in the field of Education is likely to be in disparity where some Teachers are more Stressed than the others. This issue needed to be addressed so that, we can not only understand the differences between the stress levels

suffered by the teachers of different categories but also to provide the government and other regulating authorities first hand information and in turn they provide better grounds for the performance of Teachers and Field of Education at large.

Definitions of term used

Stress

Stress is simply a fact of nature—forces from the outside world affecting the individual.

Workplace Stress

Workplace stress is the harmful physical and emotional responses that can happen when there is a conflict between job demands on the employee and the amount of control an employee has over meeting these demands. In general, the combination of high demands in a job and a low amount of control over the situation can lead to stress.

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Objective of the study:

- To Compare mean scores of Workplace stress of Physical Education Teachers and Other Subject Teachers.

Hypothesis of the study:

- There is no Significant Difference in Mean Scores of Workplace Stress of Physical Education Teachers and Other Subject Teachers.

METHODOLOGY

Design of the Study

The present study was Descriptive in nature under the heading of Descriptive Research which provided Comparison between Physical Education Teachers and Other Subject Teachers on Workplace Stress psychological Variable. The Scores of Workplace Stress of teachers were collected through the standardized Questionnaire.

Population and Sample

A sample of 50 Physical Education Teacher and 50 Other Subject Teachers selected from Mumbai City South Zone Educational Division working in CBSE schools.

Variable and Test

- **Workplace Stress**

The tool used in the present study was standardized questionnaires, known as of Teachers Workplace Stress Scale by Dr. Ramandeep Kaur Sindhu & Dr. Manu Chadha filled by Physical Education and Other Subject Teachers of Mumbai City

Tool used

The answers converted into scores through the following table:

Type of Item	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Positive	**5**	**4**	**3**	**2**	**1**
Negative	**1**	**2**	**3**	**4**	**5**

Statistical procedure

As mentioned in the objectives of the study, data were analyses with help of Independent Sample t-Test method of statistical techniques.

RESULT OF THE STUDY

Result on Workplace Stress between Physical Education Teachers and other Subject Teachers

Objective of the present study was to compare the Mean Score of Workplace Stress of Physical Education Teachers' Group and Other Subject Teachers' Groups. The data were analyzed with the help of t-Test and results are given in Table below.

TABLE 4.1: Group wise Mean, SD, N and t-value of Workplace Stress

Test	Mean	SD	N	t-value
Physical Education Teachers	**166.78**	**20.10**	**50**	**2.04***
Other Subject Teachers	**159.08**	**17.67**	**50**	

*Significant at 0.05

From above table it can be seen that the t-value is 2.04 which is significant at 0.05 level with df=98. It indicates that mean scores of Workplace Stress of Physical Education Teachers' Group and Other Subject Teachers' Group differ significantly. Thus, the Null Hypothesis that there is no significant difference in Mean Score of Workplace Stress of Physical Education Teachers Group and Other Subject Teachers Group is rejected. The mean scores of Workplace Stress of Physical Education Teachers Group is 166.78 which is significantly higher than Other Subject Teachers Group which is 159.08. It may therefore be said that Physical Education Teachers are more Stressed in their Workplace than Other Subject Teachers Group.

CONCLUSION AND RECOMMENDATION

On the basis of the result, it can be concluded that:

- Physical Education Teachers' Workplace Stress is higher than Other Subject Teachers.
- Every school should have a Teacher Training Session once a year to help them learn how to operate more productively and efficiently with modern technology.
- Guidelines and rules made by the Government in the field of Education should take such researches into consideration for better governance in Education.

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THE EFFECT OF DIFFERENT SPORTS ON MOTOR EDUCABILITY AND INTELLIGENCE OF MALE AND FEMALE ATHLETES

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Introduction

The world has reached in 21st century. This era is an age of technology and information. Everybody is running from tension, stress, anxiety, frustration and physical issues as well. Life is a continuous every lasting struggle till the last breath of life. The pressure performance of everyday life takes heavy toll on the physical and mental well-being of person. In the age of 10 to 15 years old the children are very stressful and over active with their busy schedule. They are facing Competition everywhere. To remain in the race, they have proven their self with an extra effort. For that they have to be always ready to learn new things. They have to develop their adoption capacity. They have to develop their motor ability and motor skill is a function, which involves the precise movement of muscles with the intent to perform a specific act. Most purposeful movement requires the ability to "feel" or sense what one's muscles are doing as they perform the act. Motor difficulties occur when an individual lacks the ability to move in the way he or she originally intended.

Motor Educability

The motor educability is generally defined as “The ability to learn well different motor skills quickly and easily”. In other words, motor educability refers to ones level of ease with which one learns new motor skills. Motor educability play an important role in all active sports, and in athletics psychomotor fitness has a more pronounced role to play because during the progress of an athletic event great changes occur in workload in addition to the frequent changes in event situations.

Intelligence

The term intelligence is a very popular term used widely to mean many things-quick understanding, fast learning, accuracy in learning, clever talking, quick doing, good memory etc. So it is difficult to define intelligence. The term intelligence comes from a Latin word coined a Greek word used to cover all cognitive processes. It is generally mistaken for Intellect. Intellect is the end product of what has been learnt and retained. In short intellect is nothing but the knowledge gained by using intelligence, whereas intelligence is the capacity to acquire knowledge or to learn things.

Emergence of the problem :

Each player is having motor educability in different manner. But no one knows with which games practice our motor educability is developing effectively. This study helps to know that.

This study may help to know, how is the motor educability of players those who are practicing from last two years. The study may be helps to know that which games practice is more effective for motor educability male and female athletes.

Objectives :

The Specific objectives set for this study are given bellow:

- To know the effect of specific games on motor educability.
- To check the educability of athletes age group of 10 – 15 years.
- Analysis the effect of different games on motor educability of girls.
- To understand the various parameters of motor educability and intelligence.
- To check the Intelligence of athlete age from 10 to 15 years.

Hypothesis :

- There will be significant effect may found in different sports athletes on educability.
- There will be significant effect may found in different sports on female athletes.
- There will be significant effect may found in different sports on male athletes.
- There will be significant difference may found in between motor educability and Intelligence among different sports athletes.

Limitations :

- Diet
- Heredity
- Response to tests
- Social environment
- facilities of sports

METHODOLOGY

Population and Sample :

The population of the study have selected from Pune district, of Maharashtra. The samples are taken randomly for this study, and they are selected from different sports from Pune with the age of 10 to 15 years.

Collection of Data –

The data were collected by implementing IOWA BRACE, Metheny-Johnson motor educability test and Balkanchi Budhimapan Kasoti Malika. On the subjects which was selected from different clubs and school of Pune district.

Data Analysis

Data Analysis

The analysis of data and detailed results of the study have been discussed in this chapter. The purpose of the study was to analyse and compare the Effect of Different Sports on Motor Educability and Intelligence

of Boys and Girls Athletes in Pune District schools. To achieve the purpose of the study, Iowa-Brace Motor educability test is used to assess the motor ability skills and Balkanchi Budhimapan Kasoti Malika design test is used to understand the IQ level of Boys and girls involved in selected different team sports such as volley ball(Boys & Girls n=60) throw ball (Boys & Girls n=60) basketball (Boys & Girls n=60) hand ball (Boys & Girls n=60) and Kabbaddi (Boys & Girls n=60) as a proportion of 30:30 the volunteers from different school players representing in their school team. The subjects were selected around pune district schools. A total of (150 Boys and 150 Girls) a total of 300 different sports team players were involved in the study. The age of the subjects was ranged from 10 to 15 years.The selected subjects were in the top form in the respective game and also in the school team. All the subjects were experienced in physical and mental training. The IOWA – BRACE Motor educability test that consist of 10 exercises and Balkanchi Budhimapan Kasoti Malika design test for assesses the intelligence (IQ) that consist of 10 exercises were conducted separately for boys and girls players. The study was conducted during **August 2019 to December 2019.**

Discussion on the findings

The results of the study have been analyzed and discussed here.

