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Lung Capacity and Body Mass Index Between Physical Education and Non-Physical Education Students- A Comparative Study

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ABSTRACT

The purpose of the study was to compare the lung capacity and body mass index between female physical education and non-physical education students. To achieve the objective of the study, twenty five (N=25) female physical education students and twenty five (N=25) female non-physical education students were selected randomly as subjects. The age of the subjects ranged between 20 to 26 years. To determine the significant difference between the mean scores of female physical education and non-physical education students on lung capacity and body mass index (BMI),'t' test was employed with the help of SPSS software. The level of significance was set at 0.05. There was significant difference obtained on lung capacity between female physical education and non-physical education students. There were no significant differences obtained on body mass index (BMI) between female physical education and non-physical education students. The finding reveals that female physical education students have significantly better in lung capacity as compare to female non-physical education students.

Key words: BMI, Lung Capacity, Physical Education and Non-Physical Education Student

Introduction: Obesity is a major health issue all over the world. Obesity impacts on many areas of clinical medicine, including pulmonary medicine, where it is debated if obesity is linked to asthma, or whether the obesity, due to its effect of decreasing lung volumes and increasing airway resistance, cause symptoms that simply mimic asthma. It is important to understand the relationship between body mass index (BMI) and lung function to properly interpret PFTs.Several previous studies have reported that increased body weight decrease lung volumes, they included subjects with coexisting morbidities such as cardiovascular disease, or they were conducted with the subjects in the supine position. Obesity has relatively little effect on vital capacity (VC) or total lung capacity (TLC). However, functional residual capacity (FRC) and expiratory reserve volume (ERV) can be severely decreased as a result of the altered chest wall mechanics in obesity. Mild obesity decreases FRC and ERV in patients with cardiovascular disease, but more severe obesity is required to decrease FRC and ERV. It has been studied that decreasing body weight had the expected positive impact on the lung mechanics. A high frequency of normal airway function has been observed in many obese patients with asthma receiving bronchodilators. Obesity increases risk for developing diabetes, gallstones, hypertension, heart disease, stroke and colon cancer. In any case, adults who are overweight in middle age face a poor quality of life as they age, with the quality declining the greater the weight. Chronic obstructive pulmonary disease (COPD) is characterized by dyspnoea, impaired exercise tolerance, and frequent weight loss and nutritional depletion. People with a higher body mass index (BMI) at the time of diagnosis of their COPD have been shown to have significantly longer survival than both underweight and normal weight people. This reduction in respiratory muscle strength, in combination with altered pulmonary mechanics may have an impact upon recovery in the postoperative period. High BMI measurements are linked to lowered VO2 max values. The role BMI plays in reducing VO2 max is related to changes in respiratory capacity and cardiovascular endurance. When BMI reaches 30, the minimum classification of obesity, the functional residual capacity of the lungs is reduced by 25%, and the expiratory reserve volume is reduced by over 50%. While these two lung functions measurements are not heavily involved in normal breathing, they do drastically limit

the lungs capacity for achieving maximum work and will result in lowered VO2 max values. Increased BMI levels have also been associated with decreases in cardiovascular system capacity. High BMI results in decline in several measurements of cardiovascular functions that impair cardiovascular endurance.

Objectives of the Study

1. To find out the lung capacity of female physical education and non-physical education students.
2. To compare the body mass index (BMI) of female physical education and non-physical education students.

Hypotheses of the Study

It was hypothesized that there would be significant differences between physical education and non-physical education female students on the variables of lung capacity and body mass index.

PROCEDURE AND METHODOLOGY

Twenty-five female (N=25) physical education students and twenty-five (N=25) female non-physical education students from Panjab University Campus were selected randomly as the subjects of this study. The age of the subjects were ranging between 20 to 26 years. In consultation with experts and considering tester's competency and even feasibility criterion in mind, especially of equipments reliability and time factor, the following physiological variables were selected for the study namely: lung capacity and body mass index. The lung capacity was measured by peak flow meter in L/minute and BMI was calculated by the following formula: BMI = weight in kilograms / (height in meters) ^{2}. In order to examine the hypothesis of the present study independent sample t-test were employed with the help of SPSS software to compare the mean scores of physical education and non-physical education students. Level of significance was set at .05.

RESULTS AND DISCUSSIONS OF THE FINDINGS

The comparison between physical education and non-physical education students for the selected variables: lung capacity and body mass index (BMI) were statistically analyzed using 't' test. The data pertaining to the same is presented in Table 1 to 2. The comparison of lung capacity between physical education and non-physical education female students is presented in table 1.

Table-1
Comparison of Score on Lung Capacity between Physical Education (PE) and Non-Physical Education (NPE) Female Students

Variable	Group	N	Mean	S D	M D	S E	't' ratio
Lung Capacity	PE	25	334.40	65.70	66	17.202	3.837*
	NPE	25	268.40	55.50			

*Significant at .05 level
't'.05 (48) = 2.02

A perusal of inside of table 1 pertaining to female physical education and non-physical education students on lung capacity would show that the first group i.e. physical education students had secured the mean and SD values of 334.40 and 65.70 respectively. On the other hand, non-physical education students had secured mean and SD values of 268.40 and 55.50. The t-value was found to be statistically significant as the value obtained was 3.837 whereas, the tabulated value was 2.02 which 48 degrees of freedom at .05 level of significant. Mean scores of lung capacity between female physical education and non-physical education students are depicted graphically in figure 1.

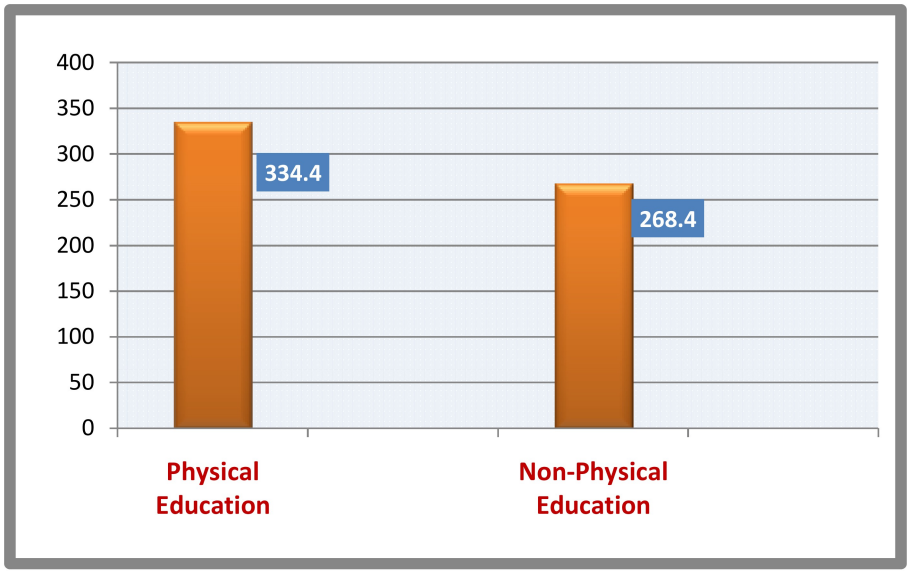

Fig-1: The Graphical Representation of Mean Scores of Female Physical Education and Non-Physical Education Students on Lung Capacity

The comparison of body mass index (BMI) between physical education and non-physical education female students is presented in table 2.

Table-2
Comparison of Score on Body Mass Index (BMI) between Physical Education (PE) and Non-Physical Education (NPE) Female Students

Variable	Group	N	Mean	S D	M D	S E	't' ratio
BMI	PE	25	21.32	2.52	0.39	0.788	0.494
	NPE	25	21.71	3.02			

*Significant at .05 level
't'.05 (48) = 2.02

A glance at the results depicted in table 2 would show that with regard to female physical education and non-physical education students on the variable body mass index, the physical education group had obtained the mean scores and SD values of 21.32 and 2.52. As compared to their values, non- physical education group had obtained the mean and SD value of 21.71 and 3.02 respectively. The t-value was not found to be statistically significant as the value obtained was 0.494 whereas, the tabulated value was 2.02 which 48 degrees of freedom at .05 level of significant. Mean scores of female physical education and non-physical education on body mass index (BMI) are depicted graphically in figure 2.

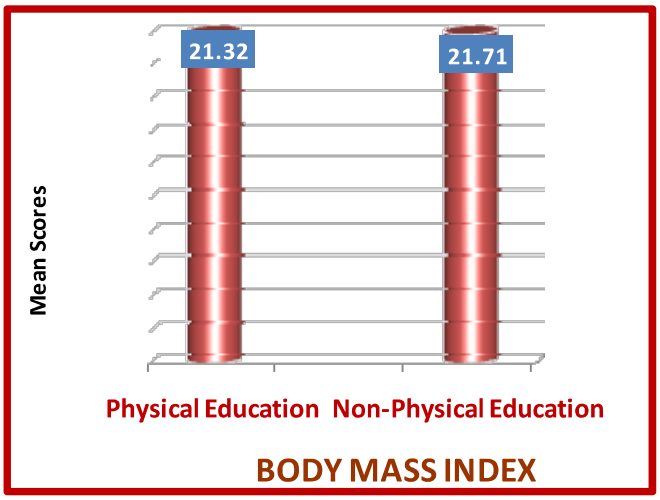

Fig- 2: The Graphical Representation of Mean Scores of Female Physical Education and Non-Physical Education Students on Body Mass Index

DISCUSSION OF FINDINGS

Statistical analysis of data revealed that there was significant difference obtained on lung capacity between female physical education and non-physical education students. There were no significant differences obtained on body mass index (BMI) between female physical education and non-physical education students. The probable reason could be that the subjects of physical education are more active, energetic and their physical fitness level differed from non-physical education students because of their participation in sports, regular conditioning and fitness activities.

CONCLUSIONS

In the light of the findings and limitations of the present study the following conclusions were drawn:
Physical education students have significantly better score in lung capacity as compare to non-physical education students.In case of BMI, no significant difference was observed between physical education and non-physical education students. Physical education students are better mean score in their BMI.

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Comparative Effect of Static, Dynamic and combination of static & dynamic training for the development of Explosive power of Boxer.

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ABSTRACT: This study examined and compare the effectiveness of static, dynamic and combination of Static & Dynamic training for the development of explosive power of Boxers. The study was confined to the male students of the 1st and 2nd year +2 students of R.M.D. College of Science and Education, Patia, Bhubaneswar From the list of 256 students studying in the +2sceince course at R.M.D. college of Sc & Education, Patia Bhubaneswar-31, during the academic year 2000-2001, 80 male students those who are practicing Boxing for inter college and junior state championship were chosen at random as subjects for this study. The age of students ranged between 15 to 17 years. Te average age of students is 16 years.. The whole training program for the experimental groups (A, B and C) was carefully and systematically planned. The experimental groups A, B and C underwent the training program on static, dynamic and combination of static and Dynamic training respectively under the guidance of the group leaders at different places at one time under the careful supervision of the research scholar for a period of twelve weeks on alternative days, i.e. thrice in a week. The objective reflected exactly what was expected of the subjects after going through the training programme. The control group (Group D) was not allowed to undergo the training program.

Introduction:Static and dynamic contractions many times may appear in combination in sports activities. This can be (i) dynamic-static muscle contraction in which the muscles first contract dynamically to cause the movement and then remain in static contraction to maintain the assumed body posture and (ii) static-dynamic muscle contraction in which the muscle first contracts statically and then dynamically. These types of muscle contractions occur in various sports movements. While designing and selecting the exercise for the improvement of strength, one should be more specific and it may be expected that the combination of Static and Dynamic exercise may produce better result. The value of strength is well known and may be achieved through well planned scientific training program, i.e. the static, dynamic and combination of static and dynamic training method which can be applied by Indian coaches and physical educationists. Since these methods, the professionals in the field less understand particularly the combination of static and dynamic method, it was decided to take up this study to obtain better results in Boxing Arena the sports like Boxing events.

Statement of the problems

The purpose of the study was to compare the effectiveness of static, dynamic and combination of Static & Dynamic training for the development of explosive power of Boxers.

Delimitation

1. The study was confined to the male students of the 1st and 2nd year +2 students of R.M.D. College of Science and Education, Patia, Bhubaneswar.
2. The study was delimited to five exercises i.e. Dead lift; two arm curl, abdominal curl, help squat and bench press.
3. The study was further delimited to 50m.sprint, standing broad hump, and putting the shot for effective comparison of explosive power.

Limitation

No motivational technique was employed by the research scholar to enable the subjects to put up their best performances. However the subjects were told to put up their best effort.

Hypothesis

It is hypothesized that there may not be any difference in the effect of static, Dynamic and Combination of Static and Dynamic Training for the Development of Explosive power of Boxers.

Procedure

The subjects, the reliability of data, the criterion measures, the experimental design, the procedure of administering the test, the training programme, the description of exercises and the statistical procedure and analyzing the data are described in this chapter.

Statistical Procedure:

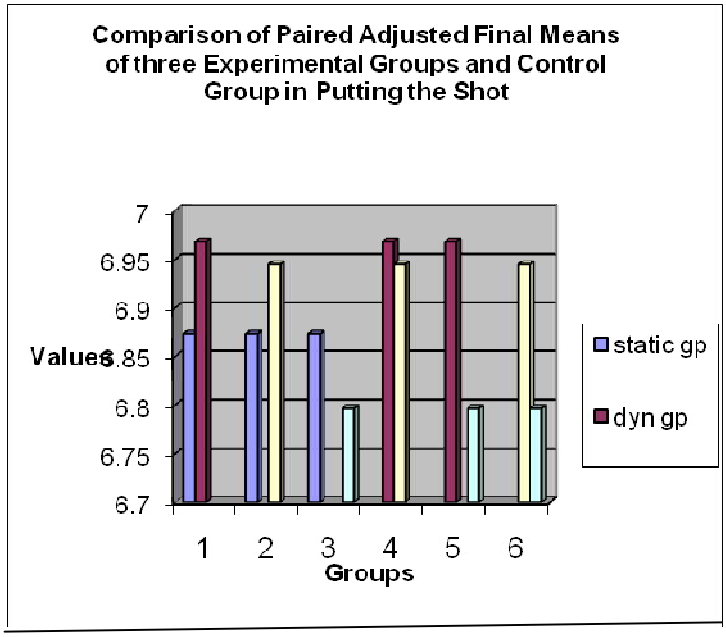
To establish the comparative effect of the static, isotonic and combined isometric and isotonic exercises on the performance of explosive power of Boxers, the data were examined by applying analysis of covariance. The level of significance chosen was five percent.

ANALYSIS OF DATA AND FINDINGS OF THE STUDY:

The statistical analysis of data [1] (50 m.sprint, Standing broad jump, Putting the shot)Collected on eighty male subjects belonging to three experimental groups and one control group, each comprising of twenty subjects, is presented in this chapter . Group A,B and C were trained by static, dynamic and combination of static and dynamic training respectively and group D served as the control group.The data were examined by applying analysis of variance as well as by analysis of co-variance [2] (F ratio) with regard to three experimental groups and one control group to find out the inter-group variability to allow for the comparison between initial and final scores and to effect adjustments in final or terminal scores which allowed for difference in some initial variables.The subjects of the three experimental groups and the control group were selected at random and were not equated with reference to the factors examined. Hence, the difference between the initial means of the groups at the pre-test had to be taken into account during the analysis of the post-test difference between the means by the process of application of analysis of co-variance where the final means were adjusted for differences in the initial means of the adjusted means were tested for significance.

Discussion of Finding

The analysis of data revealed that the three experimental groups trained by Static training, Dynamic training and Combination of Static & Dynamic weight training showed significant gains in performance of the development of explosive power of Boxers .The mean gain achieved by the Dynamic group and Combination of Static and Dynamic group was higher as compared to Static group in Putting the Shot event .The Control group did not show any significant increase in the performance of the development of explosive power of Boxers.



Conclusion

The following are the conclusion may be drawn.

- The dynamic training method proved more effective than the static and combination of static & dynamic methods of strength training in the performance of sprinting ability.

- The experimental group trained with the static strength training method produced significant training effects as compared to dynamic and combination of static& dynamic training methods. The dynamic group proved better than the combination group in the performance of explosive leg power as measured by standing broad jump.

- With regard to the performance in putting the shot, the dynamic training method proved to be more effective in improving performance as compared to static training method, whereas combination group also showed better than static group.

Recommendations

As per the conclusions drawn, the following recommendations may be made:

Teachers of Physical Education and Coaches may adopt all three methods of strength training used in this study for improving performance in the explosive power of boxers.

Similar studies may be undertaken with age group and sex other than those employed .

Similar studies may be carried out to compare the effect of strength on males and females.

Further study may be undertaken by increasing the duration of training programmes and employing variations with regard to percentage of load.

The study may be replicated on different ethnic groups in the country.

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Evaluation of an Informal Introduction to Departmental Student's Life via an E-Learning Environment Performed by the Departmental Student Commission of a Department of Sport Science – Initiating a Digital Learning Culture

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Abstract

The first contact of freshmen with university and its virtual learning environment should not take place at the first day when the university is in session, but already in the scope of the Departmental Student Commission's offer for freshmen.Therefore, an own freshman-course was created for the Departmental Student Commission of the Department of Sport and Exercise Science at the University of Stuttgart (Germany) using the virtual learning environment "Moodle". Using Moodle is obligatory for lecturers and students at the Department of Sport and Exercise Science at the University of Stuttgart.All activities for freshmen (first-semester students) organized by the Departmental Student Commission were supported by Moodle and its provided E-Learning-activities. The offer consisted of: a) online discussion forums for study and examination regulations, b) an online news forum for relevant information and announcements, c) online consultation hours in form of an online chat, d) a Wiki for the organization and post-processing of the freshman weekend, and e) an online test during the freshmen breakfast that introduces the Department of Sport and Exercise Science in a humorous way.The use of Moodle was evaluated with an online questionnaire.

Keywords: Departmental Student Commission, Virtual Leaning Environments, Digital Learning Culture, E-Learning Implementation, Freshmen Students, Moodle

Introduction

"It would be an extremely rare tertiary institution that does not have a Learning Management System (LMS) for online delivery, and a body of staff already using it in their courses" (Nichols & Anderson, 2005). Technology and the terminology of "E-Learning" has become part of the daily life of students and lecturers. Nonetheless, for the process of implementing E-Learning in the area of university education it is not enough just to make digital infrastructure available. Offer does not automatically generate demand and lively usage by students (and lecturers). "However, e-learning in itself does not guarantee efficient or effective learning and teaching. For it to be efficient and effective, a great deal of care and attention needs to go into its implementation" (Naidoo, 2006).To establish a digital learning culture a widespread strategy is needed, that guarantees introducing and getting students used to virtual learning environments as soon as possible (Goodvin, 2010). Therefore, the first contact of freshmen (first-semester students) with university and its virtual learning environment should not take place at the first day when the university is in session and at the very first moment students attend in class. The key lies in the scope of the Departmental Student Commission's offer for freshmen which actually is the first physical and personal contact with university for freshmen. Therefore, an own freshman-course was created for the Departmental Student Commission of the Department of Sport and Exercise Science at the University of Stuttgart (Germany) in the virtual learning environment "Moodle".

Methodology

2.1 Settings and Status Quo

The very first day of studying students are confronted with a bunch of diverse experience and impressions. They focus a new environment, new people to meet and get to know, students, lecturers, etc., and finally, the virtual learning environment (or learning management system). Freshmen are enforced to deal with a couple of functions, buttons, tasks, etc. They are supposed to cope with that overburdening and they are considered to accomplish the needed knowledge to get to terms with the somehow strange experienced technology.Sure, this is some kind of black and white painting, but form the view of a non-technology affine freshmen it sound plausible somehow (Bennett, Maton & Kervin, 2008; Kennedy, Judd, Churchward, Gray & Krause, 2008). Every winter semester about 80 freshmen try to get along with their first semester at university and its treatments like online environments at the Department of Sport and Exercise Science at the University of Stuttgart. Some of them, the tech-savvy so-called digital natives (Prensky, 2001), are used to internet technology at all, but some are "scared" and "lost in cyberspace". Therefore, a strategy is needed to bring the lost ones back into "normal" digital university life.

2.2 Didactic Approach – Or: Towards A Digital Learning Culture

Implementation of E-Learning is not trivia. Structural issues for traditional universities (e.g. organizational structures), implications of E-Learning for students (e.g. learning processes, quality assurance), and implications of E-Learning for lecturers (e.g. workload, teaching styles) are to be considered (O'Neill, Singh & Donoghue, 2004). Due to O'Neill et al. (2004) relevant factors of the implementation process can be visualized in a model:

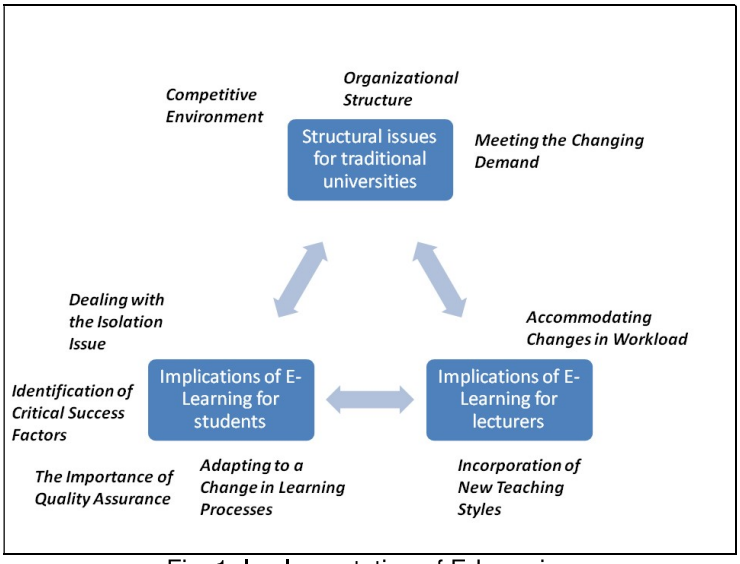

Fig. 1: Implementation of E-Learning

The aim is to habituate the freshmen to E-Learning, especially the virtual learning environment. According to the model students should be the starting point for a further development of a digital learning culture (Agarkhani, 2004). Students (and lecturers) need to develop 21st century skills (Varis, 2004):

- Technology Literacy: The ability to use new media such as the Internet to access and communicate information effectively.
- Information Literacy: The ability to gather, organize and evaluate information, and to form valid opinions based on the results.
- Media Creativity: The growing capacity of citizens everywhere to produce and distribute content to audiences of all sizes.
- Global Literacy: Understanding the interdependence among people and nations and having the ability to interact and collaborate successfully across cultures.
- Literacy with Responsibility: The competence to consider the social consequences of media from the standpoint of safety, privacy and other issues.

However, freshmen need an introduction into the virtual learning environment of the university (and/ or their department). The first contact in serious lectures is definitely too "sharp" and late. Students need to get to know the learning environment without daily stress and performance pressure in serious university courses. Hence, an early contact with E-Learning technology has to be installed, in an informal setting

without lecturers, but with student colleagues who give introduction and information using the learning environment "naturally", not as a somehow weird, alienated and foreign particle. Actually, first contact with "university stuff" for freshmen takes not place in course rooms, but is with the Departmental Student Commission that opens up an opportunity to implement E-Learning and to start and develop a digital learning culture. According to Stockmann (2005) this strategy is a fruitful way for implementation.

2.3 The Departmental Student Commission's Offer for Freshmen

The Departmental Student Commission consists of regular students who are elected by all students of a certain department. This group of students can participate in political, structural, and formal commissions of the department and stand up for the positions and opinions of all departmental students. Usually members of the Departmental Student Commission get reduction of tuition fees for their political work and effort. The Departmental Student Commission is the first contact for upcoming students, interested school students, and freshmen, of course. The Departmental Student Commission has several offers for freshmen that were enhanced by online activities in the learning management system Moodle. Using Moodle is obligatory for lecturers and students at the Department of Sport and Exercise Science at the University of Stuttgart. Participating in the Departmental Student Commission and its offers is voluntary.

2.3.1 Online Discussion Forums for Study and Examination Regulations

For each of the possible graduation programs (Bachelor of Arts in Sport Science, Bachelor/ Master of Arts in Education, Diplom) an online forum was created, wherein freshmen could ask questions concerning their study and examination regulations. The forums were moderated by selected members of the Departmental Student Commission.

2.3.2 Online News Forums for Relevant Information and Announcements

In this general forum relevant information (e.g. cancelling of courses, changing of regulations) is provided. Every course member is automatically subscribed for this forum and gets all threads via E-Mail. Using the forum all freshmen could easily be contacted and informed at once.

2.3.3 Online Consultation Hours in Form of an Online Chat

Online consultation hours were announced to give the freshmen a chance to interact synchronously with experts from the Departmental Student Commission. Therefore, an online chat was used. 1228 entries were posted by a total of 20 participants.

2.3.4 Wiki for the Organization and Post-Processing of the Freshmen Weekend

The weekend before the semester begins the Departmental Student Commission offers a weekend trip for freshmen. The weekend event takes place at a youth hostel and is a good opportunity to get connected to new student colleagues. **Online Test During the Freshmen Breakfast**

A couple of days before the semester begins the Departmental Student Commission offers a breakfast for freshmen. During the breakfast groups of freshmen should pass an online test that introduces the Department of Sport and Exercise Science in a humorous way.

1. Results

The activities in Moodle by the Departmental Student Commission were evaluated using an online questionnaire scaled with a 4-point ("forced choice") Likert scale (1=strongly agree; 4=strongly disagree). The sample contains 27 freshmen. 80 freshmen matriculated. Only selected results will be presented.

