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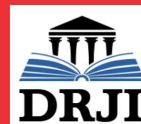
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Roles,Skills And Duties Of A Sports Manager And Their Importance In Professional Activity In Todays Sports.

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Abstract:

Preparing competent specialists in the field of sports management has to allow for a clear and pertinent answer to the new commands and social exigencies regarding the diversified activity of sport. The manager is a person with a double role, who has to carry out both the specific professional activity and also the management activity.

Keywords:management, physical education and sport, professional activity etc..

Introduction:

Management is of utmost importance in today's sports. In modern days of keen competition success depends upon management skills of high grades. Management indicates execution or implementation for the sake of attaining predetermined objectives of Sports associations.

The success of any sport depends upon on three factors – Organization, Management and administration. Of these, Management is the most important as it is concerned with planning and programming, policy formulation and coordinating activities. It also includes control or work performance and maintenance of discipline for a purpose of maintaining a satisfactory quality of the sport.

Sports management represents the coordination of the techniques, processes, financial, material, informational, and human and time resources, as well as of the situations problems and contingent aspects with the purpose of increasing the efficiency of the production and of the exchange of sports products and services, as well as the increase of the results, respectively of the sport performances.

Management and sports marketing are one of the most important, also the most complex activities, which ensure that sport and business functions are carried out in the more rational, economical and efficient way. Sports management as a skill and unstructured experience of talented managers of individual athletes, teams and clubs emerged with the appearance of the first professional sports organization. The appearance of a systematic, scientific knowledge of sport management is linked to the growth of professionalization of sport and its submission to the laws of market economy and the emergence of management science, first in the profit sector, corporate business and then it's spreading to the sector of non-profit public and private sector. The specific management processes are led by persons who have competencies, knowledge and qualities in organizing and conducting the activities, that are the managers. The methods, techniques and procedures used in the managerial process contain varied knowledge from fields as: reference field, sociology, psychology, economy, pedagogy, law, marketing, ergonomics, informatics

The range of sports managers is very wide containing leaders from different sports organizations (federal secretaries, presidents, clubs, secretaries, club managers and sports base managers), leaders for the preparation processes – coaches at different level – federal coaches, coaches for the national leagues,

coaches from clubs and associations, teachers specialized in sports training of the children and juniors from schools.

The methods, techniques and procedures used in the managerial process contain varied knowledge from fields as: reference field, sociology, psychology, economy, pedagogy, law, marketing, ergonomics, informatics

The sports manager's role can vary enormously depending upon the setting, but the specific task of the manager will be to take general management functions and perform them in a sports setting- integration of management functions and sports administration/operations. All management functions can apply in different situations at different times- the really skilled manager will know when each applies and will use that process appropriately.

Sports manager will require a background knowledge in the process of management, but they will more particularly require a knowledge of sports and the people involved in it. To be genuinely effective they will have to have a feeling for the business of sport as well as management skills. In essence, sports management is all about managing -

* the workplace , the people, day to day operations, the facilities, the activities, the development process

Discussion and Conclusion:

This article aims at describing the profession of a sports manager – his/her qualities, abilities, skills and knowledge, and outline this profession in present-day managerial practice along with the emphasis on the importance of managers in today's sports organizations. Managers in the scope of their function set certain goals and tasks, which means that they are taking care of the planning. Setting sport related goals and their accomplishment belongs to the basic model of application of sport management.

The most frequent types of entrepreneurial activities in sport are: offering advertising services, renting sports venues, selling refreshment, holding events of entertainment and exhibition nature, providing hostelry services, providing consulting services, selling sports goods, providing services in the area of regeneration and relaxation, offering the possibilities and developing movement skills, in-service training.

According to Parks (1998) "Sport is a competitive physical activity, utilizing specialized equipment and facilities, with unique dimensions of time and space, in which the quest for records is of high significance."

J. B. Parks provided another perspective with his suggestion that sport should:

- be playlike in nature,
- involve some element of competition,
- be based on physical prowess,
- involve elements of skill, strategy and chance,
- have an uncertain outcome.

Unlike the old times, There is a number of factors influencing the present development and socially-economic significance of sport. These factors include e.g.:

- rise in new types of sports and movement activities,
 - variedness and range of population engaging in sport and movement activities,
 - rational management of leisure time by the contemporary population,
- sport is becoming an important leisure time activity,
- rise in the awareness of sport as a part of healthy lifestyle,
 - rise in competition with companies and facilities offering the same or similar movement activities,
 - rise in production of goods related to sport,
 - establishing new sports venues and sports facilities, maintaining the existing ones,
 - rise in new production technologies for goods related to sport,
 - increasing the importance of service as a sports product,
 - development of marketing in sport connected with the development of sport advertising,

- rise in individual forms of sponsoring in sport,
- rise in mass media interest in sport and sports environment,
- rise in the number of journals, magazines and publications, from professional to popular ones,
- rise in the possibilities of education in sport,
- rise in the number of job vacancies created by sport,
- development of sport as sphere of activity for entrepreneurial activities,
- development of tourism, travelling
- globalization of sport.

In order to deal with the sports industry with respect to the vast and widespread dimensions of sports as mentioned above it is necessary to have an appropriate individual acting as a manager and taking sports to a more higher levels. This requires a manager who is sociable, adaptable, polite tempered, correct, respectable, dynamic, confident in his own forces and the forces of the group and who takes advantage of all these qualities and makes a behavioural style out of them, and such a person will obtain much better results in

various sporting activities unlike an unsociable, unpopular, grumpy, quiet, unstable, uncontrollable, subjective person

the three new unique aspects of sport management include

- sport marketing,
- sport enterprise financial structures,
- sport industry career paths.

These three aspects of sport management make sport different from other business enterprises and justify sport management as a distinct area of professional preparation and the need for sports managers with the most significant qualities and abilities like

- communicativeness,
- good manners, honesty, diplomacy and correctness,
- wholesome self-confidence, ambition and purposefulness, natural authority, charisma,
- precise, clear, quick, creative and flexible decision-making, independence and creativity,
- ability to improvise, logical thinking,
- ability to find different solution alternatives, cope with critical situations,
- art of motivation,
- being empathic and assertive and tolerant,
- industriousness, determination, resolution and responsibility,
- patience, perseverance, consistency,
- ability to set realistic targets, art of losing, keeping promises,
- suitable temperament,
- ability and willingness to study

In the daily activity the manager has to be close to his co-workers and subordinates, sportsmen and technicians. The door of the manager must be always open for the one who requests a meeting with him .He also has to have some spare time in order to reflect in peace. At the same time, the manager has to know how to keep a secret from the ones with whom he talks and to be ready to help them.

The most important activities in the area of sport management are all activities leading to acquiring funds essential for successful functioning of a sports organization. At present it is very difficult to get a new sponsor, but also to keep the existing one. The communication with sponsors becomes artistry and in such situations a sports manager with the right commutative and convincing skills is of great weightage. This includes the activities of a manager in the area of marketing strategy and cooperation with sponsors including acquiring sponsors, and activities that lead to acquiring grants and subsidies from regions, cities and municipalities.

Some problems are connected with sport as such and they have a general character – commercialization of sport, acquiring finances, cooperation with sponsors and communal sphere, negative phenomena within the present-day sports environment, problems in interpersonal communication, etc. these specific problems are solved by the managers of sports.

Motivation or motivating also belongs to fundamental processes of the management in sport. This function sometimes gets the priority over all other elements in sport. In this case, manager has to find certain innovative solutions to capacitate sports organization in the whole, but also the subjects of sport activities – the sportsmen. Motivation belongs to psychological factors and it can be realized through various psychological methods and means. The manager in sport on this way becomes the main organization part and the foundation of all preparatory manifestations in sport environment and certain sports organization

Not only innate qualities and abilities, but also the acquired ones play a very important role for the profession of a manager, as well as a sports manager.

The sports activity must also fit into the science of management, another fact which explains the presence of a course in the educational plan of an institution which proposes to form high-qualified specialists, capable to exert managerial competences under different circumstances and at different organization levels of the Indian sports.

In the future, enlightened sport managers will become more aware of their social responsibilities and will deliver their services in ways that reflect this understanding. With the advent and development of information technology in our country it is important for sports administration (sports management) to adequately and properly carry out their jobs and learn to save time and resources of their organization to achieve competence. For this purpose, It is very important to have adequate training (training) of employees in sport (sports administration) to keep pace with the development of information technologies and how to get the most progress from the new technologies we apply.

Most of the sports organization accepting the progress of new technology learning, develop and adopt new methods (information and communication technology) that will help them improve their products and services and bring them closer to their customers. To achieve the highest quality in the sport, it is necessary to create, modify, organize, and to continuously implement an ongoing and final preparation of elite athletes, and along with that, work on finding the most suitable organizational forms, methods and content of work in preparing elite athletes for the highest-level representative sporting achievements. Contemporary sports organization in today's dynamic environment characterized by frequent changes and numerous competitors can not survive without management.

The future managers will have to be formed so that they could know thoroughly the problematics of the science of how to organize and manage the sports activity, in order to be able to accomplish their mission.

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2013, Vol. 3

Comparative Study Of Self-Confidence Among Sports Women Of Individual And Team Sports

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Abstract: Sports and games improve our capability. They improve our efficiency. Either study or work alone makes us exhaust. We remain no longer efficient to do any work. Sports remove our mental exhaustion. Sports are integral part of education. Education without sports is incomplete. Keeping their value in life, children are taught some sorts of games in the very early stage in school. These days' sports are a part of academic curricula. **Hypothesis:** 1) There was no mean difference in self confidence between, the sportswomen of team sports and individual sports. 2) there exists mean difference in self confidence between, the sportswomen of team sports and individual sports. **Methodology:** The researcher selected the subjects who had represented university of Mysore, at least during 2004-06 in the inter university competitions for women. A request was made to the physical directors of all the colleges in Mysore city where the Mysore University representatives were pursuing some course other to cooperate with researcher to the complete study by providing responses in the questionnaire provided to them. The researcher visited the colleges on prior intimation and administered the questionnaire to the subjects. A total of 19 subjects in the individual sports and games category and 33 subjects in the team games category responded to the request. Thus a total of subjects were included in the study. **Result:** Since the calculated t-value was less than the tabulated t-value, we cannot reject the null hypothesis that there was no significant mean difference in self confidence among sportswomen of team sports and individual sports at 5% level of significance i.e., the mean difference in self confidence exists between the sportswomen of individual and team sports and it was found to be statistically not significant. **Conclusion:** The possess of all the above may get nullified, if the sportswomen do not possess the necessary amount and type of self confidence. Self confidence is earned while participating in sports over a period of time. It was observed that the levels of confidence were seen in varying degree among sportswomen who pursue either individual or team competitive sports. Therefore, the author was curious to study self confidence among sportswomen who pursued individual and team sports. It was hypothesized that there will be no difference in self confidence among sportswomen who pursued individual and team games and sports.

Key Words: Self Confidence, Sportswomen, Individual Sports, Team Sports

INTRODUCTION

Sports and games are means of mental and physical growth. During sports we come to learn many things. We learn how to maintain mental balance in the midst of hopes and despair. They make us learn how to tackle the difficult situation. Sports develop a sense of friendliness. They develop in us team spirit. They help in developing mental and physical toughness. They shape our body and make it strong and active. They give us energy and strength. They remove tiredness and lethargy. They improve blood circulation. This improves our physical well-being.

Sports and games improve our capability. They improve our efficiency. Either study or work alone makes us exhaust. We remain no longer efficient to do any work. Sports remove our mental exhaustion. Sports are integral part of education. Education without sports is incomplete. Keeping their value in life, children are taught some sorts of games in the very early stage in school. These days' sports are a part of academic curricula.

Despite the fact that participation in competitive sports do a world of good to its pursuers, opportunities provided were not consistent and uniform for either sex and sports competitions remained as male bastion for long. Thanks to persistent demands for equal opportunities and agitations against gender bias opportunities for women's participation have opened up. However; there is much to be desired. It may be remembered that participation of women in sports helps them in innumerable ways.

According to Slusher, Sports as life, is place for happiness as well as grief. Through activity man builds anxieties, suffers pain, engages the tensions of life and frequently challenges actual death.

HYPOTHESIS

- Ho- There was no mean difference in self confidence between
The sportswomen of team sports and individual sports
- H1- The exists mean difference in self confidence between
The sportswomen of team sports and individual sports

DELIMITATIONS

The study was delimited to women sportspersons who had represented university of Mysore at least once in the inter university competitions.

The study was further delimited to the university sports women who were pursuing education in Mysore university colleges.

Self confidence of the subject was estimated by using the self confident inventory conceived by Basavanna

Participants in athletics, table tennis, chess, lawn tennis, gymnastics, and badminton were considered as participants in individual games and sports category; hockey, basketball, kho-kho, ball badminton and volleyball participants were treated as team game pursuers.

5. There may be subjects who pursued sports events of either category.

LIMITATIONS

Due to time constraint the researcher confined herself to the libraries in her department of study, and library at post graduate center of Mysore University and internet sources.

Due to paucity of time all sports women of Mysore University could not be entertained as subjects.

Girls and women participate outside the university jurisdiction were not included in the study.

METHODOLOGY

The purpose of study was to compare self confidence of individual sports and games pursuers and team game pursuers in women section.

The researcher selected the subjects who had represented university of Mysore, atleast during 2004-06 in the inter university competitions for women. A request was made to the physical directors of all the colleges in Mysore city where the Mysore University representatives were pursuing some course other to cooperate with researcher to the complete study by providing responses in the questionnaire provided to them.

The researcher visited the colleges on prior intimation and administered the questionnaire to the subjects. A total of 19 subjects in the individual sports and games category and 33 subjects in the team games category responded to the request. Thus a total of subjects were included in the study.

RESULTS

The purpose of the study was to find the difference in self confidence among sports women of individual and team sports persons.

To accomplish the purpose of the study, the author had administered self confidence inventory evolved by Basavanna to fifty two sportswomen who had participated in various university and state level tournaments. Thirty three sports women included in the present study, belonged to team sports, such as Hockey, Basketball, kho-kho, Ball badminton, and Volleyball and nineteen sportswomen belonged to individual sports such as athletics, table tennis, chess, lawn tennis, gymnastics and badminton.

The age of the subjects ranged between 17 years and 23 years. The procedure of administering the self confidence inventory evolved by Basavanna and the scoring of the individuals was in accordance with the directions in the instruction manual supplied along with the self confidence questionnaire.

The collected data were tabulated and statistical analysis was done subsequently. To find the mean difference in self confidence of sportswomen who had participated in individual and team sports, the following statistical hypothesis was framed and tested by two sample 't' test.

Ho- There was no mean difference in self confidence between
The sportswomen of team sports and individual sports

H1- The exists mean difference in self confidence between
The sportswomen of team sports and individual sports

The descriptive statistics of self confidence of sportswomen of individual and team sports were tabulated below in table 1.

Table 1 Descriptive statistics

Variable Statistics	Mean	SD	Skewness	Min. Value	Max. Value	N
Team sports participants	33.48	15.07	0.10	7	62	33
Individual sports participants	39.95	15.26	0.38	15	79	19

From the above table, it was inferred as follows. The average self confidence value for sportswomen of team sports was 33.48 with SD of 15.26. The positive skewness of both the type of sportswomen indicated that the number of less than average self confidence.

The t- value (calculated) was

X-y

t=

$\frac{1}{n_1} + \frac{1}{n_2} \times s$

X - Women Team sports participants

Y - Women Individual sports participants

N1 - 33 N2 - 19

1

$S = \frac{1}{N_1 + n_2 - 2} [N_1 \sigma_x^2 + n_2 \sigma_y^2]$

$N_1 + n_2 - 2$

And S=15.44

And t= 1.455

Tabulated t-value at 5% level of significance with 50 d.f was 1.96

Since the calculated t-value was less than the tabulated t-value, we cannot reject the null hypothesis that there was no significant mean difference in self confidence among sportswomen of team sports and

individual sports at 5% level of significance i.e., the mean difference in self confidence exists between the sportswomen of individual and team sports and it was found to be statistically not significant.

Conclusion

The possess of all the above may get nullified, if the sportswomen do not possess the necessary amount and type of self confidence .Self confidence is earned while participating in sports over a period of time. It was observed that the levels of confidence were seen in varying degree among sportswomen who pursue either individual or team competitive sports. Therefore, the author was curious to study self confidence among sportswomen who pursued individual and team sports. It was hypothesized that there will be no difference in self confidence among sportswomen who pursued individual and team games and sports.

The subjects who pursued individual sports were the participants in track and field sport, gymnastics, and table tennis, chess, lawn tennis, and Badminton. Their mean score was 39.95 with a s.d of 15.26, the team game pursuers were the participants in hockey. Basketball, kho-kho, Ball badminton and volleyball. Their mean score was 33.48 with a s.d of 15.07. The tabulated t-value at 5% level of significance with 50 d.f was 1.96. Since the calculated t-value was less than the tabulated t-value it was concluded that their exist mean difference in self confidence between sportswomen of individual and team sports. However, the difference was not statistically significant. The result of the study is justified in the fact that individual sports pursuers rely on their own ability to achieve results. Any let-up or mishap will have devastating effect. Thus they are more anxiety prone. On the other hand, in team sports contests even the least skilled and substitute players will bask in the glory of team's star performers. There are ample opportunities for the players who falter to remake the ground, and hence they are shown to have better self confidence.

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Sport Competition Anxiety Among College Level Cricket Male And Female Players

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Abstract

The purpose of this study was to compare the Sport Competition Anxiety between college level male and female cricket player. For the purpose of the study total 100 players 50 (male) and 50 (female) cricket players from M.D.U. Rohtak were purposively selected as the subjects for the study. The hypothesis selected for this study that there would be no significant difference between the inter- college male and female cricket players. In this study sports competition anxiety test SCAT; (Martens et al 1990) questionnaire was used to measure sports competition anxiety. Sports competition anxiety test questionnaire was distributed between male and female cricket players one hour before the competition. To measure competition related anxiety of players sport competition Anxiety Test (SCAT, developed by Martens et al. (1990) was used. The data was analyzed by applying 't' test. The level of significance was set at 0.05 levels **Keyword**Sports competition anxiety, Cricket, Male, and Female.

Introduction

Psychologists generally differentiate between two types of anxiety. Trait anxiety relates to an aspect of personality in which nervousness is a stable personality trait in an individual. State Anxiety on the other hand refers to temporary feelings of anxiety in a particular situation. Therefore a person with an anxious personality may find many different everyday tasks stressful compared to someone who only gets nervous in extreme situations. The game of cricket has had a long and complicated history in the West Indies. Originally imported to the West Indies as an agent of control and reaffirmation, the game steadily evolved into a cultural institution radically opposed to the original intentions of those who conspired for its import. The exact role cricket has played in terms of resistance to the postcolonial hegemonic order in the West Indies is widely debated. Much of this debate has to do with the variety of ways in which cricket culture has been allowed to progress according to specific histories of individual locales.

Objective of the study

To compare the sports competition anxiety level between inter- college male and female cricket players.

Methodology

In this study total 100 players' fifty male cricket players and fifty female cricket players were randomly selected as the subject for this study. The subject age was ranged between 20 to 25 years. To measure competition related anxiety of the players sport competition Anxiety Test (SCAT, developed by Martens et al. (1990) was used. The data was collected by administering sports competition anxiety test questionnaire. To find out the significance of mean differences between inter college male and female cricket player't' test was applied. The level of significance was set at 0.05 level.

Result and Interpretation

Table-1Mean differences of competitive anxiety between inter- college male and female cricket players

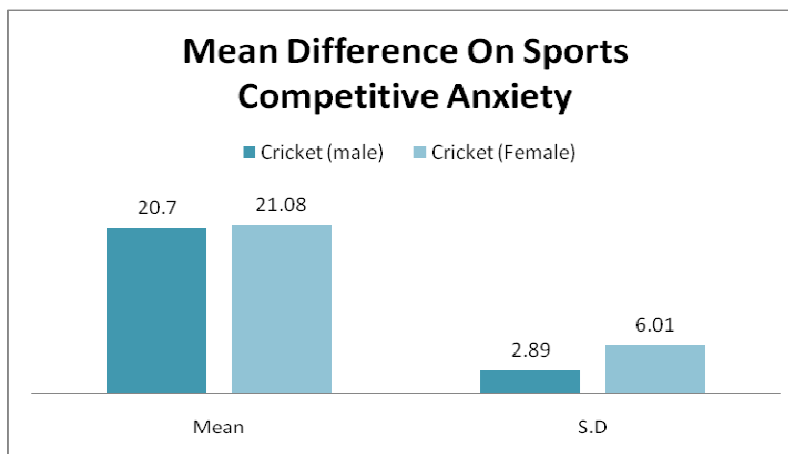
Variables	Game	N	Mean	S.D	S.E.D	't' ratio	Significant
Sports Competition	Cricket (male)	50	20.70	2.89	0.85	0.38	Non-Significant
	Cricket (Female)	50	21.08	6.01	0.40		

anxiety test							
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Significant at 0.05 level

The table 1 depicts that the mean and S.D. value of inter- college male cricket were 20.70 and 2.89, whereas the inter-college female cricket players were having the mean and S.D. value 21.70 and 6.01 respectively. The inter- college female cricket players was found to have comparatively high mean score as compare to the inter- college male cricket players which indicate that inter- college female cricket players feels more anxiety as compare to inter college male cricket players. Results in the above table shows that there is no significant differences observed between inter – college male and female cricket players in their competitive anxiety level.

Graph-1 Graphical representation of mean differences of competitive anxiety between inter-college male and female cricket players



Conclusion

In the present study no statistically significant differences have been observed between the inter- college male and female cricket players. Inter- college female cricket player feels more anxiety as compare to inter college male cricket players.

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An Experimental Study on Efficacy of Yogic Exercise Program on Short Distance Speed of Kho-Kho Players

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Abstract

The main objective of the present study is to assess the efficacy of yoga exercises program of short duration on short distance speed of male kho-kho players. To conduct the study 100 inter collegiate male kho-kho players (Ave. age 21.21 years) were selected. The selection of subjects was done from Bundelkhand University. These selected subjects then divided into two groups i.e. experiment and control group with equal number of subjects assigned randomly in each group. The subjects of experimental group additionally received three months of yoga exercise training program while subjects grouped into control group did not receive such programme except their usual routine training. Timings on 50m dash was recorded twice i.e. before the commencement of study and immediately after completion of three months yogic exercise program. Results indicate that three months yogic exercise regime has been instrumental in improving the 50m dash timings of male kho-kho players. Therefore it may be concluded yoga program of short duration with specific asanas and kriyas is a good medium to improve speed and acceleration of male kho-kho players. Keywords : Yoga, Speed, Kho-kho

Introduction

Kho-kho is traditional Indian sport and require quick activities across short distances. The nature of kho-kho requires rapid acceleration, hence ability to cover short distance in less time is important. When the distance is shorter, a player needs to get off the blocks quickly and accelerate rapidly. Since kho-kho is a popular sport in India, so many researchers like Dhondge (2011), Singh and Singh (2013), Rana (2013), Jaiswal (2014), Tiwari and Agashe (2016) have conducted scientific studies on factors related to performance of kho-kho players. Surprisingly yoga did not feature in any of the studies although efficacy of yoga in enhancement of physical fitness parameters has been documented quite extensively [Bhavanani and Udupa (2003), Gabbett, T., & Benton, D. (2007), Singh et al. (2011)]. To fill this void, the present study was planned to investigate the efficacy of three months yoga program on short distance speed of male kho-kho players.

Hypotheses

It was hypothesized that three months yoga exercise programme will significantly improve the 50 meter dash timings of male kho-kho players.

Methodology :-

The following methodological steps were taken to conduct the study.

Sample :

To conduct the study 100 inter collegiate male kho-kho players (Ave. age 21.21 years) were selected. The selection of subjects comprise of male kho-kho players from Bundelkhand University. These selected subjects then divided into two groups i.e. experiment and control group with equal number of subjects assigned randomly in each group.

Tools: 50 meter dash timing was recorded by standard protocol. Two trials were given and the best time was recorded. Timings on 50 meter dash for each subject was recorded twice i.e. pre test and post test.

Gain score (Post-pre test) was computed for experimental as well as control group to find out the changes in timings on 50 meter dash during study period. The obtained gain scores for both the groups

were then compared with the help of paired sample 't' test. The results are presented in table no. 1 and 2 respectively.

Analysis of Data:

Table No. 1: Pre and Post-Test Statistics on 50 meter Dash Timings of Selected Male Kho-Kho Players belonging to Experimental and Control Group

** Significant at .01 level; NS - Not Significant

Groups	Before Study Mean \pm S.D.	After 03 months Mean \pm S.D.	Mean Difference	't'
Experimental (N=50)	6.6722 \pm 0.12	6.6178 \pm 0.07	0.0544	6.23**
Control (N=50)	6.6804 \pm 0.09	6.6722 \pm 0.11	0.008	0.79(NS)

Perusal of table 1 shows no significant change in 50 meter dash timings of male kho-kho players belonging to control group ($t=0.79$, $p>.05$). In contrary to this, male kho-kho players belonging to experimental groups showed improvement in 50m dash timings in the course of study period i.e. taking part in three months yoga program ($t=6.23$, $p<.01$)

To compare pre-post changes in 50m dash timings of male kho-kho players from experimental and control group, gain score was computed and compared.

Results shown in table 2: Table No. 2: Comparison of Gain Score on 50 meter Dash Timings between Experimental and Control Group

	Experimental Group (N=50)	Control Group (N=50)	't'	Sig.
Mean Gain Score	-.0544	-.0082	3.51	.01

A perusal of entries reported in table 2 indicate that time taken to finish 50 meter dash was found to be significantly reduced ($M = -.0544$) in male kho-kho players belonging to experimental group as compared to male kho-kho players belonging to control group ($M = -.0082$). $t=3.51$, $p<.01$

Results: On the basis of statistical analysis it was observed that time to complete 50 meter dash was significantly reduced in male kho-kho players from experimental group as compared to their counterparts from control group between time span of study.

Discussion: The result indicate improved timings on 50 meter dash of male kho-kho players after participating in specifically designed three months yoga program. The reason may be attributed to improved functioning of central nervous system which enables players to quickly get off the blocks.

Conclusion

It was concluded that yoga program of short duration with specific asanas and kriyas is a good medium to improve speed and acceleration of male kho-kho players.

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Construction Of Norms For Kabaddi Skill Tests

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Abstract ---

The research related to Development of norms for particular Games, the kabaddi is a mass game in present days it will get a tremendous appreciation all over the World, More than 40 countries are playing the Kabaddi. The prerequisite are Physical and Motor Fitness however the selection norms are different for sports talent, area wise is not so for available. For Development of norms as selection criteria, especially for the Indian sports talent, area wise is a demand of the day. Suitable selection criteria for area wise to select the talented kabaddi players. Such criteria will, in fact, help to discriminate the talented sports person for coaches, and prepare the training plans according to the capacity and quality of these talented kabaddi players. Main objective of the study was to construct norms for skill test for Kabaddi players. For this purpose 500 State Level and south Zone inter university Kabaddi players of south India were randomly selected to serve as subjects. Objectivity and reliability of the 15 test variables were obtained. The limited 25 samples from selected subjects were considered for the administration of tests. The skill tests norms were constructed on the basis of the findings of the statistical analysis. The standardized norms are constructed.

Introduction

The physical fitness or condition is the sum total of five motor activities namely, strength, speed, endurance, flexibility and Coordinative abilities. These five motor abilities and their complex forms are the basic prerequisites for human motor action. Therefore the sports performance in all sports depends to a great extent on these abilities improvement and maintenance of physical fitness or condition is most important. The Kabaddi game, characterised by high intensity motor activities, places upon players a wide spectrum of requirements on all their capabilities. Dasondhi and Karkare (Jan., 2016) constructed of physical fitness test norms for under 19 cricketers in Central Zone Vidarbha Cricket Association, Rajasthan Cricket Association, Madhya Pradesh Cricket Association, Chhattisgarh State Cricket Sangh and Uttar Pradesh Cricket Association. Ramachandra and Gasti (2015) constructed of physical fitness norms for adolescent girls. The purpose of the present study was to construct physical fitness norms for adolescent girls of Karnataka state. The coaches are select the appropriate kabaddi players by using the fitness tests only, the main object for this study is to construct the norms for kabaddi skill tests.

Methodology

Main objective of the study was to construct norms for kabaddi skill tests. For this purpose 500 State Level and south Zone inter university Kabaddi players of south India were randomly selected

Selection of test items

For this study, the researcher identified test variables by factor analysis. Nine factors were identified viz. agility, coordination, reading ability, flexibility, back strength, muscular strength, static strength, speed and cardiovascular endurance. Total 500 kabaddi players were randomly selected, the researcher personally visited during coaching camps and administered tests to 500 subject. Raw scores were converted into standard scores represents by sigma scale has been developed for kabaddi players.

Statistical techniques

The data, which was collected by administering test, was statistically treated to develop norms for all the test items. Two scales, namely, Percentile Scale and 7 Sigma Scale were constructed. Further the scores were classified into five grades i.e., Excellent, Good, Above Average, Average, Below Average, Poor and Very Poor.

RESULTS

The 9 test items, selected one from each factor, were included in the Kabaddi Skill Ability Test Battery. Seven Sigma Scale was constructed and further the scores were classified into five grades i.e., Excellent, Good, Above Average, Average, Below Average, Poor and Very Poor, a norm was developed.

Grading scale for the Interpretation of Foot Work test Scores of Kabaddi players

Grade	Evaluation	Alphabetical Grade
Excellent	Below 19.478	A
Good	19.479 to 22.572	B
Above Average	22.573 to 25.666	C
Average	25.667 to 31.854	D
Below Average	31.855 to 34.948	E
Poor	34.949 to 38.042	F
Very Poor	Above 38.043	G

Grading scale for the Interpretation of Reaction Ability Scores of Kabaddi players

Evaluation	Scores	Alphabetical Grade
Excellent	Above 29.546	A
Good	27.082 to 29.545	B
Above Average	24.618 to 27.081	C
Average	19.690 to 24.617	D
Below Average	17.226 to 19.689	E
Poor	14.762 to 17.225	F
Very Poor	Below 14.761	G

Grading scale for the Interpretation of Riding Skill test scores of Kabaddi players

Evaluation	Scores	Alphabetical Grade
Excellent	Below 9.348	A
Good	9.349 to 10.567	B
Above Average	10.568 to 11.786	C
Average	11.787 to 14.224	D
Below Average	14.225 to 15.443	E
Poor	15.444 to 16.662	F
Very Poor	16.663 Above	G

Grading scale for the Interpretation of Foot Touch Reach test scores of Kabaddi players

Evaluation	Scores	Alphabetical Grade
Excellent	185.514 Above	A
Good	174.100 to 185.513	B
Above Average	162.686 to 174.099	C
Average	139.858 to 162.685	D
Below Average	128.444 to 139.857	E
Poor	117.030 to 128.443	F
Very Poor	Below 117.029	G

Grading scale for the Interpretation of Backward Shot Throw test scores of Kabaddi players

Evaluation	Scores	Alphabetical Grade
Excellent	14.267 Above	A
Good	13.132 to 14.266	B
Above Average	11.997 to 13.131	C
Average	9.727 to 11.996	D
Below Average	8.592 to 9.726	E
Poor	7.457 to 8.591	F
Very Poor	Below 7.456	G

Grading scale for the Interpretation of Push Ups test scores of Kabaddi players

Evaluation	Scores	Alphabetical Grade
Excellent	48.987 Above	A
Good	43.184 to 48.986	B
Above Average	37.381 to 43.183	C
Average	25.775 to 37.380	D
Below Average	19.972 to 25.774	E
Poor	14.169 to 19.971	F
Very Poor	Below 14.168	G

Conclusion

The playing ability performance (overall performance) scores of the players were interpreted by using a grading scale on the basis of 7-sigma scale as A, B, C, D, E, F & G or Excellent, Good, Above Average, Average, Below Average, Poor and Very Poor respectively according to their overall performance score based on the Hull Scale Norm, which was developed for all the 9 test items. The test constructed measured nine different skills namely foot work, reaction ability, raiding footwork, forward medicine ball throws, push ups, grip strength left, grip strength right, leg thrust, defensive foot work and breath holding capacity.

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Assessment Of Adjustment Level Between Basketball And Handball Female Players

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Abstract

The purpose of the study was to compare the adjustment level between Basketball and Handball female players. The samples of the study was conducted on 60 female players (30 Basketball and 30 Handball) female players who had minimum participated at least in the national level tournaments. Only Sirsa district was selected for the present study. The age ranged between 18-29 years. Only Social adjustment and Emotional adjustment was measured for the study. To carry out any type of research "Bell adjustment inventory by "S.M. Mohsin" Hindi version 1934 was used to measured total adjustment and data was analysis by 't' test. Keywords Adjustment level, Female Basketball and Handball.

Introduction

Adjustment attempts to satisfy needs by over-coming both inner and outer abstracts and by adopting circumstances. The learning about adjustment means analyzing two things interval make-up and internal personal or social behavior. Adjustment is dynamic process by which organizes mart their needs. Physical education and related activities satisfy many of these needs.

Methodology

In this study 60 female players (30 Basketball female players) and 30 (Handball female players) were selected from Sirsa District in Haryana. The age ranged between 18-29 years. Only Social adjustment and Emotional adjustment was measured for the study. To carry out any type of research "Bell adjustment inventory by "S.M. Mohsin" Hindi version 1934 was used to measured total adjustment and data was analysis by 't' test.

Table -1 Comparison of Social adjustment between Basketball and Handball female players

Game	N	Mean	S.D.	't'
Basketball (F.P)	30	12.30	.53	3.47*
Handball (F.P)	30	12.71	.43	

Significant at 0.05 levels

The mean value in case of Basketball and Handball female players is 12.30 & 12.71 respectively and S.D is .53 & .43 and the 't' value obtain was 3.47 There exist significant difference at 0.05 level. Graphical representation between Social adjustment between Basketball and Handball female players

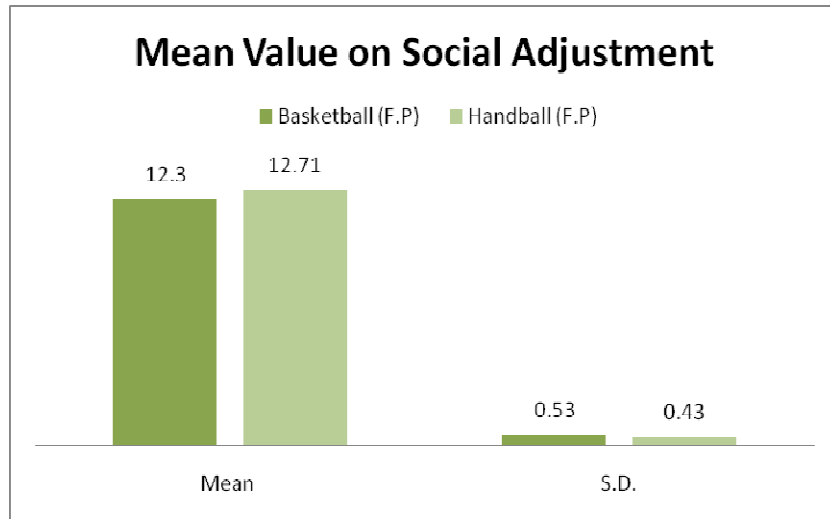
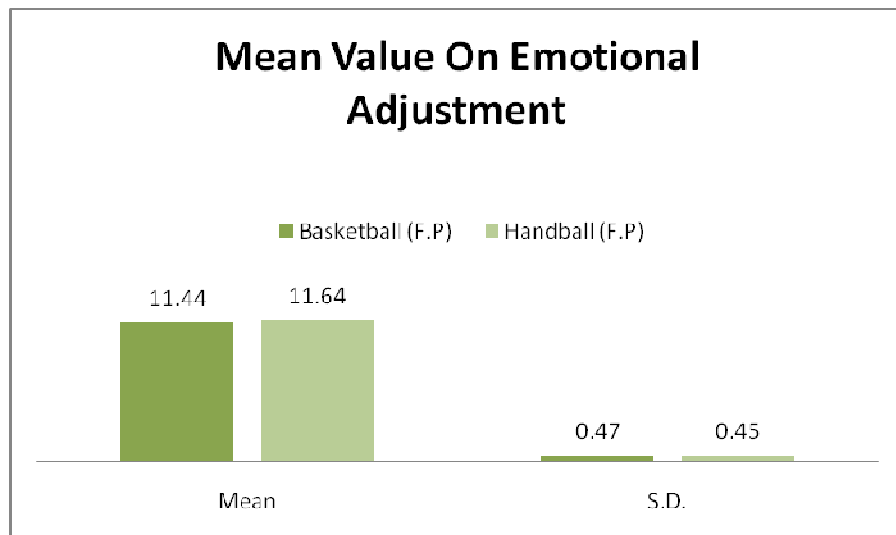


Table- 2 Comparison of Emotional adjustment between Basketball and Handball female players

Game	N	Mean	S.D.	t'
Basketball (F.P)	30	11.44	.47	1.98*
Handball (F.P)	30	11.64	.45	

Significant at 0.05 level

The mean value in case of Basketball and Handball female players is 11.44 & 11.64 respectively and S.D is .47 & .45 and The 't' value obtain was 1.98, There exist no significant difference at 0.05 level. Graphical representation between Emotional adjustment between Basketball and Handball Female players



Conclusion of the study

Significant difference was found on social adjustment between the mean score of Basketball and Handball female players of Sirsa district in Haryana.