The results of the study showed that there was a significant effect on IOWA – BRACE Motor educability test in different games of Volley ball, Throw ball, Basket ball, Hand ball and kabaddi, based on the research findings and reviews of related literature the range of of mean difference the values 0.20 are "small" in magnitude, those around 0.50 are "medium" and those around or above 0.80 are "large." In IOWA – BRACE Motor educability test the medium effect was observed in Volley ball and low effect was observed in Throw ball, Basket ball, Hand ball and kabaddi.

Further the results showed that there was a significant effect on Balkanchi Budhimapan Kasoti Malika for intelligence (IQ) In Balkanchi Budhimapan Kasoti Malika for intelligence (IQ) the medium effect was observed in Volley ball, Basket ball, Hand ball and kabaddi and low si effect was observed in Throw ball only The results of the study also showed that IOWA – BRACE Motor educability test that The games of volley ball and kabaddi the p-value is higher than 0.05 ($p > 0.05$) therefore it is not statically significant., in the games such as throw ball, basket ball, and hand ball the p-value were lower than 0.05 ($p" < 0.05$), stating that it is statically significant The results of the study also showed that Balkanchi Budhimapan Kasoti Malika for intelligence (IQ) test that the games of volley ball, hand ball and kabaddi the p-value is higher than 0.05 (> 0.05) therefore it is not statically significant., in the games such as throw ball and basket ball the p-value were lower than 0.05 ($p" < 0.05$), stating that it is statically significant In comparison Analysis of variance of mean differences on IOWA – BRACE Motor Educability test and Balkanchi Budhimapan Kasoti Malika for intelligence (IQ) among Boys. It indicates that there is a significant different among different games of volley ball, throw ball, basket ball, hand ball and kabaddi

In comparison Analysis of variance of mean differences on IOWA – BRACE Motor Educability test and Balkanchi Budhimapan Kasoti Malika for intelligence (IQ) among girls. It indicates that there is a significant different among different games of volley ball, throw ball, basket ball, hand ball and kabaddi According to the coefficient of correlation of IOWA – BRACE Motor Educability test and Balkanchi Budhimapan Kasoti Malika for intelligence (IQ) among the boys. Based on the result of the r values the games of volley ball, throw ball, basket ball, and hand ball among the boys are in negative correlation only the kabaddi have a positive correlation Further The coefficient of correlation of IOWA – BRACE Motor Educability test and Balkanchi Budhimapan Kasoti Malika for intelligence (IQ) among the girls, Based on the result of the r values the games of Basket Ball and Hand Ball, are in negative correlation in the game of volley ball, throw ball and Kabaddi the girls have a positive correlation Based on the results of our study the researcher observed that there is low motor ability this is due are the ability to make movements using the small muscles in our hands and wrists specifically in ball game it requires high muscle power and strength and endurance due to the lack of age, physical training, physical movement the conditions of boys and girls had a low effect and low level of significance in the development of motor ability skills. This study is supported by McCloy (1992) has made an analysis of the constituents of motor educability and has included the prerequisites for effective learning of motor skills to be the following: neuromuscular strength, dynamic energy, agility, flexibility, peripheral vision, concentration, understanding of the mechanics of the activity, and absence of disturbing complications. Based on the findings of our study the researcher observed that there is the intelligence test score of boys and girls of different games are in average. This may be due to the fact that schools concentrate more on the marks of the students and rote memory is encouraged without understanding the concepts. This result is supported by Stemberg (1995) has developed the component theories of intelligence that are analytical, creative, and practical intelligence. According to him, practical intelligence allows the players to adapt effectively to the demands of Physical activity in the physique.

HEALTH BENEFITS OF PHYSICAL ACTIVITY

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Abstract

A sedentary life style is particularly harmful to one's health because of its physical and mental effects.The key to a longactive and pleasurable life is good health and fitness.It is impossible to live a happy life without good health and wellness. Simply said, being healthy and fit entails taking proper care of one's body. It's important to remember that a healthy mind can only exist in a healthy body. Good mental and physical health allows one to maintain the necessary energy level to accomplish success in life.Regular physical activity and fitness contribute to good health and wellness. The focus is on moderate physical activity and integrating physical activity into lifestyle, which provides additional opportunities for sedentary people to improve their health by participating in physical activities. There was a lot of evidence that those who engage in regular exercises or physical activity to obtain good physical health, fitness and wellness.

Keywords: *Sedentary Life Style, Health, Wellness, Physical Activity*

INTRODUCTION

There's no denying that the value of physical activity and fitness programs is growing in popularity. The majority of people believe that regular exercise or physical activity is beneficial to their health and well-being, but they rarely exercise. Physical activity is one of the major healthy behaviors contributing to good health, wellness, and fitness. A physically active and healthy lifestyle can help to prevent disease and improve general health and well-being.

Physical activity on a regular basis is linked to overall health (physical and mental health) benefits, as well as a significant reduction in the risk of a range of illnesses. Many people are aware of physical activity's health benefits when combined with a healthy lifestyle, but they are also aware that lack of physical activity and low fitness are world's most serious health issues.Several studies have shown that frequent physical activity and exercise is beneficial to people's health, fitness, and well-being.

METHOD

The literature for this study will be discovered by browsing PubMed, Google Scholar and other research journal databases. The goal of the search was to learn about the various perspectives of the importance of physical activity for health.The procedure to review the

literature of the desired topic started with a search in the databases of Google Scholar and PubMed. The key words used physical activity impact, sedentary life style, health, wellness, physical fitness and physical inactivity.Papers were shortlisted and referred too that were relevant to the topic, with main focus on physical activity for health and wellness. There was a lot of evidence that those who engage in regular exercises or physical activity to obtain good physical health, fitness and wellness.

Physical Activity forBetter Health

Regular physical activity can help people live longer, regardless of the reason of death. Physical activity and exercise can benefit your health now and in the future. Most significantly, regular exercise can help you live a better life. Physical inactivity, in combination with bad dietary habits, was placed alongside alcohol and tobacco use as one of the top preventable factors to adult death. The regular physical activity has been shown to be useful in the secondary prevention of cardiovascular disease and in lowering the risk of premature death in both men and women.Though there is some debate on how much exercise is enough per day, a minimum of 30 minutes of action every day, according to various studies, is advantageous to one's health. So go for a stroll, pull some weights, or sign up for that yoga class you've been eyeing.

The Heart's Health and Physical Activity

Regular physical activity increases the heart's ability to pump blood and oxygen, according to research. A heart muscle that is in good shape may withstand increased demands. The heart muscle strengthens contracts more strongly, and pumps more blood with each beat as a result of frequent exercise. This leads to a reduced heart rate (particularly when exercising) and higher heart efficiency. The heart is like any other muscle in that it contracts and relaxes. To stay fit, it needs to be exercised on a regular basis. The heart of a healthy person has open, clean arteries that are free of plaque and atherosclerosis. 72 beats per minute is thought to be the normal resting heart rate (bpm). People who engage in regular physical activity often have lower resting heart rates than those who do not. Low heart rates in response to a moderate amount of exercise are a strong measure of fitness.