3.1 Freshmen Breakfast

1=Strongly agree; 2=Agree; 3=Disagree; 4=Strongly Disagree	M	SD	N
The online test at the freshmen breakfast was sensible.	1.64	0.5	11
The online test was unfamiliar to me.	2.18	0.87	11
The use of Moodle for registration for the freshmen breakfast was sensible.	1.63	0.68	19

Tab. 1: Freshmen Breakfast

3.2 Freshmen Weekend

1=Strongly agree; 2=Agree; 3=Disagree; 4=Strongly Disagree	M	SD	N
The use of Moodle for registration for the freshmen weekend was sensible.	1.77	0.73	13
The use of the Wiki for organizational purposes was sensible.	1.87	0.77	13

Tab. 2: Freshmen Weekend

3.3 Online Consultation Hours

1=Strongly agree; 2=Agree; 3=Disagree; 4=Strongly Disagree	M	SD	N
The online consultation hours were sensible.	2	0.81	8
I would prefer online consultation hours instead of contact consultation hours.	2	0.83	8
I would prefer online consultation hours instead of phone consultation hours.	2.12	0.84	8
I would prefer online consultation hours instead of E-Mail requests.	1.62	0.74	8
I would prefer online consultation hours instead of an online forum.	2	0.64	8

Tab. 3: Online Consultation Hours

3.4 News Forum

1=Strongly agree; 2=Agree; 3=Disagree; 4=Strongly Disagree	M	SD	N
The use of a news forum for general information is sensible.	1.63	0.94	27

Tab. 4: News Forum

3.5 Moodle in General

1=Strongly agree; 2=Agree; 3=Disagree; 4=Strongly Disagree	M	SD	N
The use of Moodle for a freshmen course is sensible.	1.89	0.89	27
The use of Moodle was unfamiliar to me.	2.59	0.96	27
A learning management system like Moodle is indispensable at university.	1.57	0.66	27

Tab. 5: Moodle in General

ConclusionResults of our evaluation show a strong tendency for a positive freshmen's attitude towards the virtual support via Moodle. In sum, our freshmen tend to rate all provided online activities positively.Moreover, the Departmental Student Commission's offers for freshmen behold a sensible opportunity to establish a virtual learning environment. They can truly be an initial point for the development of a digital learning culture.Nonetheless, in a holistic approach that does not focus mainly only on one unique dimension, organizational development and lecturer issues have also to be focused on (O'Neill et al., 2004).

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The effect of middle distance training regimes with pace running tactics C, D, E on 1500m performance time among Malaysian junior athletes

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Abstract:This time series design study examined the effectiveness X (adopted from IAAF) and Y (adopted from Sebastian Coe) specific middle distance training regimes incorporated with pace running tactics C (fast 1st lap), D (fast at 2d lap) and E (fast at 3 lap) on 1500m (3 3/4 lap) performance time. The samples consisted *n* = 40 junior athletes ±16 years old (*n* = 20 boys and *n* = 20 girls) were chosen using stratified random sampling and talent identification technique. The samples were distributed equally in two groups of boys and another two groups of girls. The effectiveness of the X and Y training regimes with pace running tactics C, D and E were evaluated using three posttests that represented three different phases of training period. Findings showed that for girls group, X training with pace running tactic C was effective especially at the competition period. While the Y training with pace running tactics C was efficient at the peaking period for boys. These finding recommend that secondary schools athletic teachers and coaches can adopt the effective training regime
Key words: Middle distance training regime, pace running tactics,C,D,E

Introduction: The effect of middle distance training regimes on pace running tactics C, D, E and 1500m performance among Malaysian junior athletesSpecific middle distance training for junior athletes starts at age of 16-18 after basic training stage, age (Bompa, 1999, Thumn, 1989). The 1500m track event is an important event in the school athletic championship but its also an important component in school cardiovascular fitness tests which is conducted are physical education in Malaysia In Asian countries like Malaysia, there are possibilities of producing world class athletes in middle distance event like 1500m through proper planned regimes of training. Hence, it must be started at school level (Belloti, 1991; Thumm, 2007). This has been proven by Malaysian counterpart countries like China and Saudi Arabia. Talent identification, talent scouting and developing comprehensive 1500m training must start in schools. A teacher is the most suitable person to conduct athletics training as they are competent in pedagogical aspects of teaching and they can act as a coach in conducting training regimes too (Connell, 1993; Khoo, 1985). Modern method of training requires systematic ways of teaching and training skill and tactical aspects of sports, therefore teachers are the right persons in conducting athletic training. Athletes need systematic ways of training to reach their actual potential performances (Jegathesan, 1997). At the early stages in 1500m athletic training, athletes need systematic ways like talent identification test for selecting potential runners (Peltola, 1992). At this stage potential runners need to go through multilateral training phases according to their developmental age and specialization only must start at the age of 16 years-old for the 1500m event (Bompa 1999; Vittori, 1991). Early specialization would bring about psychological damages and burn out syndrome to children (Grund & Ritzdorf, 2007; Jegathesan, 1997). World champion in 1500m event like Qu Yun Xia and Peter Rono are made champion through well planned training programmes which started from school (Connel, 1996; Gambetta, 1993).Malaysian schools 1500m event for the under 18 years-old record stands as follows for the boys category set by Kumaran Gopal at 4:06.3 (2003) and for the girls set by Hemalata (2000) at 4.55.6 (MSSM, 2003). This performance time is much slower than it is in other Asian countries performance time in 1500m event. This is proven by the performance time set by Mohd. Sulaiman of Qatar who holds Asian youth record with the time of 3:44.0, Edward N. Nabuone (Indonesia) who holds ASEAN schools record with the time of 3:57.6. Qu Yun Xia of China holds the Asian girls record with the time of 4:11.89. The best junior 1500m athlete Malaysia ever produced is B. Rajkumar who clocked 3:50.3 in 1983 at Asia Track and Field meet (Asian track and Field, 1997).The present 1500m training system which is carried out in ordinary Malaysian school and athletic centre may be carried out using traditional approach without considering factor like pace running tactics in enhancing performance time (refer to Table.2). Coaches and teachers start specialization training too early without taking into consideration factors such as maturity stages of athletes early and late bloomers. What is important is that coaches and teachers need proper standardized training programmes as a guide to train athletes especially 1500m according to the age of maturity. Furthermore, modern training system needs a tactical model of teaching to be incorporated in training the motor skill (Grehaigne, Godbout & Boutheir, 2001; Rebecca, 1996; Werner,

Thorpe & Bunker, 1996). Tactical model of approach helps an athlete to decide pace running tactics fast and automatically in a race situation. As it is, in Malaysia there are no standardized 1500m athletes training programmes thatincorporate tactical model approach in the training regimes as a guide for the coaches and teacher to produce high calibre 1500m runners and to improve running performance gradually according to their maturity. The main purpose of this study is to investigate the effectiveness of two types of specific middle training regimes been suggested by IAAF and the other used by Sebastian Coe based on mean performance time (sec). The first regime labelled as X training, which was adapted from the middle distance programme that has been suggested by the International Association of Athletic Federation (IAAF, level I/II, 2000). The second regime known as Y training which was adapted from Sebastian Coe training programme (Martin & Coe, 1993; Coe, 1996).The second purpose of this study was investigate and identify the most effective pace running tactics throughout the training phases. In this study, three pace running tactics named as tactics C. D and E are incorporated with X and Y training regimes. Finally, the most effective training regimes was determined based on the performance time at the competition period (posttest III). The most effective 1500m training programme and pace running tactics from this research will be recommended as standardized training regimes to be used as a guide to teachers and coaches in secondary schools in Malaysia. Basically, it was null hypothesized that there was no significant 1500m mean score (sec.) difference between pace running tactics C, D and E in the X and Y training regimes from pretest to posttest III for girls. A second null hypothesis was that there was no significant 1500m mean score (sec) difference between pace running tactics C, D and E in the X and Y training regimes from pretest to posttest III for boys.

Methodology

This study employed quasi experimental time's series method to test the null hypotheses (Gay & Airasan, 2003; Leedy, 1993; Tenenbaum & Driscoll, 2005).DEscibe postests

Participants This research used stratified random sampling technique and then with proceeded to middle distance talent identification test to select *n*= 40 school athletes between 16-18 year-old boys and girls. The talent identification test consist of 30 minutes aerobic running test, 4x60 second Kosmin Test, 400m time test, 30m acceleration test, 30m flying speed test and 400m stride consistency test (IAAF Level I/II, 2000). The samples were divided equally into four groups (*n* = 10 boys and *n* = 10 girls for X training regime with pace running tactics C, D and E; *n* = 10 boys and *n* = 10 girls for Y training regime with pace running tactics C, D and E). InterventionThe samples ran 1x1500m as a pretest to determine their base ability level. Immediately after the pretest the samples underwent 25 weeks of intervention programme. The training phase (intervention programme) were divided into three periods, that were conditioning period (12 weeks), precompetition phase (6 weeks) and competition phase (7 weeks). At the end of the conditioning period the samples ran 3x 1500m using pace tactics C, D and E in turns as posttest I. Similarly at end of pre competition period the samples again ran 3 x 1500m using pace tactics C, D and E in turns as posttest II. At the end of the competition period the samples once again ran 3 x 1500m using pace tactics C, D and E in turns as posttest III. Data from the pretest to posttest III were analysed using *t-test* and one-way *ANOVA* to determine the mean score performance of the training regimes X and Y with tactics C, D and E for boys and girls. Figure 1, shows the research procedures. The X training regime was basically made of the biomotor components which were suggested by the IAAF, whereas Y training regime which was based on biomotor components which were used by Sebastian Coe. Table 1, shows the percentages biomotor components of X and Y training regimes which were manipulated in this research for 25 weeks of single periodization, in line with single periodization theory (Bompa, 1999; Bompa, 1994; Dick, 1980). This research incorporates the pace running tactic C, D and E with both the X and Y training regimes to enhance the running performance of 1500m.The pace running tactics C, D and E were constructed by researcher by using pace running split of 1500m which were recommended by IAAF (IAAF, level I/II, 2000). Table 2, shows the pace running tactics C, D and E that were formulated and used by the researcher based on the 3 ¾ laps and the personal best (PB) 400m time as the guide for the runners, Pace running tactics C was made of the first lap of fast running tactics using P.B 400m time plus another 20 second, average running speed in the second lap with 25 second added to the run and average running speed in the third lap with another 25 second added to the run. The last ¾ lap (300m) is run using P.B 400m time as the guide. Pace running tactics D was made of the first lap of average running tactics using P.B 400m time plus another 25 second, fast running speed in the second lap with 20 second added to the run and average running speed in the third lap with another 25 second added to the run. The last ¾ lap (300m) is run using P.B 400m time as the guide. Pace running tactics E was made of the first lap of average running tactics using P.B 400m time plus another 25 second, average running speed in the

second lap with 25 second added to the run and fast running speed in the third lap with another 20 second added to the run. The last ¾ lap (300m) is run using P.B 400m time as he guide.

Validation and reliability

The content validity of the both manipulated X and Y training regimes with pace running tactics C, D and E were validated by experts coach of track and field. To maintain the reliability 1500m instrumentation protocols, the researcher used standardized 400m field track, also used three qualified officials each for lap scoring and time keeping.

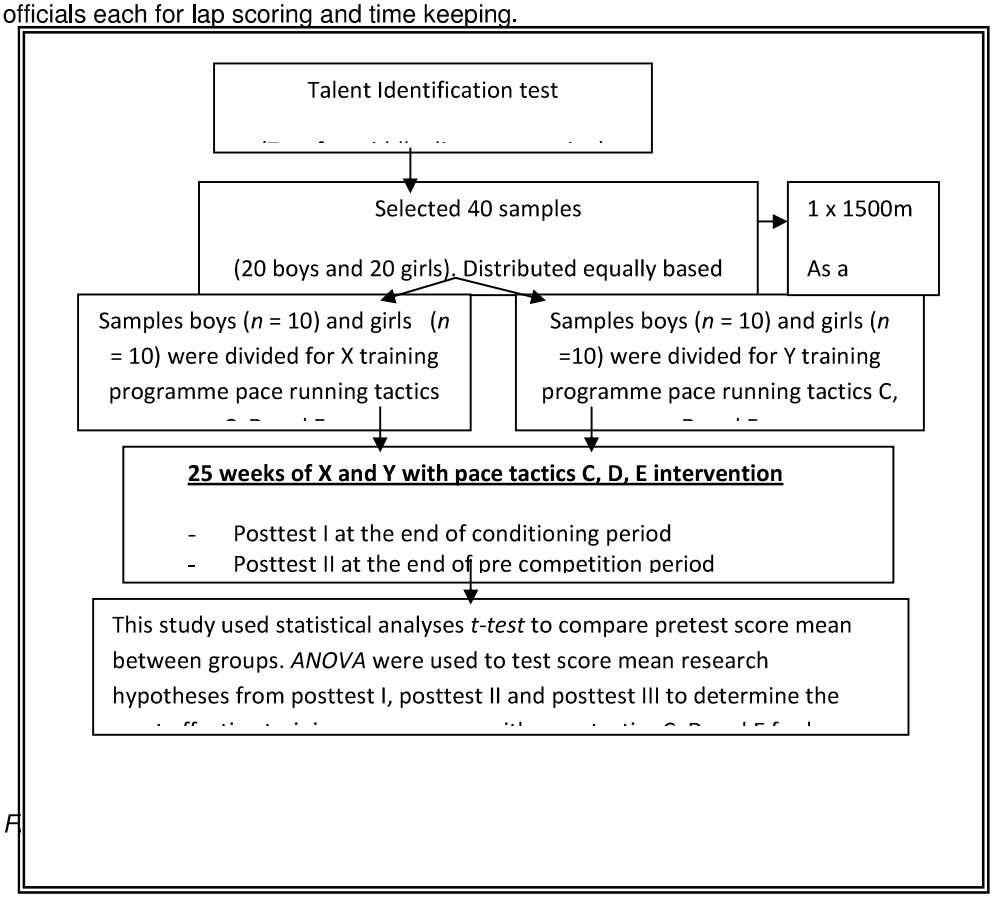

Table 1. Components of X and Y Training Regimes for Boys and Girls

Period of Training	X Training Regime	Y Training Regime
Conditioning Phase (12 weeks)	General conditioning (20 %) Aerobic (40%) Interval Tr. (10%) Fartlek (10%) Pace Endurance Tactics (20%)	Speed Tr. (10%) Aerobic (40%) Interval Tr. with Pace Running Tactics (30%) Multijumps Ex. (10%) General Strength (10%)
Precompetition (6 weeks)	- Aerobics (40%) - Speed Endurance with Pace Running Tactics (20%) - Strength Tr. (10%) - Interval Tr. (20%) - Fartlek (10%)	Aerobics (35%) Interval Tr. with Pace Running Tactics (40%) Speed Tr. (15%) Strength Tr. (10%)
Competition Phase (Peaking Phase) (7 weeks)	- Fartlek (30%) - Interval Tr. (20%) - Pace Endurance with Pace Tactics (40%) - Speed Tr. (10%)	Pace endurance with Pace Tactics (5%) Aerobic Tr. (20%) Interval Tr. (50%) Speed Tr. (25%)

The intensities of training load for girls 15% lighter than boys

Table 2. Pace Running Tactics C, D and E

Pace Running Tactics C	Pace Running Tactics D	Pace Running Tactics E
First lap (400m), fast running tactics (PB 400m + 20 sec) Second lap, average speed (PB. 400m +25 sec) Third lap (400m), average speed (PB. 400m + 25 sec) Last 300m, an average speeds of	First lap (400m), average speed (PB. 400m +25 sec) Second lap, fast running tactics (PB. 400m +20 sec) Third lap (400m), average speed (PB. 400m + 25 sec) Last 300m, an average speeds of	- First lap (400m), average peed (PB. 400m +25 sec). - Second lap, average speed (PB. 400m +25 sec) - Third lap (400m), fast

400m PB.	400m PB.	running tactics (PB. 400m +20 sec). - Last 300m, an average speeds of 400m PB.

** Sec (second) PB (Personel Best)*

Measurement and InstrumentationThe effectiveness of X and Y training regimes with pace running tactics C, D and E in 1500 performance time (sec) were measured using 3 laps of 400m and 300m as a distance and pace in the1500m run with pace tactics C, D and E in turns. At pretest the 40 samples were measured only running 1x1500m without using any pace running tactics. This done to evaluate their initial ability level in 1500m running performance time. The samples which were divided in four groups were measured again running 3x1500m in turns using pace tactics C, D and E during posttests I, II and III.

Results and Discussion The pretest results of 1500m running for boys and girls were analysed using *t-test*. Result indicated that there was no significant mean score time (sec) difference for groups of girls between X-training regime with Y-training regime, *t (18) =0.65, p =.52.* Result also showed there was no significant mean score time (sec) difference for groups of boys between X-training regime with Y-training regime, *t (18) =0 .65, p =.99.* Table 3 shows the pretest results of sample groups of girls and boys who participated in X and Y training regime. These results proved that the X and Y training groups of girls and boys equally distributed according to their initial middle-distance running ability and gender.

Table 3. Pretest Results for Girls and Boys

Training Regimes	*n*	*M (time in sec)*	*SD*
X for group of girls	10	421.80	28.69
Y for group of girls	10	414.30	22.37
t (18) =0.65, p =.52, 95% CI = (-16.67, 31.67)			
X for group of boys	10	321.20	28.69
Y for group of boys	10	321.30	22.37
t (18) =0 .65, p =.99, 95% CI = (-16.68, 16.48)			

Table 4 and Figure 2, show the comparison mean score performance time (sec) results of X and Y training regimes with pace running tactics C, D and E from pretest to posttest III for groups of girls and boys respectively. Based on the mean score performance time (sec) results for groups of girls and showed X training was efficient throughout the 3 phases of training especially with the assistance of pace running tactic C. The group of girls in the X training recorded gradual improvement in performance mean time (sec) in 1500m run from 421.80 sec at pretest to 377.20 sec at posttest I using pace running tactics C and the clocked 344.70 using tactics at posttest II. Finally reached the optimum performance time at posttest III (competition period) with mean score time 329.80 sec. using pace running tactic C. For the boys group, Y training programme recorded gradual improvement in performance mean score time (sec) in 1500m run, from 321.30 sec at the pretest to 312.10 sec using pace running tactic C at posttest I. Further improvement 295.70 sec.using pace running tactic D at the posttest II. At last the boys group achieved the optimum mean score time 278.40 sec with pace running tactic C at the posttest III (competition period).

Table 4. 1500m Mean Performance score Time (sec) for X and Y Training Programmes Groups

1500m Running Test with Pace Tactics C, D and E.	Training X (Girls)	Training Y (Girls)	Training X (Boys)	Training Y (Boys)
Pretest	421.80	414.30	321.20	321.30
Posttest IC	384.40	339.70	321.80	312.10
Posttest ID	379.00	373.30	322.10	325.80
Posttest IE	377.20	380.20	319.60	313.60
Posttest IIC	344.70	353.90	301.70	305.60
Posttest IID	354.30	355.20	296.30	295.70
Posttest IIE	353.50	346.90	298.10	298.10
Posttest IIIC	329.80	330.00	279.90	278.40
Posttest IIID	341.80	338.80	285.90	287.00
Posttest IIIE	344.00	346.90	292.40	286.30

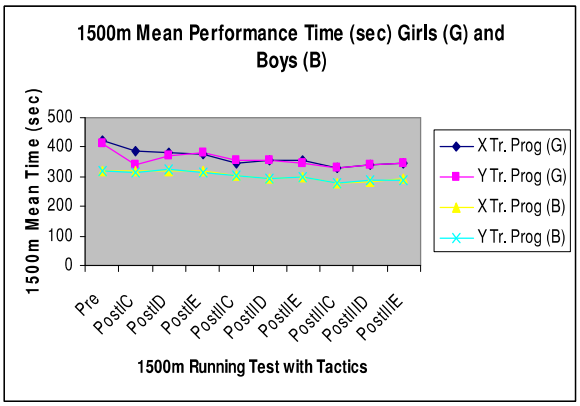

Figure 2.1500m mean Score Performance Time (sec) in X and Y Training with Pace Tactics C, D and E for group Girls and Boys

The Table 5 and 6 shows the results of tested hypotheses, the effectiveness pace running tactics C, D and E in X and Y training regimes which were compared from three posttests for girls and boys. The significant value stated at $p < .05$. The result showed in table 5, for girls group of X and Y training with pace running tactics C at the posttest III was significant $F(1) = 4.93$, $p = .042$. This indicated that pace running tactic C was effective in X and Y training at posttest III for girls (competition period). Whereas for the boys group, X and Y training with pace running tactic C was also significant $F(1) = 6.56$, $p = .02$. This also shows pace running tactic C equally good for boys in X and Y training especially at posttest III (competition period)

Table 5. Results of ANOVA Posttests for X and Y Training with Pace Running Tactics C, D and E for group of Girls

1500m Test	*n*	*df*	*Mean Square*	*F value*	*p value*
Posttest I					
X and Y with tactic C	20	1	100.3	.13	.94
X and Y with tactic D	20	1	87.8	.11	.74
X and Y with tactic E	20	1	242.3	.31	.58
Posttest II					
X and Y with tactic C	20	1	73.6	.11	.75
X and Y with tactic D	20	1	879.7	1.29	.27
X and Y with tactic E	20	1	167.5	.25	.62
Posttest III					
X and Y with tactic C	20	1	2817.2	4.93	.04
X and Y with tactic D	20	1	951.8	2.63	.13
X and Y with tactic E	20	1	1500.6	.40	.54

* significant at $p < .05$

Table 6. Results of ANOVA Posttests for X and Y Training with Pace Running Tactics C, D and E for group of Boys

1500m Test	*n*	*df*	*Mean Square*	*F value*	*p value*
Posttest I					
X and Y with tactic C	20	1	656.9	3.64	.08
X and Y with tactic D	20	1	109.5	.61	.45
X and Y with tactic E	20	1	382.4	2.12	.12
Posttest II					
X and Y with tactic C	20	1	8000.5	3.07	.10
X and Y with tactic D	20	1	330.7	1.27	.28
X and Y with tactic E	20	1	417.8	1.60	.23
Posttest III					
X and Y with tactic C	20	1	1448.2	6.56	.02*
X and Y with tactic D	20	1	13.8	.063	.81
X and Y with tactic E	20	1	360.4	1.63	.22

Conclusions and Implications for Future Research

Based on gradual mean score performance for three phases of raining X training regime with pace running tactic C was efficient at the peaking period. As for boys the Y training regime was efficient throughout the three phase of training also using pace running tactic C. The both X and Y training peaked at the competition period based on the posttest III results. These findings supported the importance of periodization and training theory (Bompa, 1999; Kuipers, 1996). These findings recommended that secondary school athletic teachers and coaches especially in Malaysia can adopt X training for girls and Y training programme for boys incorporating with pace running tactic C as a training guide. Future research could consider incorporating pace running tactics in athletic training regimes for boys and girls at different age groups especially for middle and long distance events. References

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A Study of Work Values of Students and Faculty of Management Institution

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INTRODUCTION: Modernization of technology, adequate trained and skilled manpower and other resources are no doubt important. According to Rokeach (1970) reviewed that a person is said to have a value, if he has an enduring belief that a specific mode of conduct or end state is personally and socially preferable to alternative modes of conduct or end states of existence. Once a value is internalized, it becomes consciously or unconsciously a standard for guiding action. Values are internal to the individual, they are basically social products.Work values are expected to be in integral part of the national ethos, in recent years attempt have also been made to conceptualize, and they can studied cross culturally at various levels – individuals, group, social etc.Students change in many ways during college, in some cases there is a more fundamental personality change accompanied by the emergence of new values. College students has demonstrated differences in attitudes, interests, and career plans between students at different levels. Frequently, academic aims and processes of the college are in large measure transmitted to the incoming students or mediated for them by the predominant student and faculty culture

METHOD: The sample consisted of 125 management students, faculty and others of management institutions in Hyderabad. 25 first year students (mean age 23-26), 25 working as faculty members in the institutes (mean age 35-45) and 25 others working in an enterprise (mean age 36-46) etc.

MEASURES: Kilpatrick (1964) 30 item scale of work values was used. The respondents were asked to give responses on a 5 point scale with categories are strongly agree, disagree, doubtful and strongly disagree. Later on the scale was given to five judges, they identified 11 parameters of work values viz., leadership, expertness, prestige, service, wealth, independence, affection, security, self/realization, duty and pleasure.

PROCEDURE: The scale was administered to the first year, second year and outgoing students selected randomly and the faculty and others were administered the same questionnaire.

RESULTS: The study was designed on way analysis of variance. Work values of each group were ranked on the basis of the mean values of the respondents' preferences on the 11 values:Work values preferences for the five groups

Work Values	First Year	Second Year	Outgoing Students	Faculty Members	Others
Leadership	5	2	3	4	1
Expertness	5	4.3	4	2	1
Prestige	5	3	2	4	1
Service	1	2	5	3	4
Wealth	4.5	2	4.5	3	1
Independence	2.5	4	3	1	5
Affection	4	1	3	5	2
Security	2	5	1	3	4
Self-realization	5	2	3.5	1	3
Duty	1	2.5	5	3.5	2
Pleasure	2	3	5	4	1

First year students: highest on self realization, lowest on wealth, service and independence.. Second year students: highest on self-realization, expertness and prestige lowest on security. Outgoing student: highest on self-realization, prestige and independence lowest on pleasure and wealth. Faculty members: highest on self-realization, expertness and independence and lowest on wealth. Others: highest rank on prestige, leadership and self realization, lowest rank on security.Ranking of each work values: 1st year

students ranked highest on service, duty, pleasure and security giving them second rank. 2nd year student ranked highest on affection only, second ranks among on service, leadership. Wealth and self-realization. Outgoing students ranked highest on security, second rank on prestige. Faculty members ranked on independence and self realization, second rank on expertness. Others ranked highest on leadership, expertness, prestige and pleasure, affection and duty were second rank.