Basketball female players were significantly more adjustable than the Handball female players of Sirsa district in Haryana.

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Sports For The Person With Physical Disability

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Abstract

The regime will roll out confirmatory programs for the sports persons neglected another way to facilitate them to take to sports with buoyancy, appreciate their impending without reticence and rise to the magnificence they are competent of without fail. It will reach out to the distant villages and packed urban neighborhoods and make certain exploitation of the obtainable and expansion of new sports amenities in line with the preferences of the people/residents. The sports department shall take all obligatory steps to meet sports needs of differently-abled persons.

KeywordsSports, Physical deficiency, Government, Haryana.

Introduction

The phrase disability is unadventurously worn to refer to attributes that are harsh enough to get in the way with, or prevent, normal day-to-day activities. According to the UN Convention on the Rights of Persons with Disabilities, "persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others."

The National Centre on Physical Activity and Disability believes that exercise is for everybody. Having a disabling condition does not mean that you cannot be physically active. The social and psychological benefits of exercise and sport participation are not exclusive to the able bodied and there can be major improvements in self-esteem and social integration through an active lifestyle (Webborn 2000). The benefits of

being active are enormous for individuals with a disability, and society as a whole, while prolonged physical inactivity is associated with long term risks of disease in people with or without a disability.

Details are presented on the numbers of persons with a disability or LTC who participated in sport and physical recreation in the previous 12 months, prior to interview. Consideration is firstly given to total participation rates i.e. all participant roles. The term participant is defined as either: a player; coach, instructor or teacher; referee, umpire or club official; committee member or administrator. A person may have a playing and non-playing role and is then represented in more than one role category.

People with a Disability in Sport

In 1998, the President's Council on Physical Fitness and Sports issued a research report which clearly identified several important findings related to sport and physical activity. Highlights include the following:

Exercise and sport can be used as a therapeutic or preventative intervention for enhancing Physical and mental health for adolescents.

Regular physical activity helps reduce symptoms of stress and depression.

Sport participation enhances mental health in a variety of ways.

Barriers Faced in Physical Activity Participation

There are many barriers inherent and ecological faced by people with disabilities when participating in physical activity. The Allied Dunbar Study 1992 branded a number of barriers that faced adults in the general inhabitants who participated in physical activities and these incorporated motivation, availability and time, these are barriers that are also faced by people with physical and sensory disabilities. Intrinsic barriers include not having knowledge about the benefits of physical activity. There is very little information available to people with disabilities about the benefits of activity for their main condition or its potential in preventing secondary complications occurring. This lack of knowledge can lead to uncertainty occurring for people with disabilities as to whether physical activity is beneficial or harmful to the person's condition (Health Education Authority 1998). People with disabilities also face the barrier of their own attitude where they may feel frustrated about lost abilities together with embarrassment and loss of dignity in front of others participating in the activity (Health Education Authority 1998).

Athletes by Disability Classification

Wheelchair Athletes.,Athletes with an Amputation.Athletes with Cerebral Palsy.
Athletes with Visual Impairment.Athletes with Mental Impairmen.

Participation and Inclusion

It is important for a person with a disability to become involved in physical activity, as they generally lead a more sedentary life compared to the general public. In the European Charter for Sport for All: Disabled People it recommended that "sport for all" should include individuals with disabilities because.

- (1) They have the same rights to sport as non-disabled persons.
- (2) Sport adds to the quality of life.
- (3) Athletes with disabilities can compete on the elite level.
- (4) Persons with disabilities receive both physiological and social benefits.

Participation in exercise has also a role to play in rehabilitation and supporting social contacts, and this can provide people with disabilities with an outlet to enjoy themselves. People with a disability traditionally participate in sport and active leisure within a disability environment i.e. Special Olympics organization or Paralympics group and not in an everyday integrated situation. This situation is being tackled in Ireland through the Department of Equality and Law reform "equal participation". This programme commits the government to take specific action to end discrimination and to ensure equal opportunity for participation by all people in Irish life. A key challenge identified by the Irish Sports Council is the need to promote social inclusion and equity and widening the accessibility of sport to all.

Health benefits for physical disable person

Comprehensive research has shown there to be many health benefits from regular physical activity, including: Superior health. Puts you in a optimistic mood. Helps control weight. Gives you more power. Helps you unwind and sleep better. Helps keep your blood pressure levels healthy. Helps in decrease stress, depression and anxiety. Enhances your self-esteem and self-confidence. Helps in to keep your cholesterol levels healthy. Builds stronger muscles and bones. Better posture and balance.



Conclusion

People with different physical disabilities experience several generic, but also specific barriers and facilitators of sports participation. Both generic and specific barriers and facilitators should be included in sport stimulation programs to increase sports participation of people with physical disabilities. In order to do so, the following considerations should be kept in mind: Persons with a physical disability should have a positive attitude towards sports participation and have to be (internally) motivated to become active. Rehabilitation professionals should emphasize health and psychosocial benefits of sports participation. Rehabilitation professionals should provide information about strategies to overcome barriers and about local sports possibilities. Municipalities should improve the infrastructure such as transport and sports facilities, and collaborate with other health care authorities regarding funding. Municipalities should also improve disability sports knowledge, to fully integrate sports participation of people with and without physical disabilities.

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Effect Of Concurrent Aerobic And Anaerobic Training On Selected Physical Fitness Components

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Abstract

The basic principle of this study was to evaluate the effectiveness of twelve weeks concurrent aerobic and anaerobic training in enhancing the potentiality on selected physical fitness components. For the purpose of study, thirty male Khokho players from Guntur District, Andhra Pradesh, aged 18 to 20 years took part in the study. The subjects were randomly assigned to either control (n=15) or concurrent training (n=15) groups. The training regimen lasted for twelve weeks. The selected criterion variables namely: speed, cardio respiratory endurance, and agility were assessed using standard tests and procedures, prior to and immediately after the training programme. Analysis of covariance was employed to establish degree of significant adaptation on chosen criterion variables. The findings of the study revealed that twelve weeks of concurrent training has a statistically significant influence in augmenting potentiality of the selected physical fitness components. Key words: Aerobic, Anaerobic and fitness component.

Introduction

In this modern era of scientific knowledge man is making rapid progress in all walks of life and it is true in the area of games and sports. In addition, scientific knowledge has revolutionised the standards of human performance in sports disciplines. The sportspersons are now trained systematically using well refined technology for peak performance in their respective sports, with least expenditure of energy and time. Physical fitness is nowadays considered as one of the most important health markers in childhood (Ortega *et al.*, 2008). Accordingly, in the past decades numerous countries have been promoting physical fitness improvement among young people in diverse ways. It is known that planning long-term fitness programs is the best way to improve these components (Donnelly *et al.*, 2009).

In order to have the utmost efficiency, consistent improvement and balanced abilities, a sportsperson must participate in year round conditioning programs. For that they must put their bodies under a certain amount of stress to increase physical capabilities. Physical exercise is extremely important for maintaining physical fitness including healthy weight; building and maintaining healthy bones, muscles, and joints; promoting physiological well-being; and strengthening the immune system. To improve or maintain a desired level of physical fitness, there is a need to constantly administer an adequate training intensity while exercising. Different training modalities are used for the development of different features of physical fitness, as each sportsperson requires a different types and levels of physical composure.

Exercise is considered to be a more intensive physical activity than the normal activities of daily living. There are two main types of exercises: aerobic exercise and anaerobic exercise. Aerobic exercise is one of a number of different exercises that makes the heart and lungs work harder. Aerobic exercise increases the need for oxygen, which in turn benefits many of the body's systems. Aerobic exercise is any continuous movement that uses large muscle groups and engages them for a long period of time.

Anaerobic is a technical word, which literally means without oxygen, as opposed to aerobic. Anaerobic exercise, a form of exercise at high work intensity during which the needs of muscle metabolism for oxygen exceeds the capacity of the circulation to supply it and an oxygen debt is incurred.

Aerobic exercise and fitness can be contrasted with anaerobic exercise. The two types of exercise differ by the duration and intensity of muscular contractions involved, as well as by how energy is generated within the muscle. Aerobic and anaerobic training focuses on very different results on the body, it is easy to assume there are many different adaptations the body must make if one were to choose exclusively aerobic or anaerobic training.

Longer endurance track events, which rely on sub maximal aerobic pathways, athletes participating in short track events must rely on a combination of aerobic and anaerobic pathways (Neumann, 1992). Concurrent training, relative to resistance training alone, has been shown to result in decrements in strength (Dolezal & Potteiger 1998; Hakkinen *et al.* 2003; Hickson *et al.* 1980), hypertrophy (Hickson *et al.* 1980; McCarthy *et al.* 2002), and power (Hakkinen *et al.* 2003; Hennessy & Watson 1994; Hunter, Demment & Miller 1987; Leveritt & Abernethy 1999). However, additional studies have found little to no decrements in strength training gains with the addition of endurance training (Balabinis, *et al.* 2003; McCarthy *et al.* 1995; McCarthy *et al.* 2002). There is a scarcity of research work carried out to identify the impact of concurrent aerobic and anaerobic training modalities. Hence, the investigator proposed to examine whether physical fitness components could be significantly influenced by means of concurrent aerobic and anaerobic training protocol.

Methodology

Subjects and Variables

For the purpose of this study, thirty male Khokho players from Guntur District, Andhra Pradesh, aged 18 to 20 years were recruited, with their consent. All of them were healthy, nonsmoking and with a negative medical history. The selected subjects were randomly assigned to both the control and concurrent training groups of fifteen each. The selected criterion variables were assessed using standard tests and procedures, prior to and immediately after the training regimen. The instruments used for testing the criterion variables were standard and reliable as they were purchased from the reputed companies, and moreover they were attuned and tested for its accuracy. The standard tests and instruments used for assessing the criterion variables are presented in table 1.

Table

1

Criterion Variables and Tests

SL. No.	Variables	Tests / Instruments	Unit of Measurement
1.	Speed	30 metres Dash	Time in Seconds
2.	Cardio respiratory Endurance	Cooper's 12 minute Run	Distance in Metres
3.	Agility	5-10-15 metres Shuttle Run	Time in Seconds

Training Protocol

The exercise training program of the experimental group consisted of running for distance in time and then jogging or walking for a short period that allows partial to complete recovery of the heart rate. Fifteen subjects participated in the concurrent aerobic and anaerobic training program. The subjects confined to the experimental group trained two sessions a day, four days a week for twelve weeks, while the control group did not participate in any specialized training during the period of study. In the morning aerobic training was administered, whereas in the evening anaerobic training was incorporated. The training load was progressively upgraded by increasing the number of repetitions / sets, or increasing quality of sprinting by means of intensity in percentage, or decreasing the recovery period between repetitions/sets, or any two of these components of over loading principles in sports training. Over loading was done periodically once or twice in weeks. Further, the prescription of exercise load had taken care of stabilization to a training intensity. The intensity of aerobic training ranges between 60% and 70% of their target personal best for 200 metres sprint time, while the intensity of anaerobic training ranges from 80% to 88% of their target personal best for 100 metres sprint time.

Experimental Design and Statistical Procedure

The experimental design used for the present study was random group design involving thirty subjects. Analysis of covariance (ANCOVA) was used as a statistical procedure to establish the significant difference, if any, existing between pretest and posttest data on selected criterion variables. The level of significance was accepted at $P < 0.05$.

Results and Discussions

The descriptive analysis of data collected on selected physical fitness components prior to and immediately after twelve weeks of concurrent aerobic and anaerobic training is presented in table 2.

Table 2: Computation of Mean and Standard Deviation on Selected Physical Fitness Components

Variables	Groups	Pretest		Posttest	
		\bar{x}	σ	\bar{x}	σ
Speed	Control	3.92	0.17	3.87	0.18
	Experimental	4.00	0.24	3.79	0.30
Cardiorespiratory Endurance	Control	2466.90	230.41	2381.70	279.44
	Experimental	2466.80	248.48	2622.00	232.72
Agility	Control	23.65	0.68	23.16	0.74
	Experimental	24.35	1.17	23.57	0.97

The graphical representation of data on selected physical fitness components of control group and concurrent aerobic and anaerobic training group was illustrated in figure 1 to 3.

Figure 1: Graphical illustration of Data on Speed

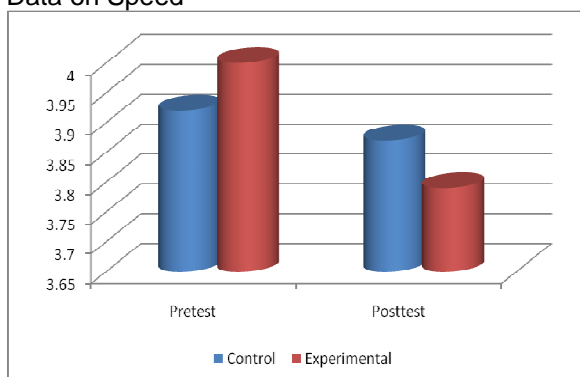


Figure 2: Graphical illustration of Data on Cardiorespiratory Endurance

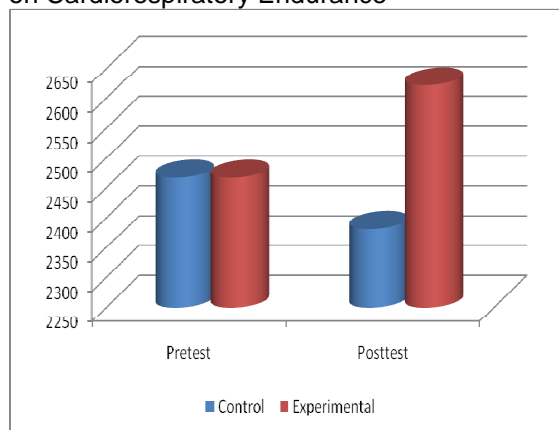
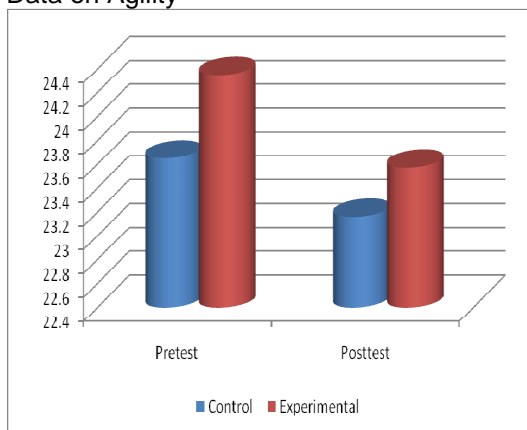


Figure 3: Graphical illustration of Data on Agility



Analysis of covariance was employed to determine the significant influence of concurrent aerobic and anaerobic training on selected physical fitness components and it is presented in table 3.

Table 3: Analysis of Covariance on Selected Physical Fitness Components of Control Group and Concurrent Aerobic-Anaerobic Training Group

Variables	Groups	Adjusted Mean	SOV	Sum of Squares	df	Mean Square	'F' ratio	Sig.
Speed	Control	3.91	B	0.189	1	0.189	8.723*	.006
	Experimental	3.75	W	0.584	27	0.022		
Cardiorespiratory Endurance	Control	2382.00	B	433428.691	1	433428.691	28.779*	.000
	Experimental	2622.00	W	406630.186	27	15060.377		
Agility	Control	23.42	B	0.076	1	0.076	0.302	.587
	Experimental	23.31	W	6.753	27	0.250		

* Significant at 0.05 level.

The results of the study shows that statistically significant difference exists between control and experimental groups for the adjusted post test means on speed and cardiorespiratory endurance as the obtained $F(1, 27)$ is 8.723 ($P = 0.006$) and 28.779 ($P < 0.05$) respectively. However, there was no significant difference between control and experimental groups for the adjusted post test means on agility as the obtained $F(1, 27)$ is 0.302 ($P = 0.587$). It reveals that concurrent aerobic and anaerobic training has considerable influence on speed and cardiorespiratory endurance, but not on agility. The findings of the study is in par with the previous views of some that speed and cardio respiratory endurance is not inhibited when concurrent training relative to aerobic training. Yet, it appears that force at high velocities is affected more than force at low velocities (Dudley & Djamil 1985).

Conclusions

The result of this study demonstrated that, concurrent aerobic and anaerobic training with repeated bouts of a combination of different intensity running and recovery has significant influence on speed and cardio respiratory endurance.

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Effectiveness of Concurrent Aerobic And Anaerobic Training On Selected Strength Variables

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Abstract

The primary purpose of this study was to examine the efficacy of twelve weeks concurrent aerobic and anaerobic training in augmenting the selected strength variables. For the purpose of study, thirty male Khokho players from Guntur District, Andhra Pradesh, aged 18 to 20 years took part in the study. The subjects were randomly assigned to either control (n=15) or concurrent training (n=15) groups. The training regimen lasted for twelve weeks. The selected criterion variables namely: abdominal strength endurance and explosive power were assessed using standard tests and procedures, prior to and immediately after the training programme. Analysis of covariance was employed to establish degree of significant adaptation on chosen criterion variables. The findings of the study revealed that twelve weeks of concurrent training has a statistically significant influence in enhancing the capability on abdominal strength endurance and explosive power.

Introduction

In this modern era of scientific knowledge man is making rapid progress in all walks of life and it is true in the area of games and sports. In addition, scientific knowledge has revolutionised the standards of human performance in sports disciplines. The sportspersons are now trained systematically using well refined technology for peak performance in their respective sports, with least expenditure of energy and time. Adaptations to exercise training and the resultant performance improvements and training outcomes are highly specific to the mode of activity performed. The key components of a training program are the volume, intensity and frequency of exercise sessions. The sum of these inputs can term the training stimulus. (Hawley, 2009).

Physical fitness is nowadays considered as one of the most important health markers in childhood (Ortega *et al.*, 2008). Accordingly, in the past decades numerous countries have been promoting physical fitness improvement among young people in diverse ways. It is known that planning long-term fitness programs is the best way to improve these components (Donnelly *et al.*, 2009).

In order to have the utmost efficiency, consistent improvement and balanced abilities, a sportsperson must participate in year round conditioning programs. For that they must put their bodies under a certain amount of stress to increase physical capabilities. Physical exercise is extremely important for maintaining physical fitness including healthy weight; building and maintaining healthy bones, muscles, and joints; promoting physiological well-being; and strengthening the immune system. To improve or maintain a desired level of physical fitness, there is a need to constantly administer an adequate training intensity while exercising. Different training modalities are used for the development of different features of physical fitness, as each sportsperson requires a different types and levels of physical composure.

Exercise is considered to be a more intensive physical activity than the normal activities of daily living.

There are two main types of exercises: aerobic exercise and anaerobic exercise. Aerobic exercise is one of a number of different exercises that makes the heart and lungs work harder.

Aerobic exercise increases the need for oxygen, which in turn benefits many of the body's systems. Aerobic exercise is any continuous movement that uses large muscle groups and engages them for a long period of time. Anaerobic is a technical word, which literally means without oxygen, as opposed to aerobic. Anaerobic exercise, a form of exercise at high work intensity during which the needs of muscle metabolism for oxygen exceeds the capacity of the circulation to supply it and an oxygen debt is incurred. Aerobic exercise and fitness can be contrasted with anaerobic exercise. The two types of exercise differ by the duration and intensity of muscular contractions involved, as well as by how energy is generated within the muscle. Aerobic and anaerobic training focuses on very different results on the body, it is easy to assume there are many different adaptations the body must make if one were to choose exclusively aerobic or anaerobic training. Aerobic exercise, which involves prolonged muscular work, increases aerobic capacity through numerous adaptations at the cardio respiratory and muscular levels (Chromiak & Mulvaney, 1990). Repeated bouts of endurance exercise may cause increases in slow-twitch fiber area and possibly even elicit a conversion of fast-twitch fibers to slow-twitch fibers (Simoneau *et al.*, 1985). Resistance training in contrast to endurance training contains the low-repetition performance with near maximal muscular contractions and has been shown to increase maximal contractile force (Gergley, 2009). The magnitude of hypertrophy or strength improvements depends on the volume and intensity of the training stimulus (Docherty & Sporer, 2000). Only the muscles which are exercised will experience adaptive changes, whereas non-exercised muscles will experience little or no training effect (Bottinelli *et al.*, 1999). Longer endurance track events, which rely on sub maximal aerobic pathways, athletes participating in short track events must rely on a combination of aerobic and anaerobic pathways (Neumann, 1992). Concurrent training, relative to resistance training alone, has been shown to result in decrements in strength (Dolezal & Potteiger 1998; Hakkinen *et al.* 2003; Hickson *et al.* 1980), hypertrophy (Hickson *et al.* 1980; McCarthy *et al.* 2002), and power (Hakkinen *et al.* 2003; Hennessy & Watson 1994; Hunter, Demment & Miller 1987; Leveritt & Abernethy 1999). However, additional studies have found little to no decrements in strength training gains with the addition of endurance training (Balabinis, *et al.* 2003; McCarthy *et al.* 1995; McCarthy *et al.* 2002). There is a scarcity of research work carried out to identify the impact of concurrent aerobic and anaerobic training modalities. Hence, the investigator proposed to examine whether physical fitness components could be significantly influenced by means of concurrent aerobic and anaerobic training protocol.

Methodology

Subjects and Variables: For the purpose of this study, thirty male Khokho players from Guntur District, Andhra Pradesh, aged 18 to 20 years were recruited, with their consent. All of them were healthy, nonsmoking and with a negative medical history. The selected subjects were randomly assigned to both the control and concurrent training groups of fifteen each. The selected criterion variables were assessed using standard tests and procedures, prior to and immediately after the training regimen. The instruments used for testing the criterion variables were standard and reliable as they were purchased from the reputed companies, and moreover they were attuned and tested for its accuracy. The standard tests and instruments used for assessing the criterion variables are presented in table 1.

Table 1 Criterion Variables and Tests

SL. No.	Variables	Tests / Instruments	Unit of Measurement
1.	Abdominal Strength Endurance	Bent Knee Sit-Ups	Numbers
2.	Explosive Power	Standing Broad Jump	Distance in Metres

Training Protocol The exercise training program of the experimental group consisted of running for distance in time and then jogging or walking for a short period that allows partial to complete recovery of the heart rate. Fifteen subjects participated in the concurrent aerobic and anaerobic training program. The subjects confined to the experimental group trained two sessions a day, four days a week for twelve weeks, while the control group did not participate in any specialized training during the period of study. In the morning aerobic training was administered, whereas in the evening anaerobic training was incorporated. The training load was progressively upgraded by increasing the number of repetitions / sets, or increasing quality of sprinting by means of intensity in percentage, or decreasing the recovery period between repetitions/sets, or any two of these components of over loading principles in sports training. Over loading was done periodically once or twice in weeks. Further, the prescription of exercise load had taken care of stabilization to a training intensity. The intensity of aerobic training ranges between 60% and 70% of their target personal best for 200 metres sprint time, while the intensity of anaerobic training ranges from 80% to 88% of their target personal best for 100 metres sprint time.

Experimental Design and Statistical Procedure

The experimental design used for the present study was random group design involving thirty subjects. Analysis of covariance (ANCOVA) was used as a statistical procedure to establish the significant difference, if any, existing between pretest and posttest data on selected criterion variables. The level of significance was accepted at $P < 0.05$.

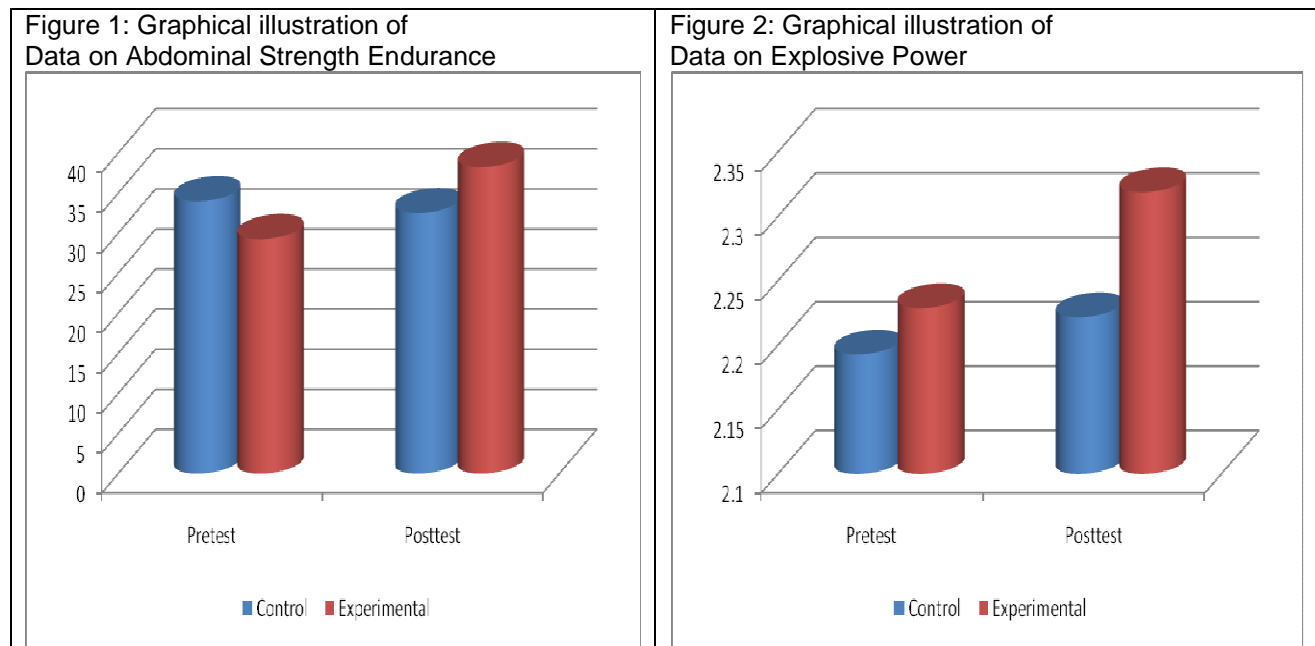
Results and Discussions

The descriptive analysis of data collected on selected strength variables prior to and immediately after twelve weeks of concurrent aerobic and anaerobic training is given in table 2.

Table 2 Computation of Mean and Standard Deviation on Selected Strength Variables

Variables	Groups	Pretest		Posttest	
		\bar{x}	σ	\bar{x}	σ
Abdominal Strength Endurance	Control	34.000	10.447	32.533	9.342
	Experimental	29.267	8.884	38.267	6.933
Explosive Power	Control	2.193	0.107	2.222	0.103
	Experimental	2.229	0.213	2.319	0.211

The graphical representation of data on selected strength variables of control group and concurrent aerobic and anaerobic training group was illustrated in figure 1 and 2.



Analysis of covariance was employed to determine the significant influence of concurrent aerobic and anaerobic training on selected strength variables and it is presented in table 3.

Table 3

Analysis of Covariance on Selected Strength Variables of Control Group and Concurrent Aerobic-Anaerobic Training Group

Variables	Groups	Adjusted Mean	SOV	Sum of Squares	df	Mean Square	'F' ratio	Sig.
Abdominal Strength Endurance	Control	30.697	B	623.739	1	623.739	54.409	.000
	Experimental	40.103	W	309.523	27	11.464		
Explosive Power	Control	2.238	B	.031	1	.031	6.542	.016
	Experimental	2.302	W	.126	27	.005		

* Significant at 0.05 level.

The results of the study shows that statistically significant difference exists between control and experimental groups for the adjusted post test means on abdominal strength endurance and explosive power as the obtained $F(1, 27)$ were 54.409 ($P < 0.05$) and 6.542 ($P = 0.016$) respectively. It reveals that concurrent aerobic and anaerobic training has substantial influence on abdominal strength endurance and explosive power. Muscular strength has been reported to increase a little or not at all as a result of endurance training (Gergley, 2009; Sillanpää *et al.* 2008). A decrease in muscle fiber size may accompany endurance training, a change that could negatively impact muscle strength and power (Tanaka & Swensen, 1998). In contrast to that, other studies have found that endurance training may promote improvements in leg press or knee extension strength in previously untrained subjects (Lo *et al.*, 2011; Glowacki *et al.*, 2004). Complex exercises that involve movement at more than one joint (multi-joint exercises), fixator muscles used in support of the prime movers may have to increase in strength or improve their ability to activate and coordinate contractions before hypertrophy of the prime movers occurs (Fleck *et al.*, 2006). Improvements in both strength and cardiorespiratory fitness are important and concurrent training seems to be the best strategy to enhance those variables (Cadore *et al.*, 2010).

Conclusions

The result of this study demonstrated that, concurrent aerobic and anaerobic training with repeated bouts of a combination of different intensity running and recovery has significant influence on abdominal strength endurance and explosive power.

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Impact Of Badminton Training On Physical Parameters Of Players

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Introduction

Badminton is considered to be merely a slow and light game for children, a game that can be played outdoors or Indoor. Badminton requires jumping, changing directions, rapid arm movements and a broad range of body postures (Cabello et al. 2003), and also requires extremely explosive movements to be carried out over a small court area. Changes in direction are necessary after most shots and all movements must be completed quickly with good technique and control. Therefore, it is vital that programs of fitness assessment should reflect the very exact necessities of the sport.

Objectives of the Study

There is lack of information regarding the influence of basic technical training on some physical capacities and balance in children, and this study would help sports facilitators develop skill and competitive fitness and conditioning programs for badminton athletes, and think about special considerations about their skill and fitness training (Fletcher 1994). Thus, this study aims to investigate the effect of the basic technical skills training on the balance of some physical parameters in healthy, beginner level children.

Methods

Participants and Experimental Design

The experimental group included beginner level badminton players aged between 8-10 years old (female = 10, male = 10), while the control group included Elementary School students from the same age group (female = 10, male = 10).

Procedures

Before the collection of data, the objectives of the study and methodology of each test were explained to the subjects. An informed consent form was taken from the subjects signed by their parents or guardians. All of the subjects participated in the study were absent of any health problems or disability. The experimental group underwent the summer badminton training program for eight weeks, and five days per week. Each session was held for 60 minutes, while the control group was not exposed to any type of training. The fundamentals and practice of badminton skills such as passing, throwing, and hitting were implemented during the 8 weeks of the training. No special strength training was scheduled so that the subjects would not be exposed to harmful effects of strength training for this age group. The measurements were completed before and after 8 weeks of the training program. They included the assessments of length measurement, weight measurement, vertical jump, horizontal jump, and balance tests.

Vertical Jump Test Protocol

Procedure: The subject stands side on to a wall and reaches up with the hand nearest to the wall. Keeping the feet flat on the ground, the point of the fingertips is marked or recorded. This is also known as standing reach height. The subject then stands away from the wall, and leaps vertically as high as possible using both arms and legs to assist in projecting the body upwards. The jumping technique does or do not use a countermovement. Attempt to touch the wall at the highest point of the jump. The difference in distance between the standing reach height and the jump height is the score. The best of three attempts is recorded score.

Horizontal Jump Test Protocol

The subjects stand behind marked line on the ground in feet to some extent apart. A two- foot takeoff and landing was used, with swinging arms and bending of the knees to provide forward drive. The subjects tried to jump as far as possible, landing on both feet without falling backwards. The measurement was taken from takeoff line to the nearest point of contact on the landing. The subject had to land with the feet together and stay upright. The distance was calculated from the initial line to the end where the heel touched the ground upon finishing the test. The subjects tried it three times, and their best score was recorded.

Results: There were no significant differences between the training and control groups' age, height and the mean body weight ($p > 0.05$) after 2 months of training. There are significant differences in the vertical jumper performance between training and control groups in both the pre-test ($t = -2.563, p < 0.05$) as well as the post test ($t = -2.337, p < 0.05$). Similar scores in standing broad jump performance in the pre test ($t = 6.476, p < 0.05$) and post test ($t = 7.448, p < 0.05$) were determined between the groups (Table).

After two months of training it was determined that the vertical jump increased for the experiment group ($t = -5.467, p < 0.05$). It was determined that the standing broad jump performance show the significant improvement in performance for the exercise group ($t = -5.045, p < 0.05$). Interestingly, the control groups' vertical jump ($t = -2.091, p < 0.05$) and standing broad jump ($t = -2.214, p < 0.05$) values were found to increase significantly after 8 weeks. The mean differences for the vertical jump and vertical jump test parameters did not differ between training and control groups (Vertical jump: $t = .413, p < 0.05$, standing broad jump: $t = .901, p < 0.05$).

Table I: Subjects' demographic characteristics

Variables	Groups	Pre- test		Post-test	
		\bar{X}	Σ	\bar{X}	Σ
Age (years)	Training	9.54	1.94	10.05	1.82
	control	10.05	0.686	10.07	1.67
Height (cm)	Training	141.50	7.80	142.65	8.04
	control	145.00	6.48	146.60	6.73
Body Weight (kg)	Training	37.67	8.29	38.69	8.59
	control	36.44	8.36	37.39	8.64

For before and after training, the subjects' average vertical jump scores are presented in Table II. There were significant differences in the vertical jump performance between training and control groups in both the pre-test ($t = -2.563, p < 0.05$) as well as in the post test ($t = -2.337, p < 0.05$). Similar scores in standing broad jump performance in the pretest ($t = 6.476, p < 0.05$) and post test ($t = 7.448, p < 0.05$) were determined between the groups.

Table II: Mean and standard deviations of vertical jump and standing broad jump for pre- and post-test

Variables	Groups	Pre- test		Post-test	
		\bar{X}	σ	\bar{X}	σ
Vertical Jump	Training	23.46	3.84	24.92	3.92
	control	26.20	3.24	27.40	3.03
Standing Broad Jump	Training	128.42	17.92	133.77	18.75
	control	98.70	11.35	102.44	9.24

Statistically significantly different from pretest, at $p < 0.05$.

Statistically significantly different from Training Group, at $p < 0.05$.

After two months of training, it was determined the vertical jump increased for the experiment group ($t = -5.467, p < 0.05$).