Effects of Physical Activity on Cardiovascular Diseases

Cardiovascular illness comes in a variety of forms, and some of them are classed as coronary heart disease (CHD) because they damage the heart muscle and blood vessels. Atherosclerosis and arteriosclerosis are two disorders that raise the risk of coronary heart disease in those who work in active versus passive jobs. According to studies, adults who expend a significant number of calories each week in strenuous locations and other activities have a lower risk of coronary heart disease.One of the most efficient strategies to reduce the risk of heart disease in adults is to increase one's level of activity and physical workout. After studying the scientific literature, it was shown that a sedentary lifestyle, like high blood pressure, obesity, and high blood cholesterol, is a risk factor for heart disease (bad cholesterol). Physical inactivity in middle age is linked to an increased risk of heart attack

and is also classified as a kind of CHD, despite the fact that it is merely a sign of impaired circulation. Daily basis physical activity can help people with hypertension decrease their blood pressure and prevent or delay the onset of high blood pressure.Physical activity can help lower cholesterol levels in the blood, it means reducing the risk of heart disease.

Heart attacks,peripheral vascular disorders, hypertension andstrokes are all caused by atherosclerosis. Blood flow and oxygen supply to the tissues are restricted by deposits on the walls of arteries. Atherosclerosis of the coronary arteries, the vessels that deliver oxygen to the heart muscle, is especially dangerous because when these arteries constrict, the blood flow to the heart muscle is reduced, and angina pectoris (Chest Pain) can develop. Because a fibrous clot is more likely to obstruct a narrower artery than a healthy open one, atherosclerosis raises the risk of heart attack. Regular exercise can lower blood lipid levels, especially LDL-C (Bad Cholesterol). Regular physical exercise results in higher HDL levels, lower TC/HDLC ratios, and thus a lower risk of heart disease.

Physical Activity and Obesity

Gaining and maintaining excess weight can be caused by a variety of circumstances. Eating bad habits, lack of exercise, environmental circumstances, and genetics are among them.When people consume more calories than they expend through physical exercise, they acquire weight. The main factor to weight gain is this imbalance.Overweight people are more susceptible to respiratory infections, have a higher risk of high blood pressure, atherosclerosis, and circulatory and respiratory system diseases, and have a higher than average risk of several cancers.The effect of physical training program or physical activity on weight loss and maintenance has been studied in a significant number of reviews and original research studies.Physical activity, when combined with excellent nutritional management, is an effective way of lowering body fat, and it can help to reduce the risk of diseases related with obesity and fatness.

Type 2 Diabetes and Physical Activity

Type 2 diabetes is a frequent illness in which the blood sugar (glucose) level rises to excessive levels. It can induce symptoms such as increased thirst, frequent urination, and exhaustion. It can also increase your chances of developing significant eye, heart, and nerve problems.Dietary intake and physical activity are the two key factors of energy balance, and they are considered the foundation of diabetes treatment.Physical activity helps young people retain their body fat levels in a healthy range and helps the body regulate blood sugar levels more effectively, which is vital in the management and treatment of Type II diabetes. Diabetes is a collection of disorders caused by an excess of sugar in the bloodstream. It occurs when the body fails to efficiently utilize insulin, resulting in a variety of health issues as well as damage to the eyes, kidneys, nerves, heart, and blood vessels. Exercise is ineffective as a treatment for Type I (insulin-dependent) diabetes on its own.Those who engage in regular physical activity are less likely than sedentary people to develop Type II diabetes. Regular physical activity and healthy eating can help patients with Type II diabetes lose weight, reduce insulin resistance, enhance insulin sensitivity, and improve the body's

capacity to eliminate sugar from the blood in a timely manner. All of these elements help to keep the condition under control.

CONCLUSION

According to data, regular physical activity helps to prevent a variety of diseases and is connected to a lower risk of premature death. The physical activity appears to have a graded linear relationship with health status, with the most healthy and active people having the lowest risk. The largest benefits in health are noticed when those who are physically inactive become more active, because the risk of chronic disease begins in childhood and grows with age.

Regular exercise and fitness activities also help to offset the detrimental effects of obesity by lowering the risk of cardiovascular illnesses, obesity, and hypertension, among other things. It should be obvious that physical fitness entails much more than being healthy or unwell, just as health is an important aspect of a happy existence. Exercise appears to be a major role in controlling the consequences of ageing, together with a healthy diet. There is a scientific data that sports and physical activity are beneficial as part of a healthy lifestyle. The benefits of regular physical training program or physical activity are especially evident in the prevention of different chronic illness, including cardiovascular disease, diabetes, hypertension, obesity, and atherosclerosis.Physical activity and good health status appear to have a linear relationship, meaning that increasing physical activity and fitness will lead to greater gains in health status.

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EFFECTS OF UP-HILL TRAINING ON SPRINT RUNNING PERFORMANCE IN BOYS AGED 18-22 YEARS

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INTRODUCTION

Physical education is that education which starts with physical development and advances towards perfect development of human being, the ultimate result being vigorous and strong body, acquisition of sound health, mental alertness, and social emotional balance.

As a popular old saying rightly says a sound mind exists in sound body, the physique of an individual plays a vital role in all his activities. People were aware of this fact and encouraged sports on large scale even in ancient time. There are many training methods in sprinting i.e. hill training is running up or slope, uphill training improves strength and running efficiency (running economy). Up-hill running increases aerobic capacity, running economy, stamina, builds in strength in gluteal (buttock), quadriceps (front of thigh), gastrocnemius (upper calf) and soleus calf (lower calf) muscles.

The subject was asked to run distance of 100 meters on a up-hill track with a gradient of 15° to 30°. Subject performed 6 to 8 repetition with complete recovery between the two sets. Subject covered this distance as fast as possible.

METHODOLOGY
(PROCEDURE)

In this chapter, the procedure for the selection of the subjects, criterion measure, reliability of data, design of the study, procedure for administering the test, administration of training program and statistical techniques used for analysing of data has been discussed.

SELECTION OF SUBJECTS

Twenty male students from different colleges of Kurnool District Athletes were selected as subjects for the study, on the basis of the best performance in 100 meters sprint. The average age of the subjects was 20 years ranging between 18 and 22 years.

The requirements of the research study were explained to all subjects in the presence of the coaches and physical education teachers of the college concerned and all of them agreed voluntarily to undergo the testing and training programs. A through orientation of the requirements of the experimental procedures, testing as well as exercise schedules were explained to the subjects so that there was no ambiguity. 2

The subjects were oriented to testing and training procedure for two weeks to eliminate the learning effect. The subjects were exempted from attending the required program of the college and were asked not to take part in any voluntary sports programs or unusual physical exertions.

The subjects were at random, assigned to two groups, one is experimental group and another one is control group, each group consisting of 10 Subjects. The experimental group was uphill running (Group A), group and control group (Group B).

Performance of the subjects in 100 meters run was taken at the beginning and after an experimental period of 12 weeks.

CRITERION MEASURES

The criterion measure chosen to find out the effect of uphill running was the time taken by the subject to run a distance of 100 meters as fast as possible and recorded to the nearest 1/100th of a second. The time was clocked with the help of stopwatches, which were properly calibrated and synchronized.