ANALYSIS OF VARIANCE:

One way analysis of variance are related significant differences among the five groups on:

Work Values	F Ratio
Leadership	3.64**
Expertness	1.98
Prestige	4.21**
Service	3.95**
Wealth	3.22*
Independence	4.39**
Affection	0.61
Security	1.24
Self-realization	17.54**
Duty	1.92
Pleasure	4.58**

DISCUSSION:

The results obtained from the study highlighted several interesting noticeable aspect expressed preference for self-realization, prestige, leadership, and independence reflected a specific endorsement of the professional. It was assume that work values inferred from subjects, responses covered a broad spectrum of values of the society.In this study expressed preference for self-realization, prestige, leadership and independence reflected a specific endorsement. Eleven values presented a direction of change over a period of time. The faculty influences has observed during this period of two years were not only more intense but equally variedOthers highest ranks were on leadership, expertness, prestige with second rank on security and duty. Faculty and others differed significantly on leadership, prestige, independence and self-realization.Summing up, the results indicated both groups shared a common experience of having received, in the study of assess the respondents self concepts and attitudes toward the featuring of self realization. Work values were reflected the focus of groups on the optimization of their full creative and innovative potential.There is a decreasing impact of the faculty values the academic institution on the work value system. Provided some evidence of the discontinuation of work values after graduation. As such, the study brightness our appreciation of diversity among students, individual academic institutions may make a start by accepting more responsibility for understanding the nature and various age leads among students. Collective identity its expression in the present day context appears motivated more by self interest than group interest.

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Analysis of Selected Physiological and Anthropometric Variables on Football Playing Ability of Inter University Male Foot Ball Players

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Abstract: The purpose of the present study was to analyse the relationship between the selected physiological and anthropometric variables such as resting pulse rate, breath holding time, height and leg length on football playing ability of inter university male football players. For this purpose 252 male football players those who were represented for various universities and participating in the south zone inter university football tournament held at V.I.T. University, Vellore during the year 2010 – 2011 were selected for the present study. The criterion variables such as, resting pulse rate, breath holding time, height and leg length were tested by counting the pulse at resting condition for one minute, holding the breath for maximum duration in seconds, steadiometer and measuring tape, and the football playing ability was assessed with the help of two coaches and a national football referee's ratings. Pearson Product Moment correlation was used to find out the relationship between the selected physiological and anthropometric variables such as resting pulse rate, breath holding time, height and leg length, and football playing ability of various university male football players. There was a significant relationship between the football playing ability and physiological and anthropometric variables.

Key Words: Football, physiology, resting pulse rate, breath holding time, anthropometric, height, leg length.

Introduction: 'Sports' is a popular spectacle and a mass social movement of contemporary times. In the process of historical development sports has occupied a prominent place both in the moral culture of a society. Its social significance continues to soar. The term sports is sometimes extended to encompass all competitive activities in which offense and defense are played, regardless of the level of physical activity. Both games of skill and motor sport exhibit many of the characteristics of physical sports, such as skill, sportsmanship, and at the highest levels, even professional sponsorship associated with physical sports.The origin of football / soccer can be found in every corner of geography and history. The Chinese, Japanese, Italian, Ancient Greek, Persian, Viking, and many more played a ball game long before our era. The Chinese played "football" games date as far back as 3000 years ago. The Ancient Greeks and the Roman used football games to sharpen warriors for battle. In south and Central America a game called "Tlatchi" once flourished. But it was in England that soccer / football really begin to take shape. It all started in 1863 in England, when two football association (association football and rugby football) split off on their different course. Therefore, the first Football Association as founded in England.Soccer played on a rectangular field with net goals at either end in which two teams of 11 players each try to drive a ball into the other's goal by kicking, heading, or using any part of the body except the arms and hands. The goalie is the only player who may touch or move the ball with the arms or hands.For the physiological systems of the body to be fit, they must function well enough to support the specific activity that the individual is performing. Physiological systems are highly adoptable of exercise. Each task has major physiological components and fitness for the task requires effective functioning of appropriate systems. A normal pulse rate for a healthy adult, while resting, can range from 60 to 100 beats per minute (BPM), although well-conditioned athletes may have a healthy pulse rate much lower than 60 BPM, say 30-45 BPM. The pulse is a decidedly low tech/high yield and antiquated term still useful at the bedside in an age of computational analysis of cardiac performance.The heart rate can be (much) higher than the pulse rate depending upon the cause or etiology. In this case, the heart rate is determined by auscultation of the heart apex, in which case it is not the pulse.

Anthropometry is the measure of woman/man (anthro=man, pometry=measure). The study of anthropometry is the study of human body measurements to assist in understanding human physical variations and aid in anthropological classification.

Methodology

To achieve purpose of the present study, two hundred and fifty two university male football players from fourteen universities, such as, University of Kerala, Kerala, Kannur University, Kannur, Kerala, Sathyabama University, Chennai, Anna University, Trichirappalli, Annamalai University, Chidambaram, Bharathiyar University, Coimbatore, Hindustan Institute of Technology & Science, Chennai, University of Calicut, Calicut, Anna University, Chennai, Tamilnadu Physical Education and Sports University, Chennai, Osmania University, Hyderabad, S.R.M. University, Chennai, Mangalore University, Mangalore and M.G. University Kottayam were selected as subjects. The age of the subjects were ranged between 18 and 25 years. The following selected physiological and anthropometric variables such as, resting pulse rate, breath holding time, height and leg length were selected for the present study. Pulse rate per minute at resting condition, holding the breath for maximum duration in seconds, steadiometer and measuring tape were used to measure the resting pulse rate per minute, breath holding time, height and leg length. The Pearson Product Moment correlation was used to find out the relationship between the selected physiological and anthropometric variables such as resting pulse rate, breath holding time, height and leg length, and football playing ability of various university male football players.

Analysis of Data

The data collected on resting pulse rate, breath holding time, height and leg length on football playing ability were analysed and presented in the following table - I.

Table – I

DESCRIPTIVE STATISTICS FOR ALL SELECTED VARIABLES

Sl. No.	Variables	Mean	S.D.
	Resting Pulse Rate	64.52	4.521
	Breath holding time	53.23	3.671
	Height	159.51	4.008
	Leg Length	0.93	0.0644
	Football Playing Ability	7.40	1.076

Table – II

CORRELATION BETWEEN SELECTED CRITERION VARIABLES OF MALE UNIVERSITY SOCCER PLAYERS

	Resting Pulse Rate	Breath Holding Time	Height	Leg Length	Football Playing Ability
Resting Pulse Rate	1.00	0.167*	-0.203*	- 0.197*	- 0.160*
Breath Holding Time	-	1.00	- 0.259*	- 0.282*	- 0.072
Height			1.00	0.986*	- 0.260*
Leg Length	-	-		1.00	- 0.274*
Football Playing Ability					1.00

From the scores exhibited in Table – II following inferences were drawn:

The correlation between resting pulse rate and breath holding time was positive and r = 0.167 and it was as much as higher than the 0.008 (p > 0.01) and found to be statistically significant.

1. The correlation between resting pulse rate and height was positive and r = - 0.203 and it was as much as higher than the 0.001 (p > 0.01) and found to be statistically significant.
2. The correlation between resting pulse rate and leg length was positive and r = - 0.197 (p > 0.01) and it was as much as higher than the 0.002 and found to be statistically significant.
3. The correlation between resting pulse rate and soccer playing ability was positive and r = - 0.160 and it was as much as greater than the 0.011 (p > 0.01) and found to be statistically significant.
4. The correlation between breath holding time and height was positive and r = - 0.259 (p > 0.01) and it was as much as higher than the 0.00001 and found to be statistically significant.
5. The correlation between breath holding time and leg length was positive and r = - 0.282 (p > 0.01) and it was as much as higher than the 0.00001 and found to be statistically significant.
6. The correlation between breath holding time and football playing ability was negative and r = - 0.072 (p > 0.01) and it was as much as lesser than the 0.252 and found to be statistically significant.
7. The correlation between height and leg length was positive and r = 0.986 (p > 0.01) and it was as much as higher than the 0.00001 and found to be statistically significant.
8. The correlation between height and football playing ability was positive and r = - 0.260 (p > 0.01) and it was as much as higher than the 0.00001 and found to be statistically significant.

9. The correlation between leg length and football playing ability was positive and r = - 0.274 ($p > 0.01$) and it was as much as higher than the 0.00001 and found to be statistically significant.

It is evident from the Table - II that there is a significant relationship between soccer playing ability and resting pulse rate, breath holding time, height and leg length of male university football players in each variable separately. Multiple regression equation was computed only because the multiple correlations were sufficiently high to warrant prediction from it. Then, the correlation identified the independent variables to be included and their order in the regression equation. Multiple correlations were computed by forward selection method on data obtained for the male football players in soccer playing ability and the results were presented in Table - III.

Table – III
MULTIPLE CORRELATION CO-EFFICIENT FOR THE PREDICTORS OF SOCCER PLAYING ABILITY OF MALE SOCCER PLAYERS

S. No.	Variables (Forward Selection)	R	R Square	Adjusted R Square	R Square Change
	Leg Length	0.274	0.075	0.072	0.075
	Leg Length and Resting Pulse Rate	0.350	0.123	0.116	0.048
	Leg Length, Resting Pulse Rate and Breath Holding Time	0.374	0.140	0.130	0.017

From the Table - III, it is found out that the multiple correlations co-efficient for predictors, such as leg length, resting pulse rate and breath holding time is 0.374, which produces multiple correlations with soccer playing ability of male university football players. R square values show that the percentage of contribution of predictors to the soccer playing ability (dependent variable) is in the following order.

1. About 8% of the variation in soccer playing ability was explained by the regression model with one predictor, such as leg length.

2. About 12% of the variation in soccer playing ability was explained by the regression model with two predictors such as, leg length and resting pulse rate.

3. About 13% of the variation in the soccer playing ability was explained by the regression model, with three predictors leg length, resting pulse rate and breath holding time.

Multiple regression equation was computed and the results were presented in Table IV.

Table - IV
REGRESSION CO-EFFICIENTS FOR THE PREDICTED VARIABLES WITH SOCCER PLAYING ABILITY OF MALE UNIVERSITY FOOTBALL PLAYERS

Sl. No.	Variables	B	Std. Error	Beta Weights
1.	(Constant)	11.670	0.947	
	Leg Length	- 4.586	1.016	- 0.274
2.	(Constant)	22.499	3.09	
	Leg Length	- 5.318	1.012	-0.318
	Resting Pulse Rate	- 0.157	0.043	-0.222
3.	(Constant)	24.469	3.191	
	Leg Length	- 5.912	1.039	- 0.354
	Resting Pulse Rate	- 0.146	0.043	- 0.206
	Breath Holding Time	- 0.04	0.018	-0.138

From Table - IV, the following regression equations were derived for university football players with dependent variables.

1. Regression Equation in obtained scores form = X_C

$$X_C = (-5.912)X_1 + (0.146)\ X_2 + (0.04)\ X_3 + 24.469$$

Where, X_c = Soccer playing ability, X_1 = Leg Length, X_2 = Resting Pulse rate and X_3 = Breath Holding Time.

2. Regression Equation in standard scores form = Z_C

$$Z_C = (-0354)\ Z_1 + (-\ 0.206)\ Z_2 + (-\ 0.138)\ Z_3$$

Where, Z_c = Soccer playing ability, Z_1 = Leg length, Z_2 = Resting pulse rate and Z_3 = breath holding time.

The regression equation for the prediction of soccer playing ability of male football players includes resting pulse rate, height and leg length. As the multiple correlations on football playing ability with the combined effect of these independent variables are highly significant, it is apparent that the obtained regression equation has a high predictive validity.

Results and Discussion

The results of the study has shown that there was a significant relationship between football playing ability and resting pulse rate, height and leg length among male university football players. The study is in line with the findings of P. Krustrup et al, (2009), reported that there was a significant relationship between the football playing ability and heart rate. Amusa (1979), have reported that there was a significant correlation between the height and football playing ability. Bell, Cobner and Evans (2000) have found that there was a significant relationship between the leg length and football playing ability. But there was no significant correlation between the football playing ability and breath holding time.

Conclusions

Based on the results of the study the following conclusions were drawn:

1. There was a significant correlation between football playing ability and resting pulse rate, height and leg length among male university football players. But there was no significant correlation between the breath holding time and football playing ability.
2. The regression equation for the prediction of football playing ability of inter university football players including, resting pulse rate, breath holding time and leg length were significant.
3. As the multiple correlations on playing ability with the combined effect of these independent variables are highly significant, it apparent that the obtained regression equation has a high predictive validity.

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A study of the dang and the possibilities of sports activities

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Introduction: Dang

- **Dang** is a **tribal district** located in southern Gujarat
- The district shares its border with the State of Maharashtra and is covered with **high hills and dense forests**
- The district headquarter is **Ahwa**
- **Girmal, Waghai, Saputara, and Mahal** are the major towns of the district
- The reserved forests in Dangs are amongst the richest forests in the State
- Dang district is gradually emerging into an **agro processing and tourism hub**
- **Saputara** is an important tourist destination in the district
- **Rich wildlife, gardens, ropeway, sunrise point and echo point** are some of the main tourist attractions in Dang

Fact File :
Area : 1,764 sq. km.
Geographical Location : 73.29º to 73.51º Eas (Longitude) 20.39º to 21.05º North (Latitude)
Temperature : 37º Centigrade (Maximum) 6º Centigrade (Minimum)
District Headquarter : Ahwa
Average Rainfall : 3,048 mm
Population : 1,86,712 (As per 2001 Census)
Population Density : 81 Persons per sq. km
Sex Ratio : 986 Females per 1000 Males
Literacy Rate : 59.06%
Languages : Gujarati, Hindi,English and most dangi boli

Economy and Industry Profile :

- In **Dang**, 50% of population is working
- Majority of population is **dependent on agriculture** for their livelihood
- **Animal husbandry and bamboo cutting** are the other economic activities in the region
- There are approximately 100 small scale industries in Dangs
- Average landholding per household in the district is **1.58 hectares**
- Firewood accounts for fuel requirement of 91% of the households, which is mostly collected from the forests

Agriculture :

- **Major food crops and fruits** produced in the district are **rice, ragi, kharsani, tuver, groundnut, mangoes, custard apple,** and others
- **66%** of the agricultural land in Dangs is situated on slopes, with uneven terrain
- Local traditional crops like **ragi** are best adapted for cultivation in Dangs as it can grow in rain-fed areas on sloppy land

- The **agricultural production pattern** is slowly changing from traditional coarse grains like ragi, kharsani, and tuver to rice

Fig. 1 Food Crop Production (MT) 2006-07

Rice	Pulses	Maize
20400	52000	31300

Fig. 2 Fruits, Spices, & Vegetable Crops Production (MT) 2006-07

Fruits	Vegetables	Spices
13,165	11,359	1,294

Dairy development

- Cows given to 2500 beneficiaries
- Expansion of 650 old co-operatives
- Formation of about 150 milk co-opratives
- Milk collection increased from 1300 Liters to 30000 liters
- 3 chilling centers increased from 1.
- Animal treatment by two mobile clinic
- Monthly income of rs. 87 lacs
- Animal income of rs. 9 cror

Year	number of milk co-operatives	Member	amount of milk collected (liters)
2002-03	20	4100	731400
2003-04	50	4786	1879950
2004-05	129	5232	3124018
2005-06	142	5709	4001340

Forests :

- **59%** of the area in Dangs is covered with forest land(1,062 sq.km.)
- The forestland predominantly falls under **reserve forests,** and is the richest forest in Gujarat
- The forests of Dangs are resources for **medicinal plants**, such as Mardasingi (Helicteres ixora) and Baheda (Tecome stans microcarpa). Besides these, Sag (Tectona grandis), Khakro (Butea monosperma), Umbero (Ficus racemora), and bamboo trees are also present
- **The Purna Wildlife Sanctuary and the Vansda National Park** present in the district are home to wildlife such as hyena, sambar, chital, barking deer, and monkey

Economy Drivers :Forestland provides maximum opportunities to generate sustainable livelihood and employment for the villagers

- **Animal husbandry and dairy production** have increased business opportunities for the local population
- **Agro-processing and tourism** are the supporting pillars of the economy
- **Plantation and nursery** development activities have the potential to generate maximum wage employment
- The district also owns a few small and large **waterfalls**, rich **forests**, beautiful **landscapes**, and a **tribal culture** which account for huge influx of tourists in the district

Table1: Distance of Dangs from Major Industrial Centers

Major cities	Distance (km.)
Ahmedabad	349
Valsad	100
Surat	139
Mumbai	297
Delhi	1111
Hyderabad	732
Chennai	1278
Kolkata	1609

Education:

- There are 412 primary schools and 32 secondary and higher secondary schools.
- The Anganwadi is the primary service centre for integrated child development are present in 210 out of 311 villages
- A Government Arts & Commerce College is located at the district headquarter Ahwa
- The Industrial Training Institute in the district imparts raining in diverse areas such as cutting and sewing, armature and motor rewinding, computer operating and programming assistance, wireman, hair and skin care, electrician, fitting and stenography

Table 3: Educational Infrastructure

Educational Institutes	Total
Primary Schools	412
Secondary Schools	32
Higher Secondary Schools	
Polytechnic College	01
ITI	01
Other Colleges*	01

*Other Colleges: Arts and Commerce College

Healthcare:

- The district has one community healthcare centers, seven primary healthcare centers, and forty seven sub-centers
- There is one Central Government Hospital present at Ahwa
- The district also has one Government Ayurvedic Hospital and nine Ayurvedic dispensaries

Tourism :

- **Saputara**, also known as “Abode of Serpents”, is a hill resort on a plateau of the Sahyadri range of mountains that offers rich wildlife for tourists
- **Saputara Museum** contains interesting information about the topography and anthropology of Dangs
- **Hatgarh Fort** situated 60 km from Saputara was built by Maratha Leader Chhatrapati Shivaji and is a beautiful piece of architecture
- **Gira Falls** (3 km from Waghai) is a 30 meter natural drop into Ambika River and offers solace and relaxation
- **Purna Wildlife Sanctuary** in the district has the thickest forest cover in the State and is filled with canopies of teak and stands of bamboo
- **Girmal Falls** is the most picturesque sight in the district
- **Vansda National Park** in Dangs, harbors large mammals including the leopards, hyena, jungle cat, macaques and barking deer. It is also home to the endangered Great Indian Squirrel

Sports Opportunities: It is obvious from the above-mentioned details of the dang district. That it has not developed as much as it should.owing to very low level of education, activities of school, colleges and sports hardly take place. People are engaged in occupations like farming, cattle rearing, so thay are physically strong and very hard working. Due to hill and mountain area, very few means of transportations are available so, thay move on feet, run or ride on cycles to go from one place to another so, candidates of this area can perform at their bast in sports like long run, cross country mountain byke-cycling, waight lifting, power lifting, kho-kho, kalki etc. this is well estabilished by researches in the past. Therefore, there is agreat need to set up sports training centers for competitious in such sports. Also, this being a forest area, natives of this area have good skills and qualities in archery, shooting, mountain climbing. Thay have naturally inheritade these qualitiesFor the development of this area, level of activities of sports should be raised, training centers should be set up and more and more sports competitions should be organized so that interest could be aroused in such activities in these people by this, we can have best players and sports persons from these area. This will in turn earn a good name to state and nation

Referance

Vikas vatika, government of gujarat.

Statistical data of the Dang district.

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Physical Education and Sports Facilities in Rural and Urban Schools of Jammu and Kashmir

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ABSTRACT: The present study was designed to evaluate the status of physical education facilities in the rural and urban district schools of Jammu and Kashmir. The sample comprised of 30 government schools from Reasi (Rural) and 30 schools from Jammu (Urban) districts were randomly selected and this gave a sample size of 60 schools. A questionnaire developed by the researcher for physical education teachers; personal interviews and inspection methods were used for data collection. The present study emphasized the status of physical education and sports facilities in rural and urban schools of Jammu and Kashmir. The data was analyzed by calculating simple percentages. The result of the study revealed that 80% schools of Jammu district organize school sports meet whereas only 30% schools of Reasi district organize these competitions. The result results suggested that in most of the schools of Reasi district very poor facilities were found.

Keywords: Facilities, Rural and Urban.

INTRODUCTION: Physical education is a science of human movement dates far back to the origin of mankind. Such physical education activities from time immemorial, and until today from an important element of life, (McHenry, 1993). Sport participation offers children a viable means to acquire the recommended level of physical activity. Increasing physical activity among school-age children requires school leaders to take a comprehensive and coordinated approach, ideally informed by evidence-based strategies, Cox et.al (2010).International studies have highlighted the role of sport in the development of the social fabric and cultures in many countries (Krotee & Waters 1998; Nauright, 1997; Olivova 1985). According to Ross (1990) physical activity in its various forms, has been used to preserve indigenous cultures and traditions, which have been passed on form one generation to another.Physical education in schools is receiving national attention but because of competing academic priorities and other reasons, physical education has been compromised in many schools and numerous policy gaps and environmental barriers to the quantity and quality of physical education exist, Lounsbery & McKenzie. (2010). Adolescents who live in rural areas may be less likely to have access to supportive environments that promote physical activity than youth in more urban communities. Edwards, Bocarro & Kanters (2010). The study aims at bringing into account brief description of the importance of the physical education, teachers, playgrounds and sports equipments in the schools. Both students and teachers need facilities such as libraries, science resources sports equipments and teaching aids (Ajayi, 2001).

METHODOLOGY: The present study aims to evaluate the status of physical education and sports facilities in rural and urban schools of Jammu and Kashmir State. Urban which is situated in cities and towns and rural which is pertaining to the villages. For the purpose of the study sixty (60) government schools of Reasi and Jammu districts of Jammu and Kashmir State were randomly selected (n=30 Reasi) and (n=30, Jammu). The data was collected from Physical Education Teachers/Principals with the help of self developed questionnaire by conducting personal interviews and inspection methods. The data was computed manually through simple percentile methods and after investigating the data into content analysis, specific information was summarized in tables into percentages.

RESULTS AND DISCUSSION

Table: Facilities and programs in Rural and Urban district schools of Jammu & Kashmir

	Facilities						
District	Playground	Indoor	Outdoor	P.E.T	Equipments	Intramurals	Ratio of Participation
Reasi (Rural)	20%	0%	50%	10%	20%	30%	47%
Jammu (Urban)	50%	40%	73%	60%	72%	80%	70%

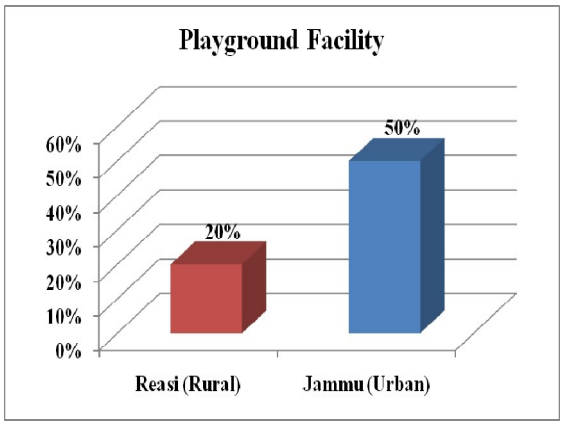

Figure 1: Showing the Playground facilities in the schools of Jammu and Reasi

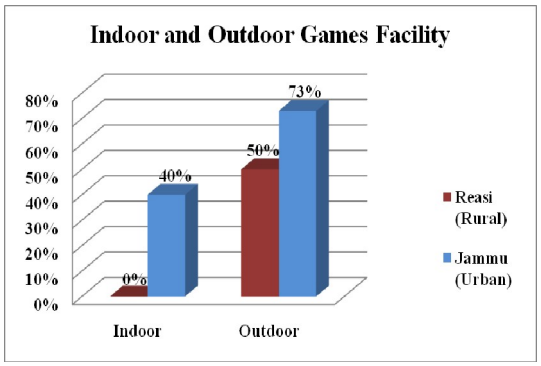

Figure 2: Showing Indoor and Outdoor games facilities in the schools of Jammu and Reasi

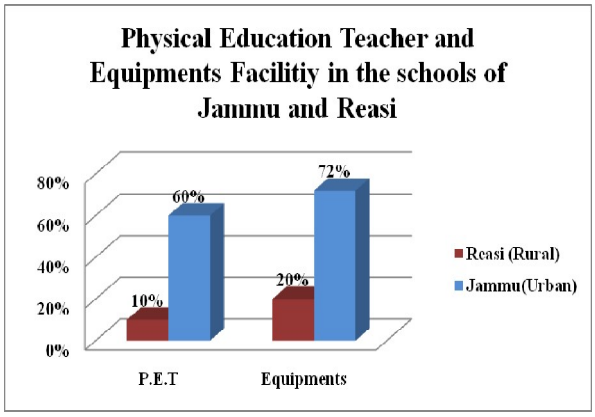

Figure 3: Showing Physical Education and Equipments facilities in the schools of Jammu and Reasi

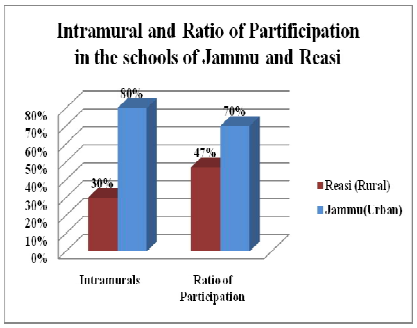

Figure 4: Showing the Intramural and Ratio of Participation in games and sports in the schools of Jammu and Reasi

The above table and figures showed that there existed no gymnasium facility in any of the schools of Reasi and Jammu districts. Respondents felt their resources were inadequate with schools stating that their indoor games facilities were inadequate. In the schools of Jammu district 40% schools had indoor games facilities whereas it is pathetic to note that none of the schools of Reasi district were found to have indoor facilities in their schools. The results also indicated that the outdoor facilities in the Jammu were found 72% and Reasi have 50% respectively. Results show that the schools of Reasi district had 58.87 rupees over 258 students per school whereas in Jammu district it was found 19.07 rupees per student over 443 students per school. Jammu district have 60% physical education teacher appointed in their schools whereas in the schools of Reasi district only 10% have physical education teachers appointed in their schools. That he results has also shown that 80% schools of Jammu were found to have organized school sports meet whereas only 30% schools were found in Reasi district where these competitions were organized.