It was determined that the standing broad jump performance showed a significant improvement for the exercise group ($t=-5.045$, $p<0.05$). Interestingly, the control groups vertical jump ($t=-2.091$, $p<0.05$) and standing broad jumping jump ($t = -2.214$, $p <0.05$) values increased significantly after 8 weeks (Table III). Table III: Mean differences between pre- and post test

Variables	Groups	\bar{X}	σ
Vertical Jump	Training	1.46	1.36
	control	1.20	2.57
Standing Broad Jump	Training	5.35	5.40
	control	3.65	7.37

Both parameters did not differ between training and control groups (Vertical jump: $t=.413$, $p<0.05$, standing broad jump: $t = .901$, $p <0.05$).

Discussion:

Compared to other sports, not many studies investigate the physical and physiological profiles of badminton players in the literature. The results of this study showed that the training program does not have any significant effect on the vertical jumping and standing broad jumping in pubertal badminton players while balance performance are affected positively by the program.

This study assessed the vertical jumping and standing broad jumping performances. It is suggested that competitive badminton consists of very explosive actions completed in a small area. The results of this study explored that the vertical jump and standing jump parameters did not differ between training and control groups, standing broad jump. Surprisingly, training and control groups vertical jump and standing broad jumping jump values were found to increase significantly after 8 weeks. Thus, improvements in both groups may be attributed to the rapid growth of children for this age group. It was also recommended that racket sports such as table tennis, tennis, badminton and squash require a combination of psychological stability, tactical analysis, motor coordination as well as strong physical and physiological attributes. According to the results of the study, eight weeks of badminton training improves balance performance of pubertal children.

Conclusion:

The result of this study could be helpful for coaches and athletes to improve performance through selection and adjust suitable training program. The main goal of sports facilitators is to develop the players' physical performance and proper growth of children athletes. To develop these abilities, the training circumstances must be transformed continually until positive adaptations in athletes occur and then athletic performance improves and the most significant part of training is amount and concentration. Because of its attractiveness, badminton could be well adopted for children. The game with its basic rules is simple and could be started with it at an early age.

Recommendations:

Children continue to grow and demonstrate expected increases in their strength. Therefore, any research to inspect strength gains in a child must combine an acceptable control to account for regular growth. The exercises such as rebounding and long jumping may be an indicator of readiness to participate in formal weight training exercises. A focus on harmless training and individual self-improvement must be of concern to sports facilitators instead of competition.

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Lipoprotein Among Physical Education Men Students Of Hyderabad

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Introduction

Weight Training: Weight Training Is A Common Type Of Strength Training For Developing The Strength And Size Of Skeletal Muscles. It Uses The Force Of Gravity (In The Form Of Weighted Bars, Dumbles Or Weight Stacks) To Oppose The Force Generated By Muscles Through Concentric Or Eccentric Contraction.

Circuit Training: Circuit Training Can Provide Vigorous Activity In A Number Of Fitness And Motor Ability Activities And Is Aimed At Developed All The Basic Physical Fitness Components Performed In An Interesting And Imaginative Fashion (Johnson 1971).

Purpose Of The Study : The Purpose Of The Study Is To Find Out The Effect Of Circuit Training And Weight Training On Plasma Glucose Low And High Density Lipoprotein Among Physical Education College Men Student Of Hyderabad

Methodology: The Investigator Randomly Selected 45 Students From College Of Physical Education And Were Divided Into 3 Equal Groups. Group One Is The Experimental Group, Group Two Is The Experimental Group, Group Three Is Control Group.

Selection Of Variables: For This Study Following Variables Were Selected

Plasma Glucose

High Density Lipoprotein And

3.Low Density Lipoprotein.

Dependent Variables:

Plasma Glucose Level - Blood Test

High Density Cholesterol -Blood Test

Low Density Cholesterol -Blood Test

Independent Variables:

Experimental Group1 -Circuit Training/Weekly 3 Days

Experimental Group2 -Weight Training/Weekly 3 Days

Control Group -No Training For This Group

Experimental Design:

This Study Is Consisting Of A Free Test And Post Test.For The Purpose 45 Physical Education College Men Students Were Selected At Random And Were Divided into three equal groups, assigning as experimental group1,experimental group2 and control group. pre test was conducted for all three groups on plasma glucose high density lipoprotein and low density lipoprotein. The experimental groups in participated their respective circuit and weight training for a period of 8 weeks on alternate days, post test was conducted on the above mentioned dependent variables after 8 weeks of the training period. The training program was scheduled at 4.30 to 5.30pm on alternate days of the week.

Method Of The Data Collection: Blood Sample Was Collected From Individuals Ear Lobe In The Morning With Empty Stomach To Check The Value Of The Individual Plasms Glucose High Density Lipoprotein And Low Density Lipoprotein, In Pre And Post Training Session. The Blood Sample Was Analysed In The Biochemistry Lab In Hyderabad.

Stastical Technique: Analysis Of Co-Variance Statistical Techniques Was Used To Find Out The Effect Of Circuit Training And Weight Training On Plasma Glucose, Low And High Density Lipoprotein Among Physical Education Men Students .To Find Out The Paired Mean Significant Differences Scheff's Post Hoc Test Was Used.

Computation Of Analysis Of Covariance Of Plasma Glucose:

the following table illustrate the statistical results of the effect of circuit training and weight training on plasma glucose of physical education college men students and ordered adjusted means and the difference between the mean's of the groups under study

TABLE1

MEANS	CON	EXP-1	EXP-2	S.V	S.S	D.F	M.S	T.F
Pre test	104.47	104.73	104.74	B	74.72	2	37.37	0.24
				W	6710.62	42	163.67	
Post test	104.47	91.95	96.40	B	1210.54	2	605.28	11.28
				W	2206.26	42	53.81	
Ad.post test	104.74	91.45	96.64	B	74.74	2	674.58	10.56
				W	6710.60	41	63.86	

Results Of Blood Glucose:

Table1 shows that the pre test means of experimental group1 experimental group2 and controlled groups were 104.73,104.74 and 104.47 respectively the obtained 'F' ratio was 0.23 lesser than the table 'f' ratio 3.23 hence pre test was not significant the post test means of circuit training on experimental group1 experimental group2 and controlled groups were 104.47,91.95 and 96.40 respectively the obtained s'f' ratio was 11.28 greater than the table 'f' ratio 3.23 hence post test was significant table1(a) is sheffe's post hoc test ordered and find means difference of blood glucose of different group different between experimental group1 and experimental group2 was 1.05 difference between experimental1 and controlled group was 25.9,difference between experimental group2 and controlled group was 7.6 respectively the obtained 'f' values all the three groups higher than the table value and all three computations were significant

Discussion Of Plasma Glucose:

The results indicated that the effect of circuit and weight training had significantly decreased in blood glucose level. When compared with the control group in terms of mean gains.to circuit and weight training has decreased blood glucose among the experimental groups analysis covariance of blood glucose carried out with the include of circuit and weight training and the results indicate the experimental group1 and experimental group2 were significant influenced in plasma glucose or blood glucose .

These results are found to be in good agreement with the earlier works done by different researchers . coggan et.al(1990) has proved that the training causes a decreased reliance on plasma glucose as an energy source during exercise performed at the same absolute intensity due to a lower rate of appearance ,disappearance and clearance.

Table-ii

Pre test Mean	90.19	90.26	90.28	B	0.046	2	0.24	0.001
				W	829.28	42	20.26	
Post test Mean	89.68	81.26	85.73	B	472.05	2	236.04	653*
				W	1481.24	42	20.26	
Adj. post test Mean	89.73	81.69	85.70	B	0.05	2	242.4	15.23*
				W	829.28	41	15.91	

Computation Of Analysis Of Covariance Of Ldl

RESULTS OF LDL :

Table II shows the analyzed data on LDL, the Pre test means of LDL, were 90.26 for Experimental Group I , 90.28 for Experimental Group II and 90.19 for Control Group. The obtained 'F' ratio 0.001 was lesser then the table 'F' ratio 3.23. Hence , the Pre test was not significant at 0.05 level of confidence for the degrees of freedom 2 and 42. The Post test means were 81.26 for Experimental Group I, 85.73 for Experimental Group II and 89.68 for Control Group. The obtained 'F' ratio 6.53 was higher then the table 'F' ratio 3.23 . Hence, the Post test was significant. Table II(a) shows the Scheffe's post hoc test of ordered adjusted final mean difference of Plasma Glucose of different groups. The difference between Experimental Group I and Experimental Group II was 4.01, Experimental Group I and Control Group was 8.01, and Experimental Group II and Control Group was 4.0.

DISCUSSION OF LDL:

There was a significant difference between pre and post training. The Experimental Groups' LDL level is decreased (90 and 96) because they are physically more active and their endocrine secretion is more suitable. As the sedentary person is physically less active their secretion of endocrine gland is less (104.40), automatically the chances are more for the cholesterol to get deposited in blood and arteries and leads to block the blood vessels. The higher the LDL cholesterol levels in the blood, the greater the heart disease risk.

TABLE—III

MEANS	Cont. Group	EXP-I	EXP-II	S.V	S.S	D.F	M.S	O.F
Pre test Mean	15.77	15.71	15.74	B	0.29	2	0.01	0.01
				W	49.34	42	1.20	
Post test Mean	15.71	15.52	15.59	B	0.42	2	0.21	0.26
				W	32.33	42	0.78	
Adj. post test Mean	15.75	15.58	15.57	B	0.03	2	0.16	0.55
				W	49.34	41	0.28	

COMPUTATION OF ANALYSIS OF COVARIANCE OF HDL

RESULTS OF HDL:

Table III shows the analyzed data on HDL. The Pre test means of HDL were 15.71 for Experimental Group I, 15.74 for Experimental Group II and 15.77 for Control Group. The obtained 'F' ratio 0.01 was lesser than the table 'F' ratio 3.23. Hence, the Pre test was not significant at 0.05 level of confidence for the degrees of freedom 2 and 42. The post test means were 15.52 for Experimental Group I, 15.59 for Experimental Group II and 15.71 for Control Group. The obtained 'F' ratio 0.26 was less than the table 'F' ratio 3.23. Hence, the post test was not significant at 0.05 level of confidence for the degrees of freedom 2 and 42. The obtained 'F' ratio 0.55 was less than the table 'F' ratio 3.23. Hence, the post test was not significant.

FINDINGS OF HDL RESULT : "good" cholesterol carries LDL back to the liver. It converts to single chain Lipoprotein and helps to prevent cholesterol buildup in blood vessels. Low HDL level increases the heart disease risk. The result surprisingly indicated that the sedentary person having (19.00) low HDL than the physically active person (21.00). In trained person, the result clearly indicated that there was optimum level of LDL, HDL in the blood than the sedentary men.

FINDING OF THE RESEARCH : Findings indicated that heart related problems can be higher in the sedentary people than the trained adult. Plasma glucose was significantly reduced from its higher level due to the influence of circuit and weight training of physical education college men students. Result shows that there was significant reduction in LDL due to training. Study indicates, the duration of training and the change in HDL level are directly proportional. It also shows that the HDL level and LDL level are indirectly proportional.

CONCLUSIONS : It was concluded that the standard sports training, can improve HDL level and at the same time the LDL and Glucose level will decrease significantly. If the sedentary person follows the standard training methods will improve the good and reduce bad cholesterol. Regular exercises can help improve your cholesterol levels (Daily work up to 30 to 60 minutes).

Eat a healthy diet, get regular physical activity and avoid smoking.

Lifestyle changes are the first line of defense against high cholesterol.

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Effect of Physical Activities Programmes on selected Physical Fitness Variables among Tribal School Boys of Kurnool District of Andhra Pradesh

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Abstract

The Purpose of the study was to find out the Effect of Physical Activities Programmes on selected physical fitness variables among Tribal School Boys of Kurnool District of Andhra Pradesh. To achieve the purpose of the study, sixty Tribal school boys were selected as subjects at random from ST Ashram High School, Alur, Kurnool District (A.P.). Their age ranged from 13 to 15 years. The subjects were divided into two equal groups namely experimental group and control group, each group consist of 30 subjects. Experimental group underwent Physical Activities programmes for the period of twelve weeks. Whereas Control group did not participate any specific physical activities programme other than their regular activities programme as per their school curriculum. The data were collected before and after the experimental period on Explosive Power, Speed, and Cardio Respiratory Endurance. The obtained data from experimental and control group were statistically analyzed with analysis of covariance (Ancova). The experimental group had achieved a significant improvement on Explosive Power, Speed and Cardio Respiratory Endurance when compared to the control group.

Key Words: Physical Activities – Explosive Power – Speed – Cardio Respiratory Endurance.

Introduction

The origin of Indian Schedule Tribe has been traced to such races as the proto Australian who one time practically covered the whole of India, secondly, the Mongolians who are still located mostly in Assam and North-Eastern India and Finally, to a limited by frizzy hair, among the Andaman and the Kadars of the South-West India. Scheduled Tribes in India are generally considered to be 'Adivasis' meaning indigenous people or original inhabitants of the country. The tribes have been confined to low status and are often physically and socially isolated instead of being absorbed in the mainstream Hindu population. The scheduled tribes have been largely living in areas relatively remote, and can still be found in compact and exclusive habitation. Such areas are commonly known as tribal areas.

Naturally the Tribal school boys have a good physical fitness. Since they are living in the remote areas. Though there are schools in the areas but there is no play field. There is no any specific physical activities programme imposed by the schools.

Physical fitness as the capacity to carry out everyday activities without excessive fatigue and with enough energy is reserve for emergencies. Emphatically this definition is in adequate for a modern way of life. By such a definition almost anyone can classify himself as physically fit (Bud Gutchell 1977) When people are physically fit they look better, feel better, work better, sleep better, think more clearly and resist disease, and tension more easily. (D.W.E. Barid, 1987). When you are fit, you look better and are likely to have more physical energy. When you feel fit, the good things of life have more meaning, the sky is blue, the music sweeter, the stark tastier (Jan Percival 1977).

Physical activity offers Fitness involves the performance of the heart and lungs and the muscles of the body. And since what we do with our bodies also effects what we can do with our minds, fitness influences to some degree qualities such as mental alertness and emotional satiability (**The world book encyclopedia, 1993**). Regular physical activity preferably performed daily will reduce one's risk of developing or dying from heart-related disease. For example, three 20 minute sessions per week with intensity producing a heart rate of 80% of estimated maximum will improve cardiovascular fitness (Armstrong, 1990). Evidence also demonstrates that regular exercises combat anxiety and depression (Miller, 1994), promotes psychological well-being, and helps build healthy bones, flexible muscles and joints (**Casperson, Nixon and Durant, 1998**). Physical activity also influences mental health, besides organic vigor fitness; and contributes to improvement in agility, speed, co-operation and skill. Opportunities to develop basic motor skills that are essential for healthy active living. As we enter old age, physical activity becomes a critical component of a healthy, happy and independence life. Physical fitness is a related construct and it is also often assumed that the more habitually active are fitter and that the relationship is casual (**Corbin et al., 2002; Livingstone, 1994**).

Statement of the Problem: The purpose of the study was to find out the effect of physical activities programmes on selected physical fitness variables among tribal school boys of Kurnool district of Andhra Pradesh.

Hypothesis: It was hypothesized that there would be a significant improvement on Explosive Power, Speed and Cardio Respiratory Endurance due to influence of physical activities programme.

Methodology

The Purpose of the study was to find out the Effect of Physical Activities Programmes on selected physical fitness variables among Tribal School Boys of Kurnool District of Andhra Pradesh. To achieve the purpose of the study, sixty Tribal school boys were selected as subjects at random from ST Ashram High School, Alur, Kurnool District (A.P.). Their age ranged from 13 to 15 years. The subjects were divided into two equal groups namely experimental group and control group, each group consist of 30 subjects. Experimental group underwent Physical Activities programmes for the period of twelve weeks. Whereas Control group did not participate any specific physical activities programme other than their regular activities programme as per their school curriculum. The data were collected before and after the experimental period on Explosive Power (Standing Broad Jump), Speed (50 Yard Dash), and Cardio Respiratory Endurance (600 Yard Run/Walk). The obtained data from experimental and control group were statistically analyzed with analysis of covariance (Ancova).

Result and Discussion:

The analysis of data on Explosive Power, Speed and Cardio Vascular endurance has been examined by ANCOVA to determine the differences if any among the group at Pre, Post and Adjusted Post test

Table I: Analysis of covariance on Explosive Power (Standing Broad Jump) of Scores of experimental group and control group

	Physical Activities Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	'F' Ratio	P-Values
Pre test Mean	1.62	1.63	Between Within	0.0023	1	0.0023	0.05	0.8238
SD	0.24	0.16		2.57	58	0.04		
Post test Mean	1.79	1.62	Between Within	0.43	1	0.43	13.52*	0.0005
SD	0.19	0.16		1.86	58	0.03		
Adj Post Test Mean	1.80	1.62	Between Within	0.48	1	0.48	53.23*	0.0000
				0.51	57	0.01		

*Significant at 0.05 levels.

(Table value required for significance at 0.05 levels with df 1 & 58 and 1 & 57 are 4.01).

It was observed from the table – I that there is no significant difference in pre test ($F = 0.05 < 4.01$) at 0.05 level of confidence. It was also observed, that the Physical Activity Programme effects are clearly evident in post test ($F = 13.52 > 4.01$) at 0.05 level and also in Adjusted post test ($F = 53.23 > 4.01$) at 0.05 level respectively. It clearly indicated that the experimental group showed statistically significant improvement on explosive power than the control group.

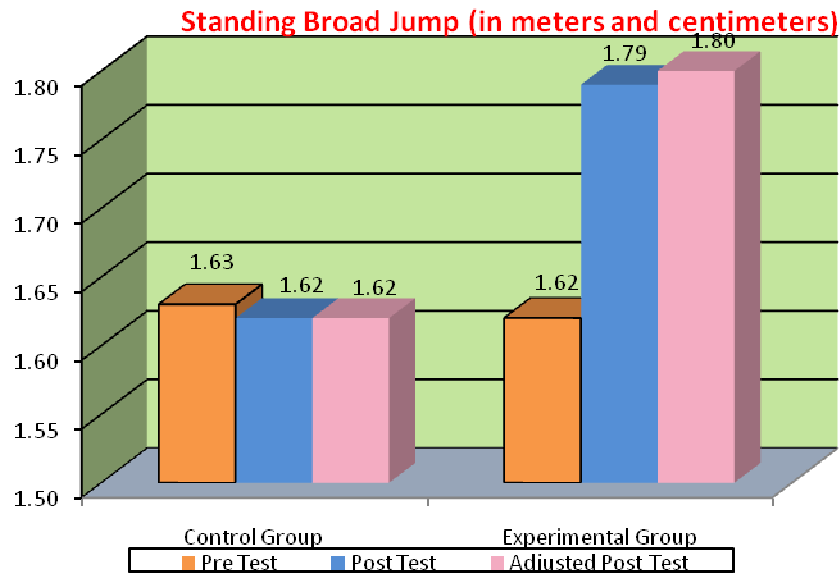


Figure 1: Mean score of pre test, post test and adjusted post test of Experimental group and control group (CG) on Explosive Power.

Table II: Analysis of covariance on Speed (50 Yard Dash) of Scores of experimental group and control group

	Physical Activities Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	'F' Ratio	P-Values
Pre test Mean SD	8.23 0.68	8.44 0.33	Between Within	0.70 17.01	1 58	0.70 0.29	2.37	0.1291
Post test Mean SD	11.84 0.58	9.11 0.65	Between Within	112.31 22.80	1 58	112.31 0.39	285.75**	0.0000
Adj-Post Test Mean	11.86	9.09	Between Within	110.60 22.37	1 57	110.61 0.39	281.80**	0.0000

*Significant at 0.05 levels.

(Table value required for significance at 0.05 levels with df 1 & 58 and 1 & 57 are 4.01)

It was observed from the table – II that there is no significant difference in pre test ($F = 2.37 < 4.01$) at 0.05 level of confidence. It was also observed, that the Physical Activity Programme effects are clearly evident in post test ($F = 285.75 > 4.01$) at 0.05 level and also in Adjusted post test ($F = 281.80 > 4.01$) at 0.05 level respectively. It clearly indicated that the experimental group showed statistically significant improvement on speed than the control group.

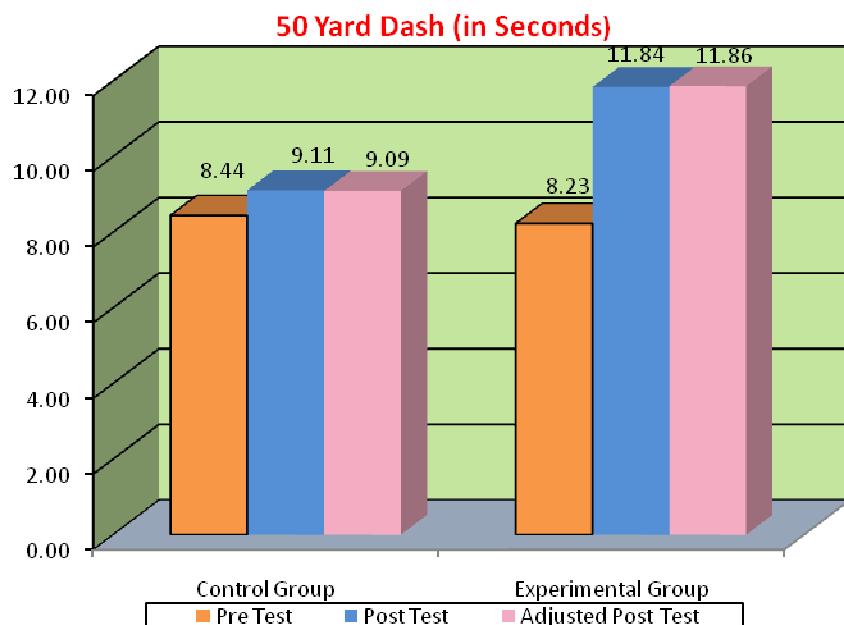


Figure 2: Mean score of pre test, post test and adjusted post test of Experimental group and control group (CG) on Speed.

Table III: Analysis of covariance on Cardio Respiratory Endurance (600 Yard Run/Walk) of Scores of experimental group and control group

	Physical Activities Group	Control Group	Source of Variance	Sum of Squares	df	Mean Square	'F' Ratio	P-Values
Pre test Mean SD	2.47 0.39	2.52 0.34	Between Within	0.04 8.03	1 58	0.04 0.14	0.28	0.5987
Post test Mean SD	2.06 0.30	2.42 0.33	Between Within	1.89 5.97	1 58	1.89 0.10	18.38**	0.0001
Adj-Post Test Mean	2.08	2.40	Between Within	1.56 2.78	1 57	1.56 0.05	31.87**	0.0000

*Significant at 0.05 levels.

(Table value required for significance at 0.05 levels with df 1 & 58 and 1 & 57 are 4.01)

It was observed from the table – III that there is no significant difference in pre test ($F = 0.28 < 4.01$) at 0.05 level of confidence. It was also observed, that the Physical Activity Programme effects are clearly evident in post test ($F = 18.38 > 4.01$) at 0.05 level and also in Adjusted post test ($F = 31.87 > 4.01$) at 0.05 level respectively. It clearly indicated that the experimental group showed statistically significant improvement on Cardio Respiratory Endurance than the control group.

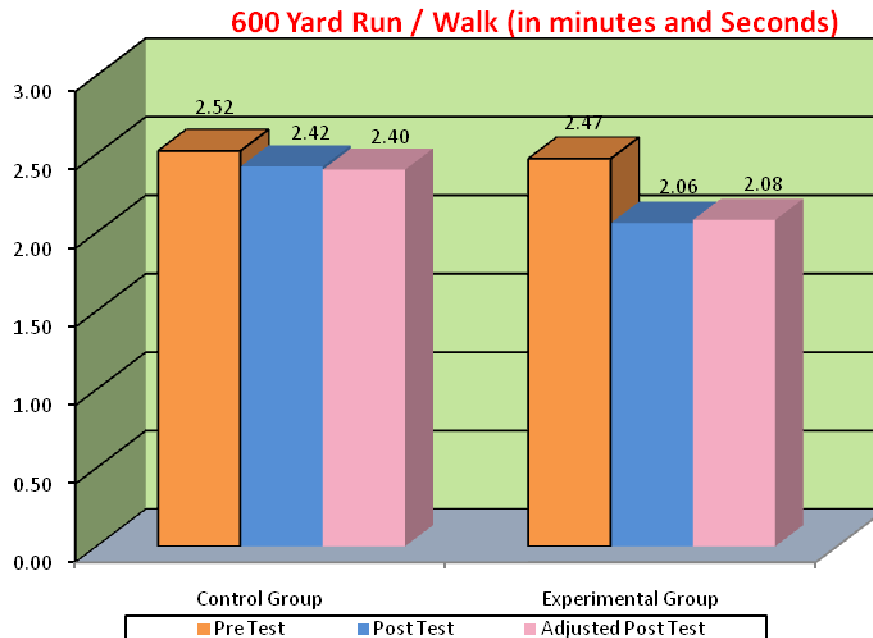


Figure 3: Mean score of pre test, post test and adjusted post test of Experimental group and control group (CG) on Cardio Respiratory Endurance.

Conclusion

The result of the study revealed that there was significant improvement on Explosive Power, Speed and Cardio Respiratory Endurance due to the influence of Physical Activity Programmes, when compared to the Control Group.

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Analysis of Vertical Jump Ability among Players of Various Individual Games

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Abstract

The present study has been designed to investigate the vertical jumping ability among different individual game players who participated at inter-university level. For accomplish the study total 80 individual game players (20 Track and Field, 20 Swimming, 20 Badminton and 20 wrestling (hockey) were randomly selected as sample. All samples were selected from the different sports academy. The age of the subjects was ranged from 18-28 years. One-way ANOVA method was applied for analyzing the data obtained from the present study if there were significant difference than the LSD post-hoc test was use to analyze the mean differences and their significance. For testing the hypothesis the level of significance was set at 0.05. We find out that Track and Field and Swimming game players having more explosive power and strength comparison of badminton and boxing game players.

KEYWORDS: Vertical jump, Track & Field, Swimming, Badminton and Boxing

Introduction

The vertical jump is the act of raising the highest center of gravity in the vertical plane only with the use of its own muscles; It is a measure of the extent to which an individual or athlete can move away from the ground to a stop. If you want a massive vertical jump, you must build a powerful lower body, a powerful upper body and a sound jump technique. Research into plyometric jumps found vertical jumps to be among the highest in terms of muscle recruitment power output, and ground reaction force produced. Fatigue has been studied in athletes for its effect on vertical jump performance and has fallen on basketball players, tennis players, cyclists, rugby players and healthy adults of both sexes.

Purpose of the study:

The main purpose of the study is to compare the jumping ability among different individual games players.

Hypothesis of the study:

There would be no difference in the jumping ability among different individual games players.

Research Process And Methodology

For this study 80 individual game players (20 Track & Field, 20 Swimming, 20 Badminton and 20 Boxing) were selected from different sports academy who participated at National/ University level were randomly selected. The age of the subjects was ranged from 18-28 years.

Tool And Techniques

To measure the explosive power of the legs we used standing vertical jump was used and the difference between the standing initial reach and the best jump was recorded as score in centimeters.

Statistical Method

One-way Anova method was applied for analyzing the data obtained from the present study if there were significant difference than the LSD post-hoc test was use to analyze the mean differences and their significance. For testing the hypothesis the level of significance was set at 0.05.

Table no. 1 Vertical jump

	Sum of squares	Df	Mean square	F	Sig.
Between Groups	465.25	3	155.08	4.94	.003
Within Groups	2385.50	76	31.38		
Total	2850.75	79			

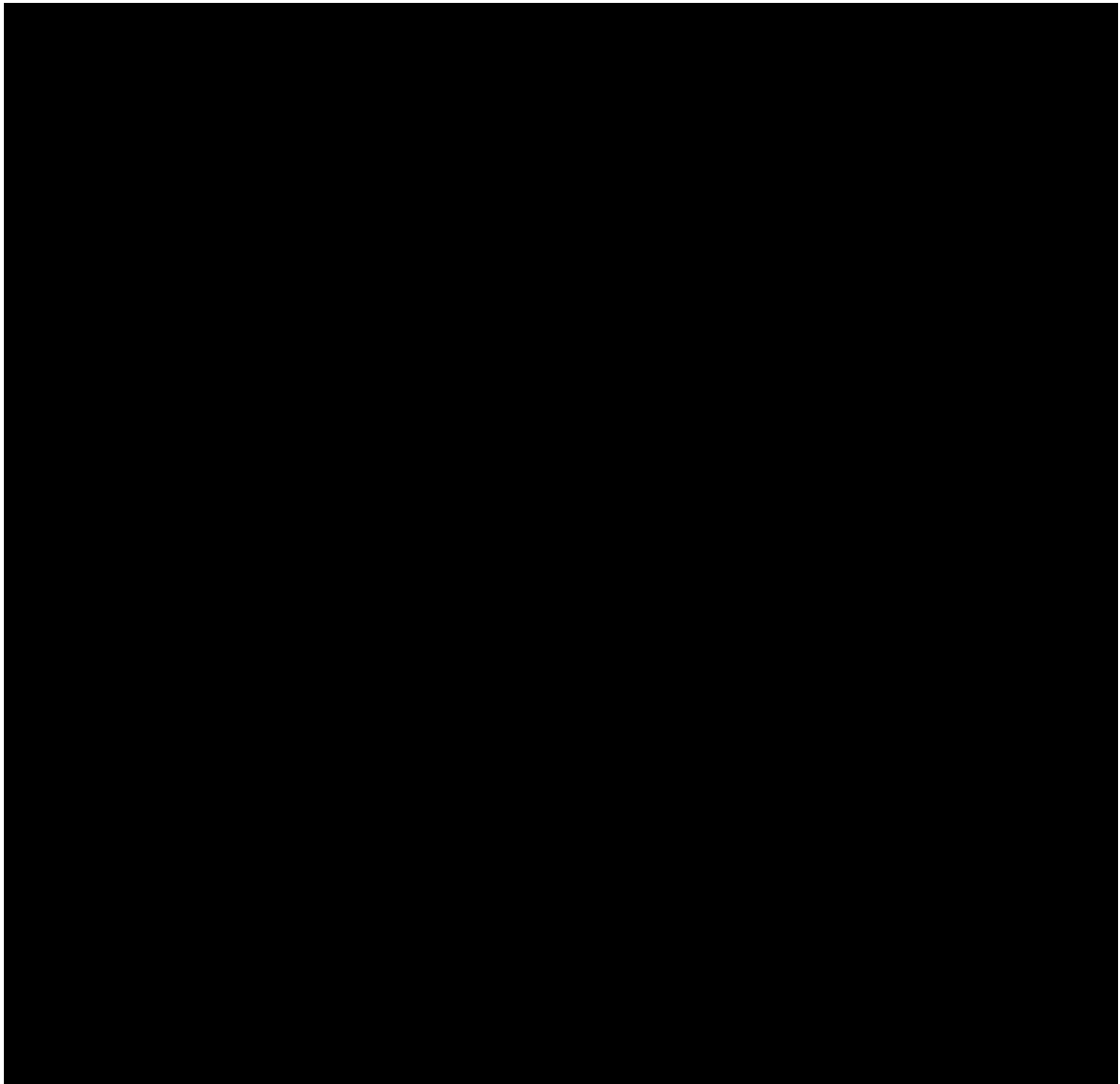
An analysis of table -1 reveals that there is significant difference in vertical jumping ability among Track and Field, Swimming, Badminton and Boxing National/University players. Because significant value is less than level of significance which is 0.05 since the calculated significance value is found significant, therefore to determine the pair mean difference among the selected different levels LSD post hoc test was computed and its shows in table no 2.

Table No 2: mean Difference Of Vertical Jumping Ability Among Different Individual Game Players Jumping Ability

GROUPING VARIABLE		MEAN DIFFERENCE	STD. ERROR	SIG(P)
TRACK & FIELD	SWIMMING	5.65*	1.77	.002
	BADMINTON	.20	1.77	.910
	BOXING	3.85*	1.77	.033
SWIMMING	TRACK & F	5.65*	1.77	.002
	BADMINTON	5.45*	1.77	.003
	BOXING	1.80	1.77	.313
BADMINTON	TRACK & F	.20	1.77	.910
	SWIMMING	5.45*	1.77	.003
	BOXING	3.65*	1.77	.043
BOXING	TRACK & F	3.85*	1.77	.033
	SWIMMING	1.80	1.77	.313
	BADMINTON	3.65*	1.77	.043

The post-hoc test result revealed that there is significant difference in vertical jumping ability among different individual game players. Significant difference was found between the Track and field and Swimming players, badminton and boxing players and track and field and boxing players in their vertical jumping ability. Not much difference was found in vertical jumping ability between swimming and boxing players. The mean values clearly shows that track and field and badminton players having more vertical jumping ability in comparison to swimming and boxing players. The estimated mean value of the players vertical jumping ability is illustrated below in Figure no 1.

Figure 1 Mean Difference Of Vertical Jumping Ability Among Different Individual Game Players



Discussion on findings

The findings of the study are that there was significant difference in the obtained value of vertical jumping ability of different individual game players. Vertical jumping ability of track and field and swimming players is significantly better than badminton and boxing National/University level Individual game players.

Conclusion

On the basis of result obtained from the study, following conclusions are drawn:-

The data showed that significant difference observed in vertical jumping ability of different individual game players who participated at National/University level. Significant difference was found between the Track & Field and Swimming players, badminton and boxing players and Track & Field and boxing players in their vertical jumping ability. We can say that Track and field and swimming players having more explosive power and strength comparison of badminton and boxing players.

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Effect Of Strength Training On Arm Strength Among College Level Men Cricket Players

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Abstract

The purpose of the present study was to find out the effect of strength training on arm strength of college men cricket players. To achieve the purpose twenty male students (n = 20) were randomly selected as subjects and the age were ranged between 18 and 24 years. The selected subjects were randomly assigned into two equal groups such as training group (TG) and control group (CG) for the strengths of fifteen (n = 10) each. Experimental training group underwent respective strength training program me for twelve weeks for three days per week and a session on each day. The control group did not involve in any special training apart from their regular activities. The criterion variable arm strength was measured by pull-ups. Analysis of covariance (ANCOVA) was used to analyse the collected data. The results revealed that that the strength training was made significant improvement ($p \leq 0.05$) in arm strength of the selected subjects. The level of confidence was fixed at 0.05 in all cases.

Key words: Strength training, arm strength, cricket players.

Introduction

Strength training is the ability of the muscles to repeat identical movement or pressures as to maintain a certain degree of tension over a period of time (**Johnson, 1982**). Strength training as the capacity of the whole organism to withstand fatigue under the long lasting exhaustion of strength. Consequently it is characterized by a relatively high ability to express strength together with a faculty of preserve (**Marget, 1988**).

Strength training exercises is not usually thought as on end in itself, but as means to an end. Strength training may be isometric, iso-kinetic contraction. Strength training is the ability of the muscle to produce a maximum amount of force. It is measured by the ability to perform one repetition of an exercise at maximum resistance. An example of maximum strength would be greatest amount of weight one can lift in the bench press exercise. Strength training has major significance in many sports and sport skills. It is a significant factor in one's ability to put the shot, throw the javelin, create a high velocity tennis serve, throw a fast ball, and many other sport skills.

Arm strength is defined as the maximum velocity of any throw made by a fielder. Everyone knows that the triceps are the largest of the arm muscles. The triceps make up around 50 – 55% of the total size of the three upper arm muscles, with the reminder dividing up across the biceps and the bronchioles (**McCall et al. 1996**). Arm strength can increased by continuously doing push-ups and pull-ups. Weight training is doing exercise, using resistance (normally weights) to build muscle strength and endurance. In weight training one can use weights like dumbbells, Bar Bells, Pulley Machines or simply one's own body weight as resistance.

Materials and Methods

The purpose of the present study was to find out the effect of strength training on arm strength of college men cricket players. To achieve the purpose twenty male students (n = 20) were randomly selected as subjects from the Department of Physical Education at Annamalai University, Tamil Nadu. The age was ranged between 18 and 24 years. The selected subjects were randomly assigned into two equal groups such as training group (TG) and control group (CG) for the strengths of ten (n = 10) each.