RELIABILITY OF DATA

The reliability of data was ensured by establishing instrument reliability and tester competency.

INSTRUMENT RELIABILITY

The stopwatches used in this study were supplied by the District Athletics Association Kurnool. These watches were also used in the Kurnool District Athletic Championships held at DSA stadium, at Kurnool district A.P.

TESTER COMPETENCY AND RELIABILITY OF THE TESTER

The tester competency was evaluated together with the reliability of the test. To determine the reliability of test, data on 100 meters sprint performance were recorded thrice with a gap of one day in between, under identical conditions, on 10 subjects selected at random under guidance of Kurnool District Athletics Association Kurnool (A.P.). All the measurements were taken by the investigator with the assistance of Physical Education Teachers and Senior Athletes.

The scores thus obtained on two occasions were co-related using Pearson's Product Moment Co-relation method. The co-relation of coefficient of 0.887 thus obtained showed that data were reliable and also verified the competency of the tester.

EXPERIMENTAL DESIGN

For the present study the experimental design adopted was random group design. Equal numbers of subjects were assigned randomly to two groups of 10 subjects to each group. The experimental treatments were also assigned randomly to the experimental group A and control group B. The two experimental groups were administered two different kinds of training programs for the development of sprinting speed. One group was trained with the method of uphill running (Group A) and the second group with Control group (Group B). The distance chosen for each of the training was 100 meters. The training sessions were conducted thrice a week i.e. on Mondays, Wednesdays and Fridays. Timing for 100 meters was taken

before and after an experimental period of 12 weeks. The subjects were advised not to take part in any voluntary sports programs or unusual physical exertions so that physical activities remained uniform for all the groups chosen for the study. 3

PROCEDURE FOR ADMINISTERING THE TEST

All the subjects were assembled on the track of the District Sports Authority Stadium, Kurnool district AP. They were briefed on the objectives and the requirements of the test.

The test was conducted on the 400 meters track of District Sports Authority Stadium Kurnool A.P. All the eight lanes of 100 meters straight were properly marked. The subjects were instructed to warm-up on their own in order to gain the best performance and avoid possible injuries. The subjects were started in groups of two and assigned for identification by the judges and timekeepers.

SPRINTING SPEED TEST (100 METERS)

EQUIPMENT USED AND MARKING

Clapper and Stop watches

100 meters distance was measured with eight parallel lines with a gap of 1.22 meters in between each two consecutive lines.

Description of Test

All the subjects ran with running shoes and Crouch start was adopted by all. The starting command' used by the research scholar 'on your marks", "set" and in place of "go" the clapper or whistle was sounded. Time keepers at the finishing line recorded the time.

Rules

The conduct of test's and recording the official timing's of each subject was as per the rules and regulation prescribed by the IAAF.

Scoring

The elapsed time from the starting signal until the runner's torso crossed the finish line was recorded to the nearest 1/100th of a second for each subject.

Administration of Training Program

The experimental groups met thrice a week for a period of 12 weeks. The first two weeks training for all the experimental groups was for physical conditioning, determining the starting practice of Hill running, so that physical and physiological system of the subjects were ready to undertake the specific load.

The load in respect of Hill running was fixed according to the pulse rate reached at the end of the 100 meters Hill running. Each subject performed two sets in Up-Hill running and 6 to 8 repetitions. A rest period of ensuring complete recovery was provided between the two sets.

UP-HILL RUNNING

Hill training is running up or slope, uphill training improves strength and running efficiency (Running economy). Up-Hill running increases aerobic capacity, running economy, stamina, builds in strength in

gluteal (buttock), quadriceps (front of thigh), gastrocnemius (upper calf) and soleus calf (lower calf) muscles.

The subject was asked to run distance of 100 meters on a up-hill track with a gradient of 15 to 30°. Subject performed 6 to 8 repetition with complete recovery between the two sets. Subject covered this distance as fast as possible. 4

PHYSICAL CONDITIONING PROGRAM FOR THE EXPERIMENTAL GROUPS

Monday

10 to 15 minutes warm-up
Calisthenics exercises
100 meters sprint x 8 rept.
Limbering down

Tuesday

10 to 15 minutes warm-up
100 meters acceleration runs x 6 rept. Skipping
Sit-ups with bent knees
Hopping Limbering down

Wednesday

10 to 15 minutes warm-up
Calisthenics exercises
Fart leg - 30 minutes
Limbering down

Thursday

10 to 15 minutes warm-up
Calisthenics exercises
100 meters sprint x 8 rept.
Limbering down

Friday

10 to 15 minutes warm-up
100 meters acceleration runs x 6 rept. Skipping
Sit-ups with bent knees
Hopping Limbering down

Saturday

10 to 15 minutes warm-up
Calisthenics exercises
Fartleg-30 minutes

Limbering down
Same program was repeated for twice a week. 5

TRAINING PROGRAM FOR UP HILL RUNNING THIRD AND FOURTH WEEK

Monday

a) 10 to 15 minutes warm-up
b) 80 meters acceleration runs x 4 rept.
Intensity 80-100 %
c) UP-Hill run 100 meters 6-8 rept. x 2 sets
d) Limbering down.

Tuesday

Active rest

Wednesday

a) 10 to 15 minutes warm-up
b) 120 meters Ins and Outs Runs x 4 rept.
Intensity 80 - 100 %
c) UP Hill run 100 meters 6-8 rept. x 2 sets
d) Limbering down

Thursday

Active rest

Friday

a) 10 to 15 minutes warm up
b) 60 meters acceleration runs x 8 rept.
Intensity 80-100 %
c) UP Hill run 100 meters 6-8 rept. x 2 sets
d) Limbering down

Saturday

Active rest

FIFTH AND SIXTH WEEK

Monday

a) 10 to 15 minutes warm-up
b) 80 meters acceleration runs x 5 rept.
Intensity 80-100 %
c) Up Hill run 100 meters 6-8 rept. x 2 sets
d) Limbering down

Tuesday
Active rest
Wednesday
a) 10 to 15 minutes warm-up
b) 120 meters Ins and Outs runs x 4 rept.
Intensity 80 - 100 %
c) UP Hill run 100 meters 6-8 rept. x 2 sets 6
d) Limbering down
Thursday
Active rest
Friday
a) 10 to 15 minutes warm-up
b) 60 meters acceleration runs x6 rept.
Intensity 80-100 %
c) Up Hill run 100 meters 8-10 rept. x 2 sets
d) Limbering down
Saturday
Active rest
SEVENTH AND EIGHTH WEEK
Monday
a) 10 to 15 minutes warm-up
b) 80 meters acceleration runs x 6 rept.
Intensity 80-100 %
c) UP Hill run 100 meters 6-8 rept. x 3 sets
d) Limbering down
Tuesday
Active rest
Wednesday
a) 10 to 15 minutes warm-up
b) 120 meters Ins and Outs runs x 5 rept.
Intensity 80 - 100 %
c) UP Hill run 100 meters 6-8 rept. x 3 sets
d) Limbering down
Thursday
Active rest