CONCLUSIONThe findings of the study indicated a serious level of inadequacy of physical education facilities in the schools of Jammu and Reasi districts. From the findings it can be concluded that there is a lack of physical education and sports facilities in rural district schools with comparison to urban district schools. It may because of lack of awareness in the society for Physical Education activities and programs. The physical education is perceived as a subsidiary subject in the schools or "just activities" that students need for recreation and not as an academic discipline. Anukam (2006) and Mbakwem and Asiabaka (2007) the cumulative effect of poor facilities is poor motivation and low morale of teachers, which result in low quality work output. It is also obvious that, the government on its part has seemed to have not played its role to meet its own intentions, the policy of Physical Education (Mafumiko & Pangani, 2008). The results have suggested that the schools of Jammu district were found much better on physical education facilities and programmes when compared to Reasi district

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Personality Traits, Emotional Intellegence and value Orientation of former International Boxer Capt. Gopal Narayan Devang: A Case Study

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ABSTRACT: To know the sportsmen's personality in the sense that it depends on many psychological factors like self-confidence, emotional intelligence, level of aspiration, achievement motivation, personality emotions, mental toughness (mental endurance) value orientation, locus of control and self-esteem etc. The review of literature has shown that the research in the sports psychology, have studied men and women separately, not much interest has been focused on the case studies of sportsmen's personality, self-confidence, emotional intelligence, level of aspiration, mental endurance, socio economic status, value orientation and locus of control.Hence the present researcher has felt necessary to conduct a case study on former international boxer Capt. Gopal Narayan Devang's to assess his level of personality traits, emotional intelligence and value orientation. Capt. Gopal Narayan Devang at present stage in Pune who is a well known champion in boxing game and received many awards at National and International level for his performance as a Boxer.

Statement of the Problem: The problem formulated for the present study is to find out the level of personality traits, emotional intelligence, value orientation and achievements of former international boxer Capt. Gopal Narayan Devang.

Objectives of the Present Study

1. To study the level of personality traits of former international boxer Capt. Gopal Narayan Devang.
2. To find out the level of emotional intelligence of former international boxer Capt. Gopal Narayan Devang.
3. To study the level of value orientation of former international boxer Capt. Gopal Narayan Devang.

Hypotheses

- There would be high scores in the sixteen primary personality factors of Capt. Gopal Narayan Devang.
- Capt. Gopal Narayan Devang would have high level of emotional intelligence, and value orientation.

Delimitations

- The research is delimited to study personality traits, emotional intelligence and value orientation of former international boxer Capt. Gopal Narayan Devang.
- The study methods are delimited to interview and psychological questionnaire testing.

Limitations

- The study is limited to responses given by the subject to three psychological questionnaires and tests.
- The psychological conditions like anxiety, stress and strain of the subject are beyond the control of the investigator. Hence, they are the considered as limitations of the study.

METHODOLOGY

Tools

Following standardized tests and questionnaires were used in the present study,

1. Cattell's 16 PF Form 'C'Questionnaire (R.B. Cattell 1969)
2. Emotional Intelligence Scale (Anukool Hyde, Sanjyot Pethe and Upinder Dhar 2007).
3. Value Orientation Scale (Chauhan N.S. 1973).

Test Administration and Collection of Data: To collect necessary data pertaining to the present case study through questionnaires and interview method. The subject was administered to the Cattell's Sixteen Personality Factors Questionnaire (Form 'C'), Emotional Intelligence Scale and Value Orientation Scale. The data were in the form of answer given by the subject in response to the various questions of the questionnaire which are present in the questionnaires asked through interview method. The subject completed answering the questionnaire within the stipulated time after which the questionnaires were collected back and the standard scoring key was used to get the score. The scores were analyzed with the help of the standardized norms [key] provided in the tabular supplement of tests manual all questionnaires.

ANALYSIS AND INTERPRETATION OF DATA: Sports activities affect the process of personality development in ways more than one. Social and environmental pressures, biological factors, frustration and tension in life are to be mended with full attention to develop mature form of personality. The present case study has been to assess the personality traits, emotional intelligence and value orientation of former international boxer Capt. Gopal Narayan Devang and were assessed and presented in the following tables.

ANALYSIS OF 16 PRIMARY PERSONALITY FACTORS

Table 1
Scores of 16 Primary Personality Factors

Sl.No.	Sixteen.P.F	Stens
1	A	8
2	B	9
3	C	8
4	E	9
5	F	10
6	G	9
7	H	10
8	I	3
9	L	3
10	M	6
11	N	9
12	O	3
13	Q1	9
14	Q2	3
15	Q3	10
16	Q4	3

According to table 1 scores the subject have shown a tendency or inclination towards the higher direction or high sten score description in ten (A, B, C, E, F, G, H, N, Q1 and Q3) out of sixteen personality factors. The subject was average in one (M) out of the sixteen factors. Towards the lower direction or low sten score description in five (I, L, O, Q2 and Q4) out of the sixteen personality factors.

Findings of the 16 primary personality factors

Factor A: Reserved Vs Outgoing

Capt. Gopal Narayan Devang tends to be good natured, easy going, emotionally expressive, ready to co-operate, attentive to people, softhearted, kindly and adaptable. He like occupations dealing with people and socially impressive situations and he rapidly from active groups. He is generous in personal relations, less afraid of criticism, and better able to remember names of people.

Factor B: Less Intelligent Vs More Intelligent

Capt. Gopal Narayan Devang tends to be quick to grasp ideas, a fast learner, intelligent. There is some correlation with level of culture, and some with alertness.

Factor C: Affected by Feelings Vs Emotionally Stable

Capt. Gopal Narayan Devang tends to be emotionally mature, stable, realistic about life, unruffled, possessing ego strength, better able to maintain solid group morale.

Factor E: Submissive Vs Dominant

Capt. Gopal Narayan Devang was assertive, self assured and independent minded. He tend to be authoritarian (managing others).

Factor F: Sober Vs Enthusiastic

Capt. Gopal Narayan Devang tends to be cheerful, active, talkative, frank, expressive, effervescent and carefree. He was frequently chosen as elected leader. He may be impulsive and mercurial.

Factor G: Expedient Vs Conscientious

Capt. Gopal Narayan Devang tends to be exacting in character, dominated by sense of duty, preserving, responsible, planful, "fill the unforgiving minute". He was usually conscientious and moralistic and he prefers hard working people to witty companions.

Factor H: Timid Vs Venturesome

Capt. Gopal Narayan Devang was sociable, bold, ready to try new things, spontaneous and abundant in emotional response. His "thick skinned ness" enables them to face weal and tear in dealing with people and grueling emotional situations, without fatigue

Factor I: Tough-minded Vs Tender-minded

Capt. Gopal Narayan Devang tends to be tough, realistic, "down to earth", independent, responsible but skeptical of subjective, cultural elaborations. He tends to keep a group operating on a practical and realistic "no-nonsense" basis.

Factor L: Trusting Vs Suspicious

Capt. Gopal Narayan Devang tends to be free of jealous tendencies, adaptable, cheerful, uncompetitive, concerned about others and a good team worker.

Factor M: Practical Vs Imaginative

Capt. Gopal Narayan Devang tends to be anxious to do the right things, attentive to practical matters and subject to the dictation of what is obviously possible.

Factor N: Forthright Vs Shrewd

Capt. Gopal Narayan Devang, tends to be polished, experimental and shrewd. His approach to people and problems is usually perceptive, hard-headed and efficient.

Factor O: Self-assured Vs Apprehensive

Capt. Gopal Narayan Devang tends to be unruffled and to have unshakable nerve. He has a mature, unanxious confidence in themselves and their capacity to deal with things.

Factor Q_1: Conservative Vs Experimenting

Capt. Gopal Narayan Devang tends to be interested in intellectual matters and have doubts on fundamental issues. He was skeptical and inquiring regarding ideas, either old or new. Usually he was more well informed, less inclined to moralize, more inclined to experiment in life generally and more tolerant of inconvenience and change.

Factor Q_2: Group-oriented Vs Self-sufficient

Capt. Gopal Narayan Devang prefers to work and make decisions with other people and like and depend on social approval and admiration.

Factor Q3: Undisciplined self-conflict Vs Following Self-image

Capt. Gopal Narayan Devang tends to have strong control of their emotions and general behavior, are inclined to be socially aware and careful, and evidence what is commonly forced "self respect" and high regard for social reputation.

Factor Q_4: Relaxed Vs Tense

Capt. Gopal Narayan Devang tends to be sedate, relaxed, composed and satisfied (not frustrated).

ANALYSIS OF EMOTIONAL INTELLIGENCE FACTORS

Table 2
Scores of Emotional Intelligence factors

Sl.No.	Factors	Factors Name	Scores	Category
1	A	Self awareness	16	High
2	B	Empathy	20	High
3	C	Self motivation	28	High
4	D	Emotional stability	16	High
5	E	Managing relations	17	High
6	F	Integrity	12	High
7	G	Self development	8	High
8	H	Value orientation	8	High
9	I	Commitment	8	High
10	J	Altruistic behavior	8	High

Table 2 presents the scores of emotional intelligence factors. The scores of emotional intelligence factors like self awareness (16), empathy (20), self motivation (28), emotional stability (16), managing relations (17), integrity (12), self development (8), value orientation (8), commitment (8) and altruistic behavior (8) clearly indicates that the subject having high level of emotional intelligence in all the ten factors.

Findings of the Emotional Intelligence factors

1. Self Awareness

Capt. Gopal Narayan Devang has high ability to empathize with, feel comparison for, validate, motivate, inspire, encourage and soothe others. He has high (more) ability to make intelligent decisions using a healthy balance of emotions and reason. He was neither too emotional nor too rational. He has high ability to manage and take responsibility for one own emotions, especially the responsibility for self motivation and personal happiness. He has high ability of recognizing and naming ones own emotions and he has high knowledge of the causes of emotions and has high ability of recognizing the difference between feelings and actions.

2. Mood Management

Capt. Gopal Narayan Devang has high frustration tolerance ability and anger management, eliminates verbal pull downs, fights and group disruptions, better able to express anger appropriately without resorting to violence, fewer, suspensions or expulsions, less aggressive or self-destructive behavior, more positive feelings about self, school and family, better at handling stress.

3. Self-motivation

Capt. Gopal Narayan Devang was more responsible, better able to focus on task at hand and pay attention, less impulsive; more self controlled and improved scores on achievement tests.

4. Empathy

Capt. Gopal Narayan Devang was afflictive person and he make good companion because he was pleasant and agreeable. Others feel comfortable him and like him in other words, affiliative persons have superior emotional and social skills in dealing with others, derive gratification and reward from their interpersonal contacts, and tend to be source of happiness to others.

5. Managing Relations

Capt. Gopal Narayan Devang was more popular and outgoing; friendly and involved with peers, more sought out by peers, more concerned and considerate, more "prosocial" and harmonious in groups, more sharing, cooperation and helpfulness, more democratic in dealing with others.

Emotional Intelligence factors level in Capt. Gopal Narayan Devang

A) High self awareness
B) High empathy
C) High self-motivation
D) High emotional stability
E) High managing relations
F) High integrity
G) High self development
H) High value orientation
I) High commitment
J) High altruistic behavior

ANALYSIS OF VALUE ORIENTATION FACTORS

Table 3
Scores of Value Orientation factors

Sl.No.	Factors	Factors Name	Raw scores	Std. scores	Category
1	C	Cosmopolitanism	9	59.33	Higher
2	S	Scienticism	9	58.33	Higher
3	V	Venturesomeness	8	55.37	Higher
4	D	Democratism	8	55.05	Higher
5	P	Progressivism	9	60.57	Higher
6	E	Empathy	8	56.27	Higher

Table 3 presents the scores of value orientation factors. The scores of value orientation factors like cosmopolitanism (9), scienticism (9), venturesomeness (8), progressivism (8), democratism (9) and empathy (8) clearly indicates that the subject having higher level in all the six factors according to standard norms of questionnaire manual.

Findings of the Value Orientation factors

1. Localism Vs Cosmopolitanism : Capt. Gopal Narayan Devang was cosmopolite person. He would like to keep and promote relationship with many people even if available or distances. He was modernized and progressive mode of life.

2. Fatalism Vs Scienticism: Capt. Gopal Narayan Devang was scienticism in nature and believes upon scientific cause-effect relationship (i.e., an objective determination of things on the phenomenal level).

3. Non-Venturesomeness Vs Venturesomeness: Capt. Gopal Narayan Devang was venturesomeness in nature that relates to 'risk taking' or innovative behavior. He was experiment like person.

4. Autocratism Vs Democratism : Capt. Gopal Narayan Devang was democratism person, believes in new era and was tolerant and also co-operative in nature.

5. Traditionism Vs Progressivism : Capt. Gopal Narayan Devang was "Change Minded" person and believes in progressiveness. He believes in remaining resonant with the scientific strides that create new objects and meanings.

6. Non empathy Vs Empathy : Capt. Gopal Narayan Devang was empathy person and believes in individual and social roles. Both individual and social roles, integrate with each other for manufacture and exchange of utility, acquisition and communication of knowledge, creations and performances.

CONCLUSIONS

- Capt. Gopal Narayan Devang is good natured, easy going, emotionally expressive, ready to co-operate, attentive to people, softhearted, kindly, adaptable, quick to grasp ideas, a fast learner, intelligent, emotionally mature, stable, realistic about life, unruffled, possessing ego strength, better able to maintain solid group morale, assertive, self assured, independent minded, cheerful, active, talkative, frank, expressive, effervescent and carefree.
- He is exacting in character, dominated by sense of duty, preserving, responsible, planful, "fill the unforgiving minute, sociable, bold, ready to try new things, spontaneous and abundant in emotional responseHe is tough, realistic, "down to earth", independent, responsible but skeptical of subjective, cultural elaborations, free of jealous tendencies, adaptable, cheerful, uncompetitive, concerned about others, a good team worker, anxious to do the right things, attentive to practical matters, polished, experimental and shrewd, unruffled and to have unshakable nerve. He has a mature, unanxious confidence in themselves and their capacity to deal with things.
- He is experimenting, interested in intellectual matters, he has doubts on fundamental issues, prefers to work and make decisions with other people and like and depend on social approval and admiration
- He has undisciplined self-conflict and have significant control of his emotions and general behavior. Inclination to be socially aware, careful and he has lot of self respect and high regard for social reputation. He is sedate, relaxed, composed and satisfied person.
- He has high emotional intelligence and higher value orientation.

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Comparing the views of coaches, athletes and Experts about Approaches for progress of Championship swimming sport in Iran

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Abstract: This study aims to comparing the views of athletes, coaches, and authorities about approaches for progress after country's championship swimming sport. The statistical sample of this study includes 39 athletes of national team, 30 coaches and 75 experts, collectively comprise 144. Measuring tools include a questionnaire prepared according to Ghasemi questionnaire (2006) including 37 questions of closed ended. Variables include 35 items such as promotion of scientific and technical knowledge of coaches, finding talents by scientific and special method, equipping the pools with special and research possibilities, support of Physical Education Organization and Olympic National Committee, classified in seven groups. Statistical analysis conducted by frequency table and forms, one-way analysis of variance test and LSD Follow-up Test and Tomhand's test. Results for progress of championship swimming sport indicated that: all groups, athletes, coaches and experts among variables, considered third group as the most important group related to approaches for progress of championship swimming sports through the country including promotion of technical and scientific knowledge of coaches, controlling and supervision on activity of coaches, finding the new talents scientifically, fully equipping the pools by special possibilities, establishing swimming schools, increasing the swimming facilities and pools. In final study, among 35 sub-variables of this study of views of three study groups (athletes, coaches and experts) three factors selected in precedence including presence of skilled managers, promotion of scientific and technical knowledge of coaches and comprehensive support by sports organization and authorities.

Key words:Championship, Swimming, Iran etc.

Introduction: The subject shows the importance of sport more than ever is that, during recent decades, sport turned to the scene of encountering the countries to each other and boasting their progress. Most medals obtained in global, Olympic and Asian championship events was in individual fields and basic sports such as track and field, gymnastic and swimming, and because these sports possess different dimensions such as political, economic and cultural ones, for this reason, success and fail of national competitors has made many sensitivities among people and authorities [1]. Initial study for championship in any sports field indicates that necessities such as coaches, finding talents, possibilities and facilities, aimed supervision and planning and likes may influence on progress of championship sports. According to Roben Frost, coaches include main basis of sport teams and among three factors, i.e. athlete, coach and spectators, coach may play important role in leadership of team as a strong organizer and infrastructure of any progress [2]. In a study of criteria for selecting coaches of national swimming teams, Shafiee (2007) classified diving and water polo in eight dimensions and finally results indicated that dimension of emotional- human skills classified in upper level and individual traits and sport skills in lower levels [3].Reviewing the records and results of prominent champions through the world indicates that most records are related to that category of sport systems that having general, scientific and systematic plans for nurturing their elite athletes that by finding the talents, recognizing the success factors and people who are prone to championship sport, it may pave the way of attaining to glory hills [4]. In a study, Gaeeni (2003) investigated the indices of finding the swimming talents in Iran and classified the success of imperial Olympic and global swimmers during past twenty years in three parts, physical, skill and mental, and studied these indices in a section on swimmers of National Team of Iran, and results indicated that most factors resulted in progress of swimmers essentially lack in the elite swimmers of our country; on the other hand, Iranian elite swimmers mostly attain to high degrees based on their family interest, accessing to possibilities and or more presence in water not based on their intimate talent needing by swimming sport [5] According to the age of swimming in Iran, up to seventy years, national swimmers could not achieve a considerable honour through Asian and globally and the issues of concern

is that the level of Asian swimming is increasing together with the level of swimming in our country and by a glance to Global Swimming Federation Standings, it can be seen the far distance of our swimmer in the global class that is in the class of 145 globally.

Methodology

This study is of scientific- comparative type and by comparing the viewpoints of three groups; it recognizes the factors effective in the progress of championship swimming sport. Population comprises from athletes, coaches and experts of swimming in Tehran province and samples of this study include 39 elite athletes of national team in age range of adolescents, young and adults, 30 coaches holder of international, national and first class certificates and finally 75 experts, such as coaches, authorities of federation and university professors in Tehran. The required date prepared by Gasemi questionnaire (2006) and its reliability evaluated by Kronbach Alpha test (α= 0.89) and scale of questions was based on Likert five- values scale and of qualitative type.

Results

All three test groups considered more importance for variables of fourth group (support of physical education organization and national Olympic committee, financial support of coaches, financial support of athletes, attracting the sponsors). The second priority for athletes was variables of group one(employing foreign coach, body building coach) and for coaches, group five and for experts, group three. Third priority was group three (promoting the scientific and technical knowledge of coaches, supervision on activity of coaches, for athletes and coaches collectively and group one for experts.

While comparing the views of study groups for briefing the paper, four groups have been compared.

For variable of first group, including employing foreign coach, expert, body building coach and psychologist as well as increasing the hours and number of exercise sessions, there is indicated significant difference than effect of using psychologist in α= 0.05 and F value is 4.48; therefore, using LSD test, result indicates that there is a significant difference among view of athletes and experts in α= 0.05.The variable of second group stressing on F value, equal with 3.48, 14.01,4.25 and according to significant level, α= 0.05, for employing specialists, launching researching committee and conducting the study and presence of skilled manager, there is no significant difference between views of three groups. Results of LSD and Tomhand's tests indicate that there is significant difference between view of coaches, experts for effect of launching a researching committee and conducting the study among view of athletes and experts and coaches and finally than effect of presence of skilled manager among views of coaches and experts (α= 0.05).For effect of factors related to variable of third group(promoting the knowledge of coaches, supervision on activities of coaches, establishing swimming schools, finding the talents scientifically,…), according ot F value equal with 5.15, it was indicated that there is significant difference, (α= 0.05) between views of three groups. By using LSD test, the difference level in α= 0.1 among the view of athletes and coaches is0.005 and athletes and experts is 0.004.For variables of fourth group, including the financial support of coaches, financial support of athletes, attracting sports sponsors, comprehensive support (5), according to F value= 3.34 in α= 0.05, there is significant difference between views of three groups only for financial support of coaches and such difference could be seen using LSD test in α= 0.05 between views of athletes and experts, equal with 0.059.Best approaches of views of three study groups among four selected groups of this study indicated that among three study group, three best approaches of first group of variables for progress of championship dimension of country's swimming sport collectively the first approach was employing body building coach, second approach was increasing the hours and number of exercise sessions and third approach was using nutrition expert, while, the view of coaches, two best remaining approaches were employing nutrition expert and increasing the hours and number of exercise sessions respectively. Of viewpoint of experts, second and third best approaches include employing psychologist and nutrition expert respectively. First best approach of second group of viewpoint of athletes, coaches and experts collectively was presence of skilled manager, while athletes knew the second best approach as spiritual support of athletes and experts' viewpoint was development in the communication with global federation and coaches' viewpoint was planning in different exercise dimensions. Third prominent approach of viewpoint of athletes and coaches was development of communication with global federation, such that experts introduced planning in different dimensions of exercise as third approach. Three best approaches of viewpoint of athletes among third group were promotion of scientific and technical knowledge of coaches, finding the talents scientifically and establishing swimming schools respectively. Based on view point of coaches, the first approach was finding the talent scientifically and second best approach of second group, like experts, was promoting the scientific and technical knowledge of coaches. Third factor, of viewpoint of coaches, was increase in facilities and swimming pools. Apart from the common viewpoint between experts and coaches, for second best approach, first and third best approaches were establishing the swimming schools and finding the talents scientifically respectively.

Discussion and Conclusion

According to above mentioned results, it seems that among approaches of first group, employing psychologist and body building coach is the most effective step for progress of championship sport. Generally, results of this study for variables of first group have been conformed with results of Sajadi (fencing, track and field) (6), Hayashi (7). In its study, Hayashi (1998) has considered the inhibitory, promoting and or punitive factors and sensitive and perception role of coaches effective on continuing or leaving the exercise by athletes.Among variables of second group of athletes, the spiritual support of athletes, coaches, experts for presence of skilled managers in the position of chairman of Country's Swimming Federation had more importance for progress of swimming sport. Generally, results of this study for variables of second group were conformed to results of Sajdi (fencing) (6), Hiuyi et al (boating) (8). Studies conducted by these researchers indicated that one of the factors resulted in failure of sport teams, whether individual, or team work, was the lack of a skilled manager who is familiar with sports management system. Among variables of third group, athletes and coaches stressed on finding the talents of novices scientifically and experts stressed on promoting the scientific and technical knowledge of coaches. Generally results of this study for variables of third groups were confirmed to Shafiei (swimming, diving, and water polo) (3), Gaeeni (swimming) (5),In their studies, they indicated that using the scientific findings of coaches by athletes may be an effective factor in the progress of championship sport. Among variables of fourth group, financial support of coaches and athletes, paying for enough monthly salary, cash bonus, etc… are conformed with results of Esmaeeli (wrestling) (9) that indicated that economic concerns of coaches and wrestlers of Lorestan province were among factors effective in reducing the level of wrestling in the province,.Among variables of fifth group,enjoying an integrated training system for coaches through the country are conformed toand increased budget of federation conformed to Armand (table tennis) (10). In his study, Armand has considered the budget shortage and its supply only by public helps in the boards and provinces of country of the factor for lack of progress of table tennis sport in Iran. Among variables of sixth group, athletes and experts more stressed on supplying the future of athletes; and coaches stressed on supplying the occupational future of athletes of national team than other sub-variables. Among variables of seventh group, coaches, experts and athletes had better view to holding the national and international events, long term camps and comprehensive camps with famous counties respectively; and for holding long term camps, it hasn't conformed to Sajadi (2003). In his study, Sajadi has considered the continuously presence of athletes in provisional camps, ignoring their required possibilities and participating in untargeted provisional competitions as the factors for disruption in sport teams and finally their disability to be dispatched to global events.

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A COMPARATIVE STUDY ON REACTION ABILITY KINESTHETIC PERCEPTION AND PERCENTAGE OF BODY FAT OF PRE ADOLESCENCE STUDENTS AMONG DIFFERENT EDUCATIONAL BOARDS.