Experimental training group underwent respective strength training program me for twelve weeks for three days per week and a session on each day. The control group did not involve in any special training apart from their regular activities. The criterion variable arm strength was measured by pull-ups. All the subjects were present for more than 90% of the total training session. The strength training is increased by doing chest, shoulders, triceps, biceps, and abs. The collected data were statistically examined by analysis of covariance (ANCOVA). The confidence level was fixed at 0.05 levels, which is appropriate to the present study.

Data Analysis

Mean and Standard deviation were calculated for arm strength of each training group. And the data were analyzed by using analysis of covariance (ANCOVA). Statistical significance was fixed at 0.05 levels

Results and Discussion

Analysis of covariance on arm strength between the training group and the control group

Test		Training Group	Control Group	SOV	SS	df	MS	F
Pre test	Mean	4.90	5.30	B	0.80	1	0.80	1.10
	SD	0.73	0.94	W	13.0	18	0.72	
Post test	Mean	8.30	6.0	B	26.45	1	26.45	47.13*
	SD	0.67	0.81	W	10.10	18	0.56	
Adjusted Post test	Mean	4.29	5.96	B	3.5	1	3.5	5.93*
				W	10.20	17	0.60	

*Significant at 0.05 level of confidence

(The table value required for significance at 0.05 level of confidence with df 1 & 18 and 1 & 17 are 4.41 and 4.45 respectively)

The analysis of covariance on arm strength among experimental and control group were described in table no I. The mean value of arm strength of training and control groups were 4.90 and 5.30. The obtained 'F' value of 1.10 was lesser than the table value of 4.41, there was insignificant among the groups in pre test result of arm strength. The post test means of the groups were 8.30 and 6.0 respectively, and the obtained 'F' value of 47.13 was greater than the table value, and there was a significant difference in arm strength between the training and control groups in arm strength among the male college cricket players. The obtained adjusted post test F value also greater the table value of 4.45 for df 1 and 17 required for significant at 0.05 level. The pre, post and the adjusted post test mean values of the experimental and control groups on arm strength were graphically represented in Figure 1.

Figure 1

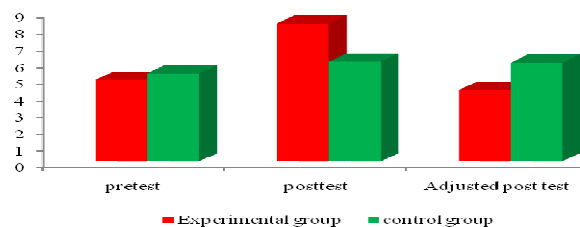


Figure 1: The pre, post and adjusted post test mean values of experimental group and the control group on arm strength.

Discussion

The result of the present study pointed out that there was a significant difference in arm strength due to strength training. The current study also utilized 12 weeks programme duration with three sessions and found that arm strength increases due to strength training. **Jensen & Fisher (1979)** pointed out that that the strength training improves arm strength of the cricket players. **Young (1991)** conducted the study that strength training increases the muscle power of the athletes. From the results of the present study and literature, it is concluded that criterion variable arm strength was significantly improved due to strength training.

Conclusion

The result of the study revealed that the training group has significant improvement in arm strength among college male cricket players after the strength training protocol. It was also concluded that the strength training is one of the best training methods for improving the arm strength as well as the physical fitness of young men.

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The Effect of Eight Weeks Endurance Training on Serum Levels of Visfatin and Glucose in Diabetic Rats

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Abstract

Background: Visfatin is an adipocytokine which secretes from adipose tissue and has relationship with plasma glucose and can be effective on diabetes. The aim of present study was to review the effect of a eight weeks endurance training on serum levels of visfatin and glucose of male diabetic rats. Materials and Methods: In this experimental research, 30 male diabetic rates selected and divided into 2 groups of (1) control, (2) endurance training. The control group had no regular exercise. Data analyzed by T tests. Results: Blood glucose, and visfatin level significantly reduced in the intervention groups compared with control group ($p < 0.05$). Conclusions: The findings show that endurance training reduces glucose and increase sensitivity of visfatin receivers and as result decrease its serum level in diabetic rats.

KeyWords: Endurance Training, Visfatin, Glucose, Diabetic Rats

Introduction:

Diabetes is one of the most widespread diseases, and getting such a disease is increasing (1), it is believed that till 2030 ,552 million, equal to 7.7% of population will suffer from it, which is one of the main reasons of death (2). The activity of the most organs of the body is related to it, for which we can mention the changes of lipid profiles, the Heart and veins system, kidneys, nerve systems, and the rest that enhances the possibility of the death for the diabetic patients (3). In the recent surveys the visceral adipose tissue, has been recognized as an active tissue, metabolically, and as an endocrine tissue, secreting numerous peptides. The most important ones are: adiponectin, leptin, Resistin and Visfatin (4). Vistafin has the semi insulin quality, and it is holistically like the mimic insulin (5). By reviewing the previous researches, we come across this fact that ,Vistafin by attaching to the insulin receivers ,in a separable position as for insulin ,effects the semi insulin features of itself (4), and it causes more glucose usage ,and its prevention of release from liver cells (5). One of the hardening forms is Arteriosclerosis which is the result of total cholesterol sediment ,lipoid and pilotage in veins (6) the outcome of some examinations manifested that the quantity of dense lipoprotein in comparison to the immense quantity of triglycerides ,and total cholesterol in heart patients is considered as one of the crucial dangerous factors . (7) The role of physical activity in betterment of cholesterol lipid profiles, reduction of glucose, and insulin sensitivity has been obvious clearly, and the result of some surveys showed that by increasing the physical activity, the metabolic syndrome of diabetic patients related to insulin resistance will be cured (5). Many medical methods for controlling and treatment of the respected disease such as correction of the living method, and application of natural medications have been suggested. (8) This survey was designed to see the effect of eight weeks endurance on the Vistafin serum, dense glucose on male diabetic rats.

Ingredients and methods:

The research methodology of this survey was experimental. In this research 28 rats of vistar species (mass average 20+-220 grams) that were proliferated in the center of keeping animals in Marvdasht Azad University. Rats were selected randomly in to four groups (1-Diabetic control, 2- endurance)

Rats Preservation Method:

For rats' preservation, transparent polycarbonate cages with the capability of autoclave, has been used. Desired temperature of animal preservation salon was between 20-24 centigrade, and the humidity of 55 -65 percent. light circle of the animal preservation salon was adjusted by the electrical light adjusting device, every 12 hours for the lab animals.

Nutrition of Rats:

For rats' nutrition of rats, the pellet suitable for rats was used. Their food access was unlimited, and water in 500 milliliter bottles.

Diabetes Induction Method:

The process of diabolizing rats, one week after their compatibility with environment started. The interference of exercise and Aloe vera usage started one week after induction of diabetes and rats' preservation. For induction of diabetes, 60 milligram streptozotocin medicine for kg weight of the body dissolved in buffer citrate (4.5=ph) in single dose and peritoneal. For assuring the induction of diabetes, after three days an examination of blood density was conducted. glucose more than 250 milligrams deciliter was supposed as diabetes case (9).

Exercise Protocol:

The prescription of endurance exercise training intensity was determined as 60% of the maximum intensity reached at the incremental speed test, as previously described by Abreu et al. (10). The training intensity was changed over time as the physical capacity of the rats increased. The animals were trained by running on a motorized treadmill (Athletic Speed 2, Athletic, Brazil), 5 days/week for a total period of 6 weeks. At the end of the first week 24 hours after the last exercise session, the rats were sacrificed after 12 hours fasting for research variables and their heart blood was taken 7 cc, directly.

Bloodletting, References, and Chemical materials: To study the effect of an independent variable on the probable variations of dependent variables, according to the program predetermined, all the animals under study were sacrificed by a suitable simple murdering. In this research it was tried that all the rats be killed with minimum pain and hurt, and the anesthesia was performed by Ketamine and Zeilazin with injection into peritoneal. Blood samples were collected by bloodletting from the heart, and were left for twenty minutes in room for blood clotting, then the sample tubes were centrifuged for twenty minutes with 3000 rpm, and the separated serum were kept at the temperature of 80. Fasting Glucose, were use with enzyme method, and using the kit of Zist-Shimi Company, using an auto analyzer set made in Italy "Visfatine" kit, of Sunlog biotech Co. of China by "Analyza" method.

Data Analysis: The data of the study were entered in to computer by using SPSS, version 18 software, to specify the data. The qualitative statistics (Average and Standard division) were used to specify meaningfulness of variations and level $p \leq 0/05$ was considered using T Test

Findings:

In table 1 the average weight of the rats under study are presented. The rats weight comparison, showed that all the rats, we faced with losing weight after diabetes at the end of sixth week. The maximum weight loss was due to the diabetic control group of exercise and extracts. In all of the groups a meaningful reduction, in the level of Visfatine, glucose and with respect to control group, was observed. (table2)

The results of Independent T tests analysis for visfatin and glucoses

variable	Group	SD \pm M	T test	Sig
Visfatin ng/ml	Diabetic control	8.06 \pm 0.67	6.46	0.001
	experimental	5.12 \pm 0.32		
Glucoses ml/dl	Diabetic control	386.67 \pm 17.56	29.94	0.001
	experimental	215.43 \pm 15.65		

Description of rat's weight in research groups

Group	Pre – test (g) SD \pm M	Pre – test (g) SD \pm M	Sig
Diabetic control	247.23 \pm 12.16	201.42 \pm 11.1	.001
experimental	245.34 \pm 10.43	213.28 \pm 6.76	.003

Discussion:

As it was seen, eight weeks of Endurance exercises in meaningful reduction, in the level of Visfatin, past researches show that the level of Visfatin in the pathology condition related to Insulin, such as fatness and Diabetes, will increase.(4,11) whereas the effect of exercise activities, on the improvement in fatness and Diabetes is reported(12). EROM and associates have reported that, modifying lifestyle such as Diet and daily exercise activities for 30 minutes, and six weeks for patients, having metabolic syndrome, cause a meaningful reduction in the level of plasma VISFATIN. These researches have reported that the reduction of Visfatin, was related to the improvement of the body composition and resistance index to Insulin. (13) Also Shang and associates have shown that six weeks of swimming exercise for fat rats was accompanied with reduction in plasma Visfatin, and improvement to sensitivity with Insulin(14). the results of study of ARDAM and associates, agree with the present study(13) reduction of Visfatin due to exercise activities is probable, due to reason of consumption in fatness tissue, muscles, liver, and for cause of the increase of fatty acids, oxidation, of the fats, and increase of Glucose(15) the reason for alignment might be because of the equality of exercises (aerobic exercises). On the other hand, the research study results of Ghanbari and associates are not in alignment (15)-the reason for inconsistency (incongruity) might be mentioned as metabolism of these exercises. On session exercise dose not result in meaningful variations, for levels of plasma, Visfatin. But for long term exercise activities, reduction in meaningful Visfatin occurs. (16) The other results found from the present research shows a meaningful reduction of glucose in the reinforced groups. These results are aligned with the Henrix and associates findings (17). the relation between exercise activities on glucose might be concluded that exercise activities cause increase in glucose delivery to the muscles during activity (contraction), where these variations are dependent upon operational variation in Insulin signals and related to the increase protein contents GLUT4(18)

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A Peer Reviewed (Refereed) International Research Journal

Effective Approach In Treatment Of Idiopathic Facial Palsy (Bell's Palsy)

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Introduction:

Face Plays an important role in expressing human emotions, A frown donates disapproval and a smile indicates someone is pleased. These Facial expressions are maintained by facial muscles, which are controlled by 7th cranial Nerve known as facial Nerve/Nerve of Expression. These facial expressions are badly affected if the nerve at any level of its course is traumatized or compressed around its passage can lead to temporary partial weakness of facial muscles to permanent complete paralysis of muscles. This review article will focus on the brief explanation of Bell's palsy and its treatment approach in *Medina Munawwarah Comprehensive Physical Rehabilitation Centre*.

Keywords: Idiopathic, Expressions, 7th Cranial Nerve, Inflammation, Compression, Intervention, Short wave diathermy, Electrical Stimulation, Exercises, Recovery

Brief Overview of Bell's Palsy :

Bell's facial paralysis, named after **Sir Charles Bell (1774-1842)**, is an acute onset attributed to a non-suppurative Inflammation of the Facial nerve within the stylomastoid foramen¹. Sudden unilateral Facial Weakness with frequently pain at the onset, behind the ear in the mastoid region, or in front of tragus, usually after an Exposure from hot to cold environment resulting in Inflammation and swelling more often around the stylomastoid foramen causing a compression and temporary halt of impulses reaching to facial muscles the cause of bell's palsy is not clearly understood till now it is said to be idiopathic in origin, Since the 7th cranial nerve has to pass a long journey travelling from narrow foramens and tunnels from brainstem to its innervations any minor inflammation and swelling at its course can lead to compression of the nerve resulting in weakness of facial Muscles (**Fig.No.1**).

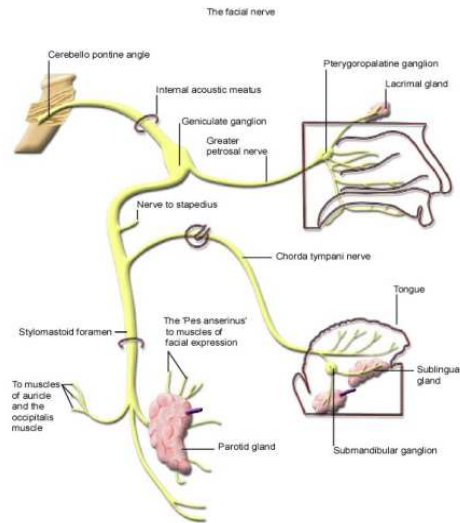


Fig.No.1

Signs and Symptoms: (Fig .No.2)

Hemi facial Weakness.
 Loss of Facial Emotions.
 Inability to close effected eye.
 Drop of angle of jaw of effected side.
 Inability to frown the effected side.
 Dribbling of food on the effected side.
 Pain at mastoid region or front of tragus.
 Depressed and anxious patient.



Fig.No.2
 (Showing left bell's palsy)

Management and prognosis: Bell's palsy usually managed conservatively with the administration of oral cortico -Steroids to reduce swelling around the nerve and vitamin **B12** supplements to provide nutritional support to the nerve. Surgical Decompression of the Facial Nerve in long standing cases will be required where there is complete denervation and without signs of reinnervation of facial nerve². Most of the Bell's palsy recover completely with the conservative Treatment and Physical therapy, Recovery Duration is always varied from patient to patient. The extent of nerve damage determines the extent of recovery. Most individuals begins to get better within 2weeks of onset of symptoms and recovers completely , returning to normal function within 3-6 months. However patients with Diabetic Mellitus and Hypertension required more time as compared to patients without having any underlying Diseases/Disorders.

Physical Therapy Intervention: Although the Idiopathic Facial palsy recovers spontaneously with medical management but Physical therapy plays a vital role in the management aiming at relieving inflammatory pain, prevention of secondary contractures, encouraging early contractions of the facial muscles to prevent muscular atrophy and minimizing the inflammation by increasing the flow of inflammatory exudates towards the lymphatic ducts. This can be Achieve by intervention of thermal modalities in the form of Short wave diathermy, Infra- red rays or hot Pads, Applying electrical Muscle Stimulation, Effleurage Massage and Mirror Exercises etc.

Treatment Approach: After taking a brief subjective history of patient about the Predisposing factors, Onset and Duration of Bell's Palsy, the Patient is examined thoroughly by the Physical therapist to assess the functional level of facial nerve, sensory disturbance or any contra indications associated with. The initial treatment is begin to aim at providing psychological assurance to the patient, decreasing oedema or inflammation around the nerve root, relieving inflammatory pain and encouraging early contractions of weak muscles. To achieve this shortwave diathermy is applied by contra planer method in front of tragus from where the facial nerve emerges the intensity is set at **50 % to 60%** continuously for **10-12 minutes** Producing mild to moderate heat. The increased amount of circulatory blood and the accompanying thermal changed in and around the cell was found to be effective in speeding the recovery of open wounds, increasing tissue extensibility, decreasing oedema/hematoma, relieving inflammation and pain³. Based on empirical use of short wave diathermy in reduction of oedema or inflammatory exudates SWD has been modality of choice in Bell's palsy over the years. This is followed by the application of electrical muscle stimulation to make the weak muscles contract by external stimuli by inducing electrical current. Stimulation of the motor Nerve is the method used in most clinical applications of electrical muscular contractions. In the absence of innervation, muscles can be stimulated by an electrical current that causes the muscle membrane to depolarize. This will create the same muscle contraction as a natural stimulus⁴. The muscle pumping action with the intermitted muscle contraction mechanically compressed the venous and lymphatic vessels to increase the centripetal flow of the their contents. The consequent reduction of interstitial pressure is considered effective for all edema, whatever the stage or cause⁵. In clinical practice stimulation of facial muscles with faradic currents using rectangular wave pattern with the pulse duration of **1 MS** at the interval of **600 - 1000 MS** with the intensity of **10-15 MA** for **10 minutes** is found to be very beneficial, every muscle is stimulated at their motor point for at least **60** contractions/min. Massage is then applied to the Ipsilateral side of the face to increase the circulation to the muscles which in turn helps in draining metabolic waste of muscles and keeping the muscle supple, Efflurage, kneading, rolling and soft tissue lifting is given without provoking pain or any discomfort to the patient. Treatment is concluded with teaching the patient how to exercise his/her affected muscles in front of mirror which is called as mirror exercises giving visual bio-feed back to the patient, each and every muscle is exercised individually by self assisted techniques till the patient regains enough muscle tone to move the muscle without any assistance. Particular emphasis is put on orbicularis oculi muscle to prevent dryness of affected eye failing to close the eye completely because of weakness of this muscle causing ulceration of eye. Patient is taught about the precautions to be taken and importance of performing self-massage and mirror exercises as home program. Treatment is followed up thrice a week in physical therapy OPD and prognosis is monitored at every sub sequent sessions, once the patient shows satisfactory recovery the treatment frequency gradually decreased until he/she is finally discharge from physical therapy department.

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The influence of socio-economic status on selected psychological variables among university level players.

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INTRODUCTION

The degree of reward, in the form of material gain as well as social recognition and status, determines the continuum of a specific sport activity. Social class back ground remains linked to participation in different kinds of sports. Sports that required expensive equipments or facilities like tennis, squash, golf, sailing, skiing, polo and rowing are mostly enjoyed by the well-to-do. In contrast, low income and minorities athletes are drawn to wrestling, boxing, basketball, football track and other activities that involve minimal outlays in equipment and expense.

Athletes in general come from disadvantaged sections of the population, and that the lower classes give importance to sports show that they value more their routine responsibility. A number of studies show, that social status has positive relationship with development of economic achievements of participation of the students in sports.

Sports are a psycho-social activity. It has both psychological and social dimension, besides physical, physiological and technical aspects. The main objective of sports is to develop physical and psychological health. Further to integrate or to bring about psycho-social co-ordination, socialization and cultural interaction, and thus to develop spirit of tolerance in order to promote nation and international, social and cultural integration and peace. Coaches, physical educationist and sports scientists have always expressed a great need to know more about those psychological factors, which are helpful in improving the psycho-motor co-ordination of the players.

Statement Of The Problem

The purpose of the study is to compare between The high expensive games(Badminton and Cricket), moderate Expensive games(Basketball and Volleyball) and Minimum Expensive games (Kho-Kho and Kabaddi) with respect to self confidence and achievement motivation of the university level players.

Hypotheses

The following hypotheses were drawn for this study,

1. It was hypothesized that there may be significant difference among high expensive, moderate and minimum expensive games players with respect to Self Confidence and achievement motivation.
2. It was also hypothesized that the players of Minimum expensive games may have higher self confidence and achievement motivation than those of high Expensive and moderate Expensive games players.

Review Of Related Literature

Cratty (1986:341) stated that generally the middle class individual is more competitive in the widest variety of situation. The lower class persons tend to feel that the odds are always against them, while the upper class individual feels that his position is secure regardless of performance. In view of the above, what the study has suggested is not realistic to expect the same level of competitive behavior from different segments of society.

Methodology

To achieve the purpose of the study, six hundred University men players in the age of 18 to 25 years, in selected sports and games, from different games such as Badminton, Cricket, Volleyball, Basketball, Kabaddi and Kho-Kho, in will selected as subjects.

Selection Of Variables

Variables will be selected based on the discussions with experts, feasibility of the criteria, availability of tools, and the relevance of the variables to the present study.

Economic Status variables:

1. Father's Occupation
2. Father's Income per Month

Psychological Factors:

1. Self Confidence
2. Achievement Motivation

THE SCALE FOR MEASURING THE STATUS VARIABLE OF FATHERS' OCCUPATION OF THE PLAYERS'

OCCUPATION	
Items	Weight
Profession and Big business, (Doctors, Engineers, University Professors, Lawyers and above)	10
Semi-profession (College Teachers, School Teachers, Bank Employees)	6
Clerical, Shop owners, Farm owners	5
Skilled worker	4
Semi Skilled Worker	3
Unskilled worker	2
Unemployed	1

FATHERS' INCOME PER MONTH

Items	Weight
Above Rs. 92,801	12
Above Rs.73,001- 92,800	10
Above Rs. 52,001-73,000	6
Above Rs. 35,001-52,000	4
Above Rs. 19,001-35,000	3
Above Rs. 10,001 - 19,000	2
Below Rs. 10,000	1

MEAN AND STANDARD DEVIATION VALUES ON SELFCONFIDENCE OF PLAYERS OF HIGH EXPENSIVE GAMES, MODERATE EXPENSIVE GAMES AND MINIMUM EXPENSIVE GAMES

	High Expensive Games	Moderate Expensive Games	Minimum Expensive Games.
Mean	15.53	17.16	19.12
SD	1.70	1.61	1.35

THE PERCENTAGE SCORES OF PLAYERS OF HIGH EXPENSIVE GAMES, MODERATE EXPENSIVE GAMES AND MINIMUM EXPENSIVE GAMES ON SELF CONFIDENCE

Sl.No	Self Confidence	Players of high expensive games	Players of moderate expensive games	Players of minimum expensive games	Total
	Very low (6 to 8 Points)	6 (3.0)	5 (2.5)	7 (3.5)	18 (3.0)
	Low (9 to 11 Points)	55 (27.5)	47 (23.5)	56 (28.0)	158 (26.33)
	Medium (12 to 14 Points)	132 (66.0)	88 (44.0)	131 (65.5)	351 (58.5)
	High (15 to 17 Points)	32 (16)	16 (8.0)	16 (8.0)	64 (10.67)
	Very high (18 Points and above)	3 (1.5)	3 (1.5)	3 (1.5)	9 (1.5)
TOTAL		200 (100)	200 (100)	200 (100)	600 (100)

(Figures in parentheses are percentages)

THE ONE-WAY ANOVA VALUE ON SELF-CONFIDENCE OF THE PLAYERS OF HIGH EXPENSIVE GAMES, MODERATE EXPENSIVE GAMES AND MINIMUM EXPENSIVE GAMES

	High Expensive Games	Moderate Expensive Games	Minimum Expensive Games	Source of Variance	Sum of Squares	df	Mean Squares	Obt. Ratio
Mean	15.53	17.16	19.12	Between Groups	35.18	2	19.45	7.72*
S.D	1.70	1.61	1.35	Within Groups	1288.18	597	2.12	

*Significant at .05 level of confidence. (The table value required for significance at .05 level of confidence with df 2 and 597 was 6.76).

The results of the study indicated that there is a significant difference among the players of High Expensive Games, Moderate Expensive Games and Minimum Expensive Games on Self-Confidence. Since, three groups were compared, whenever the obtained 'F' ratio is found to be significant, the scheffe's test is applied as post hoc test and it is presented in Table XIV-C.

ACHIEVEMENT MOTIVATION

The Mean and Standard Deviation values on Achievement Motivation of players of High Expensive Games, Moderate Expensive Games and Minimum Expensive Games have been analyzed and presented in Table-VI.

SHOWING THE MEAN AND STANDARD DEVIATION VALUES ON ACHIEVEMENT MOTIVATION OF PLAYERS OF HIGH EXPENSIVE GAMES, MODERATE EXPENSIVE GAMES AND MINIMUM EXPENSIVE GAMES

	High Expensive Games	Moderate Expensive Games	Minimum Expensive Games
Mean	13.13	14.01	15.16
SD	1.80	1.71	1.42

THE PERCENTAGE SCORES OF PLAYERS OF HIGH EXPENSIVE GAMES, MODERATE EXPENSIVE GAMES AND MINIMUM EXPENSIVE GAMES ON ACHIEVEMENT MOTIVATION

Sl.No	Anxiety	Players of high expensive games	Players of moderate expensive games	Players of minimum expensive games	Total
1	Very low (01 to 08 Points)	10 (5.0)	16 (8.0)	16 (8)	42 (7)
2	Low (09 to 16 Points)	51 (25.5)	66 (33)	77 (38.5)	194 (32.33)
3	Medium (17 to 24 Points)	69 (39.5)	111 (55.5)	75 (37.5)	255 (42.5)
4	High (25 to 32 Points)	27 (13.5)	23 (11.5)	24 (12)	74 (12.33)
5	Very high (33 to 40 Points)	10 (5.0)	8 (4.0)	17 (8.5)	35 (5.83)
TOTAL		200 (100)	200 (100)	200 (100)	600 (100)

(Figures in parentheses are percentages)

THE ONE-WAY ANOVA VALUE ON ACHIEVEMENT MOTIVATION OF THE PLAYERS OF HIGH EXPENSIVE GAMES, MODERATE EXPENSIVE GAMES AND MINIMUM EXPENSIVE GAMES

	High Expensive Games,	Moderate Expensive Games	Minimum Expensive GameS.	Source of Variance	Sum of Squares	df	Mean Squares	Obtained "F" Ratio
Mean	18.45	19.28	21.73	Between Groups	39.85	2	18.72	9.86*
S.D	1.89	1.72	1.63	Within Groups	1816.12	597	2.15	

*Significant at .05 level of confidence.

(The table value required for significance at .05 level of confidence with df 2 and 597 was 6.76). The results of the study indicated that there is a significant difference among the players of High Expensive Games, Moderate Expensive Games and Minimum Expensive Games on Achievement Motivation.

Results Of The Study

The results of the study showed that there was a significant difference among the players of high expensive games, moderate expensive games and minimum expensive games on selected psychological variables namely self confidence & achievement motivation .And also it was observed from the results of the study that there a significant difference between players of high expensive games and moderate expensive games, players of high expensive games and minimum expensive games and players of moderate expensive games and minimum expensive games on selected psychological variables namely competition anxiety, aggression,self confidence and achievement motivation.

Recommendations

Based on the results of the study, the following recommendations were drawn.

- In the present study, it was concluded that there was a significant difference among the players of high expensive games, moderate expensive games and minimum expensive games with respect to selected psychological variables. Hence, it is recommended to the coaches, trainers and physical educators to select the players of various games based on the results of this particular study.2
- The similar study may be carried out by selecting national level players as subjects.
- The study may help the coaches to select the efficient players for a particular game.
- The findings of the study can add to the quantum of knowledge in physical education especially in the area of sports sociology and sports psychology.
- It may help physical educationists to conduct further research in this area.
- This study helps to recommend a particular player to a particular game baring on his socio economic status.

Analysis On Selected Attacking And Defensive Strategies And Tactics Between Top Four Teams In The FIFA Confederation Cup- 2017

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Abstract

The purpose of the study was to make a descriptive analysis of attacking and defensive strategies, tactics in 2017 FIFA confederation cup. FIFA confederation cup" the competition which was initially sorted out by and held in Saudi Arabia and are the king Fahd container which was later assumed control by FIFA and named confederation cup. The arrangement of the competition includes the host country, the world container holders and the six mainland champions who meet all requirements for the opposition. Eight teams are drawn into two round robin gatherings. Two teams from same confederation can't be attracted gathering. But in the event that there are three teams from same confederation. The best two teams of each gatherings progress to the elimination rounds. The two victors of each gathering will play the sprinters of the other gathering. The following four teams qualified to play semifinals. Chile, Germany, Mexico and Portugal. In this tournaments Germany won the title, Chile won the runners up and Portugal won the third prize. The attacking strategies variables include short on goal, short off target, goal score For this study the performance and the tactics of top four qualified teams were considered apart from the descriptive analysis. The primary data were collected by the video analysis with the expert. The findings of the study shows that the important attacking strategies variables such as short on goal and goal scoring tactics Germany was dominated against other teams and important defensive strategies variables such as saves, blocked and goal difference Germany was higher performance to compare other teams. It was concluded that because of the qualitative strategies, tactics and some part of the luck Germany won the title

Key words: Attacking and defensive strategies and FIFA confederation cup.

Introduction

Football is an International Game and King of all Games. The game comprises of various skill, strategies and tactics along with all physical performance variables. There are wide variety of talent concerned in the sport of soccer like dribbling, kicking, ball control volleying, trapping and alertness to one of a kind conditions. Perfection of those competencies and execution of them successfully are having direct impact on the entire overall performance in the game. there are various character abilities and crew techniques had to play effective soccer. soccer is in idea are very simple game as illustrated by means of Kevin Keegan's famous assertion that techniques too triumphing a suit were to "score more quantity of desires than opponent". but well prepared and nicely organized teams are frequently seen beating groups with supposedly more skill full players even over the years, , hence to find the above the various level of competitions organized by the FIFA and other organization like FIFA world cup, European cup confederation cup, African nation cup and AFC cup were considered for finding such comparison and significant difference in the performance and predominance of strategies.

Confederation Cup

FIFA confederation cup" the competition which was initially sorted out by and held in Saudi Arabia and are the king Fahd container which was later assumed control by FIFA and named confederation cup.

Methodology

The top four qualified teams of FIFA confederation cup 2017 were selected as the subject of the study. The top four teams are Chile, Germany, Mexico and Portugal. The following variables were selected to find out the validity and reliability of the study with the available statistics through observation method.

Variables of the study

variables	
attacking strategies	Defensive strategies
short on goal	tackles
short of target	Fouls committed
goal score	Offside trap
Corner kick	Blocks
crosses	saves
Ball possession	Goal against

Results And Discussion

Table 3 -Descript Analysis of attacking strategies variables

teams	attacking strategies variables				
	Short on goal	Short of target	goal score	Corner kick	crosses
Chile	25	52	4	24	104
Germany	28	38	12	19	70
Mexico	42	64	8	24	131
Portugal	32	51	9	35	161

From the above table indicates that, from the attacking variables such as short on goal and short of target Mexico was dominated, in corner kick and crosses Portugal was dominated, in the goal scored variables Germany was dominated compare to other teams.

Figure 1- Descript Analysis of attacking strategies variables

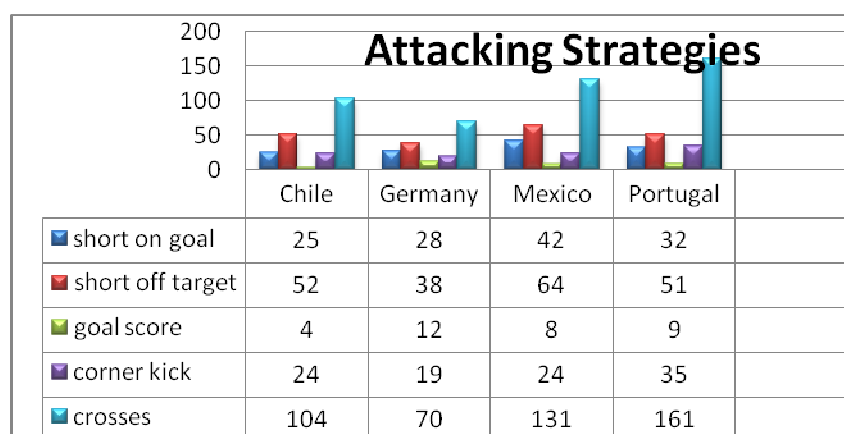


Table 4-Descriptive Analysis of Ball Possession

teams	Ball possession		
	Total passes	No of touches	Interceptions
Chile	2357	7776	40
Germany	1955	6889	36
Mexico	2079	8009	45
Portugal	1792	7252	34

From the above table's shows that Mexico was dominated in number of touches and interceptions, Chile Was dominated in total number of passes

Figure 2- Descriptive Analysis of Ball Possession

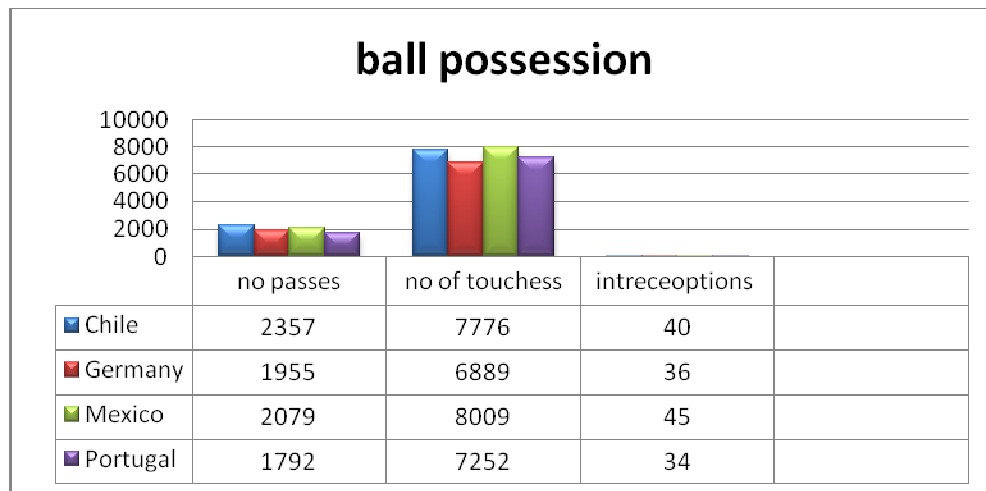


Table 5-Descriptive analysis of Defensive strategies variables

teams	Defensive strategies variables					
	saves	blocks	Offside trap	Goal against	Fouls committed	tackles
Chile	10	14	7	3	63	75
Germany	23	18	10	5	66	55
Mexico	15	13	12	10	72	61
Portugal	14	18	11	3	61	52

From the above table shows that in defensive strategies variables such as number of fouls committed, goal against and offside trap Mexico was leaded, in number of saves and blocks Germany was leaded, and in number of tackles Chile was dominated.

Figure 3- Descriptive analysis of Defensive strategies variables



Discussion Of Findings

From the descriptive analysis the selected attacking and defensive strategies and tactics Chile was dominated to compare to all other teams. The findings of the study spectates that the important attacking and defensive strategies and tactics used by Germany helped to dominated against all other teams as shown in the table below.

Teams	Attacking variables		Short converted to short on goal%	goal scored	short on goal converted to goal%	Defensive variables				Disciplinary	
	total short	short on goal				short against	save	save rate	blocked	yellow card	red card
Chile	77	25	32.46%	4	16%	51	10	20%	14	11	-
Germany	66	28	42.42%	12	43%	76	23	30%	18	8	-
Mexico	83	35	42.16%	8	22%	66	15	22%	13	13	1
Portugal	83	32	38%	9	28%	58	14	24%	18	12	1

Team status

teams	Match	won	loss	draw
Chile	5	3	1	1
Germany	5	4	-	1
Mexico	5	2	2	1
Portugal	5	3	1	1

Conclusion

Germany dominated in attacking shorts converted in total short on goal

Germany dominated in attacking short on goal converted in to goal Germany performance in defensive strategies inclusive of saves and blocks comparatively higher than the other competing teams In terms of fouls committed cards received were less in number against Germany were as higher in other teams. In terms of total number of short the off target and short on goal by Mexican team performance was better than other teams Though the ball possession was superior by all the other three teams than the Germany, the Attacking and defensive strategy and was more determined by the Germans along with luck favoring the Germans to claim the title for first time.