Friday
a) 10 to 15 minutes warm-up
b) 60 meters acceleration runs x 7 rept.
Intensity 80-100 %
c) Up Hill run 100 meters 8-10 rept. x 3 sets
d) Limbering down
Saturday
Active rest
NINTH AND TENTH WEEK
Monday
a) 10 to 15 minutes warm-up
b) 80 meters acceleration runs x 8 rept. 7
Intensity 80-100 per cent
c) UP Hill run 100 meters 10-12 rept. x 3 sets
d) Limbering down
Tuesday
Active rest
Wednesday
a) 10 to 15 minutes warm-up
b) 120 meters Ins and Outs runs x 5 rept.
Intensity 80 - 100 %
c) UP Hill run 100 meters 8-10 rept. x 3 sets
d) Limbering down
Thursday
Active rest
Friday
a) 10 to 15 minutes warm-up
b) 60 meters acceleration runs x8 rept.
Intensity 80-100 %
c) Up Hill run 100 meters 8-10 rept. x 3 sets
d) Limbering down
Saturday
Active rest

ELEVENTH AND TWELFTH WEEK

Monday

a) 10 to 15 minutes warm up
b) 80 meters acceleration runs x 8 rept.
Intensity 80-100 %
c) Up Hill run 100 meters 12-14 rept. x 2 sets
d) Limbering down

Tuesday

Active rest

Wednesday

a) 10 to 15 minutes warm up
b) 120 meters Ins and Outs run x 6 rept.
Intensity 80-100 %
c) Up Hill run 100 meters 10-12 rept. x 2 sets
d) Limbering down

Thursday

Active rest 8

Friday

a) 10 to 15 minutes warm up
b) 60 meters acceleration runs x 8 rept.
Intensity 80-100 %
c) Up Hill run 100 meters 10-12 rept. x 2 sets
d) Limbering down

Saturday

Active rest

ANALYSIS OF DATA AND RESULTS OF THE STUDY

The statistical analysis of data speed endurance scores collected on 10 male subjects belonging to a group has been presented in this chapter. The group was not equated in any way and the data on selected criterion measure for all the groups were collected under similar conditions.

The data was examined by calculating the "t" ratio and analysis of variance and covariance. The "t" ratio was applied to examine, the significance of differences between pre-test and post-test means of the group to study the improvement in sprint speed as a result of training. Analysis of co-variance was applied with regard to Up-Hill training group in this study. Hence, the difference between initial means of the group at present had to be taken in to account during the analysis of post-test differences between the means by the process of application of ANCOVA where the final means were adjusted for difference in the initial means

and adjusted means were tested for significance of differences. The differences in the final and adjusted means were tested for significance at 0.05 levels.

LEVEL OF SIGNIFICANCE

The level of significance to check the 't' ratio and 'f ratio was set at 0.05 level of confidence, which was considered as appropriate and adequate for the purpose of this study.

FINDINGS

The significance of difference between the pre-test and post-test means for the group 100metres sprinting speed performance and their "t" ratio has been presented in Table.

TABLE

SIGNIFICANCE OF DIFFERENCE BETWEEN THE MEANS FOR THE EXPERIMENTAL GROUPS (100 metres sprint)

Groups	Pre-test means (in seconds)	Post-test means (in seconds)	D.M	D.M	't' ratio
A	16.25	15.45	80	22	3.63
B	15.86	14.96	90	32	2.81

Significance at .05 levels 9

The table indicates that "t" ratio of 3.63 for the group was significant at 0.05 level of confidence. The t-ratio required to be significant at 0.05 level was 2.05.

DISCUSSION

A good sprinter one must possess speed, endurance, explosive strength besides technical perfection and strong determination. This factor can be developed through scientific and systematic program of training. When an athlete trains with proper adequate load, adaptation of the morphological and physiological system takes place, which in turn improves anaerobic and aerobic capacities, which mainly responsible for improvement of speed performance.

The anaerobic changes resulting from training are muscular hypertrophy, increased myofibrils, increase in protein particularly actin and myosin both in quality and quantity, improved glycolytic system and increase in phosphagens (ATP-CP) system which results in improvements of power and speed organism. On other hand the aerobic modification bring about rapid oxidation of carbohydrates (glycogen) and delay lactic acid accumulation, which in turn prevent fatigue and improves cardio-respiratory efficiency.

DISCUSSION OF HYPOTHESIS

The hypothesis stated earlier in the study has been accepted on the basis of the result shown by the Up-Hill training employed in the study.

CONCLUSION

Up-Hill training is effective in maintaining muscle tissue increased strength control body fat decreased risk of injury and it can increase metabolism, it will increase stride length and stride frequency and improve heart efficiency.

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EFFECTIVENESS OF TAE-KWON-DO TRAINING ON THE BASIS OF SPEED, COORDINATION AND AGGRESSION OF STUDENTS OF THANE DISTRICT

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Abstract

Taekwondo has evolved into a modern-day Olympic combat sport. The physical and physiological demands of modern-day taekwondo competition require athletes to be competent in several aspects of fitness. The present study will be undertaken with a view to develop a Taekwondo Training Program and evaluate its efficiency for the promotion of Motor Related Components and Aggression of students of Thane District. The methodology will be followed to conduct is given below. The research scholar conducts an experiment by divided into two group; one experimental group and second control group each group consisting of 25 subjects. Training programmed was carried on the period of 8 weeks. The Experimental groups were given Taekwondo Training for the period of 8 weeks. The study finding showed
that the implementing of Taekwondo Training resulting improvement in speed and coordination and increase in aggression.

Keywords: *Taekwondo Training, Speed, Coordination and Aggression.*

INTRODUCTION

Taekwondo is one of the most systematic and scientific Korean traditional martial arts, that teaches more than physical fighting and defending skills. It shows ways of enhancing our spirit and life through training to our body and mind. Taekwondo is a modern martial art from Korea that is characterized by its quick, high and turning kicks. Taekwondo is a combative and aggressively playing sport and was developed during the 1940s and 1950s by Korean martial artists with experience in martial arts. Speed is the facility to move your body swiftly. Speed is usually associated with running, but other exercises, like throwing or kicking a ball, depend on moving your arms or legs rapidly.Coordination is a skill that recruits the senses such as sight and hearing in conjunction with body parts to perform tasks accurately and with efficiency of movement.Aggression is a disorganizing emotional response. It is due to frustration based on emotional disturbance and hostility. Environment is a cogent factor in arousing aggression. The latter, once aroused, may lead to hostile and destructive behavior. It is, in a sense, manifestation of a self-assertive disposition and use of some kind of force.

Objectives of the study

• To compare the adjusted mean scores of Speed of School Students of Taekwondo Training Group & Control Group by taking Pre-Speed as Covariate.

• To compare the adjusted mean scores of Coordination of School Students of Taekwondo Training Group & Control Group by taking Pre-Coordination as
Covariate.

• To compare the adjusted mean scores of Aggression of School Students of Taekwondo Training Group & Control Group by taking Pre-Aggression as Covariate.

Hypothesis of the study

H01: There is no significant difference in adjusted mean scores of Speed of school students where Pre-Speed is taken as covariate.

H02: There is no significant difference in adjusted mean scores of Coordination of school students where Pre-Coordination is taken as covariate.

H03: There is no significant difference in adjusted mean scores of Aggression of school students where Pre-Aggression is taken as covariate.

METHODOLOGY

Design of the study

The present study is conducted by adopting experimental method. The experimental design was **non-equivalent control group design.** The subjects in the experiment were divided into two groups i.e. Group 'A' Experimental group and Group 'B' Control group each group was consisting of 25 subjects. Experimental group was given Taekwondo training program for the period of 8 weeks.