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ABSTRACT: The purpose of the study was to compare reaction ability, kinesthetic perception and percentage of body fat of pre adolescence student of three different educational boards i.e. CBSE, WBBSE and ICSE mostly prevalent in West Bengal. Sixty male students age ranging from 11-14 years from 6th to 8th standard were selected as subject for the study out of which 20 students each were from:-

- Navodoya Bidyalaya (Banipur) (Central Board of Secondary Education).
- Startford day School (Kamarthuba) (Indian Certificate of Secondary Education)
- South Habra high school (Habra) (West Bengal Board of Secondary Education)

The variables undertaken for the study were kinesthetic perception, measured by distance perception jump (Nelson & Johnson), Reaction ability, measured by Nelson hand reaction test (Nelson & Johnson) and percentage of body fat, measured by Body Fat Monitor, an electronic device manufactured by Omron model no. HBF 306. In order to investigate the existence of significant difference among the students of three educational boards in kinesthetic perception, Reaction ability and percentage of body fat, analysis of variance statistics was used at 0.05 level of significance. Statistical calculation of the gathered data showed that there was significant difference between the three Educational boards of which the students of Navodaya Vidhyalaya, Banipur under CBSE board was found better in comparison to the students of other Educational boards.

Key Word: Kinesthetic Perception, Reaction ability, Body fat Percentage

INTRODUCTION:Sports is the best weapon for peace in the world – Alfred Nobel.Fitness is now becoming the highest priority on the agenda of modern era, as because it is real fact that regular exercise can develop physical, physiological and psychological fitness and also improve sense of several well being and enhanced self image.The term kinesthetic perception refers in physical education that - The ability of the sports man to perceive the position effort and movement of parts of the body or the entire body during muscular action is sometimes referred to as the sixth sense. The kinesthetic sense is under psychological condition. (*Nelson & Johnson, 1982*)The term Reaction time may be refers that – Reaction time is the interval of time between the presentation of the stimulus and the initiation of response, it is under physiological condition. (Nelson & Johnson, 1982)Whereas body fat percentage is the amount of fat tissue in your body as a percentage of total body weight. Body fat percentage in an average healthy women is about 17-27 percent and in a man the average body fat percentage is 10-20 percent. Present study was done on pre adolescence boys. So it may be define as "The period of childhood just before the set of puberty. Often designed as between the age of 10 to 12 in girls and 11 to 13 in boys" (*www.answer.com>home library*). Preadolescence is the stages where the talent of a child has reflected in the field of sports and it may be very easier for coach to carried out then in to the global sports arena.This general belief encouraged the investigator to take up the present project in an effort to compare Kinesthetic Perception, Reaction Time & Percentage of Body fat status of pre-adolescence students among different educational board in West Bengal

METHODOLOGYSeventy five male students age ranging from 11-14 years of VI to VIII standard were selected as subject for the study out of which 25 students each were from: **i)** Jawahar Navodaya Vidyalaya, Banipur (Under central board of Secondary education), **ii)** Stratford day school, Kamarthuba, (Indian certificate of secondary education), **iii)** South Habra high school, Banipur (West Bengal board of secondary education).The subjects were tested in their respective school on three suitable days. On the evening of the first day the subjects of Jawahar Navodaya Vidyalaya were given demonstration of the tests in respect to kinesthetic perception, Reaction time and percentage of body fat which was measured by distance perception jump (Nelson & Johnson), Nelson hand reaction test (Nelson & Johnson) and Bioelectrical impedance technology" *(www.weightlossresources. co.uk/body.)* a Body Fat Monitor, an

electronic device manufactured by Omron model no. HBF 306 respectively. After that the subjects were asked to give the test and the data were recorded. Then after two days same test was conducted in the others two institution respectively South Habra High School and Stratford day school in same condition as on the first day in two consecutive days.

STATISTICAL PROCEDURE: For the purpose of comparing the reaction ability kinesthetic perception and percentage of body fat of pre adolescence students among different educational board's analysis of variance statistics was used. The level of significance was set at 0.05 level of confidence.

FINDINGS: Table-01ANALYSIS OF VARIANCE OF THE MEAN OF KINESTHETIC PERCEPTION AMONG THE STUDENTS OF THREE EDUCATIONAL BOARDS

Sources of Variance	df	SS	MSS	'F' Value
Between	2	2171.41	1085.70	3.77*
Within	72	20743.66	288.11	

* Significant at 0.05 level of confidence. Tab F_{05} (2, 72) = 3.11

Table-02

PAIRED ADJUSTED FINAL MEANS DIFFERENCE OF KINESTHETIC PERCEPTION AMONG THE STUDENTS OF THREE EDUCATIONAL BOARDS

ICSE	CBSE	WBBSE	Mean Difference	Critical Difference
45.60	32.66		12.94*	3.51
45.60		36.97	8.64*	
	32.66	36.97	4.31*	

*Significant 0.05 level of confidence

Table: 03

ANALYSIS OF VARIANCE OF THE MEAN OF REACTION ABILITY AMONG THE STUDENTS OF THREE EDUCATIONAL BOARDS

Sources of Variance	df	SS	MSS	'F' Value
Between	2	0.06	0.03	3.86*
Within	72	0.51	0.01	

* Significant at 0.05 level of confidence. Tab F_{05} (2, 72) = (3.11)

TABLE-04

PAIRED ADJUSTED FINAL MEANS DIFFERENCE OF REACTION ABILITY AMONG THE STUDENTS OF THREE EDUCATIONAL BOARDS

ICSE	CBSE	WBBSE	Mean Difference	Critical Difference
0.22	0.15		0.07*	0.05
0.22		0.17	0.05*	
	0.15	0.17	0.02	

*Significant 0.05 level of confidence

Table : 05

ANALYSIS OF VARIANCE OF THE MEAN OF PERCENTAGE OF BODY FAT AMONG THE STUDENTS OF THREE EDUCATIONAL BOARDS

Sources of Variance	df	SS	MSS	'F' Value
Between	2	255.41	127.71	4.01*
Within	72	2291.61	31.83	

* Significant at 0.05 level of confidence. Tab F_{05} (2, 72) = 3.11

TABLE-06

PAIRED ADJUSTED FINAL MEANS DIFFERENCE ON PERCENTAGE OF BODY FAT AMONG THE STUDENTS OF THREE EDUCATIONAL BOARDS

ICSE	CBSE	WBBSE	Mean Difference	Critical Difference
23.04	18.60		4.44*	3.16
23.04		20.07	2.97	
	18.60	20.07	1.47	

*Significant 0.05 level of confidence

DISCUSSION OF THE FINDINGS

After seeing all the table findings, it clearly indicated that there were significant difference in respect of kinesthetic perception Reaction time and percentage of Body fat among the preadolescence students of three different educational boards in West Bengal and also it was evident that the students of Navodoya Vidyalaya (CBSE Board) is better in comparison to Stratford day school (ICSE Board), and south Habra High School (W.B.B.S.E. Board) in repute of kinesthetic perception, Reaction times and percentage of body fat, so research hypothesis may be accepted.

Kinesthetic is our movement sense *(www.audiblos 2000.com/tactile-kinst.)*. It simply refers to an awareness of changes in momentum, balance, and pressure and body position in general. It is very easy to identify kinesthetic perception of the student of Navodaya Vidyalaya because they enjoy and usually or seen to be successful in active sports, as they are bounded by scientifically constructed Physical Education programmed including playing, Dancing, hand-on- tasks working with scientific probe and microscope, robotics instrument which is not possible for South Habra School & Stratford Day School, due to lack of economical support of the Government and scarcity of space.

In Reaction time it was believed that the body and mind are powerfully connected *(www.jstor.org/stabe/1125439)*. A human mind made a decision, the body acted immediately and it is related with human discipline in day today life which is basically suited for student of Navodaya Vidyalaya because they are restricted in a residential campus and they had to followed strictly all instruction from morning assembly to evening assembly given by the teachers, so they are found to be quick in reaction time in respect of the students of other two educational boards where they are not having the practical activity like Navodaya Vidyalaya.Pre adolescence obesity reaching epidemic proportions, Nutritional status & physical activity vastly influence percentage of body fat. It is said that in this stage the boy have to intake rich level of nutrients and do regular physical activity but they take heavy diet and are not habituated with physical activity, so they develop as obese. Therefore the mean performance of percentage of body fat of Stratford Day School is too high than other two schools. In this case also Navodaya Vidyalaya was found better in comparison because the ratio of nutritional status and physical activity are quietly standard. Navodaya Vidyalaya is a part & parcel of CBSE board. Currently there was a strong argument that Navodaya Vidyalaya has to be paid more attention for sports and physical education to encourage children to take then up a profession.In present study we have found students of Navodaya Vidyalaya Banipur excel better in the undertaken variables because of their all scientific and systematic curriculum and facilities

CONCLUSION

- Significant difference was found among the students of three educational boards in respect of kinesthetic perception.
- Significant difference was found among the students of three educational boards in respect of Reaction time.
- Significant difference was found among the students of three educational boards in respect of percentage of body fat.
- Navodoya Vidyalaya was better in comparison to others two institute in respect of kinesthetic perception, reaction time & percentage of body fat.

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A study on the using Computer resources in instruction among secondary school teachers

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Abstract: Computer at school level is an increasingly valuable tool. One of our educational goals should be to prepare students for a world in which the computer will continue to play a significant role. A teacher must not just be made a literate but should also be computer literate as the present need is to make the society into a Knowledge Society. The aim of the study was Computer education knowledge in high schools teachers of Gulbarga district**.** The researchers have chosen a sample of 50 school teachers from each area [urban and rural regions] and management [government and private], which are imparting computer education in Gulbarga district, covering 100 high school teachers with purposive random sampling methods. The results reveals that urban schools are faring better than rural schools with regard to usage of Computers in instruction while teaching other school subjects and. Infrastructure facilities and per sonnet handling computers. Government school teachers are faring better than private school teachers with regard to Infrastructure facilities and personnel handling computers. Government school teachers are found to have latest computer education syllabus than private school teachers.

Introduction: Computers have invaded our homes, offices, and schools. The end result has been that our lives, both private and professional, have been changed. Computers and related technologies have defined our relationships, especially how we learn. In district urban schools has the highest number of high schools in comparison with other rural schools**.** Computers have reached every nook and corner of the world and India is no exception. Computer at school level is an increasingly valuable tool. One of our educational goals should be to prepare students for a world in which the computer will continue to play a significant role. A teacher must not just be made a literate but should also be computer literate as the present need is to make the society into a 'Knowledge Society."Our government desired to integrate computer use into the curriculum and provide access to all the students. The computerization of the classrooms at school would allow the faculty to take advantage of these emerging technologies in their class presentations and permit students to have the hands-on experience of learning with these tools.Computers have invaded our homes, offices, and schools. The end result has been that our lives, both private and professional, have been changed. Computers and related technologies have defined our relationships, especially how we learn. In district urban schools has the highest number of high schools in comparison with other rural schools. The government is in the preliminary stage of providing computer infrastructure to all the schools of district and imparting of computer education. It is found that private schools in this district are imparting computer education for a long time.

Objectives of the Study

To identify the basic computer knowledge among the higher secondary school teachers
To study the usage of computer instruction while teaching other school subjects.
To study the status of computer knowledge in high school teachers located in urban and rural areas of Gulbarga district.

Selection of the Sample

The researchers have chosen a sample of 50 secondary school teachers from each area [urban and rural regions] and management [government and private] which are imparting computer education in Gulbarga district, covering 100 high school teachers with purposive random sampling methods.

Methodology

Descriptive survey method was used.

Tools used:A questionnaire was constructed and developed after interviewing heads of the institutions, high school computer teachers, taking into consideration the views expressed by the experts in the field of computer and education

Table —1: Difference in responses of higher secondary teachers on Basic computer knowledge

	N	M	SD	F
Male	50	22.42	6.61	11.644-**
Female	50	18.78	3.63	

** Significant at 0.01 level of confidence

From the above table, it is observed that the Mean score of male teachers have more than Female teachers. The calculated F —value is found to be significant at 0.01 level confidences. Hence, male teachers are faring better than Female teachers with regard to basic knowledge respectively.

Table—2 Usage of computers in instruction while teaching other school subjects with respect to area of the schools

	N	M	SD	F
Urban school teachers	50	3.96	5.21	11.41**
Rural school teachers	50	1.06	3.09	

** Significant at 0.01 level of confidence

From the above table, it is observed that the Mean score of urban school teachers is more than and rural school teachers. The calculated F — value is found to be significant at 0.01 level of confidence. Hence, urban school teachers are faring better than rural school teachers with regard to usage of Computers in instruction while teaching other school subjects.

Table —3: Infrastructure facilities and personnel
Handling computers with respect to different management school teachers

	N	M	SD	F
Government school teachers	50	21.77	7.09	4.49**
private school teachers	50	19.43	3.23	

** Significant at 0.01 level of confidence

From the above table, it is observed that the Mean score of government school teachers is slightly more than the private school teachers. The calculated F-value is found to be significant at 0.05 level of confidence. Hence, government school teachers are faring better than private school teachers

.**Results and Findings:**The result reveals that urban school teachers are faring better than rural school teachers with regard to usage of Computers in instruction while teaching other school subjects. Urban school teachers are faring better than rural school teachers with regard to basic knowledge of computer. Government school teachers are faring better than private school teachers with regard to Infrastructure facilities and personnel handling computers.

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"Optimistic – Pessimistic Attitude In Relation to Mental Health and Decisiveness of Sportsmen"

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ABSTRACT: The study was conducted on an incidental-cum-purposive sample of 200 sportsmen of Aurangabad town. The purpose of the study was to examine the effect of optimistic and pessimistic attitude on mental health and decisiveness. First hypothesis of the study Optimistic – Pessimistic Attitude have play significantly role in mental health of the sportsmen. And second hypothesis Optimistic – Pessimistic Attitude have play significantly role in decisiveness of the sportsmen. For the purpose D. S. Parashar optimistic-pessimistic scale, C.G.Deshpande Mental health scale and L.N.K.Shinha's Differential personality scale (DPI) of the respondent respectively. Besides these, a PDS was used to get the other necessary information relating to the respondents. The scales along with PDS were employed and data were obtained. The obtained result confirmed all the hypotheses. It was conclusion that Optimistic – Pessimistic Attitude have play significantly role in mental health of the sportsmen. And Optimistic – Pessimistic Attitude have play significantly role in decisiveness of the sportsmen.

Introduction: Cognitive psychologists suggest that an individual athlete's "explanatory style" is a significant factor in influencing sports performance. Individuals with an optimistic explanatory style consistently outperform those with a pessimistic explanatory style. [Seligman, (1990); Hanrahan & Grove (1990)]. Their work is based on 'attribution theory' - ie. on how people explain 'good' and 'bad' events that happen in their lives. An individual's explanatory style can be used to determine their level of optimism or pessimism - and as a consequence, their performance potential in sport. To determine explanatory style (and hence optimism or pessimism), psychologists typically employ an Attribution Style Questionnaire (ASQ) to evaluate various "dimensions" such as Personalization (Ps), Permanence (Pm) and Pervasiveness (Pv) about both negative and positive events which has been suggested ultimately determine optimism or pessimism in explanatory style [Seligman (1990)]. Others, [Hanrahan, Grove and Hattie (1989), Hanrahan and Grove (1990)], have likewise developed attribution style questionnaires measuring dimensions of internality, stability, controllability, globality and intentionality.Most such questionnaires use very general scenarios and are not particularly sports specific, consequently, the following short questionnaire was developed as a sports contextualized style of ASQ. Using the following short Sports ASQ coaches can obtain a very general guide to their athletes' explanatory style, and establish relative levels of optimism and pessimism between individual players. Such information may be of use in both the recruitment and selection of players (when everything else is about equal choose the more optimistic recruit), and in identifying existing players who may benefit from specific psychological skills training to develop more optimism - and hence improve sports performance. When using the following questionnaire with players, recognise that it is a simplistic questionnaire - not a proper psychological diagnostic tool - and should be used as a guide only. Should a specific player be identified as pessimistic by this questionnaire, further professional guidance should be sought in establishing the veracity of the result, and in the specific identification and design of a cognitive training program to develop more optimism.Evidence indicates that optimism enhances motivation, persistence and performance (Carver & Scheier, 2002b; Taylor & Brown, 1988). Czech, Burke, Joyner, and Hardy (2002) found no significant differences among optimistic and pessimistic athletes on win orientation, goal orientation, and competitiveness. However, Seligman, Nolen-Hoksema, Thornton, and Thornton (1990) found that pessimistic swimmers achieved more unexpected poor performances during competition than optimistic swimmers. Results also showed pessimistic swimmers who performed less well than expected on the first trial, performed worse on additional trials. Optimistic swimmers who performed less well than expected, performed significantly better on additional trials.Rudski (2004) found optimism to be positively correlated with religiosity, while pessimism was negatively related to religiosity. Pessimism was found to be a predictor of superstitious belief (Rudski, et al., 1999). There was also a positive correlation between optimism and the belief that one has control of stress in one's life (Fontaine, Manstead, & Wagner, 1993). Athletes who reach higher levels of performance and success are found to have a greater control over their behavior, and more optimistic perceptions of their future (Taylor & Brown, 1998).

Objective of the Study: The main objectives of the study are to examine the effect of Optimistic – Pessimistic Attitude on the mental health and decisiveness of the sportsmen.

Hypothesis:

1. Optimistic – Pessimistic Attitude will play significantly role in mental health of the sportsmen.

2. Optimistic – Pessimistic Attitude will play significantly role in decisiveness of the sportsmen.

Sample: The study was conducted on 200 undergraduate sportsmen of Aurangabad town using incidental-cum-purposive sample. The sportsmen were matched in other respect so far as practicable.

Tools

Optimistic–Pessimistic Attitude Scale: This test is developed and standardized by D.S.Parashar. The 40 each items Two Alternatives. The subjects were required to respond to each item in terms of "Agree", and "Disagree". This is well known test having high reliability and validity coefficients.

C.G.Deshpande Mental Health test:

C.G.Deshpande Mental Health test was used for measuring Mental Health. All the 50 items of the scale are presented in simple and brisk style. Each of the 40item has two answer (multiple Choice) 'YES' and 'NO' This is well known test having high reliability and validity coefficients.

Differential Personality Inventory (DPI):

This test is developed and standardized by L.N.K. Shinha and Arun Kumar Singh. The test consisted of 165 Items. The subjects were required to respond to each item in terms of 'True' OR 'False'. The test – retest Reliability Coefficient Range from .73 to .86 which were high and significant indicating that the Different dimensions of the Scale have sufficient Temporal Stability.

Personal Data Sheet (PDS):

Procedures of data collection

The study was conducted in two phases. In the first phase, Optimistic–Pessimistic Attitude Scale were give on the 200 college going students. The data were obtained and median value on Optimistic–Pessimistic Attitude Scale was calculated. Students at and above median value were treated as having optimistic sportsmen and below median value were treated as having pessimistic sportsmen. From among 200 sportsmen, 100 sportsmen having optimistic sportsmen and 100 sportsmen having pessimistic, were selected. The selected students were subjected to mental health Inventory and differential personality inventory (DPI) for decisiveness factor in the second phase. The obtained data analyzed using t-test

Variable

Independent variable- Attitudes a) Optimistic b) Pessimistic

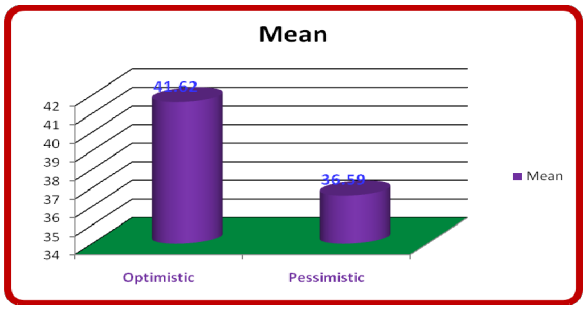
Dependent Variable 1. Mental Healt 2. Decisivenes

Statistical analysis and discussion

Table No. 01

Mental Health among optimistic and pessimistic sportsmen students Mean S.D. and "t" Value.

Sportsmen	Mean	S.D	N	df	't'
Optimistic	41.62	4.13	100	198	9.05**
Pessimistic	36.59	3.72	100		

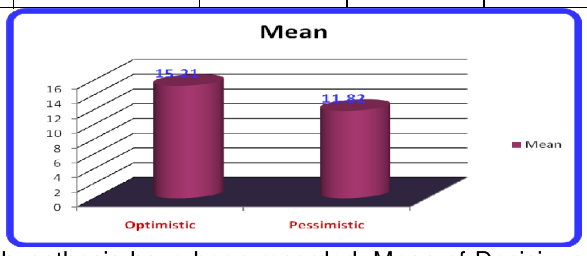


The results related to the hypothesis have been recorded. Mean of mental health score of the optimistic sportsmen Mean is 41.62 and that of the pessimistic sportsmen Mean is 36.59 The difference between the two mean is highly significant ('t'= 9.05, df =198, P < 0.01) It is clear that optimistic sportsmen and pessimistic sportsmen Differ Significantly From each other from the mean scores and graph it was found that the optimistic sportsmen have Significantly better mental health than the pessimistic sportsmen. This Result Support the Hypothesis.

Table No. 02

Decisiveness among optimistic and pessimistic sportsmen students Mean S.D. and "t" Value.

Sportsmen	Mean	S.D	N	df	't'
Optimistic	15.21	3.89	100	198	7.70**
Pessimistic	11.82	3.32	100		



The results related to the hypothesis have been recorded. Mean of Decisiveness score of the optimistic sportsmen Mean is 15.21 and that of the pessimistic sportsmen Mean is 11.82 The difference between the two mean is highly significant ('t'= 7.70, df =198, P < 0.01) It is clear that optimistic sportsmen and pessimistic sportsmen Differ Significantly From each other from the mean scores and graph it was found that the optimistic sportsmen have Significantly high Decisiveness than the pessimistic sportsmen. This Result Support the Hypothesis

Conclusion: Optimistic – Pessimistic Attitude have play significantly role in mental health of the sportsmen.Optimistic – Pessimistic Attitude have play significantly role in decisiveness of the sportsmen.

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Long Term Detraining Effect of Aerobic Power After Training on Middle Aged Males

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ABSTRACT: The purpose of the study was to examine the influence of training and de training on aerobic power in middle and old aged men. For the study, eleven people from 35 to 54 years were selected for a 15 week training program. All subjects walked for ten minutes at a constant speed and grade on the treadmill, three days per week. The training intensity was 80% VO_2 max. Maximal ventilation, VO_2 max, maximal cardiac output and physiological variables were determined by the exhaustive walking test at pre training, post training and six months after training. Exhaustive time, VO_2 max , maximal pulmonary ventilation, tidal volume, maximal cardiac output, maximal heart rate, and stroke volume increased with training. Following the six month de training period, the changes in the physiological responses to exhaustive exercise were almost opposite to those reported for training.

Key words: cardiac output, VO_2 max , respiratory frequency , stroke volume.

INTRODUCTION: Physical exercise has been advocated for preventive, diagnostic, and or rehabilitative purposes to minimize the many associated with coronary heart disease in the developed countries. Now a days, hypo kinetic diseases have become one of the main research objects in all over the world. In the field of exercise physiology , several researchers have studies on the effect of training on cardio respiratory functions in middle aged and older people by comparing different regions. It is proved that regular exercise and training can improve maximal aerobic power by 15-20% in the sedentary men and women , and this digit is almost same all over the globe.

It is well known that when training stops one returns rapidly to pre training levels. For instance, Cureton and Philips (1) reported that the cardio vascular fitness induced by 9 weeks of training was rapidly lost after an eight week layoff. Fardy (3) reported that five weeks detraining resulted in significant deterioration of fitness gained during the program of soccer training. These reports were concerned with young male subjects. As for female, Drink water and Horvath(2) concluded that three months without formal training sessions had reduced the cardio respiratory fitness of the young female track athletes to the levels found in non athletic girls of the same age. Fringer and stull (4)stated that a detraining period of ten weeks produced greater losses in VO_2 max than one of five weeks in young adult females. However, the physiological responses to cessation of training are less well known in middle aged and older men. The aim of the present study was to evaluate physiological effects of both physical training and detraining on maximal aerobic power and some related variables in middle aged and older men.

METHODS: Eleven sedentary males from King Fahd University, Dhahran, Saudi Arabia, aged between 35 to 54 years volunteered to participate in the present study. A modification of the Balk technique was used for measurement of VO_2 max. The exhaustive walking was performed on the treadmill at a constant speed of 110 m/min. The grade was increased by 1% every minute up to exhaustion. Heart rate was obtained from ECG recorded with bipolar chest leads.

Oxygen uptake was determined by the Douglas bag method. I.e., the expired gas was collected with a face mask and connecting tube(diameter 33 mm) in the bag every minute until exhaustion. The volume of collected gas was measured by dry gasometer and gas analysis was performed with the Scholander micro analyzer. For determination of VO_2 max criteria employed were (1) respiratory quotient (RQ) greater than 0.95 , (2) there is no further increase in oxygen uptake despite of further increase in grade, (3) heart rate is similar to the maximal value related to age. Cardiac output was estimated by a co_2 re- breathing method (Jernerus et al.,1963): The partial pressure of CO_2 in arterial blood was estimated from the mean of two determinations of partial pressure of CO_2 in the alveolar gas measured with the end-tidal method immediately after exhaustion. The partial pressure of CO_2 in the mixed venous blood was estimated by rebreathing a gas mixture of CO_2 (4 – 6 %) in O_2 (Klausen,1985). This process was completed within 17 seconds after exhaustion. The values of the content of CO_2 in the arterial blood and the mixed venous blood were read on a standard CO_2

dissociation curve from the partial pressure of CO_2 in the arterial blood and in the mixed venous blood, respectively. Respiratory frequency was determined with the aid of thermister attached to the inside of the mask.