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Effect of Plyometric Training for development of Speed in Soccer Players of Hyderabad District in India

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Abstract:

Plyometrics, also known as "jump training" or "plyos", are exercises based around having muscles exert maximum force in as short a time as possible, with the goal of increasing both speed and power. The objective of the study is to determine the effect of plyometric training for development of speed among Soccer Players of Hyderabad District in India. It is hypothesized there will be effect of Plyometric training for development of Speed among Soccer Players. The purpose of the present study to find out the effect of plyometric training for the development of Speed in Soccer Players. The sample for the present study consists of 40 Male Foot ball of Hyderabad District. out of which 20 are experimental group and 20 are controlled group. Plyometric exercises such as hopping, bounding, depth jumps, tuck jumps, box jumps etc and were given to experimental group on alternate days i.e. three sessions per week and controlled group were given the general training in Foot ball for eight weeks. To assess the Speed Pre Test and Post Test were conducted in 50 Meters Run to the experimental group and controlled group. Results: This study shows that due to the plyometric exercises there is a improvement of Soccer Players experimental group in speed and foot ball Players controlled group is decreased in performance ability and speed due to the general training. Soccer is a game which requires a player in constantly moving but most of running in short sprints from 5 meters to 20 meters with many changes of direction. Explosive power is a combination of speed, muscular endurance and muscular strength, all of which can be developed through plyometric exercises. It is concluded that due to plyometric training there will be improvement in speed among Soccer players. Key words: plyometric exercises, speed, explosive power etc

Introduction:

Association football, more commonly known as **football** or **soccer**, is a team sport played between two teams of eleven players with a spherical ball. It is played by 250 million players in over 200 countries and dependencies, making it the world's most popular sport. The game is played on a rectangular field with a goal at each end. The object of the game is to score by getting the ball into the opposing goal. Players are not allowed to touch the ball with their hands or arms while it is in play, unless they are goalkeepers (and then only when within their penalty area). Other players mainly use their feet to strike or pass the ball, but may also use their head or torso. The team that scores the most goals by the end of the match wins. If the score is level at the end of the game, either a draw is declared or the game goes into extra time or a penalty shootout depending on the format of the competition. The Laws of the Game were originally codified in England by The Football Association in 1863. Association football is governed internationally by the International Federation of Association Football which organizes World Cups for both men and women every four years.

Plyometrics for soccer is one of the most effective method to increase the Explosive Speed among Soccer Players. Plyometrics are exercises that challenge your muscles explosively. With consistent plyometric training, football players can significantly increase their speed and power.

Previous Studies:

In soccer there are around 1000-1400 strength and power actions per match (Stølen, Chamari, Castagna, & Wisløff, 2005). Actions like sprinting, jumping or kicking are known to be critical on a soccer match, therefore, is not surprising that maximum strength and vertical jumps can distinguish competitive level between soccer athletes (Faina e col., 1988; Wisløff, Helgerud, & Hoff, 1998). In a study two teams from the Norwegian elite soccer league, one elite and other sub-elite, were compared regarding endurance, strength and power (Wisloff et al., 1998). The elite team (Rosenborg) was the most successful team in the elite soccer league, while the sub-elite team (Strindheim) was playing for the first year on the major league at the time of the study. In what respect to lower body strength and power, both teams were tested for one repetition maximum (1-RM) 90° squat and vertical jump. Not surprisingly, the more competitive players (elite team) were significantly stronger compared to their opponents (sub-elite team) with squat values of $164 \pm 21,8$ kg and $135 \pm 16,2$ kg respectively. Power was also higher (not significantly) in athletes of the elite team compared to the sub-elite, with jumping heights of respectively 567 ± 66 mm and 531 ± 40 mm. The objective of the study is to determine the effect of plyometric training for development of speed among soccer players of Hyderabad District in India. It is hypothesized there will be effect of Plyometric training for development of Speed among Soccer Players.

Materials and Methods:

The purpose of the present study to find out the effect of plyometric training for the development of Speed in Soccer Players of Hyderabad District. The sample for the present study consists of 40 Male Soccer Players of Hyderabad District of Telangana State in India out of which 20 are experimental group and 20 are controlled group which practices daily at Osmania University Grounds and participate in the foot ball matches during the year 2016-2017. The 40 Male Soccer players consists of Experimental Group 10 Forward Players and 10 Defense players and Control Group consists of 10 Forward players and 10 Defence players. They are randomly chosen among the foot ball players of Hyderabad District. The Footballers of the Hyderabad District are Amateur. Plyometric exercises such as hopping, bounding, depth jumps, tuck jumps, box jumps etc were given to experimental group on alternate days i.e. three sessions per week and controlled group were given the general training in Soccer for eight weeks. The following are one week schedule for the soccer players.

Days	Exercises	Repetitions and Sets
Tuesday	Lower body Exercises Hopping, Bounding, box Jumps	Hopping 30 M X 8 sets (Each Leg) Bounding 30 x 12 Sets Box Jumps 4 boxes x 12 sets
Thursday	Upper Body Exercises Medicine Ball Throwing to wall and catching Clap Push ups, Medicine ball Back Throws	Medicine ball throws
Saturday	Lower and middle body Exercises (With Weights) Sit ups with weights back of Head, Lunges front and back (20 Sec), High Knee Running with weights (30 Sec), step ups with Weights (30 Sec)	12 reps x 3 sets each Exercises 20 Sec x 3 Reps (Lunges) 30 Sec x 3 Reps (High Knee and step ups)

To assess the Speed Pre Test and Post Test were conducted in 50 Meters Run by the qualified technical officials of athletics to the experimental group and controlled group

50 M Run:

Sprint or speed tests can be performed over varying distances, depending on the factors being tested and the relevance to the sport. The 50 Meter Sprint is part of the International Physical Fitness Test.

Purpose: The aim of this test is to determine acceleration and speed.

Equipment required: measuring tape or marked track, stopwatch, cone markers, flat and clear surface of at least 70 meters.

Procedure:

The test involves running a single maximum sprint over 50 meters, with the time recorded. A thorough warm up should be given, including some practice starts and accelerations. Start from a stationary standing position (hands cannot touch the ground), with one foot in front of the other. The front foot must be behind the starting line. Once the subject is ready and motionless, the starter gives the instructions "set" then "go.".The tester should provide hints for maximizing speed (such as keeping low, driving hard with the arms and legs) and the participant should be encouraged to not slow down before crossing the finish line. Results: Two trials are allowed, and the best time is recorded to the nearest 2 decimal places.

Results:

This study shows that due to the plyometric exercises there is a improvement of Soccer Players experimental group in speed and soccer Group controlled group is decreased in speed due to the general training.

Mean values and Independent Samples Test of 50 M run test between experimental and control groups

Variables	Group	Pre Test Mean \pm SD	Post Test Mean \pm SD	t	P - Value
50 M Run Test	Experimental	7.51 \pm 0.294	7.24 \pm 0.262	4.58	0.000
	Control	7.64 \pm 0.376	7.74 \pm 0.408		

*Significant at 0.05 level

The Experimental Group of 50 M Run Men is 7.51 in Pre Test and Controlled Group mean is 7.64 in Pre Test there is difference of 1.13 in Pre Test. The Experimental Group Mean is 7.24 in Post Test and Controlled Group mean is 7.74, the Experimental Group mean in Post Test in 50 M Run is decreased from 7.51 to 7.24 there is a improvement of 0.27 from Pre Test to Post and Control Group Mean is post test is 7.73 there is a increasement of 7.64 to 7.74 from Pre Test to Post, the performance is come down to 0.10 in the controlled group. The Standard deviation of Experimental group in Pre Test 0.294 and Post Test is 0.262 and controlled group is 0.376 to 0.408. T value is 4.58 and p-value is 0.000.The Control Group is not Concentrated more on any training of motor abilities. They are just playing the foot ball and the timing of 50 M Run is increased little from 7.64 to 7.74.

Discussion & Conclusion:

Plyometric exercises will develop explosive power in your hips and legs, which in turn will help you sprint faster.Speed and strength are two athletic abilities that help a football player significantly improve his performance on the field. How fast and strong you are will partly depend on your body type and genetic makeup, but you can make notable strides by incorporating weight training, plyometrics and speed work into your regimen. Soccer Players need a combination of Aerobic and An Aerobic fitness. A good mid fielder requires good Aerobic Fitness and forward Striker requires more An Aerobic Fitness. Plyometric Exercises improves the Explosive Power in the legs, arms, chest and shoulder. It also abosorb the forces of impact during the games. It is concluded that due to plyometric training there will be improvement in speed among Soccer Players. Hence Coaches must include in Training Programme Plyometric exercises to increase the speed and explosive strength among soccer players.

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A Study On The Behavioural Patterns Of The Sports Performers At Secondary Level

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Abstract

Human being is competitive by his nature. He learns the competition prior to the cooperation and involves himself in variety of competitions through his life time . One competes with other to make his presence noticeable; one competes with other to show his supremacy and records. Progress and high degree of achievement are true wonderful world competitions. The main aim of the modern sport competition are to detect and diagnose the human ability at an early stage of life and channelize it in the right direction to realize the achievements aimed at a particular sport or game. Psychologists study human nature scientifically, rather than formulate conclusions from casual observations. They sort out and / or check and recheck human characteristics under reliable conditions. In this manner and through the use of acceptable scientific evaluation, it is possible for psychologists to determine the conditions under which certain human characteristics will operate or learning occur. parents ,teachers and sport lovers in the communities, A strategic need for self motivation is very much appreciated on par with the studies although it is their final goal. The art of sporting and games is a must for all the students for their health which helps increase the wellness appetite for good performance, for good grades and to be a good and responsible citizen.

Introduction:

The adolescents in sports tend to become strong physically, emotionally , psychologically and socially in every situation as good citizens of India because they are on the right track towards better studies and healthy students when they become self-disciplined being injected by a spirit of strong convictions overcoming depression . Thus they make a difference in the school they attended and in the grades they get and the health they possessed. Obviously that all the students who play in schools were not exposed in equal measures to sport competitions. But were exposed to in different competitions. Hence, these differences in participation would result in differences in motivation level, anxiety, self confidence, and self discipline.

Hence, the research involves the assessment of selected Psychological variable motivation, anxiety, self confidence and self discipline among students who participate in sports -motivation -anxiety-self discipline-self confidence

Motivation: Increasing motivation towards physical activity through quality physical education has recently gained considerable attention. Several investigators have outlined specific models or theories to illustrate how motivation can be enhanced in physical education .

Anxiety in sport is most common in competitive sports environments and could also be termed competitive stress in sport, but one definition, proposed by sport Psychology: A Self-help Guide, "is that it's "the result of an interaction between the individual and the environment...an emotional response to the demands placed upon the individual by the environment."

Self-Confidence: Sport psychologists say self-confidence as the belief that you can successfully perform a desired behaviour. Confident players and athletes expect success and have a high level of self-belief that appears crucial in determining how far they strive towards their goal.

Self-Discipline: To get success in life the person needs undeniable self-discipline. The fact that the athlete or player can come through and do what he/she needs to do at a given time, is crucial to being on top of his/her way. Here are some tips that help the athlete to have better self-discipline;

-Set your goals. One of the most important aspects of self-discipline, is having goals, and doing all within your power to accomplish them. Goals can provide you with the needed drive and motivation to follow through and overcome any obstacle in front of you, thus creating powerful self-discipline.

Practice makes perfect: Self-discipline is yourself with practice. It's only by getting up and getting your hands dirty that you can start to incorporate discipline within your existence. Only then can you truly experience the ups and downs that it takes to become truly self-disciplined.

Purpose of study:

Through the study, the researchers wanted to determine whether participation at school sports can help avert anxiety, improve their motivation levels, self-confidence and self-discipline among secondary school level students.

Methodology:

The researcher surveyed 200 secondary level students. Out of which 100 were girls and 100 boys. 100 boys who participate in school sports and 100 girls those who don't participate in school sports of Hyderabad and Rangareddy district.

The researcher had approached students from different schools of Hyderabad and Rangareddy dist.

Results

1. It was found that boys who participate in school sports and girls who don't participate in sports (16.86) scored less than girls and boys sport participants (21.72) in relation to their anxiety level.

2. It was found that boys who participate in school sports and girls who don't participate in sports (17.76) scored less than female and male achievers (23.24) in long distance running event in relation to their anxiety level.

3. It was found that girls and boys who participate in school sports (79.90) scored higher than girls and boys who don't participate (79.66) in relation to their achievement motivation.

4. It was found that girls and boys who participate in school sports (83.20) scored higher than girls and boys who don't participate. (77.22) in relation to their achievement motivation.

5. It was found that girls and boys who participate in school sports (79.00) scored higher than girls and boys who don't participate (72.78) in relation to their self-confidence.

6. It was found that girls and boys who participate in school sports (81.82) scored higher than girls and boys who don't participate (71.90) in relation to their self-confidence.

7. It was found that girls and boys who participate in school sports (78.18) scored higher than girls and boys who don't participate (73.90) in relation to their self-discipline.

8. It was found that girls and boys who participate in school sports (78.84) scored higher than girls and boys who don't participate (75.80) in relation to their self-discipline.

Discussion: After the survey, researcher found that some of the students who participate in school sports and games become strong psychologically and developed in very important aspects like:

self-confidence, social behaviour, good character, self-esteem, memory power, good blood circulation, good appetite, good sleep, improved lung capacity, good posture, decrease tension and anxiety, self-discipline and self-motivated.

Behavioural changes in normal students: motivated in many things of wellness and getting involved in the sports more joyfully. Depending on the outside support and not within oneself because of less triggering force in the physical status lacking toning of nerves and muscles due to poor movements in the body and thus a person possessing a mind getting dull for any motivation and on possible route to depression. Frequent sickness of headache, colds due to lack of blood circulation due to less efforts of movement although daily routine work in dullness.

Conclusion

Psychology plays a significant role in overall performance of students. The psychological VARIABLES SHOW A DIFFERENCE of role for students to control over the behaviour. A positive emotions are less dominated by negative emotions in sports and games where as negative emotions will be less dominated in individual events and those who participate less in school sports.

Behavioural changes in students who participate in school sports and games : motivated in many things of wellness and getting involved in the sports more joyfully. Depending on the outside support and not within oneself because of less triggering force in the physical status lacking toning of nerves and muscles due to poor movements in the body and thus a possessing a mind getting dull for any motivation and on possible route to depression Frequent sickness of headache, colds due to lack of blood circulation due to less efforts of movement although daily routine work in dullness.

Unlike the normal school going students, sports participants are very few who are more goal oriented, they try to strive and achieve goals. The focus is more towards improving their performance in their respective sports /games. At a young age, they learn to manage team members, improve reflexes, improve cognitive functioning .

The following conclusions were drawn from the attempted study:

That It was concluded a significant difference was found among students who play s in school and who don't play in school in relation to their motivation level

That It was concluded a significant difference was found among students who play s in school and who don't play in school in relation to **anxiety level**.

That It was concluded a significant difference was found among students who play s in school and who don't play in school in relation to their **self --confidence**

That It was concluded a significant difference was found among students who play s in school and who don't play in school in relation to their **self discipline**.

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Comparative Analysis On Fitness Variables Of Open And Closed Skill Athletes

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Abstract

The purpose of this study was to find out the significant differences of selected physical fitness variables between open and closed skill athletes. To obtain data for this study, the investigators had selected on ninety (N=90) male university level athletes of 19 to 25 years of age group to act as subjects. They were further divided into two groups which includes forty five (n= 45) open skill athletes and forty five (n= 45) closed skill athletes of various games and sports. The purposive sampling technique was used to obtain the required data. The selected physical fitness test considered for this study was flexibility (sit & reach test), Agility (Illinois Agility Test), speed (30 M. sprint), Strength (standing long jump) and cardio-vascular endurance (800 meter run). To compare the mean differences between the two groups, mean, S.D and t-tests were computed by means of Statistical Software. To test the hypotheses, the level of significance was set at 0.05. The analyzing of data reveals that the mean, standard deviation with regard to flexibility (sit & reach test) of Open Skill subjects were (19.50, 6.20) and whereas for closed skill subjects shows mean, standard deviation were (24.50, 4.31). With regard to Agility for both the groups the mean and standard deviation were (15.4, 0.43) and (15.7, 0.59) respectively. The data speaks an interesting results regard to sprinting performance with mean and standard deviation were (4.22, 0.18) and (4.31, 0.18) respectively. The data for standing long jump for both the groups shows mean and standard deviation were (1.75, 0.23) and (1.84, 0.24) respectively. Regards to 800 meter run the data shows picture for Open Skill subjects and closed skill subjects with mean and standard deviation were (3.09, 0.18) and (2.98, 0.26) respectively. It is concluded that the both groups differ significantly. It is concluded that closed skill athletes had significantly higher flexibility, strength and cardio-vascular endurance. Moreover the open skill athletes had shows greater performance with regard to agility and sprinting performance compare to their counterpart i.e. closed skill participants.**Keywords:** Fitness, Open And Closed, Skill, Athletes

Introduction

"A sound mind in a sound body" is a good mean that has stood the best test of time. There have been a number of studies tending to shows that mind and body are inseparable. Ancient thinkers of Greek, Aristotle, combined moral intellectual and physical excellence. At Athens an uneducated body was a much a disgrace as an untrained mind. A success of any sports and games can be accredited to many factors, but training is the one of the most important factor. Different training methods have been commonly used to improve physical fitness and related standards of performance of athletes Fitness is total and total fitness generally implies soundness and readiness for life, and its functions. Fitness is the ability to perform muscular work satisfactorily (WHO, 1994). Physical fitness is the capacity to meet successfully the present and potential physical challenges of life (Lamb, 1984).Physical fitness, today, is better understood in terms of the functioning of the heart, blood vessels, lungs, and muscles to function at optimum efficiency Fitness emphasizes on the state in which an individual has sufficient energy to avoid fatigue and give best in his event. Sport training is long, continuous, and systematic process or physical and mental hard work, to attend high level of performance in competitions at various levels by making the best use of the principles derived from the sports sciences (Singh Hardayal, 1993). Physical fitness is

generally judged by the performance and this performance is based on composite of many factors.. It is considered is a matter of fact that when all other contributing factors are considered the level of fitness or physical fitness shall definitely lead to improvement in the performance level of the sportsman participant in a variety of games and sports High level of health and fitness are very vital aspect for sports men performance. Sports performance of an athlete's in any event mostly depends on physical fitness level. Physical fitness comprises the following five motor abilities namely muscular strength, agility, power, speed, and cardiovascular endurance. This is evident that the sports performance of sportsmen in various sports and games depends on huge extent on fitness abilities, as athletes aged, needs lot of high level of fitness to continue their performance. The training schedule is designed to improve the skills and to increase the energy capacity of an athlete for a particular sport or game. Therefore training is essential for the development of physical fitness components (William & Sperryn, 1976). Sport training is a long, continuous, and systematic process or physical and mental hard work, to attain high level of performance in competitions or various levels by making the best use of the principals derived from other sports sciences (Hardayal Singh, 1993).The variables of physical fitness like muscular strength, speed, Muscular endurance, flexibility and a variety of coordinative abilities are important for technique and tactical competency stated by (Mal, 1982). The activities such is running, jumping, leaping are considered is fundamental human movements but at the same time are considered basis to all types of games and sports. There is no such game, which does not involve activities like running, jumping, leaping. Thus, it automatically becomes clear that the degree to a particular game or sports training, excessive concentration would be given on the fitness because high level of fitness would be more helpful in emergency conditions. The following factors have generally been conceded is being most commonly mentioned component of physical fitness. Flexibility is the ability to achieve an extended range of motion without being impeded by excess tissue, i.e. fat or muscle (e.g. executing a leg split). Every individual needs some flexibility in order to perform activities in day to day life. Research suggests that flexibility is useful in preventing some type of muscle sprain, low back pain, (cady, L.D, 1979). Muscular endurance is an important fitness component and helps individuals in performing high performance. Muscular endurance is the ability of the muscle group to perform repeated contraction i.e. isotonic, iso-kinetic, or eccentric against a load or sustain a contraction isometric for an extended period of time (Fox, 1989). Speed is the ability to perform rapidly successive movements over a short period of time in a given direction (Singh, 1991).This present study was conducted to determine the significant difference between open and closed skill athletes with regards to Physical fitness. A closed skill sport athlete basically knows when and how to execute the movements /skills, which are unlikely to change or influenced by external factors. Closed skill sports may include skills which are trained in a set pattern and have clear beginning and endings, such as athletics, swimming, bowling, gymnastics, shooting etc. Closed sports include skills which have the tendency to be self-paced and require focus on a relatively unchanged environment (Lerner et al., 1996). Open skilled sports are sports which include execution of skills which are determined by the constant change of the environment. Skills are adapted to the instability of the environment which are predominantly perceptual and paced externally (Knapp, 2002). These sports are such as football, tennis, badminton, handball and basketball etc.

Method And Procedure

Sample of respondents

To obtain data for this study, the investigators had selected ninety (N=90) male university level athletes of 19 to 25 years of age group to act as subjects.They were further divided into two groups which includes forty five (n= 45) open skill athletes and forty five (n= 45) closed skill athletes of various games and sports. The purposive sampling technique was used to obtain the required data. All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study.

Table-1Details of selected open and closed skill athletes.

Sr. No	A-Open Skill	Sample	B-Closed Skill	Sample
1	Basketball	15	Track and field	15
2	Handball	15	Swimming	15
3	Cricket	15	Gymnastic	15
		45	45	

Table- 2 Selection of variables

S.No	Variables	Tests	Criterion Measure
	Speed	30 meter dash	Recorded to the nearest 1/100 th Second
	Strength	Standing long jump	Recorded to the nearest Centimetres
	Agility	Illinois Agility Test	Recorded to the nearest 1/100 th Second
	Cardiovascular Endurance	800 meter run	Recorded to the nearest minutes /sec
	Flexibility	Sit & reach test	Recorded to the nearest Centimetres

Data Analysis

Student's t-test for independent data was used to assess the between-group differences. The level of $p \leq 0.05$ was considered significant.

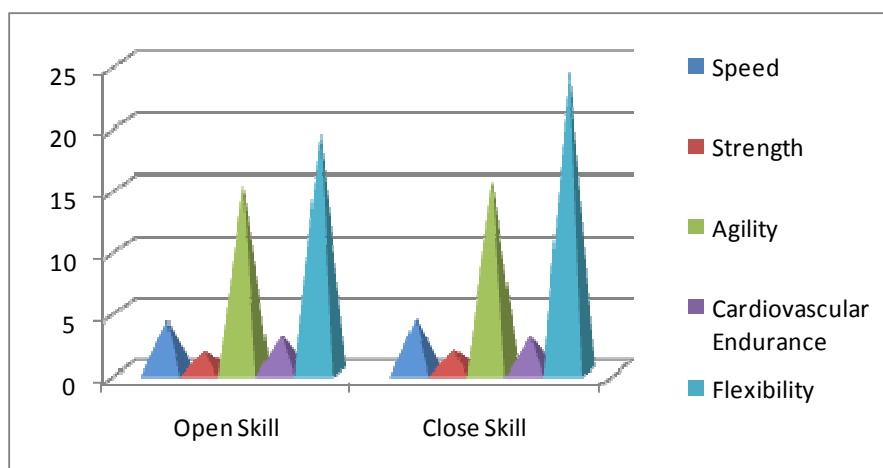
Results

The results pertaining to significant difference, if any, between open and closed skill athletes were assessed using the Student's t test and the results are presented in tables-3:

Table-3 Mean, Standard Deviation and t-value and of between open and closed skill athletes

Test Items	Open Skill (N=45)		Closed Skill (N=45)		t-value
	Mean	S.D	Mean	S.D	
Speed	4.22	0.18	4.31	0.18	1.30
Strength	1.75	0.23	1.84	0.24	1.51
Agility	15.4	0.43	15.7	0.59	1.94
Cardiovascular Endurance	3.09	0.18	2.98	0.26	1.41
Flexibility	19.50	6.20	24.50	4.31	3.86

The analyzing of data reveals that the mean, standard deviation with regard to sprinting performance (30 meter dash) of Open Skill subjects were (4.22, 0.18) and whereas for closed skill subjects shows mean, standard deviation were (4.31, 0.18). The data for standing long jump for both the groups shows mean and standard deviation were (1.75, 0.23) and (1.84, 0.24) respectively. With regard to Agility for both the groups the mean and standard deviation were (15.4, 0.43) and (15.7, 0.59) respectively. Regards to 800 meter run the data shows picture for Open Skill subjects and closed skill subjects with mean and standard deviation were (3.09, 0.18) and (2.98, 0.26) respectively. The mean, standard deviation with regard to flexibility (sit & reach test) of Open Skill subjects were (19.50, 6.20) and whereas for closed skill subjects shows mean, standard deviation were (24.50, 4.31). The comparison of mean scores of both the groups has been presented graphically in figure-1

**Figure-1** Graphical representation of mean scores of open and closed skill athletes on the variables i.e. Speed, Strength endurance, Flexibility, Power and Cardio-vascular endurance

Discussion & Conclusion

The analysis of data reveals significant differences among both the groups. Both the groups differ significantly with regard to flexibility, and closed skill participants group shows greater performance this is because of the nature and skills of their game which effects on the performance relate to flexibility. Both the groups differ significantly with regard to Agility, further more it shows that the Open Skill participants had shows greater performance. In respective demand of the game, each component of the physical fitness is necessary and important and should be developed as a result. Different body types have different level of fitness, which may change from day to day, place to place and time to time. Open Skill subjects had shows superior sprinting performance compare to their counterpart, this apart it reveals that the Open Skill subjects are having better sprinting performance due to their demand of skills develop in their training schedule and also during the play. The closed skill subjects are mostly emphasizing on strength, flexibility and cardio-vascular endurance as their nature of game demands. Lastly with regard to agility and speed performance both the groups differ significantly, and the Open Skill participants had shown greater performance.

Acknowledgements

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Comparison of Explosive Power among Korf Ball Players and Throw Ball Players of the Hyderabad District in India

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Introduction:

Korfball (Dutch *Korfbal*) is a mixed gender team sport, with similarities to netball and basketball. A team consists of eight players; four female and four male. A team also includes a coach. It was founded in the Netherlands in 1902 by Nico Broekhuysen. In the Netherlands there are around 580 clubs, and over 100,000 people playing korfball. The sport is also very popular in Belgium and Taiwan and is played in 54 other countries. The game consists of Two Half of 30 minutes each, with an interval of 5 minutes between the first and second half. After every two Goals the team has to change the courts. Korfball is played in over 60 countries including: United States, United Kingdom, Ireland, Australia, New Zealand, the Czech Republic, Poland, Greece, Serbia, South Africa, Zimbabwe, India, the Netherlands, Belgium, Russia, Germany, Taiwan, Turkey, Hong Kong, Portugal, Pakistan, Sweden, Hungary, the Philippines, Italy etc. Korfball has been played in the World Games since 1985. IKF World Championships have been held every four years since 1978. The leading nations are Belgium and the Netherlands, Spain, France and Romania. It is growing in popularity in the UK. Throwball is a non-contact ball sport played across a net between two teams of seven players on a rectangular court. Throwball is popular in Asia, especially on the Indian subcontinent, and was first played in India as a women's sport in Chennai during the 1940s. Like volleyball, the game's roots are linked with the YMCA. Both volleyball and newcomb ball, while older games, share many similarities with throwball. Throwball rules were first drafted in 1955 and India's first national level championship was played in 1980.

Purpose of the Study:

The Purpose of the study is to find out the Leg Power among Korf Ball Players and Throw Ball Players of the Hyderabad District in India.

Previous Studies:

A.Naresh and Babai (2013) Published in the International Journal of Health, Physical Education and Computer Science in Sports conducted the Study on Agility among Sepak Takraw and Basket Ball Players. It was found in the Study Sepak Takraw Players are having better agility compare to basket ball Players

Dr.KaukabAzeem (2013) Published in the Asian Journal of Physical Education and computer Science in Sports conducted the study A Comparative study of agility among Sepak Takraw and Netball Players of Hyderabad District

Dr.K.Deepla (2014) Published in the Asian Journal of Physical Education and computer Science in Sports A Study Of Aerobic Endurance Among Foot Ball Players And Sepak Takraw Players Of Hyderabad .

Methodology:

The Sample for the Study consists of 20 Korf Ball Players and 20 Throw Ball Players of Hyderabad District between the age group of 18-20 Years. To assess the Leg Power the Standing Broad Jump Test is conducted by the Technical Officials.

Standing Broad Jump:

The Standing long jump, also called the Broad Jump, is a common and easy to administer test of explosive leg power.

purpose: to measure the explosive power of the legs

equipment required: tape measure to measure distance jumped, non-slip floor for takeoff, and soft landing area preferred. Commercial Long Jump Landing Mats are also available. The take off line should be clearly marked.

procedure: The athlete stands behind a line marked on the ground with feet slightly apart. A two foot take-off and landing is used, with swinging of the arms and bending of the knees to provide forward drive. The subject attempts to jump as far as possible, landing on both feet without falling backwards. Three attempts are allowed.

Result and Discussion:

Table I showing the Mean values and Independent Samples Test of Standing Broad Jump between Korf Ball and Throw Ball Players

Variables	Group	Mean \pm SD	t	P - Value
Standing Broad Jump	Korf Ball Players	2.32 \pm 0.157	3.55	0.001
	Throw Ball Players	2.28 \pm 0.159		

*Significant at 0.05 level

In Table –I the Mean Values of Korf Ball Players in Standing Broad Jump is 2.32 and throw Players is 2.28. The Standard Deviation on Korf Ball Players is 0.157 and throw Ball Players is 0.159 and t is 3.55 and P-Value is 0.001

The Mean values of Korf Ball Players in Standing Broad Jump is 2.32 and throw ball Players is 2.28 in Standing Broad Jump. Hence the Korf Ball Players are having good explosive Power compare to Throw Ball Players. Explosive power is more important in all sports and games.

Conclusions:

Korf ball is a fast paced and dynamic game that is the only truly mixed team sports in the world. The Qualities required by the Korf ball player is Strength, Speed and Endurance. The important physical quality is explosive power to have good performance in Game. Korfball is a fast, dynamic sport. Two teams of mixed sex compete against each other to score a basket at opposing ends of the court.

It is concluded that the Korf Ball Players are having more explosive Power because they require good jumping ability to throw the ball in basket.

Recommendations:

Similar Studies can be conducted among females and in other Sports and games. This study is useful to the Coaches to prepare the conditioning program to improve their skills in Korf Ball and Throw ball.

Acknowledgements:

I am very thankful to Mr.E.B. Srikanth, Korf Ball Coach and Mr.Venkat Throw Ball Coach for their help for the Study.

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Wikipedia Korf Ball and Throw Ball

www.topendsports

Asian Journal of Physical Education and Computer Science in sports

International Journal of Health, Physical Education and Computer Science in Sports

Effect of Yogic Practices on Selected Physical and Physiological Variables of Inter District Men Football Players

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Abstract

The high level of physical fitness comes from years of daily experience in a selected variety of Yogic practice. Man needs yogic practice for growth and development. To perform the daily activities in a more efficient manner, condition of muscles, their strength and endurance are essential to man. The game of soccer is additionally known as association football. It needs strength, much more endurance. The purpose of the study was to find out the effect of 12 week yogic practices on selected Physical and Physiological variables. 90 men Football players were selected as subjects, at the age group of 18 to 25, the selected subjects were divided into 2 groups of 45 subjects each group. For this study group I served as Experimental group and group II acted as Control group. The collected and analyzed statistically, in all the cases the level of confidence is fixed at 0.05 for significance.

Key Words: Yogic practice, Asanas, Physical, Physiological, Football.

Introduction

Man needs yogic practice for growth and development. To perform the daily activities in a more efficient manner, condition of muscles, their strength and endurance are essential to man. Every human being participates in some kind of Yogasanas or physical exercise during the course of his life. This exercise may assume different forms for different individuals. It may be practicing of various yogic poses, walking, jogging, cycling, working in a factory, participation in games and sports etc. Regular participation in Yogic programmes markedly influences physical, physiological and mental fitness of an individual. Physical fitness is the ability to carry out tasks without undue fatigue. Physical fitness is a state of physiologic well being that is achieved through a combination of good diet, regular physical exercise, and other practices that promote good health. The game of soccer is each associate degree art and science. It involves techniques of running, passing, kicking, tackling, blocking, heading, cardiopulmonary exercise and dribbling; of these activities have usually to be performed at nice speed.

Methodology

Selection of Subjects

The purpose of the study was to find out the effect of 12 week yogic practices on selected Physical and Physiological variables. 90 men Football players were selected as subjects, at the age group of 18 to 25, who are belongs to Anantapuramu District, Andhra Pradesh. The selected subjects were divided into 2 groups of 45 subjects each group. Group I acted as experimental group and group II served as control group.

Selection of Variables and Experimental Design

The following physical and physiological variables were selected to assess before and after the experimental period of training; the following physical and physiological variables were selected to assess before and after the experimental period of training. The subjects were tested on the selected variables at the beginning (pre-test) and at the end of the experimental period of eight weeks (post-test). The training period was restricted only 12 weeks.

Dependent Variables

Physical Variables	Physiological Variables
1) Muscular endurance.	1. Resting Pulse rate
2) Cardiovascular endurance	2. Resting Respiratory rate
3) Speed (50 meters dash)	3. Vital Capacity
4) Agility	

Independent Variables

Yogic Practices

Table 1

Criterion measures

The following Criterion Measures were adopted to measure the test.

Sl.No	VARIABLES	TEST ITEM	UNITS OF MEASUREMENTS
1.	Cardio Vascular Endurance	12 minutes Run/Walk	In meters
2	Muscular Endurance	Knee bend sit-ups	In minutes
3	Agility	Shuttle run	In Seconds
4	Speed	50 mtrs. Dash	In seconds
5	Resting Respiratory Rate	To Record the Heart beats	In minutes
6	Resting Pulse Rate	To Record the number of Respirations	In minutes
7	Vital Capacity	To measure Lung Volume	In minutes

Table 2: Showing the summary of Means and T-Test for the Pre-test and Post-test data on Resting Pulse Rate (Scores in minutes)

Group	Test	Mean	Mean Difference	Standard Deviation	Obtained -t
Control	Pre-Test	81.16	0.62	7.53	0.70
	Post – Test	81.77			
Experimental	Pre-Test	82.13	12.00	12.20	*8.63
	Post – Test	70.13			

Table 3: Showing the summary of Means and T-Test for the Pre-test and Post-test data on Respiratory Rate (Scores in minutes)

Group	Test	Mean	Mean Difference	Standard Deviation	Obtained –t
Control	Pre-Test	25.0	0.20	1.41	0.50
	Post –Test	25.20			
Experimental	Pre-Test	25.58	3.65	3.09	*7.52
	Post –Test	21.93			

Table 4: Showing the summary of Means and T-Test for the Pre-test and Post-test data on Vital Capacity (Scores in minutes)

Group	Test	Mean	Mean Difference	Standard Deviation	Obtained –t
Control	Pre-Test	1584.4	11.37	225.05	0.82
	Post–Test	1595.8			
Experimental	Pre-Test	1293.3	255.45	261.91	*9.28
	Post– test	1548.7			

Table 5: Showing the summary of Means and T-Test for the Pre-test and Post-test data on Muscular Endurance (Scores in minutes)

Group	Test	Mean	Mean Difference	Standard Deviation	Obtained –t
Control	Pre-Test	21.91	0.58	4.40	0.54
	Post – Test	22.49			
Experimental	Pre-Test	25.11	6.58	6.48	*2.77
	Post – Test	31.69			

The result of the study indicated that there was a significant improvement on Resting Pulse Rate, Resting Respiratory Rate, Muscular Endurance and Speed.