SELECTION OF POPULATION AND SAMPLE

A sample of Sixty (n=50) students will be selected from S. H. Jondhale High School, Dombivali. Further they are randomly selected into two equal groups. Experimental group (specific training group): 25.Control group (non specific training group): 25

Research Design: (Non - equivalent control group design)

The design of the experiment had been planned in three phase,s viz phase-I: pre - test, phase- II, training or treatment ,and phase- III : post-test. The subjects in the experiment were divided into two group one specific training i.e (experimental group) and one non specific training group i.e (experimrntal group) war griven specific training programme for the period of six weeks. The total training programme of the experimental group of 8 weeks, 6 day in week i.e Monday to Saturday except on holiday.

SELECTION OF VARIABLES

Dependent Variables - Speed, Coordination

Psycho-Physiological Parameters - Aggression

Independent Variables - Specific training programme is Taekwondo training which is

combination of Axe Kick (NaeryeoChagi), Roundhouse Kick (DollyoChagi), Knuckle Fist Punch (JipgeJumeokJireugi), High Block (UlgoolMakgi), Low Block (AraeMakgi)

Tools/ Instruments

The following criterion measure were included to record the reading of test items

Sr. No. Variables Test Unit

1 Speed 30 m Dash Meter

2 Co-ordination Eye leg co-ordination Time (second)

Psychological variable Test Unit

Aggression

Questionnaire

Dr. Guru Pyari Mathur &

Dr. Raj Kumari Bhatnagar

Score

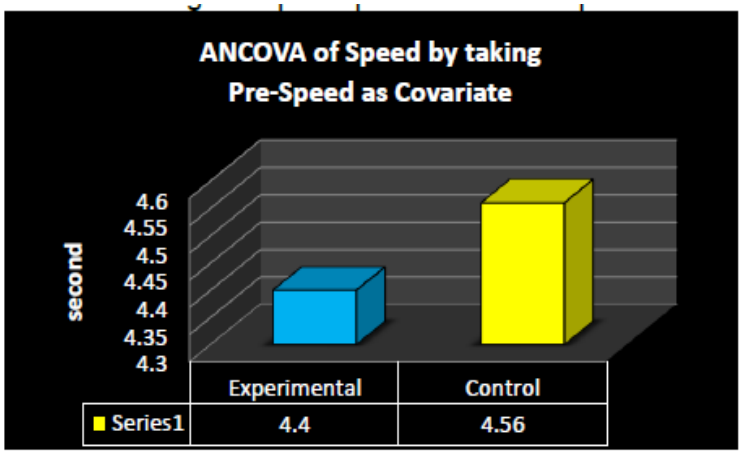
STATISTICAL PROCEDURE USED

Since, there were two group for this experimental study viz. experimental group and control group where in the researcher has decided to compare the adjusted mean scores of speed, co-ordination and aggression by taking pre and post test of Taekwondo training group and control group Comparison of group will be done with the help of One way ANCOVA was appropriately used for the data analysis.

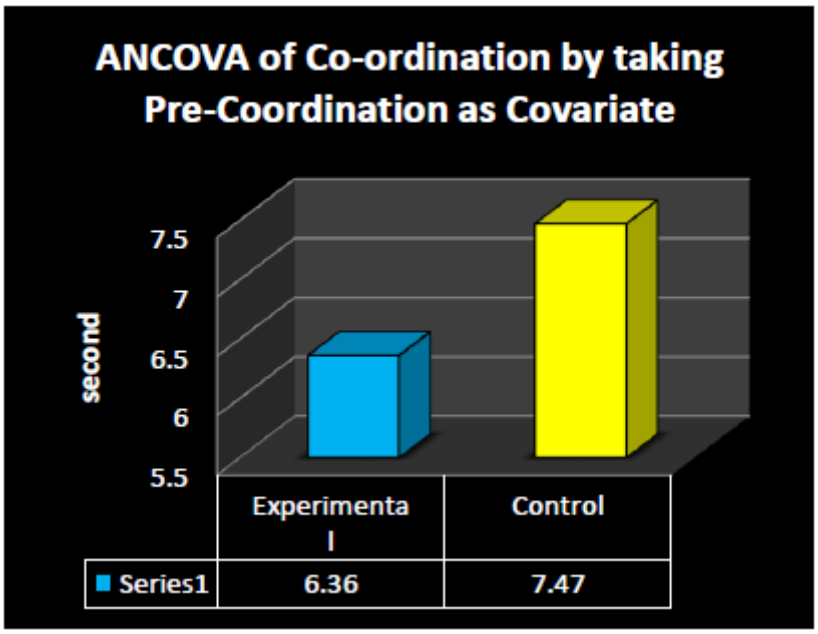
Result and discussion:

Group wise comparision of Taekwondo Training programme on speed, Coordination and Aggression are:

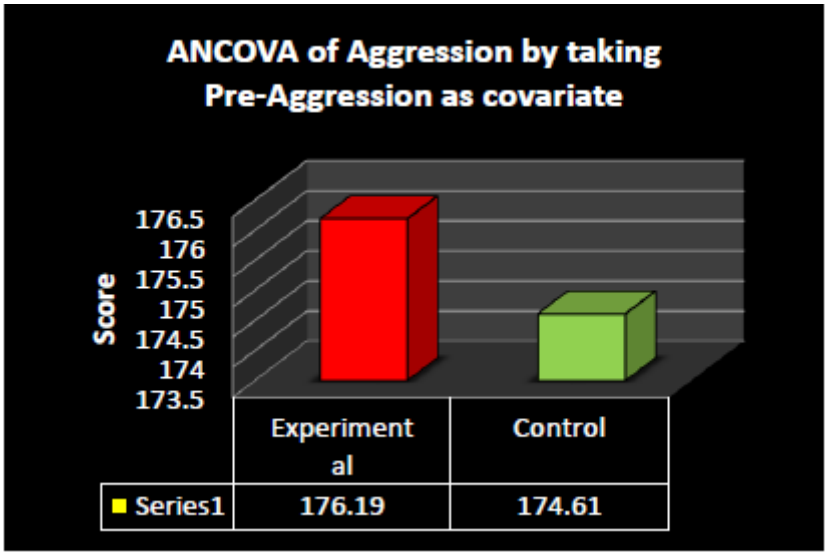
• There was significant difference between adjusted Mean Scores of Speed of Taekwondo Training Group and Non-Taekwondo Training Group by taking Pre-Speed as Covariate (Fy.x=33.174, df=1/49, p>0.01). Therefore, adjusted mean score of Speed of Taekwondo Training Group is 4.402 which is significantly higher than that of Non-Taekwondo Training Group where adjusted mean score of Speed is 4.564. Thus, the overall performance of scores of both the groups of Taekwondo Training Group and Non-Taekwondo Training Group of Speed were not equal.



• There was significant difference between adjusted Mean Scores of Coordination of Taekwondo Training Group and Non-Taekwondo Training Group by taking Pre- Coordination a Covariate (Fy.x=4.890, df=1/49, p>0.01). Therefore, adjusted mean
score of Coordination of Taekwondo Training Group is 6.364 which is significantly higher than that of Non-Taekwondo Training Group where adjusted mean score of Coordination is 7.467. Thus, the overall performance of scores of both the groups of Taekwondo Training Group and Non-Taekwondo Training Group of Coordination were not equal.



• There was no significant difference between adjusted mean scores of Aggression of Taekwondo Training Group and Non-Taekwondo Training Group by taking Pre- Aggression as Covariate (Fy.x=.740, df=1/49, p<0.05). Therefore, adjusted mean



score of Aggression of Taekwondo Training Group is 176.190 which is significantly lower than that of Non-Taekwondo Training Group where adjusted mean score of Aggression is 174.610. Thus, the overall performance of scores of both the groups of Taekwondo Training Group and Non-Taekwondo Training Group of Aggression were equal.