Training began for all subjects one week after they completed the first test (T-1). The training task involved of walking for ten minutes on the treadmill at a constant speed of 110 m/min. and at a constant slope which was determined by T-1 to be equivalent to 80% of VO_2 max. Training was performed three days per week. At the end of the 15 weeks of training, all subjects were tested (T-2) on the same cardio-respiratory variables as used in T-1 . Thereafter all subjects reverted to normal sedentary life. Then six months after training the third test (T-3) was conducted on the same subjects.

RESULTS & DISCUSSION: The below tables 1 and 2 shows the results of the study.

Table – 1 – *comparison of physiological variables during untrained, trained and detraining conditions*

	Training groups	mean	SD
Age (years)		43.7	5.9
Height (cm)		170.4	5.7
Weight (kg)	T-1 T-II T-III	60.2 60.2 60	2 7.8 } ns } 7.7
Exhaustive time (min)	T-1 T-II T-III	8.8 10.8 9.3	2 1.3 } p<0.001
VO_2 max(l/min)	T-1 T-II T-III	2.2 2.4 2.2	.402 .335 } p<0.001 .351
VO_2 max (ml/kg/min)	T-1 T-II T-III	36.9 41.3 38.3	6.6 4.6 } p<0.001 5.6
Maximal pulmonary Ventilation (l/min)	T-1 T-II T-III	74.9 86 74	20 18 } p<0.01 13
Respiratory frequency (f/min)	T-1 T-II T-III	38 38 75	5.5 4.4 } p<0.01 3.2
Tidal volume(l)	T-1 T-II T-III	1.9 2.2 2.1	.41 .37 } p<0.01 .33
Maximal cardiac Output (l/min)	T-1 T-II T-III	19.4 21.3 19.5	3.6 3.1 } p<0.001 3.1
Arterio venous Oxygen difference (Ml/l)	T-1 T-II T-III	113 115 114	10.2 9.3 } p<0.05 10.1
Maximal heart rate (beats/min)	T-1 T-II T-III	178 183 177	11 10 } p<0.001 10.3
Stroke volume (ml)	T-1 T-II T-III	108 116 112	20.3 19 } p<0.05 19.5
Ventilator equivalent for oxygen	T-1 T-II T-III	33 32 34.4	6 ns 4.8 } p<0.05 4.1

Table 1 summarized average values and standard deviations for physical characteristics, VO_2 max and other related variables in T-1 , T-2 AND T-3 respectively. VO_2 max increased in all the eleven subjects after 15 weeks of training. VO_2 max decreased in nine subjects and did not change in two subjects after six months of detraining. Three subjects showed lower value of detraining than the initial value of pre training. Body weight showed no change on an average throughout training and detraining periods. There was a significant increase (+22.7%) in exhaustion time of walking on the treadmill after training, and also a significant decrease (-13.5) after detraining.

The mean values of VO_2 max significantly increased (+11.7%) from T-1 to T-II and significantly decreased (-7.2%) from T-II to T-III. The increase and decrease were respectively related to the increase and decrease in maximal ventilation (15% , -13.9%) and tidal volume (+14.8% , -6.8%). Respiratory frequency did not change with training, but decreased (-8%) with detraining.

Table –II - comparison of VO_2 max changes with training, middle aged and older men.

Reporters	Age	No.of trainees	Training weeks	Days per week	VO_2 max Pre post	Percent increase
Pollock et al (1982)	39	22	20	2	37	17
Saltin (1989)	41	42	9	2	37	14
Wilmore et al. (1990)	41	16	10	3	40	10
Hanson et al.(1988)	49	7	28	3	35	17
Oscai et al(1988)	36	13	23	3	35	21

As for circulatory functions, the increase and decrease in VO_2 max were related to the increase and decrease in maximal cardiac output (+9.9%, -6.9%) , stroke volume (7.1% , -3.9%) and maximal heart rate (+2.7% , -3.5%) , and arterio-venous oxygen difference being almost unchanged.

There was found a significant correlation (r= 0.952) between the % increase in VO_2 max and the % increase in maximal cardiac output from T-I to T-II and a significant correlation (r= 0.855) between the % decrease in VO_2 max and the % decrease in maximal cardiac output from T-II to T-III, respectively.

The initial VO_2 max and VO_2 max changes with training in the present study were very similar the previous values obtained for the Caucasians of the same age(Table 2).These results might indicate that the training program conducted in the present study was suitable enough to improve the overall oxygen transport system in the sedentary middle aged men. The duration of the present study was relatively shorter in the present study compared with others. Cureton and Philips (1) reported that the fitness including VO_2 max was not completely lost after an 8 week lay off. Fringer and Stull(4) indicated that improvements were retained to some degree after 10 weeks of detraining. On the other hand, Drinkwater and Horavath(2) found that three months without training sessions had reduced the cardio respiratory fitness of young track athletes to the levels found in non athletic girls.

CONCLUSION

In the present study, the mean gain in VO_2 max acquired during training had not disappeared completely even after six months of detraining. However, an inspection of the individual data revealed that two subjects showed no change in VO_2 max after six months of detraining and other subjects lost 92.0% of the gain in VO_2 max. Those results might indicate that the training and or enhanced aerobic power had induced some of the subjects to move more vigorously in their daily lives. In other words, the level of physical activity itself in sedentary life might have changed after training.

Acknowledgement The author thanks the subjects for their cooperation in making this study successful and the authorities of KFUPM.

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Effects of Yogic Practices on Physical Fitness

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Abstract:

Introduction: Globally yoga benefits one and all. Yoga is system of attaining perfect mental and physical health. Yoga was first introduced in second century A.D by the father of yoga Patanjali. Yoga is a method by which one can remove ignorance and attain union with the supreme self (B.K.S.Iyengar, 1983). The purpose of this study was to find out the effect of Yogic practices on physical fitness on males from pre to post test.

Method: For this study a group of 30 male students at Golden gym, health, and fitness centre, Hyderabad, India were randomly selected as subjects, age of the subjects was between 18 to 21 years. Pre and post tests were administered on the subjects for B.M.I, flexibility and muscular strength & endurance. Electronic weighing machine was administered in testing body weight (kgs) of the participants and stadiometre in measuring the height, sit & reach test was conducted to find out the flexibility, Bench press test of 1RM for muscular strength and sit-ups test for 30 sec consider for muscular endurance. The Yogic practices were employed for the 12 weeks, 6 days in a week, 50 minutes of training session. The statistical tools of mean, standard deviation and 't'-test were used for the analysis of the data by using statistica software.

Results & Discussion: The results revealed that the effect of yoga on the B.M.I of the subjects had shown improvement in the performance from pre to post test with the mean and S.D being (25.33, 5.50) and (24.06, 5.31) respectively, which is significant. With regard to the effect of yoga practices on flexibility from pre to post test the participants had shown a significant improvement, with the mean and S.D being (18.80,7.86) and (21.90,8.66) respectively. The muscular strength with the mean and S.D in the pre and post test were, (80.69, 18.27) and (80.77, 18.27) respectively, which is significant. Lastly the muscular endurance with the mean and SD in the pre and post test were (18.50,4.67) and (23.60,3.74) respectively, which is significant. **Conclusion:** It is concluded that the effect of yoga practices showed a significant performance with regard to body mass index, flexibility and muscular endurance of the subjects from pre to post test, which is significant. It is also concluded that the participants had not shown any improvement from pre to post test with regard to muscular strength, which is insignificant.

Keywords: Yoga, Strength, Fitness, Endurance, B.M.I

Introduction: Globally nowadays every individual is conscious about his health and wants to look handsome, like there role models heroes. Today youth spend a lot of time in the gymnasium to improve their muscles, to reduce fat and to maintain quality of life. In fact we know yoga practices helps for improving cardio- vascular system and in reducing fat. Yoga knowledge is essential and very much important for individuals before starting any program. With a sensible approach one can be benefited with out any side effects. If one goes astray the wrong foot steps of yoga practices may leads to side effect on the human body. One should always remember to train under the guidance of a professional coach which gives him very fast results in a safe way. Yoga was first introduced in second century A.D by the father of yoga Patanjali. Yoga is a method by which one can remove ignorance and attain union with the supreme self (B.K.S.Iyengar, 1983). BMI is closely related to both percentage body fat and total body fat (Haslam and James 2005). Accumulation of fat deposits in the body tissues results in obesity. Obesity is a condition that arises, when ones body weight exceeds the normal range of BMI i.e. 19.5 to 25. Flexibility is the ability of an individual to move the body and its parts through as wide a range of motion as possible without undue strain to the articulations and muscle attachments. A high level of flexibility helps in saving energy during vigorous movement because of the full range of moment of the joint and muscles, the

individual may be less prone to injury. Flexibility is the range of motion around a joint, high flexibility helps in lowering the injuries in all stages of life (Uppal, 2004). It is a very important component of sports performance that can be significantly improved if approached correctly. Muscular strength is an important component of physical fitness and plays an vital role in performance of athletes in the various sports and games. Muscular strength is the maximal ability to generate force. It is evaluated by how much force a muscle can generate during single maximal contraction, (Power and Howley, 1997).Muscular endurance is also plays an important role in the performance of individuals in various sports and games. Muscular endurance is an important fitness component and helps individuals in performing high performance.. Muscular endurance is the ability of the muscles to continue to perform with out fatigue (Hardayal Singh, 1991). The purpose of this study was to find out the effect of Yogic practices on physical fitness on males from pre to post test.

Method: For this study a group of 30 male students at Golden gym, health, and fitness centre, Hyderabad, India were randomly selected as subjects, age of the subjects was between 18 to 21 years. Pre and post tests were administered on the subjects for B.M.I, flexibility and muscular strength & endurance. Electronic weighing machine was administered in testing body weight (kgs) of the participants and stadiometre in measuring the height, sit & reach test was conducted to find out the flexibility of the participants, Bench press 1RM consider to measure muscular strength of the subjects, and sit-ups test for 30 sec consider to find out muscular endurance of the subjects. The Yogic practices were employed for the 12 weeks, 6 days in a week, 50 minutes of training session. The statistical tools of mean, standard deviation and 't'-test were used for the analysis of the data by using statistica software. **Results:** The below tables from 1 to 4 shows the analysis of data pertaining to the effect of yoga practices on physical fitness of male students.

Table -1

Sl. No.	Body Mass Index	No. of Subjects	Mean	SD	't' Value
1	Pre-test	30	25.33	5.50	12.9137
2	Post –test	30	24.06	5.31	

P-value=0.00, 't'-test for dependent samples marked difference are significant at p< 0.05

Table-1*:Body Mass Index Result:* The mean, S.D and t-test of the body mass index of the participants had shows improvement from pre to post test. Mean and S.D of the subjects were (25.33, 5.50) and (24.06, 5.31) respectively. The data clearly shows that the effect of yoga practices had a profound effect on B.M.I of the subjects, which is significant at (p<0.05).

Table -2

Sl. No.	Flexibility (Sit & reach test)	No. of Subjects	Mean	SD	't' Value
1	Pre-test	30	18.80	7.86	8.22246
2	Post-test	30	21.90	8.66	

P-value=0.00, 't'-test for dependent samples marked difference are significant at p< 0.05

Table-2*: Flexibility (sit & reach test) Result:* The mean, S.D and t-test of the flexibility from pre to post test had shows encouraging result. Mean and S.D of the participants were (18.80,7.86) and (21.90,8.66) respectively. The data clearly shows that the effect of yoga practices with regard to flexibility of the subjects had shows greater improvement from pre to post test, which is significant at (p<0.05).

Table -3

Sl. No.	Muscular strength (Bench press 1RM)	No. of Subjects	Mean	SD	't' Value
1	Pre –test	30	80.69	18.27	0.02608
2	Post-test	30	80.77	18.27	

P-value=0.00, 't'-test for dependent samples marked difference are significant at p< 0.05

Table-3*:Muscular strength (bench press 1RM) Results:*The mean, S.D and t-test of the muscular strength (bench press 1RM) of the subjects had shows insignificant improvement from pre to post test. Mean and S.D of the participants were (80.69, 18.27) and (80.77,18.27) respectively. The data clearly shows that the effect of yoga practices had shows insignificant improvement from pre to post test, which is insignificant at ($p<0.05$).

Table -4

Sl. No.	Muscular Endurance (Sit-ups 30 sec)	No. of Subjects	Mean	SD	't' Value
1	Pre –test	30	18.50	4.67	7.53367
2	Post- test	30	23.60	3.74	

P-value=0.00, 't'-test for dependent samples marked difference are significant at p< 0.0

Table-4*:Muscular Endurance (sit-ups 30 sec) Results:*The mean, S.D and t-test regard to muscular endurance of the male participants had shows improvement. Mean and S.D of the subjects were (18.50, 4.67) and (23.60, 3.74) respectively. The data clearly shows that the effect of yoga practices had shows improvement from pre to post test with regard to muscular endurance (sit-ups test for 30 seconds), which is significant at ($p<0.05$).

Discussion: From the results of the study, the above tables showed that there was a significant difference in body mass index of the participants. Regard to the flexibility (hip& trunk flexibility) of the male subjects, the data clearly speak greater performance from pre to post test .In case of flexibility which is an important for the sports men to perform well in various sports & games. Sports men need lot of strength, and muscular endurance, apart from flexibility, to compete in various sports and games. Athletes need lot of power, strength, speed, muscular endurance apart from flexibility to take part in the sports. When playing or training need lot of skills, flexibility, power, speed, muscular endurance to perform well. From the analysis, it revealed that there is a significant difference on body composition (body mass index) of the subjects. Regard to muscular strength (parallel bench press 1RM) the effect of yoga practices had shows no improvement from pre to post test, which is insignificant.

Conclusion: It is concluded that the effect of yoga practices showed a significant performance with regard to the body mass index of the subjects from pre to post test. With regard to flexibility it is concluded that the effect of yoga practice had shows greater improvement from pre to post test among the participants. It is concluded that the effect of yoga practice with regard to muscular strength from pre to post test had shows insignificant improvement. Lastly with regard to muscular endurance the subjects had shows improvement from pre to post test, which is significant.

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Innovation in Sports Technology---Invevitable or Unfair

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Introduction: Time and again the sports world is challenged by the eternal question of whether it is the sporting talent that should rule or it is technology that should hold sway. But which ever way you look at it talent and technology are the two sides of the same coin. No sports person can claim exceptional success if he does not use technology aided equipment/accessories. Whatever the skill level of a player, how ever long the training session, it is finally those scientifically designed equipment or accessories that hold the secret in a player being the better of the best.In all this technology does not stay far behind. With each innovation right from the material, weight, length, shape, thickness, the rigidity of the materials even the sweat factor plays on final product that comes out of a brand. Such is the research and focus that is happening in the Sports Science.Today, controversies abound about the use of technology in sports. It has been the subject of intense debate. With the rapid advances in sports science, Prosthetics and artificial materials, the question of what is legitimate and what gives the user "Unfair Advantage" is likely to occur with increasing frequency.
Two recent examples of controversial innovations in sports are-

1. Ossur`s Cheetha Flex – Foot.

2. Speedo LZR Racer Swimsuit.

Disability As Advantage:
Ossur`s Cheetha Flex Foot --- Lower limb Prosthetics has enabled double amputee Paralympics runners like Oscar Pistorious to compete with able-bodied runners.Prosthetics are artificial appliances used to replace or restore human body parts in order to regain the last functionality of the missing part.The prosthetic has been designed not to boost able-bodied persons` performance but to allow lower-limb amputees to enjoy activities that involve running. Some claim, however that it actually gives amputees an advantage over able-bodied competitors.Oscur Pistorious, a South African double amputee who has set numerous Paralympics world records in the 100, 200 and 400 meter runs and waits to run in the regular Olympics. His application was denied by the International Association of Athletics Federation (IAAF), the governing body for track and field events. The IAAF quoted an independent scientific study that showed Pistorious was able to run at the same speed as able-bodied sprinters of similar potential based on their physiology, but with about 25 % less energy expenditure. However the court of Arbitration for Sports, based in Switzerland over ruled the decision.

The Suit Does Not Swim Alone: It used to be simple. In the ancient Greek Olympics, the athletes competed in the nude, hence there was no conflicts over what shoes, shorts or swimsuit an athlete could wear. Probably in part because of the nudity, the ancient Olympics was a "Men Only" event, with women banned not only from competing in but also from watching them.Today's Olympics has both sexes participating, but with the proliferation of various types of swim suits, sneakers and other implements the International Olympic Committee and other Sports governing bodies must rule on which Sports Innovations should or should not be allowed.The LZR Racer {called as LASER} has created a controversy in part because of issues of fairness. Engineered with the assistance of NASA (National Aeronautics and Space Administration) the suit helps to minimized the wearer's "drag", which is caused by the friction of a swimmer's body against the water. The use of Performance Computational Fluid Dynamics (CFD) analysis and light weight nylon / elastance water-repellent fabric were helped to design LZR.Body suits are not new. They debated in the 2000 Sydney Olympics. The LZR swim suit has been allowed at the Olympics.
It has been used in virtually all World Record breaking swims since its release. Today, records regularly are being broken by new LZR Racer Swim suit wearers. Is this a mark of better swimming or better swim suit.

There would be no problem if all Olympic swimmers swam in LZR Racers. Unfortunately, that is not possible. For example, some in the German team, which has contractual with another company, have grumbled about not being able to wear LZR swimsuit. The cost of an LZR is also high which may be too expensive for some athletes. In an interview German Swimmer Britta Steffen, who will not be wearing the LZR swimsuit, said "with all this discussions, people shouldn`t forget, the suit doesn`t swim alone". Inside a person that has a good or bad day and Trained well or badly.

Conclusion

Both disputes have been over fairness. But the LZR swimsuit debate likely will be sorted out when all athletes have access to swimsuit of LZR`s capabilities. It is much harder to foresee a long term consequences of the dilemma highlighted by the Pistorious dispute. It is inspiring that a disabled athlete will be able to compete as an equal with able-bodied athletes, but the implements he uses never will become standard equipment of able-bodied athletes. It is possible that as advances in Prosthetics continues, people with artificial limbs will become stronger and faster than the able- bodied should they be excluded from regular events, this time as "SUPER-ABLED"?So, it all comes back to the proverbial egg-and- chicken question. Did the egg come first or the Chicken? Technology drives talent. Talent thrives on technology. Without technology mere talent will be mediocre. Mere talent becomes superlative with advanced technology. So where does that leave us? Rapturous? How?One thing is certain: regardless of the outcome of the controversies, innovation in Sports Technology will go on and Sports- governing bodies will have to set and change rules concerning these advances.

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Effect of Health and working Place and Environment on the Job Satisfaction Among Physical Education Teachers

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ABSTRACT: The present paper is an analysis on the job satisfaction of the members of Physical Education Faculty in selected schools in Guntur dist., A.P. The main aim of this analysis is to evaluate the faculty members' job satisfaction with their work, with the administrators, with games program and opportunities. In this study, 50 School Physical Education Teachers, Physical Directors and Directress were selected as subjects at random. They were selected from all the recognized schools. The technique here used is the attitude scaling technique and data was collected personally from all the respondents opinion received, thus the 3 point job satisfaction scale used for the study. After the collection of data 'F' ratio was employed to establish degree of significant difference between factorial constrains in each dimension of the inventory such as the factors Health and Working Place and Environment, the statistical analysis of the values of the 'F' ratio test and the values of scheffe's post- hoc test helped to conclude that health, working place and environment are the major factors for the cause of job satisfaction in the school level Physical Education Teachers.

Key Words: Job Satisfaction, Physical Education Faculty, Factors

INTRODUCTION: The Physical Education is a judicious blending of the education of body and mind. In order to create interest among the students for participation in sports and games, the teachers must play their part. This paper is a study of the Job Satisfaction of Physical Education Teachers caused by various aspects and situations. The main factors causing Job Satisfaction are Personal factors, Number of dependents, Time of the job, Age, Intelligence and Education. It was hypothesized that male and female Physical Education Teachers may have the Job satisfaction with the factors such as Health, Working place and Environment.

METHODOLOGY: This is a study of Job Satisfaction among Physical Education Teachers working in various schools hence a survey method employing simple percentage analysis procedure was used to study the level of job satisfaction.

Selection of Subjects: In this study, 50 School Physical Education Teachers, Physical Directors and Directresses were subjected at random. They were selected from all the recognized schools in Guntur, Andhra Pradesh, India

Selection of Variables: The study was done using the attitude scaling technique and the data was collected personally from all the respondents. A 3 point job satisfaction scale used for the study.
Reliability of Data: The reliability of data was ensured by establishing instrument reliability, tester's competency and reliability of tests and subject's reliability.

Collection of data: The data was collected by administering the 3 point scale. The response on the 3 point scale namely "SA" Strongly Agree, "A" Agree, "DA" Disagree were brought into the following three categories of responses to get a clear cut view about the varied responses. The agreement and disagreement of the scale was computed and percentage of response estimated. Hence the interpretation of the data analysis was done

STATISTICAL TECHNIQUES ADOPTED IN THE STUDY:

Chi square Technique: The Chi square test represents a useful method of comparing experimentally obtained results with those to be expected theoretically on some hypothesis.

One Way Analysis of Variance: Analysis of variance is an extension of the study of the significant difference between the means. By analysis of variance an overall test of significance was made between any numbers of sample means. The calculated "F" ratio value indicates whether or not any significant difference existed between the factors.

ANALYSIS OF DATA:Health as a cause for job satisfaction:

Chi-Square value for the number of response options obtained percentage values of responses and number of responses in the scale options in job satisfaction cause inventory

St. No	Chi-Square Value Obtained	SA	A	DA	% of Agreement	% of Disagreement	P
1	88.36	1	1	48	2	48	5.99
2	53.32	4	5	41	9	41	5.99
3	30.76	33	16	1	49	1	5.99
4	14.68	27	18	5	45	5	5.99
5	100.00	--	--	50	--	50	5.99

'P' indicates Chi-Square value at 0.05 level of confidence

From the analysis of the statements, it was found that majority of the statements received positive responses. So, as per the Chi-square test analysis, all the five statements were found to be having significant difference at 0.05 level of confidence.

Working Place and environment as a cause for job Satisfaction:

Chi-Square value for the number of response options obtained percentage values of responses and number of responses in the scale options in job satisfaction cause inventory

St. No	Chi-Square Value Obtained	SA	A	DA	% of Agreement	% of Disagreement	P
1	19.48	25	23	2	48	2	5.99
2	19.48	23	25	2	48	2	5.99
3	13.00	25	20	5	45	5	5.99
4	05.08	17	23	10	40	10	5.99

'P' indicates Chi-Square value at 0.05 level of confidence.

From the analysis of the responses to each of the statements in working place and environment, it was found that majority of the statements received positive responses. So, as per the Chi-square test analysis, all the five statements were found to be having significant difference at 0.05 level of confidence.

Computation of Analysis of Variance:

Source of Variance	DF	SS	MS	OF	Tf at 0.05 level
With in variance	N-K = 60-12 = 48	55594	$\frac{55914}{11}$ = 1158.21	1.84	1.80
Between variance	K-1 = 12-1 = 11	23412	$\frac{23412}{11}$ = 2128.36	1.84	1.80

$$OF = \frac{(MS)B}{(MS)W} = \frac{2128.36}{1158.21} = 1.84$$

The table shows that the obtained "F" ratio was 1.84. The required "F" ratio at the 0.05 level of significance was 1.80. It was known that "F" ratio 1.84 was greater than the required "F" ratio of 1.80.

DISCUSSION:

Ordered means and differnce between mean of factorial constraints in one way analysis of variable

Health	Working place and Environment	Mean Value	C.Value (Schefe's Value)
118.00	197.00	79.00*	75.91

The above table shows the computation of analysis of variance for the purpose of finding out the significant difference between factorial constraints. "F" ratio was calculated for the total score obtained in each dimension of the inventory (the health and the working place and environment). Here the difference between the means of the above two factors was 79.00 which was greater than the Schefe's value 75.91. Hence it was concluded that there was a significant difference between the dimensions, health factors and working place environment factors.

CONCLUSION: With in the limitations imposed by the subjects and testing conditions, the following conclusions were considered appropriate. The job satisfaction factors, health and the working place and environment plays a major role in providing the job satisfaction for the Physical Education Teachers at school level considered at a 0.05 level of significance.

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Potential Use of Smartphone for Teaching, Reporting Communicating and Monitoring in Physical Education

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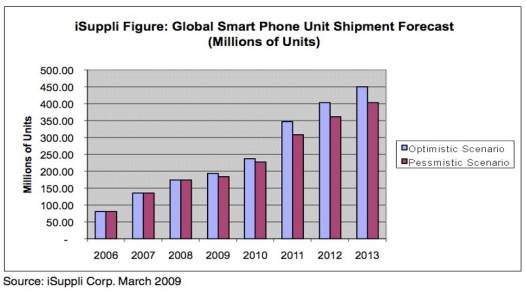
Abstract: The purpose of this study was to discuss the benefits of mobile learning in a variety of situations specific to Physical Education arena such as its typically outdoor setting. To find the most common measurable parameters of physical education, a survey was conducted on faculty of physical education department, KFUPM. It also discusses the ease and economy of effort required in the documentation, reporting, communicating and data dissemination with a Smartphone. This paper concludes by tabulating potential monitoring and reporting activities in Physical Education according to their certain Smartphone features.