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The Importance Of Physical Education In Today's Schools

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Abstract

Participation in physical activities is crucial for the holistic development of young people to nurture their physical, social and emotional health as well as intellectual side. The contribution of physical education to the personal, social and physical development of the child has been a well recognised fact for years but still it remains unexplored in many schools, especially at the primary level. Physical Education (PE) provides children with the knowledge, skills and understanding necessary to perform a variety of physical activities, maintain physical fitness and to value as well as enjoy physical activity as an ongoing part of a healthy lifestyle. Physical education (PE) as an important part of overall child education and development has started getting the due importance in the contemporary world. However, earlier it was one of the highly ignored aspects in the context of overall development of a child. Having said the above, most certainly we all can further acknowledge the fact that sports inculcates qualities like leadership, discipline, sharing, team work, honesty, team spirit, tolerance and many more among its participants. However, we cannot vouch and say that every child in a school gets an opportunity to experience this.

The main purpose of this paper is to highlight the importance of physical education in building and shaping school children with respect to their overall development and why it should be included as an integral part of today's school education system.

Introduction

A common phrase used by the general public is that "a healthy body leads to a healthy mind." There are many benefits physical education provides to today's students and society. This article looks at the development of the concept of physical education to the current status of PE in our primary schools. It takes into account the way PE is taught, looks at who teaches it, how teachers should be trained to teach it. Despite the acknowledged importance of PE, primary teachers in India in the 21st century find themselves endeavouring to implement an ambitious PE curriculum in the context of increasingly sedentary lifestyles, ironically juxtaposed with the celebrity status of sports-stars, and equipped with an uneven distribution of resources. Within a school setting, a physical education program can serve society in many ways if implemented and utilized appropriately. There are many areas physical education can serve and positively affect students and society. One is overall physical fitness. Physical education helps students and society improve skill-related components such as speed, agility, reaction time, balance, coordination, and basic movement patterns. Physical education helps students and society improve upon strength, endurance, flexibility, and cardiovascular/respiratory activities.

Hence, the question:

Why is there little emphasis on the importance of physical education in today's schools?

Physical education produces efficient sports teachers that inspire and motivate young students to achieve life enhancing goals. These goals include student improvement in

- (a) time involved in moderate to rigorous physical activity (b) nutrition habits
(c) body composition (d) flexibility (e) aerobic capacity and (f) muscular strength and endurance.

Physical education teachers are responsible for promoting a healthy and positive environment for learning. A healthy positive environment can be created and maintained especially if a physical education teacher provides constructive and positive feedback. In addition, if a physical education teacher is

prepared, provides well-organized activities, and establishes clear expectations, students will usually respond to the environment in a positive manner.

Physical education provides students the opportunity to enhance their physical, social, emotional, and cognitive development. This usually occurs during team sports, project adventure activities, problem-solving and physical fitness activities.

P.E at young age acts as a preventive measure taken at a young age to reduce future health risk factors. Furthermore, they found that students who engage in daily physical activity within the school setting will achieve the health benefits that they need to be physically fit more so than those students that do not engage in daily physical activity throughout the school day.

Physical education programs are the primary means to promote weight loss, this is evident with lessons on physical fitness. Physical education can also promote team play. Working as a part of a team is always encouraged to make the students competitive. The most common activities are athletics, gymnastics, aquatics, dance, and martial arts such as wrestling, boxing.

Discussion and Conclusion

Many researchers in the past have found that teachers have reported positive results regarding students being more alert and focused during class after participating in physical activity. Teachers also reported that 45 minutes of physical activity (one period) during the school day has not had any negative effects on student academic performance.

Furthermore, the researchers stated that if physical education teachers give students a reason to believe that they can make improvements in their abilities, then there is an increase in intrinsic motivation and found that providing students with goals gives them direction on what will meet their individual physical skill and fitness needs. Furthermore, they stated the importance of relating physical education classes to student interests. As a result, students will be more motivated to participate in physical education class. These are just a few ideas given to show the importance of motivating students in physical education class.

In order to implement these motivational techniques and other teaching methods, physical education teachers need to pursue professional development opportunities to enhance their instruction and teacher knowledge in the field of physical education.

One also notices an interesting shift in the mindset of parents, as now they have become more aware and understand the importance of a physically fit body. Also the realization of the ill effects of today's lifestyle on their children has made parents become more involved in trying and keeping their children fit, they now encourage their children to take up some form of sports or physical activity along with their studies.

There are many benefits students receive from school level physical education classes that contribute to students becoming responsible adults who are aware of the importance of a healthy lifestyle. School students retain a higher level of knowledge related to overall health that help them make educated decisions regarding their own health, safety and well-being.

Regular Fitness Activity

Physical fitness is an important component to leading a healthy lifestyle. The inclusion of regular fitness activity helps students maintain fitness, develop muscular strength and improve cardiovascular health. A regular fitness activity improves the absorption of nutrients by the body, improves digestive processes and increases physiological processes. P.E enhances growth in young primary students .

Builds Self-Confidence

The participation in physical education in school provides a positive influence on a student's personality, character and self-esteem. Their achievements in physical field and its recognition acts as a morale booster for them. In addition, the team-building process enhances communication skills, and the skills required to get along and cooperate with students of varying ethnic backgrounds and personalities.

Develops Motor Skills

Physical education in schools is essential to the development of motor skills and the enhancement of reflexes. Hand-eye coordination is improved, as well as good body movements, which helps in the development of a healthy body posture.

Health and Nutrition

Physical education teaches students the importance of physical health. High school is an age where students misinterpret the meaning of "overweight" and eating disorders prevail. Physical health and education informs students on sound eating practices and the essential guidelines for nutrition.

Relieves Stress

School students have substantial amounts of stress due to curriculum, homework, families and peer pressures. Involvement in sports, recreational activities or other forms of physical fitness offer a method of stress relief.

Today, a large number of schools have come up with initiatives where they not only provide the best sports infrastructure to encourage sports education among the young blood of the country but also provide systematic physical education programs by partnering professional companies with specialization in the field such as The Sports Gurukul (TSG).

TSG is India's first of its kind professional sports and fitness development and training organization promoting sports and physical education amongst children to enable them lead a healthy and active lifestyle through a structured and scientific researched KG to 12 PE & Sports curriculum and programs specifically meant for schools.

According to some research conducted by the TSG in schools over a long period of time, we can say that 70 percent of the school-going children in India do not get any exposure to any focused and planned physical education.

Of the remaining children, only those with active inclination towards sports get to do a little more physical activity & sports.

Children begin to develop an aversion towards sports when left out and this can only be solved if there is a structured program starting from the basic level of Junior KG and continues further integrating every child in the school.

If schools set a dedicated sports & physical education program so that children are exposed to physical activity from young & tender age, we can ensure that a huge number of children will be able to appreciate and understand the importance of physical education. This would further help them in being active throughout their lives and will encourage active participation in all forms of sports.

The statistics are alarming and unless there is a nationwide call for action, we will end up creating lop-sided educated children not in a position to conduct themselves in tomorrow's competitive world. The answer to this solution starts from a school and it is time that schools wake up to this silent time bomb waiting to explode which may end up creating a generation of unfit future Indian citizens. Can we afford that?

The physical education curriculum is one of the most crucial programs in early schooling as it can promote good health, giving students a new way to make them fit and learn their lessons at the same time. Thus we can conclude that there is a positive correlation between physical activity and academic achievement and every school in India should have well trained physical instructors with well equipped grounds and infrastructure.

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Comparison of Speed in Medium Start and Bullet Start among the Sprinters of Hyderabad District of Telangana State

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Abstract:

Sprint start along with the starting blocks and Spikes are compulsory in all sprint events in athletics. There are three types of sprint starts i.e. Bunch or Bullet start, Medium start and Elongated start. The difference between these starting positions is found during the on your marks part of the start. The Start has three phases on your mark, set and gun will be fired. **Purpose:** The purpose of the study is to find the difference in speed among Medium Start and Bullet Start among Sprinters of Hyderabad. **Methodology:** The sample for the present study consists of 50 sprinters of Hyderabad District out of which 25 Sprinters are Medium Start Group and 25 Sprinters are bullet Start Group. The 50 M Run is used to assess the speed in Medium Start Group and Bullet Start Group. The 50 M Run Test is conducted in Medium Start group and Bullet Start Group in crouch position with the Starting Blocks by the Qualified Technical Officials. **Results:** The results of the study shows that in Medium start timing is faster than the Bullet start in 50 M. **Conclusion:** Sprinters use blocks to achieve an explosive start in competitive events. By using the starting blocks, the sprinters can assume a sloping body position, which lifts your centre of gravity and helps you to reach maximum velocity in the shortest period of time. The blocks also abbreviate the distance between your start position and a correct and balanced running gait. It is concluded that medium start is faster in speed compare to the bullet start. Hence it is recommended medium start is good for sprinters to enhance the performance.

Key words: medium start, bullet start, sprinters etc.

Introduction:

Sprints are short running events in athletics and track and field. Races over short distances are among the oldest running competitions. The first 13 editions of the Ancient Olympic Games featured only one event—the stadion race, which was a race from one end of the stadium to the other. There are three sprinting events which are currently held at the Summer Olympics and outdoor World Championships: the 100 metres, 200 metres, and 400 metres.

Starting Blocks are used for all competition sprint (up to and including 400 m) and relay events (first leg only, up to 4x400 m). The starting blocks consist of two adjustable footplates attached to a rigid frame. Races commence with the firing of the starter's gun. The starting commands are "On your marks" and "Set". Once all athletes are in the set position, the starter's gun is fired, officially starting the race. For the 100 m, all competitors are lined up side-by-side. For the 200 m, 300 m and 400 m, which involve curves, runners are staggered for the start.

In the rare event that there are technical issues with a start, a green card is shown to all the athletes. The green card carries no penalty. If an athlete is unhappy with track conditions after the "on your marks" command is given, the athlete must raise a hand before the "set" command and provide the Start referee with a reason. It is then up to the Start referee to decide if the reason is valid. In the event that the Start referee deems the reason invalid, a yellow card (warning) is issued to that particular athlete. In the event that the athlete is already on a warning the athlete is disqualified.

Crouch Start:

Sprint starts are very commonly used in athletics ranging from sprints to a number of middle and long distance events. The two main variations are the standing and the crouch start which are used for middle or long distance events and sprints respectively. The crouching start is where when the gun shooter says "On your Mark" you stand in front of your line and you bend down and put your hands right under the line never above or you will get disqualified. Then when they say "Get set" You lean forward and put your butt in the air (not too much and not too little)..

There are three types of sprint starts:

- **Bunch or Bullet start** - The toes of the rear foot are approximately level with the heel of the front foot and both feet are placed well back from the starting line.
- **Medium start** - the knee of the rear leg is placed opposite a point in the front half of the front foot.
- **Elongated start** - the knee of the rear leg is level with or slightly behind the heel of the front foot.

Materials and Methods:

The sample for the present study consists of 50 Male sprinters of Hyderabad District out of which 25 Sprinters are Medium Start Group and 25 Sprinters are Bullet Start Group. The 50 M Run is used to assess the speed in Medium Start Group and Bullet Start group. The 50 M Run Test is conducted among Medium Start group and Bullet Start Group in crouch position with the Starting Blocks by the Qualified Technical Officials.

50 Meters Run:

Sprint or speed tests can be performed over varying distances, depending on the factors being tested and the relevance to the sport. The 50 Meter Sprint is part of the International, and their protocol is listed here.

purpose: The aim of this test is to determine acceleration and speed.

Equipment required: measuring tape or marked track, stopwatch, cone markers, flat and clear surface of at least 70 meters.

Procedure: The test involves running a single maximum sprint over 50 meters, with the time recorded. A thorough warm up should be given, including some practice starts and accelerations. Start from a stationary standing position (hands cannot touch the ground), with one foot in front of the other. The front foot must be behind the starting line. Once the subject is ready and motionless, the starter gives the instructions "set" then "go.". The tester should provide hints for maximizing speed (such as keeping low, driving hard with the arms and legs) and the participant should be encouraged to not slow down before crossing the finish line.

Results:

Two trials are allowed, and the best time is recorded to the nearest 2 decimal places. The timing starts from the first movement (if using a stopwatch) or when the timing system is triggered, and finishes when the chest crosses the finish line and/or the finishing timing gate is triggered.

Results and Discussion:

The Table No.1 showing the Mean, S.D, Standard Error, t-ratio of Sprinters in Medium Start and Sprinters in Bullet Start in 50 Meters Run.

Table No.1

Results of 50 M Run Test	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Bullet Start	25	6.87	0.48	0.12	2.25	48.00	0.03
Medium Start	25	6.55	0.23	0.06			

The Sprinters Bullet start mean performance in 50 M Run is 6.87 and Standard Deviation is 0.48 and Sprinters medium Start mean performance in 50 M Run is 6.55 and Standard Deviation is 0.23. The results of the study shows that in Medium crouch start mean timing is faster than the bullet crouch start mean timing in 50 M Run. The t-value is 2.25.

Conclusions:

It is concluded that Medium Crouch Start is having better speed and advantage in Sprints compare to the Elongated Crouch Start. Medium Start is suitable to all athletes whereas the Elongated Start is only suitable to the Height Athletes only.

Recommendations:

It is recommended that similar studies can be conducted in hurdles and relays in athletics and also female athletes.

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Wikipedia Sprints, Top end Sports

Systematic Review on the Effect of Imagery Training on Sport Performances and on other Psychological qualities of an athlete's:

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Abstract

The purpose of this literature review was to examine the effect of imagery training on performance and other psychological variables of athletes. Articles related to the topic were reviewed. A comprehensive analysis of the studies undertaken in this area indicates that imagery is a powerful and potential tool that has varied application in the field of sports. Imagery has shown to improve performances in various sport events. Athletes participated in various fields of athletics, gymnastic, soccer, basketball, Tennis and others sport activities were used their imagery skills during training and competition and scored a better performance. Imagery has also shown to improve the psychological qualities of athletes such as in reducing anxiety and regulate arousal, improving self confidence, attention and concentration abilities.

Key words: imagery, performance and psychological qualities.

Introduction

Greater sport performance is the result of physical, psychological, technical and tactical training as well as good lifestyle and personal qualities (Giles Warrington, 2010) nowadays; coaches and athletes have given exceptional emphasis for psychological preparation in their regular training programs and have been obtained outstanding performance. That is why I have chosen to study the effect of psychological qualities of athletes on their sport performance. There are various psychological variables that have greater relationship with performance of athletes. Some of them are, effective use of self-talk, relaxation, sharp concentration, self-regulation of arousal, goal setting, aggression, imagery, motivation, mental toughness, coping (process of changing ideas and behavior) and so on.

In this study, the effect of imagery training on performance development of an athletes and its effect on other psychological variables of an athlete's has been studied. In order to study these Aspects systematically the literature has been divided into two parts. In the first part studies ideas related to imagery and in second part studies the effect of imagery training on performance and on other psychological variables of an athlete's has been studied.

Objective of the study

- To examine the effect of imagery training on sport performance and on other psychological variables of an athletes

2.1. Imagery

According to Weinberg & Gould (2011) Imagery can be defined as the creation or re-creation of an experience in the mind. It is the process of creating picture or rehearses practice in the mind. It is important to use the power of the brain during competition, in addition to using the power of our muscles and other body parts. It used visual, kinesthetic, auditory, tactile and olfactory senses. It also involves moods and emotions.

Imagery can be used before and after practice or competition, during breaks in action and personal time and it s important to: Improve performance of experienced and non experienced athletes. It also used to Build confidence, improve concentration and Control emotional responses of individuals. Cope with pain, difficulty and Solve problems are the other importance of imagery. (www.psycologycampus.com)

How imagery works? There are theories that try to explain the effectiveness of imagery: According to Psycho neuromuscular Theory, Imagery helps the learning of motor skills, because by imagining movement, the neural pathways in the brain that control that movement are used and then strengthened. The other theory, Symbolic Learning Theory says, Imagery is a sort of mental plan of movements that help people to understand them and use them. Psychological Skills Hypothesis in its part explains as Imagery develops and refines mental skills such as concentration and confidence and reduces anxiety. According to Bio informational Theory, Images are made up of certain stimulus and responses to the situation. It is important to imagine the situation in advance to take advantage. Movement Imagery Questionnaire Revised (MIQ-R) and Sport imagery questionnaire (SIQ) are the common methods used to measure the imagery ability of a person.

The effect of imagery on performance and on other psychological variables of an athlete's

An article that examined the effect of imagery on flexibility ability of a person is entitled as "the effects of using imagery for flexibility training." Vergeer and Roberts (2005) this article participate 30 volunteers took part in a 4 week flexibility training program. They were randomly allocated to one of three groups: (G-1) where participants imagined moving the limb they were stretching; (G-2) where participants imagined the physiological processes involved in stretching the muscle and (3) control, where participants did not engage in imagery. Active and passive range of motion around the hip was assessed before and after the imagery intervention. Results showed significant increases in flexibility over time, both imagery groups scored significantly higher than the control group, Movement imagery group also scoring significantly higher than the physiological process imagery group. The researcher concludes that the imagery had stronger psychological effects than physiological.

Another study on the effect of skill training with and without imagery on fosbury flop technique in high jump performance of men students was done by Cleofas and Kutty (2004) studied. In the study 30 male students aged between 22-25 years randomly selected by Physical education teacher. They were equally divided into three groups. (G-A) , which undergo the skill training along with visual imagery, (G-B), which undergone the skill training only and (G-C), acted as the control group. The training was given on alternate days for a period of six weeks. Before and after the training program three judges rated the participants in their performance in the fosbury flop skill. Statistical application of analysis revealed that the training with visual imagery had a better effect in learning the fosbury technique in high jump.

An article done by Miller and Donohue (2003) examined the influences of two mental preparation interventions on 1.6 km run performance in 90 (45 male, 45 female) long-distance runners in Nevada, U.S.A. After participants completed a 1.6 km baseline run, they were randomly assigned to receive one of these interventions three min prior to a second 1.6 km run (i.e. listening to a personalized script of motivational and running technique statements on headphones, listening to music on headphones, listening to no Sound on headphones). Results of running performance indicated that participants who were assigned to the motivational and running technique statements and music conditions significantly improved their run performance, whereas participants in the no sound control condition did not. Youth ratings of intervention satisfaction were consistent with performance outcome. Positive imagery may enhance performance, negative and suppressive images have been found to be detrimental to performance

Imagery program has been seen a lot in tennis sport. Many players try to play through theses intervention programs. Mamassis and Doganis (2004) studied the effects of imagery training on Pre-competitive anxiety, self-confidence and tennis performance junior's tennis players. This season-long Mental Training Program (MTP) applied on a group of players having 5 members. Another group of elite junior tennis Players having 4 members received the same amount and quality of tennis practice without mental training practice. Program effectiveness was evaluated through various mechanizes, (a) The Competitive State Anxiety Inventory - 2 (CSAI-2), (b) the athletes' appraisal on 8 aspects of tennis performance, and (c) tennis-specific statistical data of two selected cases. The results indicated an increase in the direction dimension of the somatic anxiety, cognitive anxiety and self- confidence for the intervention group at the post test. Moreover, the intensity of self-confidence, as well as the overall tennis performance, was greater for all the participants of the intervention group after the MTP. Results on two selected cases are reported which clearly demonstrate the effectiveness of the MTP in eliminating specific performance problems.

The other article done by Jordet (2005) studied to determine whether an imagery intervention program would affect perception (i.e. vision of activity and potential control of future actions) in three elite soccer players. The imagery was presented to the unique action opportunities typically experienced by each player in a series of games. A single subject design was implemented and video analyses were carried out from in a series of games. Post-intervention questionnaires and interviews were also carried out to support the video analyses. Two of the participants appeared to increase their visual or perception of activity, but the other one of the participants marginally improved his performance with the ball. Elite soccer players can improve components of perception through imagery training. It is recommended that perceptual training addresses specific types of actions more directly.

The last Article on the effects of 5-minutes or less imagery training on free throw performance of basketball that I am going to review is called, "The effects of brief imagery on free throw shooting performance and concentration style of intercollegiate basketball players" Carboni J. Burke K. Joyner A. Hardy C. & Blom L.C.(2002). This article, conducted a study that wanted to examine the effects of 5-minutes or less imagery training on free throw performance of basketball athletes. In this single subject investigation, the authors used the previous season's free throw percentage and compared to the percentage established throughout the intervention for each of the five participants in the study. One athlete was used as the control for this investigation and did not take part in any of the imagery training during the study. The proper use of imagery was taught to each of the five participants in the study and asked to engage in a imagery session prior to shooting any set of free throws in the intervention phase. Results of this study did not show any consistent increases or decreases in free throw shooting performance. However, there were increases in the ability to concentrate on the task after the imagery intervention was implemented.

Conclusion

A compressive analysis of the studies carried out in theses area shows that imagery is a powerful means that has different application in the field of sports. The reviews cited above make known that imagery used in different sports disciplines. Imagery has also shown to improve the psychological qualities of athletes such as in reducing anxiety and arousal, improving self confidence, attention and concentration abilities. Imagery has shown to improve performances in various sport events. Imagery research indicates wide variations in terms of imagery modalities, duration of imagery training, and performance outcomes. This confirms the necessitate and importance for additional research in imagery in different sports with variations in the modalities, durations and type of imagery

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Yoga & Traditional sports for athletes Peak performance

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Abstract

Yoga is one of the most important nomenclatures of physical activities. The origin of Yoga is about 5000 years back in India. The Indian monks used to practice Yoga for spiritual development. The repetition of Om... Om...Om is not a ritual of the religion , bit it makes the circulation of the blood rush towards the skull. The expert say Yoga has three dimensional affects. Yoga can positively affects body , mind and spirit. Yoga is excellent for psychosomatic diseases. psychosomatic diseases are those in which body and mind are involved. Thus this culture has been widely accepted worldwide for global human resource development and its uniqueness of less requirement of space , time and no warm up and no cost for practices. Yogasana helps secretion of hormone from different glands in balanced condition , it regulates the blood circulation properly , it forms antibody to prevent diseases thus yogasana makes the body strong. The pranayam of yoga helps in breathing controls ; this breathing control exercise gives extra energy to the heart and lungs. Meditation of 5-10 minutes is really beneficial for the development of mind. The experts name few yogasana and pranayam for physical and mental health and advice for Meditation. Beside this , traditional games and sports are part of intangible heritage and a symbol of the cultural diversity of societies. They are different in nature and are of plenty in numbers worldwide. It is also raw form of many modern games and sports. Generally traditional games and sports are indigenous in nature. Experts say it is one of the excellent ways to remain healthy , fit , well being and recreate. Through playing of these games human resource development Is possible. However , Human resource development means improvement of working capacity.

Introduction:

Yoga is one of the most important physical activities. The origin of Yoga is about 5000 years back in India. The Indian monks used to practice Yoga for spiritual development. The repetition of Om... Om...Om is not a ritual of the religion , bit it makes the circulation of the blood rush towards the skull. The expert say Yoga has three dimensional affects. Yoga can positively affects body , mind and spirit. Yoga is excellent for psychosomatic diseases. psychosomatic diseases are those in which body and mind are involved. Thus this culture has been widely accepted worldwide for global human resource development and its uniqueness of less requirement of space , time and no warm up and no cost for practices.The experts name few yogasana and pranayam for physical and mental health and advice for Meditation. Beside this , traditional games and sports are part of intangible heritage and a symbol of the cultural diversity of societies. They are different in nature and are of plenty in numbers worldwide. It is also raw form of many modern games and sports. Generally traditional games and sports are indigenous in nature. Experts say it is one of the excellent ways to remain healthy , fit , well being and recreate. However , Human resource development means improvement of working capacity. Experts say a real development is possible through games and sports as it enhances the opportunity to have good physical , mental , neuromuscular and social health.

How Yoga Helps In Human Resource Development? By human resource it is understood that the people who work for a company or organization. **Human Resources Development aims to improve expertise & skills of employees and volunteers as well as attitude and style.** Through yogic practices , a harmonious development is possible of all the muscles of the body , internal organs , nerves and frame. In these practices there are no rapid movements and hence there is no waste of energy rather the energy is conserved. In Yogic practices, movements are gentle and rhythmic. The heart , lungs and brain with its cerebro-spinal system, three important organs are kept in a healthy condition by regular practice of a few important asanas and one or two breathing practices. Sound functioning of the organs depends upon good healthy nerves. These three important organs are kept in a healthy condition by regular yogic exercises. Yogic practices helps secretion of hormone from different glands in balanced condition, it regulates the blood circulation properly, it forms antibody to prevent disease. Thus Yogasanas make the body strong. The pranayam of yoga helps in breathing controls; this breathing control practices give extra energy to the heart and lungs. Therefore , regular practice of pranayam keeps those organs healthy. Besides Pranayam , Meditation also helps to develop soul, mind and body. Swami Vivekananda said that the rest we achieve through the Meditation even we cannot get through sleep. Through Meditation the depth of mind develops , mind is expanded , a mental peace is developed.

The Need Of Yoga In The Present Day Situation: In the present day situation Yoga is extremely necessary to remain fit. Rishi Patanjali mentioned about eight way of practicing Yoga. If Few exercises of Yoga regularly practiced then there may be chance of healthy life. Under Yogic practice session there should be few Yogasanas, Pranayam and Meditation. Experts say Yogic practices are both preventive and curative in their nature. They prevent diseases attacking the body by maintaining the natural health. Some practices also cure existing diseases like cold, cough, constipation and gastric troubles. Some Clean the lungs , throat, etc. Thus the body as a whole is developed, toned up and strengthened. The entire body becomes flexible, thereby preventing stagnation of blood in any part of the body.

Some Important Yoga, Pranayam And Meditation: The experts name some important yogasanas which are beneficial for human health and fitness development. Yogasanas like salvasana, bhujangasana, savasana, sahad setu asana, budhyadebasana, ardhyajurmasana biparit karani, sukhasana, pamasana, siddhasana, swastikas an, vajrasana and yogamudra etc. are beneficial. The beneficial pranayams are such as sputa pranayam, bhamri pranayam, nari soodhan pranayam, om pranayam, surjavedan pranayam, etc. which are effective. Meditation on the other hand through its practice helps us devotedly think something. Devotion to God or to a particular living being or an object is the matter of concentration during Meditation. The concentration period is to be of 10-15 minutes and after the concentration period is over to be quite for 5-10 minutes, in this way the practicing of Meditation strong the mind.

Yoga, Traditional Games And Sports For Multipurpose Development: Sports, Yoga , physical activities are for uniting force because these brings individuals and communities together , highlighting commonalties and bridging cultural and ethnic divides. Sports for Learning and understanding because it provide a forum to learn skills such as discipline , confidence, leadership, tolerance, cooperation and respect and how to manage essential steps in life such as victory or defeat. In sports there is opportunity for citizens from different worlds to meet on a common playing field. Sport as a tool address challenging developmental issues facing various populations. The practice of sport is a recognized instrument for promoting peace, as it disregards both geographical borders and social classes. Sports provide fun, heighten sense of overall well being, improve sleep patterns and levels of anxiety , clears the mind, develop motor skills and mind body connection, keep away depression, reduces risk of many diseases.

Playing sport helps much to be physically fit. It builds character , teaches strategic thinking , analytical thinking , leadership skills, goal setting and risk taking. Participating in sports/ physical activities develop the 5 components of fitness, which are: strength , speed, skill, stamina and flexibility. When we are under, excess stress from personal problems, work pressure and anxiety, apart from the fitness benefits, exercise through playing sports help release pressure and tension in a healthy and controlled way. The games and sports directly or indirectly generate income from sports-related sales and services, boosting international trade. Nonetheless by development it is understood it is a process of enlarging people's choices and increasing the opportunities available to all members of society. Sport can directly help built these capabilities.

Conclusion:

It is concluded that yoga is one of the excellent ways for development of global human resource. Yoga through its practices makes a harmonious development of all the muscles of the body, internal organs nerves and frame. Yogasana helps secretion of hormone from different glands in balanced condition , it regulates the blood circulation properly , it forms antibody to prevent diseases thus yogasana makes the body strong. The pranayam of yoga helps in breathing control ; this breathing control exercise gives extra energy to the heart and lungs. Meditation of 5-10 minutes is really beneficial for the development of mind. Traditional sports and games with its varieties of playing throughout the world develop physical mental, social conditions and spiritual faith of mankind. Traditional games and sports may be of different kinds but these are for personal, peace, community, human resource, learning and understanding , uniting force development. These are for fun, wellness, fitness and social integrity.

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Effect Of Core Stability Training On Bowling Speed In Cricket Bowlers

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Abstract

Background: Core stability has been popular in the fitness and sports industry for a decade. Although strong and stable core muscles are believed to enhance athletic performance, only few scientific studies have been conducted to identify the effectiveness of core training on athletic performance especially in bowling speed in Medium and medium fast bowlers. The aim of the study was to analyse the effect of core stability training on bowling speed in cricket bowlers. **Methodology:** A total of 64 asymptomatic Cricket medium and medium fast bowlers participated in the study. The concept of matched pairs was used for age and BMI in order to maintain homogeneity. The core stability of each participant were measured using a plank test and bowling speed was measured with a Radar speed gun. The subjects were divided into 2 groups with Group A continuing with their routine conventional training while group B performing core stability training. The core stability and bowling speed was reassessed and analysed.

Result: The mean age, height, weight and BMI of subjects in Group A were 19.93 ± 1.86 years, 174.13 ± 5.34 cm, 65.48 ± 8.38 kg and 21.68 ± 2.83 kg/m² respectively. The mean age, height, weight and BMI of subjects in Group B were 19.86 ± 1.63 years, 173.80 ± 6.12 cm, 63.08 ± 10.12 kg and 21.36 ± 2.68 kg/m² respectively. In within group analysis the mean value for pre and post plank measures were 288.06 ± 80.42 sec and 310.93 ± 81.60 sec respectively for group A. The result showed statistically significant difference between pre and post plank test ($t = -7.807$, $p \leq 0.05$) for Group A and the mean value for pre and post plank measures were 246.90 ± 90.32 sec and 338.58 ± 97.75 sec respectively for group B. The result showed statistically significant difference between pre and post plank test ($t = -7.807$, $p \leq 0.05$) for Group B. In within group analysis the mean value for pre and post bowling speed measures were 111.66 ± 7.12 kph and 112.26 ± 6.99 kph respectively for group A. The result showed statistically significant difference between pre and post plank test ($t = -7.807$, $p \leq 0.05$) for Group A and the mean value for pre and post bowling speed measures were 108.76 ± 7.63 kph and 110.43 ± 7.39 kph respectively for group B. The result showed statistically significant difference between pre and post plank test ($t = -7.807$, $p \leq 0.05$) for Group B. In between group analysis the mean value for pre-post Plank test difference for group A and group B were 22.86 ± 16.04 sec and 91.67 ± 21.96 sec respectively. The result showed significant difference between Group A and Group B pre-post plank test difference ($t = -13.936$, $p \leq 0.05$) and the mean value for pre-post Avg. Bowling speed difference for group A and group B were 0.60 ± 0.79 kph and 1.66 ± 0.82 kph respectively. The result showed statistically significant difference between Group A and Group B pre-post plank test difference ($t = -5.153$, $p \leq 0.05$) **Discussion & Conclusion:** The subjects with better developed core after core stability training bowled significantly faster than the subjects who continued with their routine conventional training. This suggests that core stability training has a positive effect on bowling speed in comparison with conventional training.

Keywords: bowling, ball speed, core stability, core training.

Introduction

Cricket is a field-based sport, with each team consisting of 11 players. Now a day's cricket is a very popular game. Cricket has now become a competitive game. For this reason physical fitness is very much essential for the players apart from the skill. (Bala & Banerjee, 2011). One of the role in cricket is medium

fast bowling. A combination of many factors determines success in fast bowling. One of these factors is the speed of the ball at release. A fast ball release speed reduces the time available for a batsman to perceive and use information about the delivery and execute an appropriate motor response. (Parameshwari& Gopinath, 2012). In biomechanical analysis of medium fast bowlers the action of bowling is divided into four distinct stages: the run-up, the pre-delivery stride, the delivery stride and the follow-through. (Bartlett et al, 1996)

Core stability is said to play important role in many athletic performances. It is body's ability to control the position of the trunk and pelvis for optimum production, transfer and control of functional activities. Many sporting activities require complex coordination between the upper and lower extremities. (Kibler, 2006). As per biomechanical analysis of bowling it shows core plays a vital role in the bowling action because to attain high ball release speeds, the bowler's trunk must flex, extend, laterally flex, and rotate within a short period and the body must absorb ground reaction forces as high as six times body weight. (Parameshwari& Gopinath, 2012).

The core (trunk, pelvis, and hip) functions as the central link between the upper and lower extremities, and stability of this region is proposed to be a requisite for optimal athletic performance and injury prevention (Kibler, 2006). Optimal core stability is dependent upon both muscle capacity (strength and endurance) and neuromuscular control. Core muscles are activated prior to extremity movement, which indicates that the core provides proximal stability upon which movement of the extremities occurs. (English and Howe, 2007). Also poor core stability has been identified as a risk factor for low back and extremity injuries in athletes. A weak core is believed to cause alterations in the transfer of energy, resulting in reduced sport performance and risk of injury to a weak or underdeveloped muscle group. (Nesser et al, 2009). These injuries can further lead to decrease in performance. Researches on cricket fast bowlers has been focused more on injury rather than on their performance. Therefore, the purpose of this study was to identify the effect of core stability training on bowling speed in medium and medium fast cricket bowlers.

Methodology

A pre-test and post -test experimental study was conducted on 62 district and university level cricket players from various academy, sport centres and university with age between 18 to 25 years. The subject were recruited on the basis of inclusion and exclusion criteria. Prior to the study the informed consent was signed by the subject after explaining the procedure as per the guidelines of Indian Council of Medical Research (ICMR, 2000).

The subjects recruited were medium and medium fast bowlers who were playing or into training for at least six months prior to the study. Cricketers with any current episode of lower back pain for three months, any metabolic, cardiac or neurological diseases/ disorders or having any current injury to the kinematics chain that impaired their ability to bowl were excluded.

Core muscle stability as well as bowling speed measurements were taken, and were recorded on a data collection sheet using plank test and speed radar gun respectively.

Procedure

Plank Test

The protocol consists of three tests that measure all aspects of the torso via isometric muscle endurance: prone plank, left side plank and right side plank. A handheld stopwatch was used to measure the length of time participants were able to hold each isometric position. Individuals were given a minimum of 5 minutes of rest between each test. For prone plank test, participants maintain a prone position. Start with the upper body supported off the ground by the elbows and forearms, and the legs straight with the weight taken by the toes. The hip is lifted off the floor creating a straight line from head to toe. As soon as the subject is in the correct position, the stopwatch is started. Participant was instructing to maintain a neutral position of a supine and pelvic, and to breathe normally during testing. Each test was terminating when the participants unable to maintain their posture and their pelvic moved up or down five or more centimetres. Similar side planks on both side were done with body supporting in one side forearm and feet of same side with opposite feet placed over other and the hip is lifted off the floor creating a straight line. Opposite hand was placed on opposite side of chest. The holding time of the prone plank test, right and left side plank test, and combine score of all plank tests was use for analysis. (Imai et al, 2016)

Bowling Speed

Each subject's bowling speed was measured using Radar Speed Gun (BUSHNELL Velocity Speed Gun, Model No.101911) having an accuracy of +/- 1 mph and +/- 2 kph(27 meters away). The radar was used to pick up the speed of each ball in KPH as it leaves the bowler's hand. The participant was then put

through a set five minute warm-up. Before each experimental session, the radar gun was calibrated in accordance with the manufacturer's specifications. The radar was positioned behind the nets at the batting end, aligned with the approximate height of ball release and in line with the stumps places in the batting end. The participants were then asked to bowl in their own action in the nets as fast as possible towards the stumps placed at batting end. The participants bowled three balls each and the bowling speeds were measured. An average of the three bowling speed measurements were recorded. (Hilligan, 2008).