Conclusion

In present study, with help of finding and results following conclusion were drawn: The above training result helps to conclude that the taekwondo training was found helpful to improve speed, coordination, and aggression of the school children.

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A COMPARATIVE STUDY OF PHYSICAL FITNESS COMPONENTS OF STUDENTS OF AMBERNATH AND ULHASNAGAR TALUKA OF THANE DISTRICT

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Abstract

Physical fitness is recognized as one of the primary objectives of physical education and sports. Historically, the objectives may have been described in terms of the development of organic vigor or physical development. Due to the pandemic Corona virus physical fitness of students has gradually decreased. To overcome these various activities are started by the schools. The present study has, therefore been undertaken for improving the physical fitness of school students which is, A Comparative study of Physical Fitness components of school students of Ambernath and Ulhasnagar taluka of Thane district. The research scholar has conducted a comparative survey on school students of Ambernath and Ulhasnagar taluka by taking sample (n=200) and conducted various physical fitness components test which includes Muscular Strength, Muscular Endurance, Cardiovascular Endurance and Flexibility. The test included for the present study were Push up test for Muscular strength, sit up test for Muscular Endurance, 9min Run & walk test for Cardiovascular Endurance and Sit & Reach for Flexibility. The study findings showed that the physical fitness of School students of Ambernath was significantly greater than School students of Ulhasnagar.

Keywords: *Physical fitness, Muscular Strength, Muscular Endurance, Cardiovascular Endurance and Flexibility.*

Introduction

Physical fitness is very important for good health. Besides feeling better mentally, exercising can help protect us from heart disease, stroke, obesity, diabetes, and high blood pressure; and it can make us look younger, increase, and maintain bone density, improve the quality of our life, and may keep us from getting sick. Physical fitness has multiple components and is conceptualized as either performance- or health-related. The specificity of performance-related fitness regarding one's athletic skill best relates to an individual's athletic performance. Conversely, health-related fitness is generalized to health status and is affected positively or negatively by one's habitual physical activity habits. Physical fitness is recognized as one of the primary objectives of physical education and sports. Historically, the objectives may have been described in terms of the development of organic vigor or physical development. Today the development and promotion of health-related fitness in a diversity of populations is an important outcome as many programs in our field. Health related fitness encompasses the development of cardio respiratory efficiency, flexibility, muscular strength and endurance and appropriate body composition. Any of which

is essential for doing any work on playing game and sports is essential. Individuals who are physically fit can work for longer period of time and they have greater stamina and energy for performing a multitude of tasks than those who are unfit by leading a physically active life style and maintaining a healthy body composition profile. It decreases the risk of cardiovascular disease and other illness related to living a sedentary lifestyle.

Hypothesis of the study

The null hypothesis of the study is as under:

H01: There is no significant difference in mean scores of Muscular Strength of students of Ambernath & Ulhasnagar taluka.

H02: There is no significant difference in mean scores of Muscular Endurance of students of Ambernath & Ulhasnagar taluka.

H03: There is no significant difference in mean scores of Cardio Vascular Endurance of students of Ambernath & Ulhasnagar taluka.

H04: There is no significant difference in mean scores of Flexibility of students of Ambernath & Ulhasnagar taluka.

Research Methodology and Analysis

Study Design & Sample: The study is comparative in nature under the heading of descriptive research. The researcher along with his assistants has collected the data of Muscular Strength, Muscular Endurance, Cardiovascular Endurance and Flexibility of the students of Ambernath and Ulhasnagar taluka of Thane district A sample of two hundred [n=200] boys has been selected by simple random sampling. 100 students from schools of Ambernath and 100 students from schools of Ulhasnagar taluka of Thane district for the research study.

Data Analysis

Since there were two groups for this comparative study viz. Ambernath School Students and Ulhasnagar School Students, wherein the researcher had decided to compare the mean scores of Ambernath School Students and Ulhasnagar School Students. Hence ‘t’ test was appropriately used for the data analysis. The analysis of the data collected by the researcher has been presented in this chapter. The data is analyzed by ‘t’ test. The comparison of mean score of Ambernath School Students and Ulhasnagar School Students was done by ‘t’ test. The first objective was to compare Mean Score of Muscular Strength of Ambernath student Group and Ulhasnagar student Groups. The data were analyzed with the help of t-Test and results are given in Table 1.

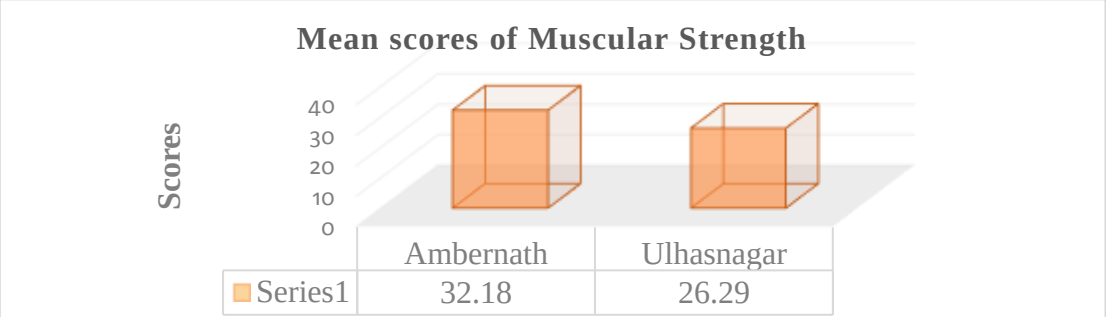
TABLE 1: Treatment wise Mean, SD, N and t-value of Muscular Strength

Test	Mean	SD	N	t-value		Remarks
Ambernath	32.18	9.96	100	4.08*	OR	p>0.05
Ulhasnagar	26.29	10.43	100			

*Significant at 0.05

From Table 1. The t-value is 4.08 which is significant at 0.05 level with df=198. It indicates that mean scores of Muscular Strength of Ambernath student Group and Ulhasnagar student Groups differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Muscular Strength of Ambernath student Group and Ulhasnagar student Groups is rejected. The mean scores of Muscular Strength of Ambernath student is 32.18 which is significantly higher than Ulhasnagar student Group which is 26.29. It may therefore be said that Ambernath student Group are superior than Ulhasnagar student Groups

Figure 1. Comparision of Mean Scores of Muscular Strength between Ambernath student Group and Ulhasnagar student Groups



The second objective was to compare Mean Score of Muscular Endurance of Ambernath student Group and Ulhasnagar student Groups. The data were analyzed with the help of t-Test and results are given in Table 2.