Introduction. The beginning of the new millennium was also the dawn of Information Technology coupled with rampant advancement in communication modes. This revolution propelled everything including technology, business, and education. One of the leading technology systems that surfaced in this revolution was the mobile communication system. From the perspective of technology, the Internet and mobile systems were converging as they both aimed at providing high speed information transfer and good mobility to users [1]. This convergence greatly benefited teaching. This also had a great impact on Physical Education (PE) [2]. PE in academia requires more responsibilities than mere teaching, assessing students or taking the roll call. It involves designing game plans, documenting scores, assigning responsibilities and developing strategies. These activities require paper work, redundant documentation and archive data which might not be particularly useful. Physical Education (PE) is a demanding field which requires a different frameset of documentation. These include articulating teaching content , statistical analysis in the form of graphs and tabulated data, illustrating sketches for the game plans [3] Chun-Hong. Due to the characteristics of standard university physical education, the traditional way of learning cannot meet the students' need for the diversity of forms of learning, therefore, a new way of learning mobile learning (M-Learning) was born [3]. As the use of Smartphone is still in its early stage of development, therefore, to study and discuss the importance of using Smartphone as tool for teaching, reporting, communicating and monitoring will greatly enhance and influence the faculty.

Mobile learning (M-Learning) The Smartphone revolution is finally here in the form of M-learning for academia - which is a natural extension of e-learning. In a span of five years, Mobile learning or m-learning has made an exponential leap from theory explored by academicians to a real contribution to learning. Globally speaking, the kind of penetration that Smartphone systems have reached is astounding and no other device can come any closer, not even computers [4]. No demography is immune from the Smartphone and it has slowly become associated with university students in a bigger way [4]. One of the main assumptions we consider as a point of departure for the ideas that guide our work is the fact that in the coming five years, whether educators would like it or not, more and more students will bring these devices into the classroom [5]



Source: iSuppli Corp. March 2009

Figure 1.0: Global Smartphone Units Shipment Forecast. Source Suppl Cor, USA

Smartphone FeaturesA Smartphone is a mobile phone that includes advanced functionality beyond making phone calls and sending text messages. Most Smartphone have the capability to display photos, play videos, check and send e-mail, and surf the Web. Modern smart phones, such as the iPhone and Android based phones can run third-party applications, which provide many different functions.Since Smartphone have a wide range of functionality, they require advanced software, similar to a computer operating system. The Smartphone software handles phone calls, runs applications, and allows customization. Most Smartphone include a USB connection, which allows users to sync data with their computers and update their Smartphone software. According to Wikipedia, a Smartphone is a high-end mobile phone built on a mobile computing platform, with more advanced computing ability and connectivity than a contemporary feature phone. The most common mobile operating systems (OS) used by modern Smartphone include Google's Android, Apple's iOS, Microsoft's Windows Phone, Nokia's Symbian, and RIM's BlackBerry OS. Such operating systems can be installed on many different phone models, and typically each device can receive multiple OS software updates over its lifetime.Smart phones are often equipped with Internet connectivity, mobile browsers, the ability to sync more than one email account to the device, embedded memory, Sensors (Compass, orientation, Accelerometer, Magnetic Sensors, Light Sensor, Voice Sensor etc.) as shown in figure 2.0.

Figure 2.0: Commonly used Sensors by Vendors for all types of Smartphone. (Source Department of Computer Science and Engineering, The Ohio State University, USA).

Smartphone also extends features such as communication, News and Information, Socializing, Gaming, Schedule Management, Hardware and/or software-based QWERTY keyboard, Wireless synchronization with other devices, such as laptop or desktop computers, ability to download applications and run them independently, support for third-party applications, ability to run multiple applications simultaneously, touch screen, Wi-Fi, texting, digital cameras with video capability, gaming, unified messaging, personal information management, GPS (global positioning system), remote control of computers, remote control of home or business electronic systems.The above mentioned capabilities make Smartphone capable of meeting the needs of PE teaching, reporting, and monitoring systems

M-Learning Possibilities for Physical Education

M-Learning has graduated to a more mature and established paradigm and is no more just a buzzword or science fiction. There are many practical, affordable, and exciting applications available to enable and conduct a variety of PE learning, reporting, and monitoring using Smartphone. These are getting faster and better, with increasing memory and storage capacity making it possible for complex applications to reside on them. Internet connectivity on a Smartphone phones is not only restricted to WiFi alone but offers options like EDGE, 3G, 4G and even LTE. Further development platforms for the Smartphone are easy-to-use and do not involve most of the complications associated with desktop or system software. According to another report published by Morgan and Stanley (Apr, 2010) It is estimated that mobile internet users will overtake desktop internet users by 2013. Further the above mentioned research also highlighted that Mobile Internet is expected to be the next trend in computing.According to a report published by the world directory of mobile network, the penetration rate of mobile devices in Saudi Arabia is estimated at 162.6%. Further, to assess the impact of mobile devices, we had conducted an informal survey on the three different departments of King Fahd University of Petroleum & Minerals (KFUPM). The results indicated that more than 80% of the KFUPM students owned Smartphone and among these owners, more than 75% accessed internet and other popular social networking services using their mobile phone. The purpose of this study was to discuss the benefits of mobile learning in a variety of situations specific to Physical Education arena such as its typically outdoor setting.

Method: Some of commonly used academic activities of PE include teaching, communicating, monitoring, and reporting. To find the most common measurable parameters of PE, a survey was conducted on faculty of PE department, KFUPM. . The results from this survey are illustrated in Table 1 and 2. The tables show the most commonly measured parameters against the above mentioned Academic Activities of PE.

Results and Discussion

Table 1.0: Commonly used measuring parameters of PE against the Academic Activities.

No.	Parameter	Academic Activities
1	Students Schedule	Communication
2	Events and Bulletin Board	Communication
3	Latest News and Reminders	Communication
4	Course Repository	Teaching
5	FAQ	Teaching
6	Pre-recorded YouTube Lectures	Teaching
7	Supplementary learning content	Teaching
8	PE Lifelong learning Resource	Teaching
9	eBooks Resource	Teaching
10	PE Bookmarks and URL Links	Teaching
11	Venue Location Maps and Directions, Gymnasium or Arena Walkthrough	Teaching & Communicating
12	Equipment Safety Procedures	Teaching & Communicating
13	Exercise Routine Repository	Teaching
	Health and Fitness Tips	Teaching
	Faculty info and Personal Pages	Communicating
	PE Quizzes, Instant online Surveys, Class Online Poling	Teaching
	Physical Fitness skill Repository	Teaching
	Just in Time Learning Resource	Teaching
	PE Social Networking (Face book, Flicker etc. Pages)	Communicating
	Technical papers Resource	Teaching
	Smartphone Apps Resource	Communicating
	Podcast Resource	Teaching
	Personal Skill and Achievements Forum	Communicating
	Sports and PE Job Opportunities	Communicating
	Inter University Collaboration	Communicating
	PE Alumni Interaction	Communication

Table 2.0: Commonly used measuring parameters of PE against the Academic Activities (Monitoring & Reporting).

No.	Parameter	Academic Activities
1	Body Mass Index (BMI) Calculator (BMI is a measure of body fat based on height and weight that applies to adult men and women.)	Monitoring & Reporting
2	Basal Metabolic Rate Calculator (|Basal Metabolic Rate is the number of calories burned if stayed in bed all day)	Monitoring & Reporting
3	Injury and First Aid Instructions (Step by step description of First aid for basic injuries and trauma)	Monitoring
4	Body Size Calculator body proportions calculator	Monitoring & Reporting

5	Personalized Coaching Videos (Pre reordered training videos hosted on YouTube)	Monitoring
6	Flexibility Test Calculator (To monitor the development of the athlete's trunk and neck flexibility.)	Monitoring
7	Sit Ups Test Calculator (How many sit-ups can be done by any individual in 1 minute)	Monitoring
8	Step Test Calculator (is to determine the anaerobic threshold and also predict a 2,000m split. You should record your heart rate at the end of each split.)	Monitoring
9	Calorie Counter (To calculate **daily caloric intake**)	Monitoring & Reporting
10	Diet Tracker and Nutrition Details (Monitoring diet an its nutrients details)	Monitoring & Reporting
11	Muscle Building Calculator (To help athlete work out exactly what he needs to be eating each day in order to achieve your the muscle mass)	Monitoring
12	Anthropometric Details (Human body dimensions and abilities of the human body)	Monitoring
13	Anatomy Description (Postings of Information and Events schedule)	Monitoring

Physical Education and the Use of Mobile Devices Traditional University education is suitable for classroom-based teaching, whereas PE is mostly outdoor and activity-based. Smartphone can be effectively used in gymnasiums, sports fields and arenas as they facilitate the collection and dissemination of authentic real world situation-based sports data in varied multimedia forms. The instructor can use a Smartphone to share information with desktop computers, download class schedules, post daily lesson plans, access the student rosters and records. He can also generate reports of student performance; customize tests, rubrics, standards, and grading criteria when required.Students can also benefit from using a Smartphone. Several school districts and universities have incorporated portable computing into their programs [8]. Students can use a Smartphone for collecting and analyzing data, in addition to writing parts of their assignments directly on their PDAs. **Conclusion**It is concluded that this study seeks to make evident the huge potential of Smartphone in aiding the Physical Education activities. It can connect learners and teachers dynamically, reducing time and effort constraints. This can directly affect both teacher and student motivation and performance. Smartphone can increase the ability of the Physical Educator to record and monitor physical education parameters in real time.

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Comparative Study on Selected Physical Fitness Components and Competitive Performance of Male Sub Junior Level High Mediocre and Low Performance Group in Gymnastics

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ABSTRACT: The present investigation has been done to compare selected physical fitness components of high, mediocre, and low performance group of 30 male sub-Junior gymnasts who had participated in 19th Sub-Junior National. The grouping was done based on their competitive results in sub junior national championship. Test for conditional abilities Pull-ups on Horizontal Bar, Jack knife sit-ups, Standing Broad Jump, Vertical Jump 30mts. Sprint, Sit, and Reach and Bridge. One-way ANOVA was used to find out significant difference between the groups. The result was showed that Jack knife sit-ups, Standing Broad Jump, Speed 30mts.and Sit & reach ware shown significant at 0.01level Body Weight, .Vertical jump, Angle differentiation ability and Time differentiation ability were shown Not Significant.

INTRODUCTION: The competitive sport is one of the areas, which have helped to draw world attention towards the role and importance of sports. The main aim of competitive sport is to prepare the sports person for winning medals in national and international competition It is an established fact that training for the performance sports is all long term process and must begin childhood HARRE (1980), The sport of Gymnastics is known to be involved combinations of conditional and coordinative abilities are for the performance gives us a great satisfaction. Different components of motor abilities play a different significant role in various events. Such as speed plays significant role when performing on vaulting Table and Floor Exercise Coordinative abilities play an important role while performing Pommel horse, flexibility when performing stretching movements with wider amplitude, strength while performing strength parts and cardio respiratory fitness for performing complete exercises on all events, especially on Floor exercise on which a gymnast has to perform for a period of ranging from 70 to 90 sec. In order to win an international sports superb physical fitness and best training of the individual are important factor. Hirata (1979).

METHODOLOGY:

Present study has been conducted on 30 male sub-Junior gymnasts who had participated in 19th Sub-Junior National Championship held at Andheri Complex in Mumbai (Maharashtra). Gymnasts who have been taken as subjects 10 boys belonged to high performance, 10 boys to mediocre and 10 boys belonged to low performance groups. The grouping was done based on their results of the competition performance. The data were collected during the competition. The subjects who have been taken include the entire position holders and on the other hand the lower performance gymnast. The competitive performance results of the 30 boys' were obtained from the organizers of championship. Test for conditional and coordinative abilities were conducted during competition. Each test was properly demonstrated by the investigator. Each gymnast was given two attempts for learning the course of the test. Sufficient time for warming-up was provided before administrating each test. Proper recovery period was also provided in between the different tests.

TESTS ADMINISTERED

1. Body weight (Kg)
2. Measurement of Strength
   (i)Pull-ups on Horizontal Bar (maximum No.)
   (ii)jack knife sit-ups (Total No 30Sec.)
   (iii)Standing Broad Jump (Cm.)
   (iv) Vertical Jump (Cm.
3. Measurement of Speed
   (i)30mts. Sprint (sec.)
4. Measurement of Flexibility
   (i) Trunk Flexion (Sit and Reach. Cm.)

RESULTS AND DISCUSSION:

One-way analysis of Variance (ANOVA) in various variables amonHigh, Mediocre, and Low Performance Group

Table –I

** Significant at 0.01 Level. * Significant at 0.05 Level.

Means & SD and Post-Hoc (Scheffe) Test Values in various Variables between High Performance and Mediocre

S. No.	Variables	Source of Square	Sum of squares	Df.	MeanofSquares	'F' Ratio
1	Competitive Performance	Between group With in the group	468.98 69.269	2 27	234.49 2.57	**91.40****
2	Body Weight	Between group With in the group	281.27 1298.20	2 27	140.63 48.08	**2.93**
3	Pull-Ups	Between group With in the group	63.20 239.60	2 27	31.60 8.87	**3.561***
4	Jack Knifes Sit-Ups	Between group With in the group	531.27 384.60	2 27	265.63 14.24	**18.65****
5	Standing Broad Jump	Between group With in the group	3615.00 14652.50	2 27	3157.50 542.69	**5.818****
6	Vertical Jump	Between group With in the group	48.87 2183.00	2 27	24.43 80.85	**.302**
7	30Mts (S.S)	Between group With in the group	7.921 9.93	2 27	3.960 .368	**10.756****
8	Sit and Reach	Between group With in the group	404.52 195.35	2 27	202.26 7.24	**27.96****

Performance Group

Table – II

S. No.	Variables	High Performance Group (N=10) Mean ± SD	Mediocre Performance Group (N=10) Mean ± SD	Mean Diff	SE	*Sig.* *P.Value*
1	Competitive Performance	48.965± 1.89	43.86 ± 1.53	5.10	0.72	***.0****
2	Jack knife Sit-Ups (One Min.)	35 ± 3.27	26.50 ± 3.75	8.50	1.69	***.0****
3	Standing Broad Jump (Cm)	230 ± 12.91	200 ± 25.60	30.00	10.42	***.027****
4	30mts. Speed (S.S)	5.31 ± .477	6.26 ± .15	0.95	0.27	***.0****
5	Sit and Reach (cm)	23.95 ± 2.89	16.45 ± 2.81	7.5	1.20	***.0****
6	*Pull-Ups Max.No.*	*14.20 ± 2.86*	*11.60 ± 3.69*	*2.60*	*1.33*	***.17***

**Significant at 0.01 level *Significant at 0.05 level

Means & SD and Post-Hoc (Scheffe) Test Values in various Variables between High Performance and Low Performance Group

Table – III

S. No.	Variables	High Performance Group (N=10) Mean ± SD	Low Performance Group (N=10) Mean ± SD	Mean Diff	SE	*Sig P. Value*
1	Competitive Performance	48.965 ± 1.89	39.29 ± 1.32	9.68	0.72	*.0**
2	Jack knife Sit-Ups (One Min.)	35 ± 3.27	25.70 ± 25.7	9.30	1.69	*.0**
3	Standing Broad Jump (Cm)	230 ± 12.91	198.5 ± 28.38	31.5	10.42	*.02**
4	30mts. Speed (S.S)	5.31 ± .477	6.5 ± .527	1.19	.27	*.01**
5	Sit and Reach (cm)	23.95 ± 2.89	15.9 ± 2.33	9.3	1.69	*.0**
6	*Pull-ups Max No.*	*14.20 ± 2.86*	*10.80 ± 2.20*	*3.40*	*1.33*	*.05**

**Significant at 0.01 Level *Significant at 0.05 Level

Means & SD and Post-Hoc(Scheffe) Test Values in various Variables between Mediocre and Low Performance Group

Table - IV

S. No.	Variables	Mediocre Performance Group (N=10) Mean + SD	Low Performance Group (N=10) Mean + SD	Mean Diff	SE	*Sig. P.Value*
1	Competitive Performance	43.86 + 1.53	39.29 + 1.32	4.57	.72	*.00***
2	Jack knife Sit-Ups (One Min.)	26.50 + 3.75	25.70 + 25.7	0.80	1.69	*.00***
3	Standing Broad Jump (Cm)	200 + 25.60	198.5+28.38	1.50	10.42	*.99*
4	30mts.Speed (S.S)	6.26 + .15	6.5 + .527	0.24	0.71	*.68*
5	Sit and Reach (cm)	16.45 + 2.81	15.9 + 2.33	0.55	1.20	*.90*
6	*Pull-ups Max No.*	*11.60 + 3.69*	*10.80 + 2.20*	*.80*	*1.33*	*.84*

**Significant at 0.01 Level *Significant at 0.05 Level

RESULTS AND FINDINGS: Table no. I Showed that One-way significant 'F' ratios of 91.40 in Competitive Performance (p<01),of 18.648 in Jack knife sit-ups (p<01),of 5.81 in Standing Broad Jump (p<01), 10.76 in Speed 30mts. Sprint (p<01), of 27.95 in Sit and reach, 3.56 in pull-ups (p<05). Non-Significant 'F' ratios have been obtained 2.92 in Body Weight, .30 in Vertical jump. It is evident from the findings that the high performance groups possess significantly greater competitive performance than mediocre and low performance group (P=0.00, p<0.01 and P=0.00, p<0.01 respectively), and the mediocre group possess significantly more competitive performance than the low performance group (P=0.00, p<0.01). High performance group has been found to posses significantly more jack knifes sit-ups than the mediocre and low performance group (P=0.00, p<0.01 and P=0.00, p<0.01respectivily) High performance group has been found to posses significantly more distance in standing broad jump than the mediocre and low performance group(P=0.27, p<0.05 and P=0.20, p<0.01respectivily). High performance group has been found to posses significantly more speed than the mediocre and low performance group (P=0.00, p<0.01 and P=0.01, p<0.01 respectively). High performance group has been found to possess significantly more trunk flexibility than the mediocre group and low performance group (P=0.00, p<0.01 and P=0.00, p<0.01 respectively. High performance group has been found to possess significantly more pull-ups than the mediocre and low performance group (P=0.17, p<0.05 and P=0.05, p<0.05 respectively). The finding of the study show no significant differences in body weight among the three groups and also show no significant difference in Standing broad jump, Speed, Sit and reach, and pull-ups among mediocre and low performance group.

CONCLUSIONS:

From above finding I have been concluded that the higher performance group has shown better results . Physical fitness components like Jack knife Sit-Ups, Standing Broad Jump, 30mts.Speed, Pull-ups in comparison to mediocre and low performance group. The mediocre performance group has shown slightly better results in following Physical fitness components like Jack knife Sit-Ups, Standing Broad Jump, 30mts.Speed, Pull-ups in comparison to low performance group. The flexibility of high performance group has shown better results than its counter parts.From above points we can concluded that the selected physical fitness components high performance groups have shown better results.

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A Systematic Review on the Effects of Athletic Participation on Academic achievemet in Secondary School Students

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INTRODUCTION: Over the past four decades there has been a continuing debate about the effects of athletic participation on academic achievement. It has become a more relevant issue now that there are budget constraints in our nation's schools. A study of the effects of athletic participation is needed to inform educators of the importance of athletics before they decide to retain or eliminate athletic programs. This research project includes a review of the literature regarding the effects of athletic participation on academic achievement. Athletic participation also may help at-risk students and other students who have academic difficulties, both during high school and in higher education. Holloway (2002) found that educators believe that athletic participation reduces the probability of school dropout by approximately forty percent. Involvement in these activities was perceived by educators to support at-risk students by maintaining, enhancing, and strengthening the student-school connection (Holloway, 2002).

Statement of the Problem

Previous research has shown that athletic participation can enhance the academic achievement of student athletes at the high school level. It also, with current budget constraints threatening the existence of athletics, more research needs to be conducted so that educational decision makers can become informed about the role that athletics has in the educational experience for high school students. Furthermore, an examination of the effects of athletic participation for male and female student athletes is needed. In the late 1980's, Holland and Andre (1987) argued that many secondary schools eliminated some of the extracurricular programs based solely on financial grounds without considering the empirically based knowledge of the positive effects of these programs on adolescent development. It is obvious that decision makers need to be well informed about the impact of athletics on academics before they decide to retain or eliminate them.

Purpose of the Study

This literature review will examine the effects of athletic participation on academic achievement. It will attempt to determine whether athletic participation enhances the academic achievement of high school students. Further, the relevant literature will be examined to determine the effects of athletic participation on academic achievement participation at the high school level.The purpose of this literature review was to determine whether or not athletic participation positively affects on academic achievement in athletes. Numerous studies have found that athletic participation may not only have positive effects on academic achievement, but there also may be positive effects in other areas of an adolescent's life.

Limitations of the Literature Review

There are three possible limitations of the present study. First, several studies did not consider any extraneous variables that may have affected the results, such as social economic status or marital status of the student's parents. These variables could have an effect on both athletic participation and academic achievement. Similarly, research bias may have affected the results. Since many of the studies were supported by NFHS, that organization's view of the positive effects of athletic participation may have skewed the results. Finally, this investigation is a review of the literature, not an empirical study. Therefore, it is not supported by any empirical experimentation, nor does it contribute new information to the field of education.This study will discuss the research examining the relation between athletics and academics. The effects of participation for at-risk among athletic participants also will be discussed.

General Effects of Sports Participation Many educators appear to support the idea that extracurricular activities, especially athletics, can enhance academic performance.

Table 1: Terms for review

Terms for review	Description	Year introduced
Life-Change Event Academic Achievement	Those occurrences, including variables could have an effect on both athletic participation and academic achievement. Similarly, research bias may have affected the results., which require an adjustment or effect a change in an individual's pattern of living	1987 to 2002
SPORTS Motor activity PA(Physical Activity)	The Physical Activity of a human as a behavioural phenomenon NB: Included, although not a web made search term quite often used as a key word	

Table-II Phase I Initial Search

1.Life changing events 2.Motor Activities 3.Physical Activities	Potentially relevant papers identified from the web based search (14)	Papers excluded on the basis of title and considered for the study Abstracts(2) Excluded on the basis of 1) No Life Events (4) 2) Physical Activity not Measured (4) 3) Review papers (3) 4)Other language (1) Total (14)	Other studies included in review Cross Sectional(01) No data before event (02) Qualitative(02)	Longitudinal studies included in review Holland and Andre (1987) Snyder and Spreitzer (1990) Eppright, Sanfacon, Beck, and Bradley (1997) Silliker and Quirk (1997 Holloway (2002) NFHS (2002)

General Effects of Sports Participation reviewed the literature

Table-III Findings from longitudinal and cross-sectional studies

Study	Design Sample Study aim Life event covered Findings
Holland and Andre (1987)	In the late 1980's, Holland and Andre (1987) reviewed the literature on extracurricular participation and adolescent development. These researchers looked at five areas and found that extracurricular participation was correlated with higher levels of self-esteem, involvement in political and social activities during young adulthood, improved race relations, feelings of control over one's life, lower delinquency rates, academic abilities and grades, and educational aspirations and attainments. Holland and Andre concluded that secondary schools that eliminated some of their extracurricular programs due to tightened budgets did not taken into consideration the empirically based knowledge of the positive effects of these programs on adolescent development.
Holloway (2002)	Holloway (2002) reviewed literature that supports the notion that extracurricular activities, such as athletics, enhances the academic mission of schools. From his literature review, he concluded that athletic participation reduced the probability of school dropout by approximately forty percent. Involvement in these activities appeared to support at-risk students by maintaining, enhancing, and strengthening the student-school connection. Holloway (2002) argued that educational decision makers should re-examine the practice of not allowing students to participate in extracurricular activities to encourage "harder work in the classroom." He asserted that disallowing participation for this reason may have a negative effect on the overall academic achievement of the students (Holloway, 2002).
Eppright, Sanfacon, Beck, and Bradley (1997)	Eppright, Sanfacon, Beck, and Bradley (1997) reviewed the literature on the importance of athletics during childhood and adolescent development. These researchers found that the literature supports the notion that sports participation is a necessary area of study as a health issue and a preventative tool. They concluded that play and sports (athletics) enhances the physical, mental, and social development of students during childhood and adolescence. The researchers also stated that participating in athletics "encourages the development of leadership skills, self-esteem, muscle development and overall physical health" (Eppright et al., 1997, p. 71).
Silliker and Quirk (1997)	Silliker and Quirk (1997) studied the relations between academic performance and interscholastic athletic participation by examining the in-season versus out-of-season academic performances of soccer players. The participants (123 high school students) in the study included male and female soccer players from five rural, western New York schools. These soccer players did not engage in another scholastic sport during the academic quarter after the soccer season. A school counselor from each of the five schools collected the following information on each participant: participant identification number, sex, grade level, first quarter GPA, second quarter GPA, and absence totals for each of the first two quarters. They found that participation in athletics can occur without significant risk to academic performance, and results suggested that participation can enhance it (Silliker & Quirk, 1997). Although it was a common strategy to take athletic participation away from students who were not performing well in athletics, Silliker and Quirk (1997) posited that students with academic difficulties would receive more benefit from peer tutoring and study-skills training.
Snyder and Spreitzer (1990)	In a survey study of 11,995 male students, Snyder and Spreitzer (1990) found supportive evidence that athletic participation enhances later success in academics. The researchers used completed questionnaires to compare white, black, and Hispanic students in terms of their participation in varsity level athletics and their later attendance at an institution of higher learning. The results supported other studies that have found positive correlations between high school athletic participation and academic achievement. The findings demonstrated that a greater percentage of students who participated in high school athletics went to college. The study also showed that the positive effect of athletic participation on college attendance was more evident among students with lower levels of cognitive development (Snyder & Spreitzer, 1990).
NFHS (2002)	NFHS (2002) also cites a Minnesota State High School League survey of 4,800 high school students conducted in March of 1995. This organization found that 91% of those students said that students who participate in school activities tend to be school leaders and role models. Several students also noted that participation in school activities allowed them to experience opportunities for developing self-discipline, and those often were not available in the general classroom setting (NFHS, 2002).