Subjects were divided into 2 groups of 32 each. Group A continued with their routine training session for 6-weeks and Group B underwent core stability training protocol for 6 weeks. Core training exercises were Plank (3x 30s hold), Side plank (3x 30s hold), Supine bridge (3x 30s hold), Abdominal crunch (3x 20 repetition), Russian twist (3x 20 repetition) and Split scissors (3x 20 repetition) for week 1 and 2. For week 3 and 4 exercise was progressed to, Plank (3x 45s hold), Side plank (3x 45s hold), Supine bridge (3x 45s hold), Abdominal crunch (3x 30 repetition), Russian twist (3x 30 repetition) and Split scissors (3x 30 repetition). For week 5 and 6 exercise was further progressed to, One arm plank (3x 45s hold), One arm side plank (3x 45s hold), Single leg supine bridge (3x 45s hold), Abdominal crunch (3x 45 repetition), Russian twist (3x 45 repetition) and Split scissors (3x 45 repetition). Three training sessions were performed per week for a period of 6 weeks. (Araujo et al. 2015). Then they were reassessed for the determined parameters such as core stability test (planks test) and bowling speed and was recorded.

Data Analysis

Statistical analysis was performed with the help of SPSS V.21. Descriptive statistics (mean and standard deviation) was used to describe the demographic details. Between groups analysis was done with independent t- test. Within group analysis was done with paired t- test. In this study the level of significance was set as $p \leq 0.05$.

Result

The mean age, height, weight and BMI of subjects in Group A were 19.93 ± 1.86 years, 174.13 ± 5.34 cm, 65.48 ± 8.38 kg and 21.68 ± 2.83 kg/m² respectively. The mean age, height, weight and BMI of subjects in Group B were 19.86 ± 1.63 years, 173.80 ± 6.12 cm, 63.08 ± 10.12 kg and 21.36 ± 2.68 kg/m² respectively. In analysis of body composition mean value for pre and post Muscle mass percentage for group B were 44.87 ± 6.48 and 47.99 ± 5.71 respectively. The result showed statistically significant difference between pre and post muscle mass percentage ($t = -2.217$, $p \leq 0.05$).

The Plank tests were measured pre intervention and post intervention. The mean values for pre and post measures were 288.06 ± 80.42 sec and 310.93 ± 81.60 sec respectively for group A. The result showed statistically significant difference between pre and post plank test ($t = -7.807$, $p \leq 0.05$) for Group A. The mean value for pre and post measures was 246.90 ± 90.32 sec and 338.58 ± 97.75 sec respectively for group B. The Bowling speed was measured pre intervention and post intervention. The mean value for pre and post measures were 111.66 ± 7.12 kph and 112.26 ± 6.99 kph respectively for group A. The result showed statistically significant difference between pre and post plank test ($t = -7.807$, $p \leq 0.05$) for Group A. The mean value for pre and post measures were 108.76 ± 7.63 kph and 110.43 ± 7.39 kph respectively for group B. The result showed statistically significant difference between pre and post plank test ($t = -7.807$, $p \leq 0.05$) for Group B.

The mean value for pre-post Plank test difference for group A and group B were 22.86 ± 16.04 sec and 91.67 ± 21.96 sec respectively. The result showed significant difference between Group A and Group B pre-post plank test difference ($t = -13.936$, $p \leq 0.05$). The mean value for pre-post Avg. Bowling speed difference for group A and group B were 0.60 ± 0.79 kph and 1.66 ± 0.82 kph respectively. The result showed statistically significant difference between Group A and Group B pre-post plank test difference ($t = -5.153$, $p \leq 0.05$).

The result revealed that core group showed improvement in both plank test and bowling speed in comparison with control group. The results seem to indicate that subjects with well-developed core after core training showed more improvement in the kinetic chain of the specific movement of bowling thus, increasing bowling speed in comparison with control group performing routine conventional training.

Discussion

The main purpose of this study was to study was to examine the effect of core stability training on bowling speed in male medium and medium fast cricket bowlers. Assessment of core stability was elicited through isometric contractions of the trunk musculature. Bowling speed was measured using Radar speed gun.

Further the subjects were divided in to group, in which on group continue with their regular exercises while the other group perform core stability training for 6 weeks. The results obtained support the initial hypothesis, indicating that the subjects done with core stability training have significantly improved bowling speed than the subjects who carry out with their regular routine training. The result also shows increase in muscle mass percentage more in core group than in control group.

Based on the hypothesis that training for core muscle stability results in an improvement in the kinetic chain of movement, several authors have attempted to apply this to different disciplines. Such is the case of the study conducted by Hilligan (2008), showed subjects with well-developed core have better bowling speed. Another study carried out by Pedersen et al. (2006), who showed that after an 8 week period of core training, elite soccer players presented increased kicking velocity and in study done by Okada et al. (2011), there were significant correlations between core stability and performance tests. According to Kibler et al. (2006), players who showed higher levels of strength in the core muscles and therefore obtained better results in the Bunkie test also performed better in the various physical tests.

In another study done by Nesser et al. (2008), results found significant but not strong relationships between core strength and strength and power performance variables. The possible reasons for these result can be due to lack of specificity of the core test used.

According to Willson et al. (2005) decreased core stability may predispose to injury and that appropriate training may reduce injury. This shows that a well-developed core stability not only increase the performance of the person but also helps in preventing the injuries.

In a study done by Manchado et al, 2017 found that progressive program for strengthening and training the lumbo-pelvic region in order to improve stability and kinetics of movement seems to be related to an increase in handball players' throwing velocity.

According to the study done by Sato and Mokha (2010), Core stability training did not significantly influence kinetic efficiency and lower extremity stability, but did influence running performance. No significant interactions were found for any kinetic variables and SEBT score, but 5000m run time showed significant interaction.

The above studies show positive effect on core stability and performance as well as negative effect on core stability and performance but as per the result obtained from the current study there was increase in the speed of bowling for group done with 6 week core training in comparison with group performing routine training.

This suggests that factors that influence the speed of the kinetic chain when bowling is the participation of the core musculature. The core musculature includes the trunk and pelvic muscles, which are responsible for maintaining spinal and pelvic stability and help generate and transfer energy from large to small body parts. Core stability is the ability to control the position and motion of the trunk over the pelvis and legs to allow optimum production, transfer and control of force and motion to the terminal segment in integrated kinetic chain activities.

Thereby increasing the stability of the core musculature with 6 weeks training protocol helps in enhancing the performance by help in generation of greater force and stabilization and helps to deliver more force into the upper arm.

The evidence suggests that the better bowling was due to betterment in stability of core muscles

Conclusion

The study satisfactorily confirm the importance of core training on bowling speed in medium and medium fast bowlers. Subjects who had undergone 6 weeks core training have shown significant increase in bowling speed in comparison with the control group performing routine conventional training.

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Fitness And Wellness - Health Education

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Introduction

How do you define wellness? We continually hear this word during the news, in conversation, at work or read in newspapers, magazines and the like. Surprisingly, there's no definition of wellness that seems to be universally accepted. Nonetheless there is a set of general characteristics found in most good attempts at defining wellness. We routinely see a reference made to wellness being a "state of well-being", which is very vague. We also routinely see wellness as a "state of acceptance or satisfaction with our present condition".

In this seminar, I will focus on determinants of health, with fitness being one of them. The importance of health education as a promoter of health and first-aid and its importance in saving lives.

Determinants of health

Generally the context in which an individual lives is a great importance for his health status and quality of life. It is increasingly recognized that health is maintained and improved not only through the advancement and application of health science, but also through the effort and intelligent lifestyle choice of the individual and society. According to the world health organization, the main determinants of health include the social and economic environments, the physical environment, and the person's individual characteristics and behaviors.

More specifically, key factors that have been found to influence whether people are healthy or unhealthy include

Income and social status, Social support networks, Education and literacy

Employment/working conditions, Social environments

Healthy child development, Physical environments personal healthy practices and coping skills

Biology and genetics, Health care services

Gender/culture

Physical fitness comprises two related concepts: general fitness (a state of health and well-being), and specific fitness (a task-oriented definition based on the ability to perform specific aspects of sports or occupations). Physical fitness is generally achieved through correct nutrition, exercise, hygiene and rest.

The president's council on physical fitness and sports – a study group sponsored by the government of the United States – declines to offer a simple definition of physical fitness. Instead, it developed the following chart:

A comprehensive fitness program tailored to an individual typically focuses on one or more specific skills, and on age – or health related needs such as bone health. Many sources also cite mental, social and emotional health as an important part of overall fitness. This is often presented in textbooks as a triangle made up of three points, which represent physical, emotional, and mental fitness. Physical fitness can also prevent or treat many chronic health conditions brought on by unhealthy lifestyles or again working out can also help people sleep better. To stay healthy it is important to engage in physical activity.

Health education is the profession of education people about health. Areas within this profession encompass environmental health. Physical health, social health, emotional health, intellectual health, and spiritual health. It can be defined as the principle by which individual and groups of people learn to behave in a manner conducive to the promotion, maintenance, or restoration of health. However, as there are multiple definitions of health, there are also multiple definitions of health education.

The role of the health educator

From the late nineteenth to the mid-twentieth century, the aim of public health was controlling the harm from infectious diseases, which were largely controlled by the 1950s. By the mid-1970s it was clear that reducing illness, death and rising health care costs could best be achieved through a focus on health promotion and diseases prevention. At the heart of the new approach was the role of a health educator. A health educator is “a professionally prepared individual who serves in a variety of roles and is specially trained to use appropriate educational strategies and methods to facilitate the development of policies, procedures, interventions, and systems conducive to the health of individuals, groups, and communities”. In January 1978 the role delineation project was put into place, in order to define the basic roles and responsibilities for the health educator. The result was a framework for the development of competency-based curricula for entry level health educators (NCHEC, 1985). A second result was a revised version of a competency-based framework for the professional development of certified health education specialists (NCHE, 1996). This document outlines the seven areas of responsibilities which are shown below.

Finally, I would like to touch upon a bit on first aid – the importance of which cannot be underestimated in saving lives under emergency – situations, especially of first aid received within the golden hour – 1 hour within injury.

First aid is the provision of initial care for an illness or injury. It is usually performed by non-expert, but trained personnel to a sick or injured person until definitive medical treatment can be accessed. Certain self-limiting illnesses or minor injuries may not require further medical care past the first aid intervention. It generally consists of a series of simple and in some cases, potentially life-saving techniques that an individual can be trained to perform with minimal equipment.

The ABC of first aid: certain skills are considered essential to the provision of first aid and are taught ubiquitously. Particularly the “ABC’s of first aid, which focus on critical life-saving intention, must be rendered before treatment of less serious injuries. ABC stands for airways, breathing, and circulation

The key aims of first aid can be summarized in three key points:

Preserve life : the overriding aim of all medical care, including first aid, is to save lives

prevent future harm : also sometimes called prevents the condition from worsening, or danger of further injury, this covers both external factors, such as moving a patient away from any cause of harm, and applying first aid techniques to prevent worsening of the condition, such as applying pressure to stop a bleed becoming dangerous.

Promote recovery: first aid also involves trying to start the recovery process from the illness or injury, and in some cases might involve completing a treatment, such as in case of applying a plaster to a small wound.

First aid training also involves the prevention of initial injury and responder safety, and the treatment phases.

Promoting recovery

The first aider is also likely to be trained in dealing with injuries such as cuts, grazes or bone fracture. They may be able to deal with the situation in its entirety (a small adhesive bandage on a paper cut). Or may be required to maintain the condition of something like a broken bone, until the next stage of definitive care (usually an ambulance) arrives.

Basic principles, such as knowing to use an adhesive bandage or applying direct pressure on a bleed, are often acquired passively through life experiences. However, to provide effective, life-saving first aid interventions requires instruction and practical training. This is especially true where it relates to potentially fatal illnesses and injuries, such as those that require cardiopulmonary resuscitation (CPR); these procedures may be invasive, and carry a risk of further injury to the patient and the provider. As with any training, it is more useful if it occurs before an actual emergency, and in many countries, emergency ambulance dispatchers may give basic first aid instruction over the phone while the ambulance is on the way.

Problems Countered By Physical Education Teacher, Trainer And Coaches

- One Micro Study

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Abstract

Sports Problem In India Appear To Be Very Challenging. Sport Teacher And Their Problems In The Field Of Sports, There Are Many Problems For This, We Were Given A Detailed Study Of The Challenges Faced By Some Teachers And The Challenges They Faced. Detailed Discussion Of How They Are Dealing With Problems In The Sports Sector And How They Are Handling Their Family Problems. There Were Some Headmasters, Sports Coach, Senior Sports Teachers And Some High Quality Players. They Presented Their Opinions According To Their Predictions, Some Things Showed That There Were Financial Problems, Some Complained About The School Administrator, And Others Found That There Were Domestic Problems In Their Personal Problems. It Is Very Important To Do Research By Thinking About Some Things And Some Conclusions Have Been Suggested From Them. The Teacher And Coaches Discussed How They Faced Several Challenges, Most Notably Concurrently Managing Their Teaching And Coaching Responsibilities While Meeting Their Family Obligations. To Alleviate The Challenges, Most Teacher-Coaches Preferred Being Relieved Of Certain Teaching Duties And Being Offered More Preparation Time As Opposed To Being Compensated Financially. Suggestions Are Provided To Help Teachers Maintain Their Involvement In Coaching. From The Promotion Of Athletes At Primary Level In India, They Are Working Very Hard To Make Special Achievements At A Higher Level. Problems Were Raised By Collecting And Analyzing The Above Topics And Solutions Have Been Suggested.

Introduction:

India Is A Country Which Is Blessed With The Great Heritage Of Art And Sports. Here A Number Of Sports Institutes Are Run By The Renowned Sports Coaches. The Sports Coaches Play And Important Role In Importing Sports Knowledge And Shaping The Future Of The Children Young Players But It Is Noticed That Very Few Players Are Eligible For The Olympics Games, Even Though There Are A Number Of Good Coaches Of India. As There Are Insufficient Facilities And Provisions For Neither These Coaches Nor Their Interests Are Taken Care Of There Is No Remarkable Performance In The Olympics Games Of International Level. To Alleviate The Challenges, Most Teacher-Coaches Preferred Being Relieved Of Certain Teaching Duties And Being Offered More Preparation Time As Opposed To Being Compensated Financially. Suggestions Are Provided To Help Teachers Maintain Their Involvement In Coaching. The Teachercoaches Discussed How They Faced Several Challenges, Most Notably Concurrently Managing Their Teaching And Coaching Responsibilities While Meeting Their Family Obligations.

Purpose Of The Research:

It Is Needful To Study The Problems Faced By The Sports Coaches Of India As Indians Young Players Have Great Potential But Due To Certain Short Comings And Drawbacks The Performance Of The Players Is Affected On A Large Scale.

Methodology :

Some Books And Some Internet-Related Information Were Studied For Studying The Procedure. On The Basis Of That Ethics And Integrity, Such A Person Related To This Area Was Contacted By Phone. He Then Took His Time. And With His Consent, It Was Decided To Meet And Interview The Day. These Interviews Come In Handy With Different Individuals And At Different Times. The Researchers Were Interviewed On The Topic On Which The Subject Was To Be Interviewed. In This, Renowned And Experienced People From This Area Were Involved. Some Headmasters, Sports Coaches, Coaches And High Quality Holder Players Were Involved.

Interview Guide:

Sports Educators, Trainers And Coaches Have Been Used By The Researchers In A Systematic Way. Eg: Nikam C.H., Patil R S., Jadhav V. A. In The Interview, Some Questions Were Asked That Through It The Main Topic Went. Example: What Are The Problems When You Are Giving Sports Training? What Facilities Do You Provide For The School Game? How The Parents Get The Response To The Game? Etc. Some Important Points Were Raised While Interviewing. He Used To Review The Sporting Events In His History. Then The Present Issues Were Raised In The Context And In The Last Section, The Issues Faced By The Future In Physical Education Were Considered Above. The Interviews Actually Showed That The Interview Received The Most Appropriate And Free Response. This Research Used The Serve Method.

Problems Faced By The P. E. Teacher, Trainer And Sports Coaches :

The Researcher Actually Collected All The Information Needed For The Operation. Asking Any Questions In The Interview, The Answers To The Questions Were Matched. Various Information Were Sorted And Confirmed. Some Grammar And Some Potential Sports Problems Have Been Found In The Reply Given By Some Of The Best And Experienced Sports Directors, Coaches, Sports Specialists. That Has Been Tried To Remove It. The Information Collected From The Researcher Was Disseminated And Documented And Displayed. Its Extensive Format Was Presented.

The Problem Of Sports Teacher, Coach And Coach Is Not A Problem Today. It Is Very Broad And Wide. Naturally-Unnatural And Physical-Material Problems Are Also Seen With The Problem Of Sports Teacher's Family Problem. Problems Were Raised By Detailed Research For This. Considering The Serious Nature Of The Problem, It Was Analyzed. It Involved Thinking About Problems Of Parents, School Issues, Role Of Government, Board Status, Etc. That Was The Conclusion. The Results Were Suggested To Remove Those Exact Conclusions From Those Samasas And To Take Measures.

Though The Sports Coach Is Physically As Well As Mentally Fit He Has Got A Number Of Challenges And Difficulties Overcome. They Are As Follow

Shortage Of Sports Equipments And Sports Ground:

Sports Equipment In India Cannot Be Available Due To Financial Conditions Due To Needy And Hard Working Players. This Material Is Not Available In The District Sports Complexes And The Needy Players Cannot Afford To Buy This Material. I.E. Archery, Air Gun Etc. In Some Places There Is No Mat Of KABADDI Game In Some Places The Players Are Not Available To Play In The Field. The Biggest Problem Is The Same Places There Are Not Available TRACK And FIELD.

Diminishing Interest Of The Young Players In The Recent Years:

Recently, The Interest Of The Children's Game Has Become Very Weak, As The Children's Were Busy In The Study, The Playgrounds Started Getting Dewy. Current Children Do Not Want To Do Physical Work Physical Activity Of The Newcomer Appears To Be The Result Of Material Things Of Luxury It Is Seen That Sports Teacher And Spors Coach To Bring Children To The Ground And Keeping Them Afloat Is Very Challenging. And The Answers From All The Levels Were That The Children Diversion Of The Focus The Young Player Shifts From Sports To Other Irrelevant Matter Such As Media, Mobile And Television

The Growing Protest Of An Unwillingness Of Parents:

Some Parents, Who Disagree With The Game, Oppose Them To Play Games Only, But They Just Want To Study. Do Not Let Your Child Know Anything About The Game. Therefore, The Sports Teachers And Sports Coach Have Difficulty In Retaining The Players.

Interference Of The Outsiders Such As Neighbors, Relatives Etc:

Some Relatives And Friends Try To Avoid Being Deprived Of Playing Good Players Due To Lack Of Play. The Players Who Play Next To The Players Do Not Play Their Own Children And Play The Role Of Those Who Play And Disallow Their Parents

Protest By The Other Subject Teachers:

Some Subject Teacher, Especially The English And Mathematics Teachers, Does Not Allow Children To Think That The Games Have The Reason For The Earning Of The Students. Some Of The Subjects With Such A Feeling Deny Teachers Not Only To Play Games But Also To Their Parents As Well. Therefore, The Sports Teachers And Sports Coach Have Difficulty In Retaining The Players.

The Monopoly Of The Sports Authorities:

Although Some Principals, Headmasters, Are Preparing For The Sporting Education, Children Are Denied Access To Play. Some Have The Fear Of Losing The School's Education, And Some Are Afraid To Lose Their Position. Sports Teachers Appear To Be Very Tired Of Their Problem. For Example: Opposing The Sending Of A Team After Taking The Practice Of Children's Night, Some Would Only Want Discipline Physical Teachers Have Other Duty Duties. Therefore, Players Made By Sports Teachers And Guides Have Difficulty In Taking The Competition And Their Efforts Are Wasted.

The Increasing Number Of Coaching Classes Or Tuitions:

Children's Increasingly Coaching Classes Make Children Aware About Sports Talent. Since The Parents Of The Children Are Doing So Much Harm To Their Parents, They Do Not Send Their Children To The Play, So The Sports Teachers Are Struggling To Run A Team Game.

Extra-Non-Salaried Grant To Schools: Since The Government Has Not Gave To The Funds To The Schools, It Is Becoming Difficult For The Children To Take Care Of Playgrounds, Buying Sports Equipment, And Taking The Players To The Sporting Events. Some Parents Also Do Not Provide Financial Help, So Sports Teachers Do Their Own.

Unaided Sports Guides: Some Coaches Are Cocahing By The Players Without Taking Any Financial Rewards, So They Are Creating Obstruction To Keep Their Family.

Interference Of A Political Personalities (Influence Of Politics On Sports): Many Sports Organizations Are Holding Political Interests In India. Political Persons Are Interfering When Choosing A Team. Sports Guides Are Doing Injustice Due To The Fact That They Are Doing Injustice. Sports Teachers And Sports Coaches Have To Work Under The Pressure Of The Political Person.

Weak National And State Policy For Game: There Are Some Errors In The Sports Policy Of The Government That In The Field Of Rural Areas The Contribution Of Sports Sector In Rural Areas Is Grossly Subsidized. Insufficient Funds Make The Sports Thinker A Lot. Some Schools Receive Grant Support For Playgrounds, But It Can Not Be Fully Functional. Researchers Have Found That Providing Sports Facilities And Sports Facilities To The Sports Teacher And Coaches, And Providing Them With Mesmerizing Facilities By Spending Money Near Sports Teachers And Coaches.

Geographical Conditions:

A Lot Of Parts In India Are Not Geographically Relevant To The Game. Very Cloudy In Some Places Eg: North East, In Some Places Too Much In The Summer, Eg In Rajasthan, In Some Places Only The Snow Is Seen. For Example: Kashmir Has Some Difficulty In Playing Some Sports.

Group Politics For The Senior Players And Ego For The High Performance Player:

Not All, But In Some Places The Game Shows A Kind Of Internal Conflict. Some High-Quality Players Fill You With Someone Different. Therefore, It Is A Serious Problem That Is Very Big For The Sports Teacher And The Coach. The Game Was Neglected As They Had To Leave Their Coaching And They Had To Get Out Of The Way.

Weaker Financial Conditions. (Inorganizing Sports Events):

Many Of The Players' Home Conditions Are Very Viable. So Parents Do Not Send Far Enough Children To Play And Play The Children To Play The Game. Players And Coaches Need To Add Money In Their Own Pocket Due To Lack Of Funds In The Sports Circle And Schools And Due To Financial Problems Of The Sports Club.

Poor Nutritional Diet:

If The Player Wants To Stay In The Competition, He Needs Good Nutrition. Some Players Need Proper Nutrition. They Cannot Handle It. The Player Does Not Get 100% Pure Diet. That's Why Such Players Fall Behind Too Much.

Physical Education Teacher Guides Given Coming Of With Solution For Various Challenges Or Problems:

Importance Of Physical Education, Sports And Games To Parents. Providing Of Various Facilities Of Play Grounds By State And Central Government. Sports Equipment Including Other Facilities Such As Kabaddi Kho-Kho Mat, Synthetic Track, Shooting Gun Etc. To Be Provided. Schools To Be Provided With Funds And Whichever Schools Are Highly Performance Or Activity Involved In Sports Activity To Be Provided With Special Facilities Allow With Funds. Every Sports Person To Be Made Aware Of The Importance And Advantages Of Sports And Physical Activities. To Encourage Students Who Are Not So Interested In Sports And Physical Activities There By Reduce The Attracting Towards Media. I. E. TV, Mobile, Computer Etc. To Create Awareness Among Other Subject Teachers About The Importance Of Sports And To Encourage Then To Be Part Of The Selection Or Sports Committee. To Provide At Least 4 To 5 Schools With Proper Track And Field Ground In Taluka.

Some Geographical Location Have Challenge In Outdoor Game And Sports Facilities Due To Climate The Sports Committee Venture Out In The Market To Find Proper Sponsorship.

Sports Committee To Encourage Best Players In Monitory Terms To Perform Better At Bigger Platforms. To Honor The Games Or Sports As Well As The Fellow Sports Person His Or Her Coach Even Of Any Individual Is A Best Performer. This Behavior As To Be In Imbided By The Sports Coach Right At The Very Beginning And Should Maintain Throw Out. To Create Interest And Awareness Among The Administrative And Senior Officials Of The School And Educate Them About The Importance Of And Benefits Of Games And Sports. To Follow The Student Coach Ratio As Per The G.R.

This Is Required As The Entered Burden Should Not Be On One Coach. This Needs To Be Followed By All The Schools As Per Prescribed Guidelines. Not To Involve The Coach In Other School Activates, Other Than Sports And Games. This Will Reduce The Burden And Will Help In Concentration On The Actual Sports And Games. Giving Equal Importance To All Type Of Sports And Not To Specific Sports. Also Give On Opportunity To Traditional Sports. To Be Part Of All Other Sports. There Are A Lot Of Great Potential And Hidden Talents In The Country. But Due To Lack Of Coverage, They Are Lost So Coaches To Take Additional Effects In Finding Such Talents.

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Health Benefits Of Surya Namaskara

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Abstract

Sun salute (Surya Namaskar) is an antique Indian method of contribution prayers to the growing Sun in the morning along with a sequence of physical postures with keeping pace gulp of air aiming at range of corporeal, mental and spiritual benefits. Opposite east, in the early hours of morning, one standing with tranquil mind offers prayer to Lord Sun (Surya in Sanskrit) with Surya Namaskar. Along with physical postures, Surya Namaskar has exact religious connotations attached to it. Surya Namaskar is a elegant combined series of twelve positions along with keeping pace breathing and relaxation. The basic conversion of Surya Namaskar is salutations to the sun. It is a very antique custom which has been in survival since the Vedic age. The physical basis of the practice links together twelve asana in a animatedly performed series.

Keywords Surya Namaskar, Adult, Effect.

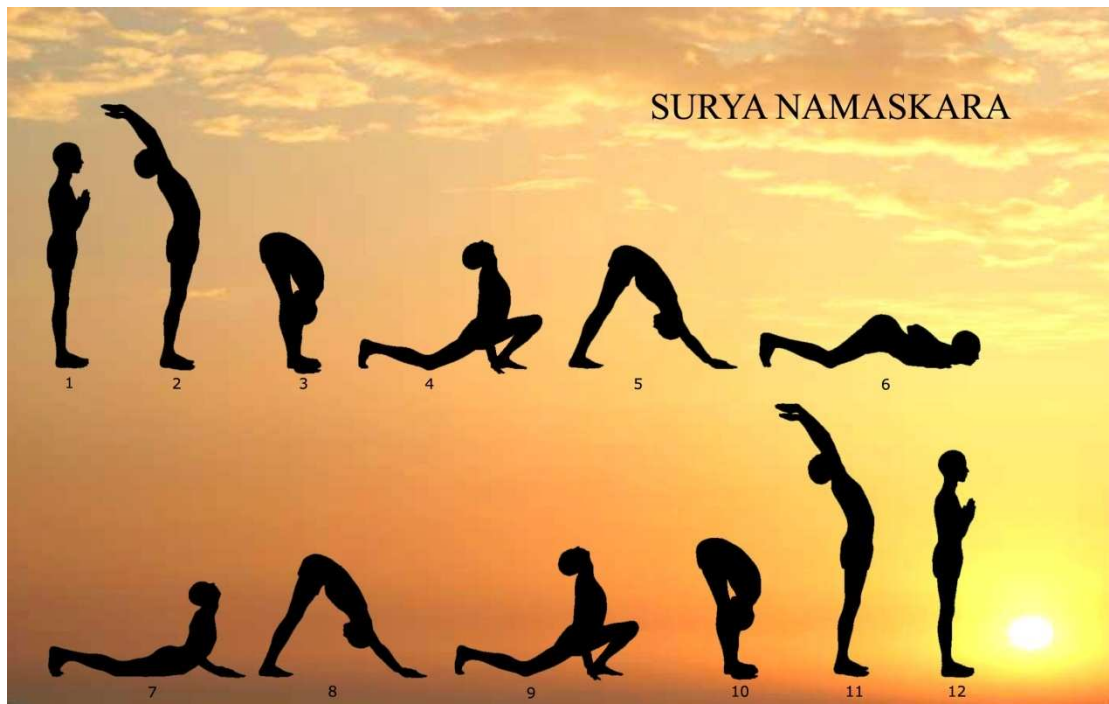
Introduction

Suryanamaskar is painstaking as the best work out as it consists of significant Yogasanas and Pranayamas. The Pranayamas and its compensation are competently in business in Suryanamaskar, so Suryanamaskar is a valued exercise among all ages from kids to old age people. Suryanamaskar or Sun greeting is the best way to burn the calories and decrease weight. It is frequently not compulsory for obesity. It is optional by a variety of authors and proved to be effectual in children. Usually practice of Suryanamaskar considerably shows decrease in pulse rate, credited to increased vagal tone and decreased concerned activity. Decreased concerned activity in turn reduces catecholamine secretion and also leads to vasodilatation most important to development in tangential circulation. It is also experiential that regular yogic practices reduce basal metabolic rate and resting oxygen expenditure. All these may be accountable for lessening in resting pulse rate. Along with physical postures, Surya Namaskar has specific spiritual connotations attached to it. Surya Namaskar is a graceful combined sequence of twelve positions along with regulated breathing and relaxation. According to the scriptures, if performed correctly, Surya Namaskar does not strain or cause injury

Asana (Postures) of Surya Namaskar

S.N	Asana	Chakra Position
1.	Pranamasana	Anahata (Heart)
2.	Hasta Uttanasana	Vishuddhi (Throat)
3.	Hastapaadasana	Swadhisthana (Sacrum)
4.	Ashwa Sanchalanasana	Ajna (Third eye)

5.	AdhoMukha Svanasana/Parvatasana	Vishuddhi (Throat)
6.	Ashtanga Namaskara	Manipura (Solar plexus)
7.	Bhujangasana	Swadhisthana (Sacrum)
8.	AdhoMukha Svanasana/ Parvatasana	Vishuddhi (Throat)
9.	Ashwa Sanchalanasana	Ajna (Third eye)
10.	Hastapaadasana	Swadhisthana (Sacrum)
11.	Hasta Uttanasana	Vishuddhi (Throat)
12.	Pranamasana	Anahata (Heart)



Why Start the Day with Surya Namaskar?

Surya Namaskar is a bargain of 12 stances, preferably to be done at the season of daybreak. The dependable custom of Surya Namaskar enhances flow of blood all from side to side the body, looks after comfort, and helps one stay behind the difficulty free. There is an assortment of advantages of Surya Namaskar for the heart, liver, digestive system, stomach, mid-section, throat, legs. From head to toe, all aspects of the body are extremely profited by Surya Namaskar, which is the reason it is exceptionally set by all yoga specialists. Stances go about as a polite connection between warm-ups and asanas and should be possible at whatever time on a annulled stomach. In any case, morning is consideration to be the best time for Surya Namaskar as it rejuvenates the body and revives the brain, making us prepared to go up against all assignments of the day. In the event that done toward the evening, it empowers the body immediately and if done at sunset, it helps you loosen up. At the point when done at a quick pace, Surya Namaskar is a extraordinary cardiovascular workout and a decent approach to get in shape.

Health Benefits of Surya Namaskar

Surya Namaskar provides all of the key health benefits of yoga in a very concise package. It is a holistic exercise that provides physical health reimbursement, but also mental or emotional as well as spiritual benefits. The understandable advantage of Surya Namaskar is the exercises it provides for the muscles, but it also benefits joints, ligaments and the skeletal system by civilizing posture, flexibility and balance.

In addition to these physical benefits, Surya Namaskar practice stimulates and conditions almost every system in the body. It is good for the heart and stimulates the cardiovascular system. It oxygenates the blood and helps strengthen the heart. Surya Namaskar is good for the digestive system and the nervous system. It stimulates the lymphatic system and ropes respiratory system health, as well.

Practicing Surya Namaskar also benefits the Endocrine system and enable the various endocrinal glands to function correctly. These include the thyroid, parathyroid and pituitary glands as well as the adrenal gland, testes and ovaries.

Like most forms of exercise, Surya Namaskar provides mental benefits to regular practitioners. You will feel wonderful after performing the Sun Salutation. It is relaxing and rejuvenates and tension, stress and anxiety melt away as you perform Surya Namaskar.

Surya Namaskar is an excellent unconventional to caffeine and other stimulants. If you suffer from insomnia or sleep turbulence, you will find enthusiastic Surya Namaskar aids in helping you fall asleep without the need for depressants.

With regular practice, Surya Namaskar is an excellent way to manage stress and ease despair. You will expend a marvelous amount of energy as you move through the two sets of poses. Surya Namaskar teaches you to deliberate, and learning to achieve the poses is extremely rewarding.

Physiological effect of Surya Namaskar on body

Effect on musculoskeletal system

Usually training of Surya Namaskar necessary four times more energy than the daily obligation, Thus it is a very good fat burner. It's training improves the flexibility of body muscles particularly leg, back, chest and buttock muscles. It is found that by practicing Surya Namaskar regularly can significantly increase Hand grip, strength and endurance.

Effect on respiratory system

Surya Namaskar training significantly increases maximum aspiratory pressure and maximum expiratory pressure. This suggests that its training improves the strength of both expiratory and aspiratory muscles. It also improves the strength of the intercostals muscles eventually leads to increase vital capacity and contractility of lungs. It is also found that by regular Surya Namaskar training there is significant change noted in forced vital capacity (FVC), forced expiratory vital volume in 1st second (FEV1), peak expiratory flow rate (PEFR) and Vital capacity (VC) .

Effect on cardiovascular system

It reported that yoga practice incorporating Surya Namaskar in daily routine life can improve cardiorespiratory efficiency and fitness. An increase in systolic blood pressure, peak expiratory flow rate, forced vital capacity, and reduction of respiratory rate, heart rate, and diastolic blood pressure also reported in practitioner.

Effect on endocrinal system

Regular practicing Surya Namaskar modulates endocrinal system of the body especially, pancreas, thyroid, adrenals and pituitary glands. The overall effect is very beneficial for Metabolic Syndrome, Obesity, Diabetes Mellitus, Hypothyroidism and menstrual disorders.

Effect on nervous system

Surya Namaskar tunes the central, tangential and autonomic Nervous system. This effect is a boon for patients with lower backache, diabetes mellitus, and different neuronal weaknesses.

Conclusion

Throughout the act of Surya Namaskar, in the occasion that one accomplishes a exact level of unassailability and supremacy over the structure, one could then be familiar with an all the more effectual and deeply huge modus operandi called Surya Kriya. Surya Kriya is the key process. Surya Namaskar is a "nation cousin" of Surya Namaskar, and there is another procedure called Surya Namaskar, which is a far away relative. In the event that you need to simply make use of the procedure as a physical society to construct muscle and turn out to be physically solid, you do Surya Namaskar. On the off chance that you

need to be physically fit furthermore need some profound component in it, you do Surya Namaskar. Be that as it may, on the off chance that you need a solid ethereal process, you do Surya Namaskar.

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Performance Of University Level Kho- Kho Players In Relation To Concentration

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Abstract :Indian culture is the oldest culture in this world. It has gifted many things to this world. Literature, arts, sports, philosophy, scientific theories and social, political and economical thoughts spread in the world are originated from Indian culture. The game Kho Kho had its origin in Maharashtra state and slowly spread throughout the length and breadth of India and subsequently to the neighboring countries, Nepal, Bangladesh, Srilanka and Pakistan.