TABLE 2:Treatment wise Mean, SD, N and t-value of Muscular Endurance

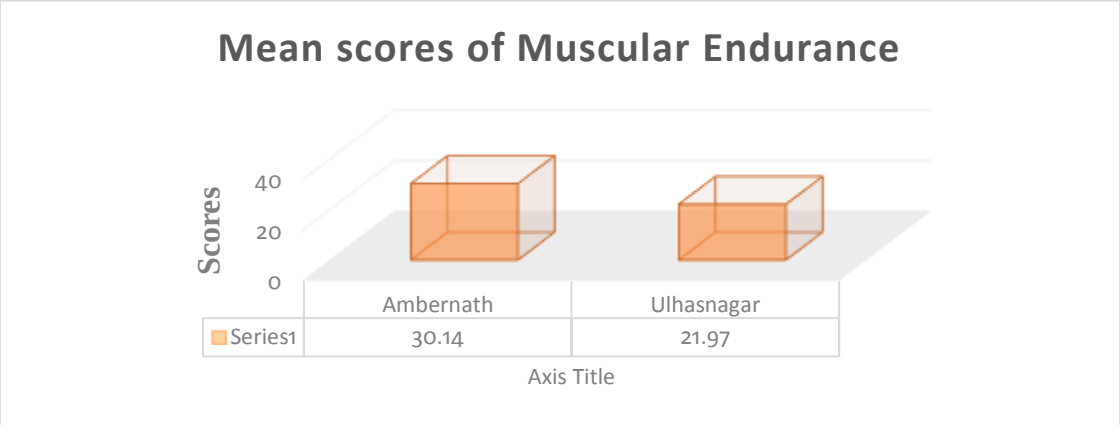
Test	Mean	SD	N	t-value	Remarks
Ambernath	30.14	9.07	100	6.77*	p>0.05
Ulhasnagar	21.97	7.96	100		

*Significant at 0.05

From Table 2. The t-value is 6.77 which is significant at 0.05 level with df=198. It indicates that mean scores of Muscular Endurance of Ambernath student Group and Ulhasnagar student Groups differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Muscular

Endurance of Ambernath student Group and Ulhasnagar student Groups is rejected. The mean scores of Muscular Endurance of Ambernath student is 30.14 which is significantly higher than Ulhasnagar student Group which is 21.97. It may therefore be said that Ambernath student Group are superior to Ulhasnagar student Groups.

Figure 2. Comparision of Mean Scores of Muscular Endurance between Ambernath student Group and Ulhasnagar student Groups



The third objective was to compare Mean Score of Cardiovascular Endurance of Ambernath student Group and Ulhasnagar student Groups. The data were analyzed with the help of t-Test and results are given in Table 3.

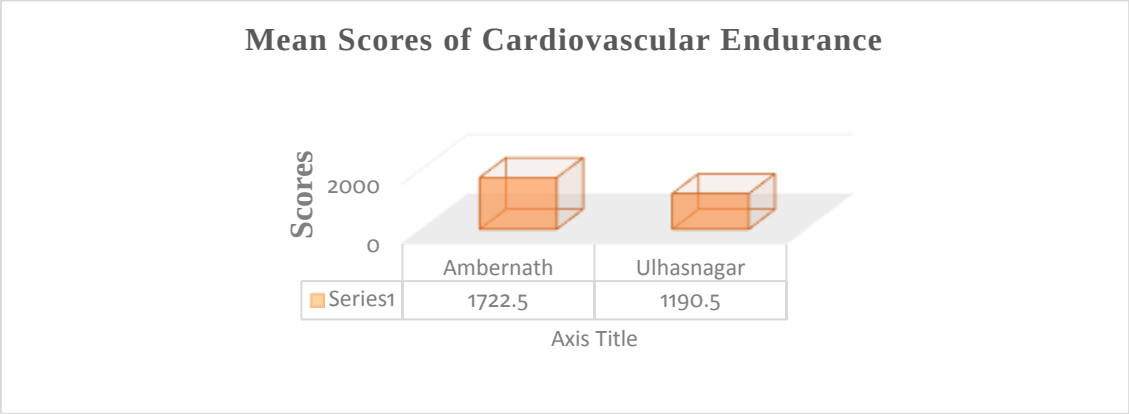
TABLE 3. Treatment wise Mean, SD, N and t-value of Cardiovascular Endurance

Test	Mean	SD	N	t-value	Remarks
Ambernath	1722.50	272.13	100	12.49*	p>0.05
Ulhasnagar	1190.50	327.66	100		

*Significant at 0.05

From Table 3. The t-value is 12.49 which is significant at 0.05 level with df=198. It indicates that mean scores of Cardiovascular Endurance of Ambernath student Group and Ulhasnagar student Groups differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Cardiovascular Endurance of Ambernath student Group and Ulhasnagar student Groups is rejected. The mean scores of Cardiovascular Endurance of Ambernath student is 1722.50 which is significantly higher than Ulhasnagar student Group which is 1190.50. It may therefore be said that Ambernath student Group are superior to Ulhasnagar student Groups.

Figure 3. Comparision of Mean Scores of Cardiovascular Endurance between Ambernath student Group and Ulhasnagar student Groups.



The fourth objective was to compare Mean Score of Flexibility of Ambernath student Group and Ulhasnagar student Groups. The data were analyzed with the help of t-Test and results are given in Table 4.

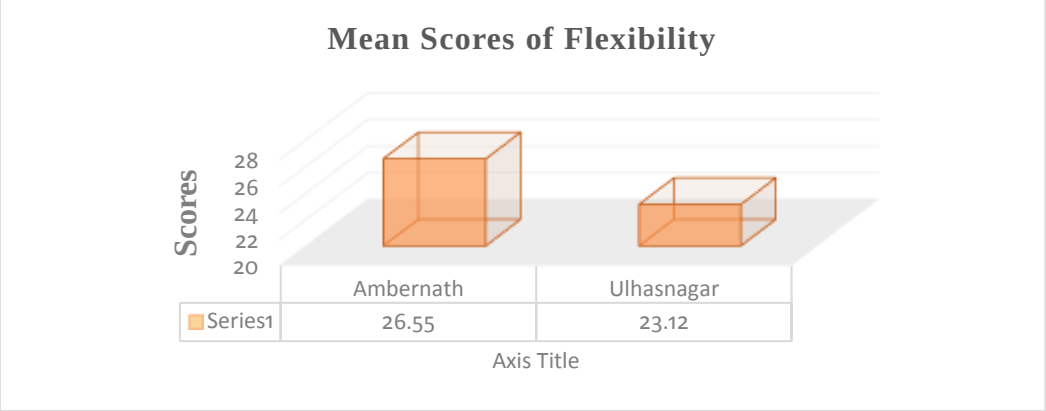
TABLE 4.Treatment wise Mean, SD, N and t-value of Flexibility

Test	Mean	SD	N	t-value	Remarks
Ambernath	26.55	5.93	100	4.12*	p>0.05
Ulhasnagar	23.12	5.84	100		

*Significant at 0.05

From Table 4. Tthe t-value is 4.12 which is significant at 0.05 level with df=198. It indicates that mean scores of Flexibility of Ambernath student Group and Ulhasnagar student Group differ significantly. Thus, the Null Hypothesis that is no significant difference in Mean Score of Flexibility of Ambernath student Group and Ulhasnagar student Groups is rejected. The mean scores of Flexibility of Ambernath student is 26.55 which is significantly higher than Ulhasnagar student Group which is 23.12. It may therefore be said that Ambernath student Group are superior than Ulhasnagar student Groups.

Figure 4. Comparision of Mean Scores of Flexibility between Ambernath student Group and Ulhasnagar student Groups



Conclusion

The analysis in interpretation of the data collected by the researcher the following finding were concluded that study shows that Muscular Strength, Muscular Endurance, Cardiovascular Endurance and Flexibility of Ambernath School Students found to be significantly higher as compared to Ulhasnagar School Students.. The above result helps to conclude that the Physical Fitness of Ambernath School Students is significantly higher than that of Ulhasnagar School Students.

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