The purpose of the present research was to study the relationship between the performances of University level Men Kho-Kho players in relation to selected cognitive variables. In order to achieve the purpose of the study, subject's performance was estimated with the help of a rating scale; the status of subjects in the selected cognitive variables reaction time was measured with the help of Electronic Chronoscope. A total of 180 subjects belonging to 16 Universities of South-India were selected in such a way that 60 subjects each belonged to Dodgers, chasers and All-rounders (customer of classification of Kho-Kho players) category. Statistical techniques used: Descriptive statistics, ANOVA, Correlation and Multiple regression analysis were used. Result: The correlation between Concentration and the Performance of the players was positive and $r = 0.371$ and it was found to be statistically significant at 5% level. Concentration and performance were positively correlated. The correlation between concentration and the performance of the players was positive and $r = 0.37$.
Keywords: concentration, Kho-Kho, Performance, Cognitive, University,

Introduction

Indian culture is the oldest culture in this world. It has gifted many things to this world. Literature, arts, sports, philosophy, scientific theories and social, political and economical thoughts spread in the world are originated from Indian culture. The game Kho Kho had its origin in Maharashtra state and slowly spread throughout the length and breadth of India and subsequently to the neighboring countries, Nepal, Bangladesh, Srilanka and Pakistan.

Today almost every nation in the world attaches great significance to the development of sports in order to improve the nation's health and for the well being of the future generations. Certain nations like USA and Russia even try to project the superiority of their political ideology and social systems through the field of sports. India still considered as one of the developing countries, is also trying to attain such a level of performance in sports and to some extent succeeded in achieving the best performance in such games as cricket, Hockey, Kabaddi, Badminton, Kho Kho etc. Particularly in Kho Kho, India has earned a unique name at international competitions by consistently winning the Asian championships' and SAF Championship'.

"Schollarnder was of the view that it was not physical, physiological, and environmental and (Schollarnder2003) economic factors alone that influence sports performance, psychological factors were also playing dominant role. There are many factors, such as physique, body constitution, technique, tactics, level of motor and physical abilities, psychological abilities, personality make up of a sportsmen etc., which influence sports performance at National and International events. Sports psychology has emerged as an important field to enhance one's performance during competition. The role of psychology in attaining high performance goes on increasing and becoming greater as the level of competition goes on becoming higher ¹

'Till recently Kho Kho game was confined to certain pockets in India. Now it has crossed the boundaries of India and has become an International event. Any nation which desires to acquit well in this game is required to cater to all facets of preparation of players namely physical, social emotional and cognitive while the first two facets are usually taken care of the cognitive aspects are not given due consideration. Therefore the researcher has ventured to take up the present study'.

Objectives Of The Study

To investigate the performance ability of kho-kho players from the study variables

Hypothesis

There is no significant relationship between concentration and performance of kho-kho players.

Delimitations Of The Study

The study was delimited to 180 male Kho-Kho players from three different categories.

The study was delimited to chasers, dodgers, and all rounder male Kho-Kho players.

The study was delimited to male Kho-Kho players of south zone states namely Karnataka, Tamilnadu, Kerala, Andhra Pradesh and Pondicherry.

Procedure

Knox Cube Imitation Test Of Concentration²: Seat the Subject comfortably on a chair or ground. Subject is asked to examine the cubes presented to him. Four of the five cubes are placed in a row about 2" apart from one another. With first cube being the one from the left of the subject, the four cubes are arranged in a row and the 5th cube is kept in front of the four cubes between the second and third cube of the row. The experimenters take the fifth cube and instruct the subject follows: "I shall present a series of taping using this cube on the other four cubes which are in front of you. After each presentation I shall ask you to present the taps in the same order". With the ready signal the experimenter will present the taps as per the prepared schedule of presentation approximately with a rate of one tap per second. Always the experimenter should begin tapping with the cube placed to the left of the subject. After tapping the four cubes, the experimenter keeps the fifth cube back in front of the four cubes arranged in a row, between the second and the third cubes. The subject has repeated the same taping for 12 number of trials. The test should proceed until the subject fails to repeat the same taping in four successive trails

PERFORMANCE RATING SCALE

Performance rating in team sports is a very hazardous task. Several factors are to be taken into consideration before rating the players' performance subjectively. It is imperative that the assessment should not be biased and it must follow certain standard. Players should be given equal opportunities to show their talent. In a game or in a competition, a player integrates variety of skills, strategy, tactics and the outcome is the performance. A holistic approach of assessment based on certain criteria helps in judging the performance, which provides constructive feedback. To rate the performance of kho-kho players, three expert coaches who have wide knowledge and experience in kho-kho were named and were asked to rate the performance of players while they participated in competition on a 100 point rating scale. The points awarded by the three expert coaches were aggregated and divided by the three to get the average score for each subject. Different rating scales were used for chasers and dodgers. The experts were informed to follow a uniform pattern of game observation and to assess the performance and grade each player independently. In order to arrive the performance rating of subjects who were All-rounders, each subject was assessed in chasing and dodging skills for 100 points each by the three experts independently. Each experts rating in chasing and dodging skills were aggregated and divided by two to reduce it for 100 points so as to be equal as chasers or Dodgers rating. The average ratings of

each expert (for 100 points) were again total (for 300 points) and divided by three. The quotient represented the All-rounder players' performance rating.

Expert should encircle the number in each category. Expert should assess each category separately and independently. Point secured by each player in each category is to be totaled and divided by ten to get the average performance rating of the player

Findings Of The Study

Concentration and Performance: One of the objectives of the present research was to find the relationship of Kho-Kho game performance and the cognitive variables, concentration. Concentration was described as an ability to focus effectively on the task on hand, ignoring the distractions. It is a component of a larger construct of "Attention". Success in sports contests was achieved with the help of verities of factors. Proficiency over the skills, high level of physical fitness, mastery over the strategies were combined with several other factors of which concentration, a cognitive variable was one. Concentration demands blocking and ignoring the distraction like the crowd, popularity of opponents, standing /position of opponents etc. It was keeping in mind the nature of ground, situation in which a sports person was placed; the task on hand etc. concentration was the skill of focusing on a pertinent factor. A number of studies were undertaken by researchers all over the world and a majority of them concluded that, concentration was a major attribute for successful performance in sports. Analysis of data of the present study leads to subscribe to the view of earlier studies which found a positive relationship between sports performance and concentration.

Correlation between Concentration and Performance of Kho-Kho Players

Variable	Statistics	Performance
Concentration and performance	Pearson correlation	.371**
	Sig. (2-Tailed)	.000
	N	180

** Correlation is significant at the 0.01 level (2-Tailed)

* Correlation is significant at the 0.05 level (2-tailed)

The correlation between Concentration and the Performance of the players was positive and $r = 0.371$ and it was found to be statistically significant at 5% level.

In most competitive sports, during the period of contests there will be regulation stoppages and stoppages due to various reasons like breach of rules, injuries, player's substitution, seeking of time outs etc. Where as in Kho-kho contest once a competition turn of (9 minutes/7 minutes) was started the play continues till the expiry of duration of the turn. Each contesting team likes to make most in the duration of a turn like chasing team trying to catch as many Dodgers as possible and the Dodgers trying to escape from being tagged/touched and remain being not out or dodge/defend for as much time as possible. Thus every move of either category of players was important and a small let up on the part of each player may lead to the detriment of that team. Therefore, all players need to concentrate on the situation at hand. Biddle and Stuart in their study on 1996 Olympic Archers revealed that concentration was one of the aspects necessary for effective performance. The subjects of the present study seem to have adhered to that principle as data of Table suggest that concentration and performance were positively correlated. The correlation between concentration and the performance of the players was positive and $r = 0.37$ Hence, the Hypothesis H1 : there was no significant correlation between Concentration and Performance of the players was rejected.

Conclusion

The correlation between Performance of the players and Concentration score was negative. The multiple regression equation of Performance and the study cognitive variables have been constructed and analyzed the effectiveness of these cognitive variables on the Performance of the players.

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The Effect Of Socio-Economic Status, Sports-Man Personality Test On Performance Of University Athletes - An Primary Evidence

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Introduction

The performance in any competitive sports event depend on such factors as physical fitness, technique, tactics and skill although the relative contribution of these factors obviously varies from sport to sport. Additionally, some other factors like physique, body composition and psychological traits of the performer also play a vital role on performance. With the modernization of sports environment, the development of training methods and techniques of sports training are important factors in winning. For better and higher performances principles of several basic sciences and technology has brought about a revolutionary change from sports performer to be a sport excellent. Today athletes are trained following scientific principles of coaching and training, using the most sophisticated equipment's and technology in order to bring out the best performance with least expenditure of energy and time. Sports performance is improving, not only by sports training but, also exploiting sports science and technology. At every step new technology has been introduced. Similarly radical change has occurred in Physical Environment.

Objective Of The Study:

The major objectives of the study are as under -

To study and understand the sports-man personality test (L. N. Dubey) of University Athletes towards respondents. To analyse the sports-man personality test (L. N. Dubey) of University Athletes towards respondents. To offer suggestions to improve the performance of University Athletes in India in the light of findings of the study.

Research Methodology:

I. Data collection -

The data for the study has been gathered from both the primary and the secondary sources, though the study is mainly based on primary data. The study is basically descriptive in nature. For the purpose of the study, primary and secondary information has been gathered from the existing literature such as relevant research based on books, articles and some relevant website have been visited for the appreciation of the conceptual issues involved.

II. Sample Size:

The researchers collected information pertaining to Socio-Economic Status on Performance of University Athletes from 200 sample University Athletes, in India by circulating questionnaire. Sample respondents were administered sportsman personality test and family climate scale and their responses were scored and tabulated for statistical analysis.

Before administering the questionnaire respondents had been given full instruction for completing the questionnaire. They were assured that their information will be kept confidential. There was no time limit; but the papers were to be filled in one stretch.

Empirical Evidence: Analysis Of Field Data

The research data has been gathered from sample University Athletes-respondents belonging to different universities in India. The filled-in questionnaires received from the Athletes-respondents were studied, analyzed and tabulated. Such tabulated data along-with interpretation has been presented in the subsequent paragraphs.

SECTION – A:

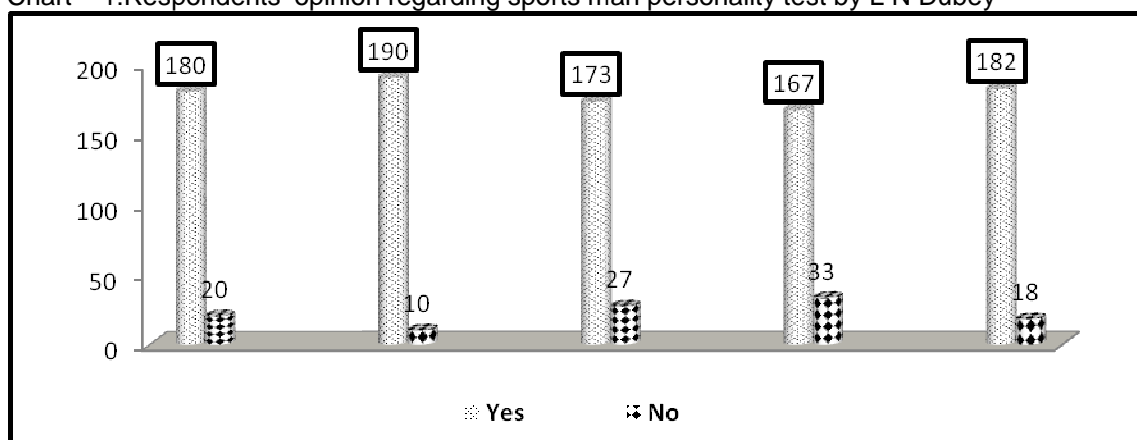
Table – 1: Respondents' opinion regarding sports man personality test by L N Dubey

Sl. No	Statements	Opinion		Total
		Yes	No	
1.	I enjoy long journey by bus or train	180 (90%)	20 (10%)	200 (100%)
2.	I plan before starting a new work	190 (95%)	10 (5%)	200 (100%)
3.	I Put up my thoughts boldly before others	173 (87%)	27 (13%)	200 (100%)
4.	I can live comfortably even in places with poor facilities	167 (84%)	33 (16%)	200 (100%)
5.	I am social by nature	182 (91%)	18 (9%)	200 (100%)

Source: Field Investigation.

Table-1 deals with the opinion of the respondents' about sports man personality test by L N Dubey. Majority 90% of total respondents agree with the 'I enjoy long journey by bus or train' and more number of 95% respondents are accepted to the statement of 'I plan before starting a new work', about 87% of the respondents are agreed to the statement of 'I put up my thoughts boldly before others'. Majority 84% of the respondents are happy with the statement of 'I can live comfortably even in places with poor facilities'. Finally, that is 91% of the respondents are agreed with the 'I am social by nature' statement. The above table also depicted that the opinion of the respondents about SMP Test which is support with less number of respondents 10% are not satisfied with the 'I enjoy long journey by bus or train', 5% of respondents are not happy with the 'I plan before starting a new work', about 13% of the respondents are not acceptable with the 'I put up my thoughts boldly before others', less number of respondents that is 16% (33) are not feel happy towards 'I can live comfortably even in places with poor facilities'. Lastly, slight number 9% of the respondents are not acceptable mode to the statement of 'I am social by nature'.

Chart – 1: Respondents' opinion regarding sports man personality test by L N Dubey



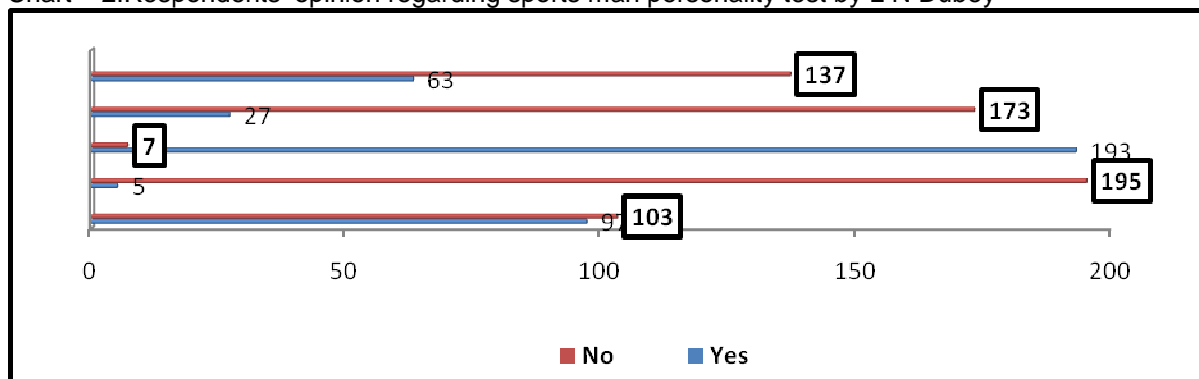
Section - B Table – 2: Respondents' opinion regarding sports man personality test by L N Dubey

Sl. No	Statements	Opinion		Total
		Yes	No	
1.	I am afraid of going to new and unknown places	97 (49%)	103 (51%)	200 (100%)
2.	If officials assign me difficult task. I show my inability	5 (3%)	195 (97%)	200 (100%)
3.	I do my work sincerely	193 (96%)	7 (4%)	200 (100%)
4.	I prefer to sit alone at the back during a social gathering	27 (13%)	173 (87%)	200 (100%)
5.	I often have difference of opinion with my seniors'	63 (31%)	137 (69%)	200 (100%)

Source: Field Investigation.

Table-2 deals with the opinion of the respondents' about sports man personality test by L N Dubey. Majority 51%, of total respondents did not agree with the 'I am afraid of going to new and unknown places', 97% (195) of the athletes did not accepted to the 'if officials assign me difficult task, I show my inability' more number of 96% respondents are accepted to the statement of 'I do my work sincerely', about 87% of the respondents are agreed to the statement of 'I prefer to sit alone at the back during a social gathering'. Majority 69% of the respondents are happy with the statement of 'I often have difference of opinion with my seniors'. The above table also shows that the opinion of the respondents about SMP Test which is support with more number of respondents 49% are not satisfied with the 'I am afraid of going to new and unknown places', 3% of respondents are not happy with the 'if officials assign me difficult task, I show my inability', about 7% of the respondents are not acceptable with the 'I do my work sincerely', less number of respondents that is 13% (27) are not feel happy towards 'I prefer to sit alone at the back during a social gathering'. Lastly, slight number 31% (63) of the respondents are not acceptable mode to the statement of 'I often have difference of opinion with my seniors'.

Chart – 2: Respondents' opinion regarding sports man personality test by L N Dubey



Section - C

Table – 3: Respondents' opinion regarding sports man personality test by L N Dubey

Sl. No	Statements	Opinion		Total
		Yes	No	
1.	I like to be with friends during leisure	183 (91%)	17 (9%)	200 (100%)
2.	I am aggressive while performing a task	197 (98%)	3 (2%)	200 (100%)
3.	I meet warmly even with my opponents	37 (19%)	163 (81%)	200 (100%)

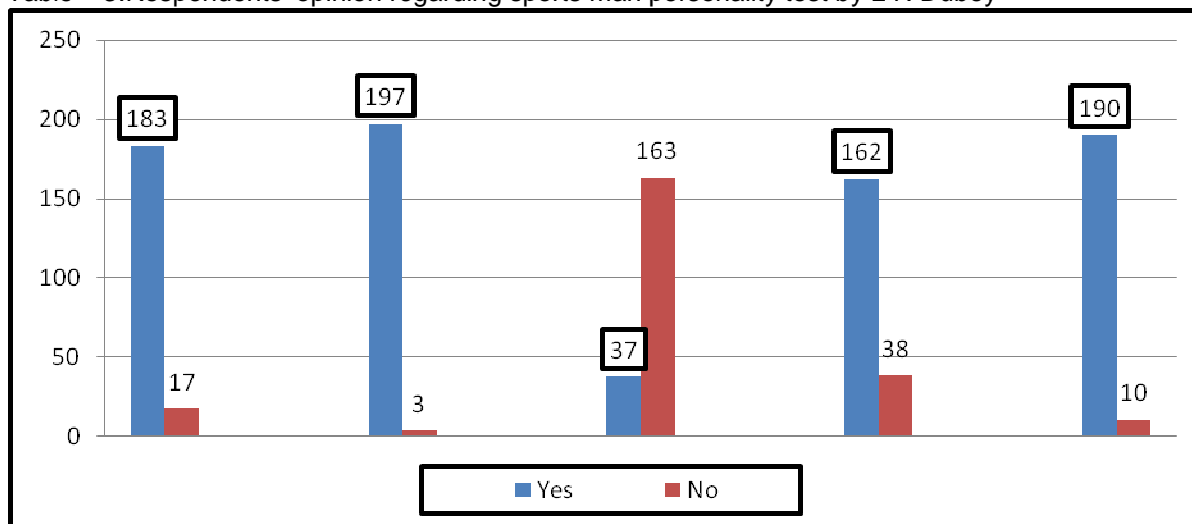
4.	Others are less confident about my success	162 (81%)	38 (19%)	200 (100%)
5.	I prefer team games to individual games	190 (95%)	10 (5%)	200 (100%)

Source: Field Investigation.

Table-3 depicted that the opinion of the respondents' about sports man personality test by L N Dubey. More number of 183 (91%) the respondents are opine that 'yes' to 'I like to be with friends during leisure' the statement and very less number that is 17 (9%) did not agreed to the above stated statement. Majority 197 (98%) of the respondents are accepted to 'I am aggressive while performing a task' statement, slight number it is 3 (2%) of the respondents are not happy with this statement.

The study table highlights that 81% of the respondents are not happy with the 'I meet warmly even with my opponents' and 19% of the respondents are happy with the above mentioned statement. About 162 (81%) of the respondents are accepted to 'others are less confident about my success' and 38 (19%) of the athletes respondents are not accepted with this. Lastly, Majority 190 (95%) of the sports athletes are happy with 'I prefer team games to individual games' and very less number of sports athletes are unhappy with above stated statement.

Table – 3: Respondents' opinion regarding sports man personality test by L N Dubey



Findings Of The Study

The major findings of the study are as under –

Majority 90% of total respondents agree with the 'I enjoy long journey by bus or train and more number of 95% respondents are accepted to the statement of 'I plan before starting a new work', about 87% of the respondents are agreed to the statement of 'I put up my thoughts boldly before others'. Majority 84% of the respondents are happy with the statement of 'I can live comfortably even in places with poor facilities'. Finally, that is 91% of the respondents are agreed with the 'I am social by nature' statement.

Majority 51%, of total respondents did not agree with the 'I am afraid of going to new and unknown places', 97% (195) of the athletes did not accepted to the 'if officials assign me difficult task, I show my inability'

More number of 96% respondents are accepted to the statement of 'I do my work sincerely', about 87% of the respondents are agreed to the statement of 'I prefer to sit alone at the back during a social gathering'.

Majority 69% of the respondents are happy with the statement of 'I often have difference of opinion with my seniors'.

More number of respondents 49% are not satisfied with the 'I am afraid of going to new and unknown places', 3% of respondents are not happy with the 'if officials assign me difficult task, I show my inability', about 7% of the respondents are not acceptable with the 'I do my work sincerely', less number of

respondents that is 13% (27) are not feel happy towards 'I prefer to sit alone at the back during a social gathering'. Lastly, slight number 31% (63) of the respondents are not acceptable mode to the statement of 'I often have difference of opinion with my seniors'.

More number of 183 (91%) the respondents are opine that 'yes' to 'I like to be with friends during leisure' the statement and very less number that is 17 (9%) did not agreed to the above stated statement. Majority 197 (98%) of the respondents are accepted to 'I am aggressive while performing a task' statement, slight number it is 3 (2%) of the respondents are not happy with this statement.

The study table highlights that 81% of the respondents are not happy with the 'I meet warmly even with my opponents' and 19% of the respondents are happy with the above mentioned statement. About 162 (81%) of the respondents are accepted to 'others are less confident about my success' and 38 (19%) of the athletes respondents are not accepted with this. Lastly, Majority 190 (95%) of the sports athletes are happy with 'I prefer team games to individual games' and very less number of sports athletes are unhappy with above stated statement.

Conclusion:

Socio-Economic Status is believed to influence performance. It is background of the players which has significant influence on their level of performance. Indian society is presently stratified in to classes like upper class, middle class and lower class. This social class extends corresponding socialization to the players. In this research paper the researcher designed with major research problems and to attempt in effective manner like viz., conceptual-frame work of Sports Man Personality Test with the help from Socio-Economic Status of the University athletes. The outcome of this research paper highlights that mainly based on primary information from university athletes with different statement parameters which is most influence on sports persons. Finally researchers find-out the ground level problems in sports, particularly university athletes and to suggest university athletes to uplift all the problems which are come across in sports.

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Comparison Of Socio Economic Status Between Volleyball And Basketball Players

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Abstract :

Status inconsistency is a situation when an individual's social position have both positive and negative influences on his social status. For example, a teacher has a positive societal image (respect, prestige) which increases his status but may earn little money, which simultaneously decreases his / her status. In contrast, a drug dealer may have low social position though have a high income. However, a drug dealer may have high status within his or her own reference group (e.g. inner city gangs) and may be indifferent to his "low status" within the larger society. For example, a wealthy drug dealer who flaunts the proceeds of his trade may have the highest social status on the "street". Thus, status inconsistency applies to situations where members of the in group judge the status of members of an out group and may not apply to cases of status attainment on all criteria within an in group.

Introduction :

Families with high socioeconomic status often have more success in preparing their young children for school because they typically have access to a wide range of resources to promote and support young children's development. They are able to provide their young children with high quality child care, books, and toys to encourage children in various learning activities at home. Also, they have easy access to information regarding their children's health, as well as social, emotional, and cognitive development. In addition, families with high socioeconomic status often seek out information to help them better prepare their young children for school.

Methodology :

The present study was undertaken with a view to investigate the relationship among variables for the purpose of explaining a current state and predicting future occurrences. In a scientific inquiry, after defining the problem and formulation of the hypothesis on the basis of literature, the next legitimate sequential order the researcher could follow is data collection. The data were collected on 309 subjects by administering the selected performance components and performance prerequisite components tests, socioeconomic status inventory.

Results of Descriptive Analysis :

Table 1: Correlation coefficients of impact of socio economic status and its impact with performance components volleyball and basketball players

	Group		M.S.	M.E.	FLX.	CVE	BMI	SES
M.S.	I	Pearson correlation	1	.464**	.066	.202**	.002	-.191**
	II	Sig. (2 tailed)	-	.000	.139	.000	.962	.000
		N	309	39	309	309	309	
M.E.	I	Pearson correlation	.646**	1	.019	.293**	.120**	0.25
	II	Sig. (2 tailed)	.000	-	.665	.000	.007	.571
		N	309	309	309	309	309	309
FLX	I	Pearson correlation	.066	.019	1	.003	.063	.185
	II	Sig. (2 tailed)	.139	.665	-	.946	.157	.000
		N	309	309	309	309	309	309
CVE	I	Pearson correlation	.202**	.293**	.003	1	.401**	.115**
	II	Sig. (2 tailed)	.000	.000	.946	-	.000	.010
		N	309	309	309	309	309	309
BMI	I	Pearson correlation	.002	.120**	.063	.401**	1	.005
	II	Sig. (2 tailed)	.962	.007	.157	.000	-	.910
		N	309	309	309	309	309	309
SES	I	Pearson correlation	.191**	.025	.185	.115**	.005	1
	II	Sig. (2 tailed)	.000	.571	.000	.010	.910	-
		N	309	309	309	309	309	309

* Correlation is significant at 0.05 level (2 tailed)

** Correlation is significant at 0.01 level (2 tailed)

Conclusion :

Research hypothesis (H1) is accepted in case of volleyball and basketball players of Karnataka region for two performance components i.e., muscular strength ($r=.085$) and cardio vascular endurance ($r=.010$) as it has significant positive correlation with socio economic status and its impact in case of other components research hypothesis is rejected and null hypothesis is accepted. Research hypothesis (H2) is rejected in case of volleyball and basketball players of Karnataka region as there is no significant positive correlation between socio economic status and its impact on performance prerequisite components.

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Effect of Plyometric Training for development of Speed among Sprinters of Kalaburagi District

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Abstract

Plyometrics is method of developing explosive power, an important component of most athletic performances. The sample for the present study consists of 20 Male Sprinters out of which 10 are experimental group and 10 are control group. Plyometric Training were given to Sprinters Experimental group for eight weeks along with general training Sprint Training and control group general training of sprints. Pre Test and Post Test were conducted for 30 M Run for both the groups. This Study shows that the experimental group of Sprinters has got rapid improvement due to Plyometric Training. It is recommended that the coaches must include the Plyometric training for sprinters. Key words: plyometric training, sprinters etc.

Introduction:

Sports training is systematically planned preparation with the help of the exercise methods which realizes the main factors of influencing athlete's progress. The content of training includes all the basic types of preparation of the sportsman-physical, technical, tactical, psychological, and physiological. Plyometrics is method of developing explosive power, an important component of most athletic performances. Coaches and athletes have sought methods and techniques for improving speed and strength combined is power and power is essential in performing most sorts of skills. Although Specific exercises designed to enhance quick, explosive movements have been taught for some time. Presently a system emerged which emphasizes "explosive reactive" power training.

Methodology:

The sample for the Study consists of 20 Sprinters from the Kalaburagi District and those who are doing athletics training since last 3-5 years between the age group of 18-20 Years. The experimental groups received selected specific plyometric exercises training for eight weeks, whereas the control group did not receive the said training. The duration of the experiment was for eight weeks. The following are the important plyometric exercises given to sprinters.

1. Hopping
2. Bounding
3. Hurdle Jumps
4. Box Jumps
5. Depth Jumps
6. Tuck Jumps
7. Half Squat Jumps
8. Step Ups

For the present study the following variables were selected:

1. Speed – 30 M Run

30 M Run:

Sprint or speed tests can be performed over varying distances, depending on the factors being tested and the relevance to the sport.

purpose: The aim of this test is to determine acceleration and speed.

equipment required: measuring tape or marked track, stopwatch or timing gates, cone markers, flat and clear surface of at least 50 meters.

procedure: The test involves running a single maximum sprint over 30 meters, with the time recorded. A thorough warm up should be given, including some practice starts and accelerations. Start from a stationary position, with one foot in front of the other. The front foot must be on or behind the starting line. This starting position should be held for 2 seconds prior to starting, and no rocking movements are allowed. The tester should provide hints for maximizing speed (such as keeping low, driving hard with the arms and legs) and encouraged to continue running hard through the finish line.

results: Two trials are allowed, and the best time is recorded to the nearest 2 decimal places. The timing starts from the first movement (if using a stopwatch) or when the timing system is triggered, and finishes when the chest crosses the finish line and/or the finishing timing gate is triggered.

Table I: Showing Mean values and Independent Samples Test of 30 M run test between experimental and control groups of Sprinters.

Variables	Group	Pre Test Mean \pm SD	Post Test Mean \pm SD	t	P - Value
30 M Run Test	Experimental	3.48 \pm 0.115	3.27 \pm 0.154	10.62	0.000
	Control	3.58 \pm 0.102	3.65 \pm 0.090		

*Significant at 0.05 level

The Mean Values of Experimental Group Sprinters is 3.48 in Pre Test and Post Test is 3.27 in 30 M Run Speed Test. There is a improvement of Experimental group Sprinters Mean from 3.48 to 3.27 due to the due to the Plyometric Training. The Mean Values of Control Group Sprinters is 3.58 in Pre Test and Post Test is 3.65 in 30 M Run Speed Test. There is a decrease in the performance of control group Sprinters Mean from 3.58 to 3.65 due to the due to the general Training. Hence it is concluded that the Sprinters has increased in Speed Performance due to the plyometric training.

Conclusion

The result of this study warrants the following conclusions:

1. Sprinting performance was also significantly improved due to plyometric training.
2. Plyometric training contributed to sprinters.

Recommendation

Plyometric exercises are extensively used nowadays to enhance performance in different sports. In fact, it is known that since running long jump and sprints are mostly influenced by heredity, role of added training intervention may not be so effective. This study contributes an idea that plyometric training helps to improve performance in running long jump and sprints, which are hereditary in nature. Moreover, plyometric training has additionally helpful for the long jumpers. Thus, this study contributed a supportive idea that environment can modify hereditary traits in enhancing sports performance.

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www.topend sports.com
www.ijhpecss.org
www.ifcss.in

Yoga and Walking Programme among Women Students

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Abstract :

Walking is one of the most relaxing, refreshing and enlivening form of exercise which reaps numerous physical, emotional and psychological benefits. To stay fit and healthy, one does not need to spend a bounty on gym facilities as the natural way of remaining healthy can be achieved by indulging in the healthy practice of brisk walking. Brisk walking can reap numerous health benefits which range from keeping one's heart in a healthy shape to helping in the whole process of weight management. Walking helps in refreshing and rejuvenating the mind along with reducing stress and fatigue. Brisk walking is a kind of aerobic exercise which increases the body's demand for oxygen and trains the heart, lungs and muscles to work more efficiently. In addition, it helps in providing protection from problems like osteoporosis colon cancer, arthritis and others.

Introduction :

For obese and overweight people, brisk walking is a must as it has been found that walking at a fast pace involves the workout of the entire body which in turn helps in trimming and toning of a body. Walking especially brisk walking has numerous benefits and one should embrace this healthy habit to lead a healthy and a disease free life. Yoga has gained tremendously in popularity during the last few years and today over 30 million people practice yoga on a regular basis. Yoga is the most rapidly growing health improvement of today, despite having existed for thousands of years already.

People's attitude towards health, spirituality, way of life and our place in society have changed quite dramatically, as people are looking for answers for their everybody problems. In these chaotic times our environments is fighting for survival and we humans suffer more and more from physical and psychological stress, with new diseases developing while old one's that we thought we could handle with antibiotics, returns with an vengeance in the midst of out society. We can't always control these development, but we can learn to face them. And to this end. Yoga is as good an invention it has ever been.

Methodology :

To achieve the purpose of the study, ninty women subject were selected from Kalaburagi district at random. Their age ranged from 18 – 22 years. The selected subjects were divided in to three groups namely yoga, walking and control groups with thirty subjects each. The study was restricted to two physical variables namely cardiovascular endurance and flexibility. The selected subjects were divided into three groups of thirty subjects each namely two experimental groups and a control group. The experimental group I underwent yoga training and experimental group II underwent waking for during of six weeks with five days per week and group III acted as control group.

The criterion variables selected for this study were cardio respiratory endurance and flexibility. The selected variables were assessed prior to and immediately after the training period by using the standardized test items. The experimental design used in this study was pre and post test random group design. The data collected from the two groups before and after the experimental period were statistically examined for significant improvement by dependent 't' test and the analysis of covariance (ANCOVA) was used. Whenever the 'F' ratio for adjusted post test mean was found to be significant, scheffe's test was followed as a post hoc test to determine which of the paired means difference was significant. In all the cases 0.05 level was fixed as significant level to test the hypothesis.

Analysis and results of the data :

The mean and dependent 't' test values on cardio respiratory endurance of yoga training, walking training and control groups have been analyzed and presented in Table – I

Table – I: Mean and dependent 't' test for the pre and post tests on cardio vascular endurance and flexibility of experimental and control group.

Criterion variables	Mean and 't' test	Yoga training group	Walking exercise group	Control group
Cardio vascular endurance (in meter)	Pre test	1670.45 ± 58.09	1655.10 ± 95.68	16000.00 ± 09.43
	Post test	1975.00 ± 75.09	1960.00 ± 123.22	1620.10 ± 75.42
	't' test	7.15*	7.65*	1.02
Flexibility (in centimeter)	Pre test	19.45 ± 2.32	19.97 ± 2.23	19.33 ± 2.35
	Post test	24.07 ± 3.13	27.63 ± 2.12	19.43 ± 2.17
	't' test	6.45*	5.57*	0.93

* Significant at .05 level. The table value required for .05 level of significant with df 29 is 2.045.

The table 1 shows that the obtained dependent t-ratio values between the pre and post test means on cardio vascular endurance and flexibility of yoga training, walking training and control groups are is 2.045. Since, it is understood that training programmes had significantly improved the performance of cardio vascular endurance and flexibility. However, the control group has not improved significantly as the obtained 't' value is less than the table value, because they were not subjected to any specific training.

The analysis of covariance on cardio vascular endurance and flexibility of yoga training, walking training and control groups have been analyzed and presented in Table II.

Table – II: Analysis of covariance on cardio vascular endurance and flexibility of yoga training, walking training and control groups.

Criterion variables	Adjusted post test means			Sources of variables	Sum of squares	df	Mean squares	'f' ratio
	Yoga training group	Walking exercise group	Control group					
Cardio vascular endurance	19.50.64	1952.00	1605.00	B	217715.91	2.86	108857.96	9.28*
				W	1009112.23		11733.86	
Flexibility	23.76	21.56	19.40	B	472.38	2.86	236.19	16.49*
				W	1231.09		14.32	

*Significant at .05 level. (The table value required for significance at .05 level with df 2 and 86 is 3.10).

Table II shows that the obtained F-ratio value for adjusted post test of cardiovascular endurance and flexibility are 9.28 and 16.49 which are higher than the table value 3.10 with df 2 and 86 required for significant at .05 level. Since the value of F-ratio is higher than the table value, it indicates that there is significant difference among the adjusted post test means of yoga training, walking training and control groups. To find out which of the three paired means had a significant difference, the Scheffe's post hoc test was applied.

Scheffe's post hoc test results shows that the adjusted post test mean differences on cardio respiratory endurance and flexibility between the yoga training and control groups; and walking training and control groups were greater than the confidence interval value, which shows significant different at .05 level of confidence.

Conclusion :

It may be concluded from the results of the study that there is a no significant difference in cardio respiratory endurance and flexibility between the adjusted post test means of yoga training and walking training groups. It was concluded that of yoga training and walking training had equal importance in improving the cardio respiratory endurance and flexibility.

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