Implications for Practice

Decision makers often find it easy to cut athletic programs because they believe sports are not overly important in the academic arena. Holland and Andre (1987) concluded that secondary schools that have eliminated some of the extracurricular programs have not taken into consideration the empirically based knowledge of the positive effects of these programs on adolescent development. Educators need to be informed of the positive effects that athletics can have on high school students. Athletic participation should be encouraged, not discouraged, because it provides experiences that are not obtainable through academics.

It has become a more relevant issue now that there are budget constraints in our nation's schools. A study of the effects of athletic participation on academic achievement is needed to inform educators of the importance of athletics before they decide to retain or eliminate athletic programs. This research project included a review of the literature regarding the effects of athletic participation on academic achievement. It also examined the gender differences related to athletic participation at the high school level. The results indicate that athletic participation can have positive effects on academic achievement, as well as self-esteem, social status, and future success in educational settings. Results also reveal differences in the effects of athletic participation for males and females, particularly with regard to social status attributions.

Conclusions and Discussion Summary of the Literature Review

The purpose of this literature review was to determine whether or not athletic participation positively affects academic achievement. Numerous studies have found that athletic participation may not only have positive effects on academic achievement, but there also may be positive effects in other areas of an adolescent's life. Future research should consider extraneous variables or try to control their effects. For example, the athletes and non-athletes can be matched according to demographic variables (e.g., socioeconomic status, gender, and ethnicity) to examine the effects of sports participation.

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Relationship between Will to Win and Sport Competition Anxiety of State Level Swimmers

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Abstract: Forty male finalist swimmers (best four swimmers from finals events) of state level swimming competition held at motilal Nehru school of sports were selected for the study. The data on "Will to Win was obtained by administering the "Will to Win" questionnaire. The data on the sports competition anxiety was obtained by administering SCAT. After applying the product moment correlation it was found that there is significant relationship between Will to Win and sports Competition anxiety. Since the correlation co-efficient of calculated value is 0.434, which is significantly higher than tabulated value .304. Finding shows that optimum level of arousal is helpful in the performance.

IntroductionWill power can move mountains. It can work miracles. As a Chinese poet put it beautifully:-

"Reach the ninth heaven to embrace the moon,
Or the five oceans deep to capture a turtle, either is possible,
Return to merriment and triumphant songs,
Under this heaven, nothing is difficult,
Only if there is will to ascend"

The desire to do one's personal best to excel, to attain the highest standard of performance, to be supreme in his chosen field is worthy human ambition which has lead and continue to increase standards and personal growth. Man wants not only to live but, also have something to live for. The trail is hard and steep. There are numerous obstacles to over come and barriers to push aside. As the physiological make up do not change, rapidly, the psychological knowledge to what is impossible can make the difference in ones performance. As man's belief's about limit change, the limit themselves change.

Competition anxiety refers to the emotional state of mind where a fear of danger or loss of suffering is a prominent feature. It generally arises as result of fear of something unknown which creates tension and disturbances. Competition anxiety plays a paramount role in sports. It is the challenging in sports participation which produces anxiety. How an athlete handles this anxiety determines how successful he would be. Anxiety may be positive motivating force or it may be interfere with the successful performance in sports events. The degree of anxiety also varies with a number of different conditions. Anxiety is likely to be greater in high competitive sports than in relatively non competitive sports, because in the competitive sports, participants are expected to win and great demands are made upon them to succeed.

Motivation is process by which an individual to inspired guided as coaxed to do something. It is one of the important conditions other than the central core of life. In other, words. It is tat psycho physical condition of the organisms which cause an individual to work as strive to fulfill his needs. In the absence of proper motivation not only learning process but also life itself becomes an interesting uphill task. Motivation is then is considered as the process by which individual may be prepared to respond to situations which are directed toward the achievement of certain predetermined goals or objectives. In this field of physical education and sports no athlete can win or even show better performance without motivation.

In this modern era, sports acquired a very complex and highly competitive in nature. A sports person gets recognition, fame, money, social status if he wins. These demands make the person more anxious to win, so it become important to know that how this "will to win" of person relates with anxiety.

Peter and Brown (1978) also reported in their earlier study that will to win is significantly related to performance and analysis indicated that high, moderate and low will to win groups, differed significantly from each other, the higher the will to win better the performance. Similarly poorest performance was show by low will to win subjects regardless of skill level. Moderate and highly skilled curlers who were also high in will to win performed better than any other groups.

Materials and Method

Forty Male finalists' swimmers of state Level swimming competition was selected as the subjects of the study. Their age ranged between15-17 (junior group-I) years.The sports Competition anxiety test (SCAT) developed by R.Marten was used in the study to obtain the data on sports competition anxiety. Also the data on "will to win" obtained by administering the Will to win questionnaire constructed by Dr. Anand Kumar and P.D.Shukla. The statistical technique used was "person's product moment method" of correlation to find out the relationship among the "will to win" and sports Competition anxiety of state level swimmers. The significance of "r" correlation co-efficient was seen with 38 degree of freedom and at level at 0.05 level of confidence.

Results

The data obtain by administering the questionnaire on "Will to Win" and Sports Competition anxiety was further put for the analysis. The relationship between will to win and sports competition anxiety is presented in table I:-

Table-I

Relationship between "Will to Win" and "Sports Competition Anxiety of State Level Swimmers N=40

Variables Correlated	Co-relation co-efficient
"Will to Win" and "Sports Competition Anxiety	0.434*

*Significant at 0.05 level of confidence with 38 degree of freedom

r.05 (38) =.304

The table clearly revels that there is significant relationship between will to win and sports competition anxiety of state level swimmers, since the correlation co-efficient of calculated value is 0.434, which is significantly higher than tabulated value (.304) required to be significant at 0.05 level.

Discussion

All our actions are manifestation of our inner experience, we don't just behave or perform; we think, we plan, we desire, we image and then we decide in our mind what action we will take.Psychic energy is the vigor, vitality and intensity with which the mind is function and is the bed rock of motivation which is pre-requisite for strong will to perform well. Psychic energy also either positive or negative, and thus is associated with various emotions. Such as excitement and happiness on the positive end, and anxiety and anger on negative end.Athletes typically experience multiple emotions when competing. They may have high positive psychic energy arising from the challenge of the task, the joy of playing sports, the determination to demonstrate competence, will to win and anticipation of extrinsic rewards. They may also experience high negative psychic energy in the form of anxiety and anger, for example the positive energy facilitates performance and the negative psychic energy inhibits performance.A similar study was undertaken by Cox on the relationship between state anxiety and performance is quadratic in nature and takes the form of the inverted U. He observed that as somatic state anxiety increases, performance also increase up to an optimum level and then decrease as somatic state anxiety continue to increase.An increase in the somatic indicators of state anxiety are associated with increased athletic performance up to an uncertain optimal level and then there after result in a decrease in performance. This is the classic inverted U relationship between anxiety/arousal and performance. With the help of given review, and from the findings of the study it is evident that the will to win of swimmers was found to be significantly related to sports competition anxiety. It may due to the fact that emotional state and strong determination influence performance at higher level of competition. Before start of the competition each sports person has a goal, the will to win, fear of performing well in the competition and uncertainty of the outcome of performance.The certainty of the result of competition is also responsible for the level of anxiety experienced and its positive and negative effects on the performance.

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The validity of between Wingate test and Running-based Anaerobic Sprint Test (RAST) in young elite basketball players

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Abstract: The purpose of this study was to evaluate the validity of between the Wingate and the RAST tests in young basketball players. The subjects were 45 young and health basketball players that participated in this study. The characteristics of the subjects were consist of: training experience of the subjects equal with 5.3 ± 0.3 years, age of they were 16.46 ± 0.37 years old, body weight equal with 72.02 ± 2.5 and BMI equal with 21.62 ± 0.54. Results of the study were shown that between of the Wingate and the RAST tests in amount of peak (max) power was significant relationship($r = 0.901$; $p = 0.00$). Also, results of the study indicated significant relationship in amounts of average power between, average power per kg .W^{-1} ,pH and PCO_2 in both tests ($p = 0<05$). In regarding of achieved results can express that between of the Wingate and the RAST tests only in average power and peak power in young elite basketball players were a significant relationship. So, it conflict to this claim that "the RAST test can be predict drop power and fatigue indexes in elite basketball players" similar to Wingate test. Nevertheless, it recommended to basketball coaches to apply the RAST test only in direction of evaluation for average and peak powers in basketball players.

Key words: Wingate test, RAST test, peak power, fatigue index and basketball

Introduction: The Wingate Bike Test became popular in the late 1970s (Bar-Or, 1978). It fulfilled the need for a precisely measured anaerobic power test. It may be used to test either arm or leg power, but is most commonly used to test the legs. This test can be determined performer's anaerobic power and *anaerobic capacity.* The distinction between these two-power vs. capacity-rests on the time factor; power refers to the *maximal* (or peak) *power* achieved in a 5-second period during the test, whereas capacity refers to the power during the entire 30 seconds of the test. The anaerobic glycolytic Source is evidenced by the moderately high blood lactate values (ranging from 6-15 times the resting value) measured in the Wingate test subjects by various investigators (Jacobs et al., 1982; Pate et al., 1983; Perez et al., 1986; Song et al., 1988; Tamayo et al., 1982; Thompson et al., 1986).
The Running-based Anaerobic Sprint Test (RAST) has been developed at the University of Wolverhampton by Draper and Whyte (1997) as a sports-specific anaerobic test. It is similar to the Wingate Anaerobic 30 cycle Test (WANT) in that it provides coaches with measurements on peak power, average power and minimum power along with a fatigue index. The tests differ with regard to specificity and cost of administration. The Wingate test is more specific for cyclists, whereas the RAST provides a test that can be used with athletes where running forms the basis for movement. The WANT necessitates the use of a cycle ergometer and computer which are not available for all coaches. The RAST requires only a stopwatch and a calculator for some simple computations. The development of the RAST provides a running-based test of anaerobic performance. But, still not the research; evaluate validate of between the Wingate test and the Running-based Anaerobic Sprint Test (RAST) in physiological variables such as: PH, HCO_3^-, PCO_2, PO_2 and BE. Therefore purpose of this study was to survey relationship of between the Wingate test and the Running-based Anaerobic Sprint Test (RAST) especially in young elite basketball players.

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Methods

Subjects characteristics

The subjects were 45 young elite basketball players, with at least 5.3 ± 0.3 years of national competition. All subjects were randomly chosen from between of basketball players that preparation to take a part at national competition. The Subjects characteristics were consisting of: number of subjects = 45; training experience of the subjects = 5.3 ± 0.3 years; age of they were 16.46 ± 0.37 years old; VO2max = 51.53 ± 4.46 $ml.kg^{-1}.min^{-1}$; body height (BH) = 1.82 ± 0.01 m; body mass (BM) equal with 72.02 ± 2.5 Kg; fat free mass (FFM) = 65.22 ± 5.02 Kg; fat content (FAT %) = 7.01 ± 1.33 %, and BMI equal with 21.62 ±0.54.The research project was approved by the Ethics Committee for Scientific Research at the Academy of Physical Education and sport sciences in Mashhad, Iran.

Experimental design

The experiment had two phases. Before the start of the experiment, initial values of body mass and body composition (BM, FFM, FAT% and total body water (TBW)) were evaluated with the use of electrical impedance (In body model of 720, made in South Korea). To increase the reliability and validity of body composition measurement by electrical impedance all tested subjects were evaluated under the same conditions during all 2 phases of the experiment. Resting blood samples were drawn from the med-cubital vein to determine several biochemical variables. In fact, the subjects immediately after execute of both test (the Wingate and the RAST tests) lying on the bedstead. Plasma lactate (LA) concentration was determined enzymatically using commercial kits (Boehringer Diagnostika, Mannheim, Germany). Blood PH, standard bicarbonate (SB) and base excess (BE) were measured using a 168pH Blood-Gas Analyzer (Ciba-Corning, Basel, Switzerland). The obtained data were analyzed statistically with the use of SPSS (V18). The results were presented as means ($\bar{X}$) and standard error of mean (S.E.M). To determine relationship between of the WANT test and the RAST test, Pearson's correlation coefficients was used. Statistical significance was accepted at $p < 0/05$.

Results

The correlation coefficients between analyzed variables and amounts of significant in the tested athletes for the WANT and the RAST tests are presented in Table 1. The results indicate a significant correlation in some of the physiological and anaerobic functional variables between the WANT and the RAST tests. Positively significant correlations in among of physiological variables such as between HCO_3^- WANT & HCO3 $^-$ RAST at level of $p < 0.05$ ($r = 0.303$; $p < 0.043$), and between pH WANT & pH RAST ($r = 0.562$; $p < 0.00$), and between PCO_2 WANT & PCO_2 RAST ($r = 0.644$; $p < 0.00$), at level of $p < 0.001$ observed. Whereas, in other physiological variables such as: Lactate WANT & Lactate RAST ($r = 0.256$; $p < 0.09$), PO_2 WANT & PO_2 RAST ($r = 0.019$; $p < 0.899$) and BE WANT & BE RAST ($r = 0.029$; $p < 0.85$), not indicated a significant correlation in among of both tests.

Table1. Correlation coefficients considered for physiological and anaerobic functional variables in between of the Wingate test (WANT) and the Running-based Anaerobic Sprint Test (RAST).

Paired variables	R	*p*
Lactate WANT & Lactate RAST	0.256	0.09
pH WANT & pH RAST	0.562	0.00**
HCO_3^- WANT & HCO_3^- RAST	0.303	0.043*
PCO_2 WANT & PCO_2 RAST	0.644	0.00**
PO_2 WANT & PO_2 RAST	0.019	0.899
BE WANT & BE RAST	0.029	0.85
Max power (W) WANT & Max power (W) RAST	0.901	0.00**
Max power (W. Kg^{-1}) WANT & Max power (W. Kg^{-1}) RAST	0.319	0.032*
Ave power (W) WANT & Ave power (W) RAST	0.975	0.00**
Ave power (W. Kg^{-1}) WANT & Ave power (W. Kg^{-1}) RAST	0.543	0.00**
Min power (W) WANT & Min power (W) RAST	0.207	0.172
Min power (W. Kg^{-1}) WANT & Min power (W. Kg^{-1}) RAST	- 0.124	0.416
Fatigue index (W. s^{-1}) WANT & Fatigue index (W. s^{-1}) RAST	0.285	0.087
Fatigue index (W.s. Kg^{-1}) WANT & Fatigue index (W.s. Kg^{-1}) RAST	0.201	0.186

* Statistically significant correlation coefficients in between the WANT and the RAST tests at level of $p < 0.05$. ** Statistically significant correlation coefficients in between the WANT and the RAST tests at level of $p < 0.001$.

Discussion

Although no research findings and backgrounds are exist about relationship between the Wingate test (WANT) and the Running-based Anaerobic Sprint Test (RAST), this study that well controlled, supported the relationship between the WANT and the RAST tests. In case of physiological variables for the study, were relationships in some factors between the WANT and the RAST tests. The obtained results showed insignificant changes in lactate concentration, yet WANT test values were higher than the RAST test ($p > 0.05$), whereas, values of both tests were similar to each other (64.26 ± 2.32 Vs. 62.83 ± 3.22 mg.dl). Nevertheless, the correlation coefficients between the WANT and the RAST in values of lactate no significant statistically ($r = 0.256$; $p = 0.09$). This finding shown that the RAST test like to the WANT test, used form of anaerobic glycolysis system (Jacobs et al., 1982; Pate et al., 1983; Perez et al., 1986; Song et al., 1988; Tamayo et al., 1982; Thompson et al., 1986; Fatouros IG et al 2011) but amount of lactate in the RAST test lower than the WANT test, so that the RAST test not achieved the athletes to bound of the fatigue (like to the WANT test). Also, base on finding of the study, indicate the significant difference in values of pH, that amount of it in the RAST test were higher than the WANT test ($p < 0.05$), in fact, values of the WANT and the RAST tests were similar to each other (7.14 ± 0.00 Vs. 7.17 ± 0.00). In this case, statistically the significant correlation coefficients were indicated between the WANT and the RAST in values of pH ($r = 0.562$; $p = 0.00$). This result had shown that amount of H^+ ions in venous blood during the RAST test lower in comparison to the WANT test. So, like to case of lactate concentration, the RAST test notable to exhaust the athletes because, in sport disciplines relying on speed endurance or strength endurance, anaerobic glycolysis provides the primary energy source for muscular contractions that total capacity of the glycolytic pathway is limited by the progressive increase of acidity within the muscles, caused by the accumulation of hydrogen ions that amount of pH and H^+ ions in the RAST test were increased and decreased, respectively (Verbitsky et al., 1997 ; Adam Zajac and et al (2009)) also, the increase in acidity ultimately inhibits energy transfer and the ability of the muscles to contract, forcing the athlete to decrease the intensity of exercise (Costill et al., 1984; Harrison and Thompson, 2005; McNaughton, 1992; Carvalho HM et al 2011) that the study indicated high values in amount of Max power and min power during the RAST test in comparison of the WANT test. In direction of it, results of the study showed insignificant difference in base excess (BE), that the RAST test values were very lower than the WANT test ($p > 0.05$) and values of both tests not were similar to each other (-6.71 ± 0.48 Vs. -7.31 ± 0.36). This finding again explanation that the RAST test not able to be a good test for indicates of fatigue index (like to the WANT test).

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The Effect of Mental Practice on Acquisition and Retention stages in "Three Steps Jump – Shot"

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Abstract: The aim of this research is the effect of practice on acquisition and retention stage in one of the skills of Handball that called three steps jump – shot. The research was partly experimental and the statistic society was 200 students of General Unit in Mashhad Technique University (Shahid Montazeri) that 64 of them were selected as samples. Measuring tools composed of "Three steps jump – shot" in handball test', "VMBR" and the visual- movement exercise technique. The results show that the best score in two stages of acquisition and retention was for physical - mental practice group and the least score was for control group.Keywords: Practice on acquisition - Retention stage - Three steps jump – shot

INTRODUCTION: Sport in today's world is going to the side of using different kinds of mental techniques that are very useful for increasing sport action. Making image is a secret skill in men that just use in top level by big champions in their exercises and competitions. According to increasing growth of competitions and its importance and inadequate information of coaches and athletes and etc about this subject and its effectiveness on learning a new movement skill, decreasing stress, increasing centralization and improvement of self confidence, so it is necessary to do research on this subject. Important theories in this research say that there is no significant relationship between learning "Three steps jump – shot" skill in handball and mental practice and also physical exercise in acquisition and retention stages. The findings on mental practice impression on primary stages of learning a new skill for beginners are different in the research of Sayed Ali Hosseini and Golestani and Bateson et al (2007).

Method: The research was partly experimental and the statistic society was 200 students of General Unit in Mashhad Technique University (Shahid Montazeri) that 64 of them were selected as samples. Measuring tools composed of "Three steps jump – shot" in handball test', "VMBR" and the visual-movement exercise technique. The subjects were divided in 4 groups of control, physical exercise, mental practice and synthetic. Then the tests were performed. The findings of this research were analyze by use of descriptive statistics to set data and to determine dispersion and central indexes, also by use of deductive statistics like; T test, Shapiro-walk, ANOVA and multiple comparative tests (post hoc) via SPSS (v 12).

Results: The average of height was 174 cm and average of weight was 65 kg. The best score in two stages of acquisition and retention was for physical – mental practice group and the least score was for control group

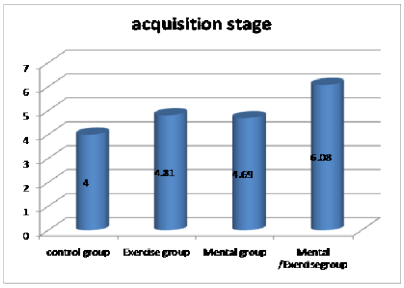

Diagram 1) The Mean in skill acquisition stage

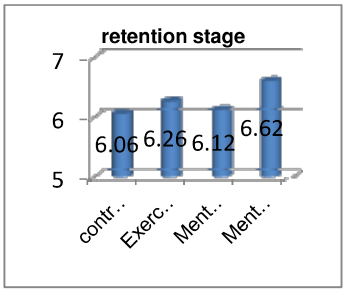

Diagram 2) The Mean in skill retention stage

3) During the retention stage there was a meaningful difference (in time) between mental practice group and control group (P<0.05) and there was meaningful difference (in time and score) between mental-physical exercise, control and physical exercise groups.(P<0.05)

A)Analysis of variance in skill retention stage

Table 1.showing the Analysis of variance in skill retention stage

Groups	Control		Physical Exercise		Mental Exercise	
	Time	P	Time	P	Time	P
Control	--	--	--	--	--	--
Physical Exercise	0/115	0/062	--	--	--	--
Mental Exercise	0/251	0/002*	0/662	0/167	--	--
Metal/Physical Exercise	0/038*	0/000*	0/605	0/32*	0/341	0/427

B)Analysis of variance in skill acquisition stage

Table 2 showing Analysis of variance in skill acquisition stage

Groups	Control		Physical Exercise		Mental Exercise	
	Time	P	Time	P	Time	P
Control	--	--	--	--	--	--
Physical Exercise	0/055	0/229	--	--	--	--
Mental Exercise	0/225	0/308	0/002*	0/852	--	--
Metal/Physical Exercise	0/236	0/003*	0/425	0/067	0/015*	0/044*

Conclusion Results show that in skill retention stage the best work is for mental exercise group after mental-physical exercise group and even better than physical exercise group. It was likely due to decreasing stress in susceptible ones. General deduction is that all the exercise methods in this research result in improvement of new movement skill but the best work is for mental- physical exercise method in both acquisition and retention stages. According to these results we can say that mental making image not only lead to improve a new skill acquisition but also is impressive in retention it.

Thus it is advised to instruct new skills in beginners levels use compound of mental and physical exercises for better learning.

Recommendation

We suggest that another researchers study about other skills in Handball such as throwing and receiving. Also in other sports and skills they can research.

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"A Study of Relation between Social Warmth and Residence of Interuniversity Football Players"

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Judging people based on warmth and competence: Think back to the last time that you metsomeone for the first time. What aspects of her or his personality are more important to you? Was the person friendly and trustworthy, with good intentions, or not? Did the person seem able to act on those intentions? The two aspects boil down to *warmth* and *competence*. Why might these two dimensions appear everywhere the same basis for making sense of other people? One possibility is that these are the two most essential and adaptive aspects to know, for survival's sake. If you agree with Charles Darwin's main notion that all animals (humans included) come from millions of years of evolution and natural selection, and if you also go along with evolutionary explanations of human behavior, you might credit the idea that we have to understand other people based primarily on *warmth* and *competence* because *warmth* reveals intentions for good or ill and *competence* reveals the ability to act on those intentions. Traits such as friendliness, helpfulness, sincerity, trustworthiness, and morality reflect *warmth*; and *competence* appears as intelligence, skill, creativity, and efficacy. So, if you meet someone for the first time, you spontaneously look for clues pointing to the person's good (or bad) intentions (i.e., *warmth*) and ability (or inability) to act on these intentions (i.e., *competence*). Years ago, Rosenberg and his colleagues (1968) examined scores of personality descriptions, and their statistical analyses suggested two primary dimensions of social perception: social good-bad (*warmth*) and intellectual good-bad (*competence*). More recent psychology supports this conclusion. Bogdan Wojciszke, studying how people understand others, has found that *warmth* and *competence* together determine more than 80 percent to four impression of others. One immediate question would be: Which dimension comes first when we judge another person? Maybe you guessed it: *warmth* is the correct answer (Peeters, 2002). Intuitively, we know that someone intending good or ill toward others is more important than the ability to act on that intention. Knowledge of warm or cold intent is more familiar to us, more sought by us, more helpful in predicting others' behavior, and more considered when evaluating others. Of course, people and situations make a difference. Women and people from so-called collectivist cultures (e.g., China or Japan) are even more sensitive to *warmth* than *competence* (Abele, 2003). What's more, some situations may lead us to attend especially to others' *warmth* than their skills—or vice versa. Given a specific context, people may understand some social behaviors either in terms of *warmth* or *competence* (e.g.,rushing out of a meeting could be interpreted either as helping a colleague or abandoning a meeting). Contexts also may be viewed from one's own or others' perspectives, and this too matters (Wojciszke, 1994). When actions are framed from one's own perspective, undergraduates interpret them in terms of *competence*, and when the same actions are framed from an other's perspective, these undergraduates make sense of the other based on the *warmth* dimension. Specifically, in this study participants were asked to assume playing the role of either an actor or observer and subsequently received descriptions of a series of actions. The actions could be interpreted both as competent and moral. For example, they read that an employee ingratiated herself with her boss but did it in such an obvious way that it angered the boss. Then participants were to judge this action from the employee (the actor) or the boss (the observer) and to write down why they judged the way they did. The results indicated that when participants were playing the role of an actor, they tended to focus on *warmth*, and when they were playing the role of an observer, the *competence* information was more salient to them.

Warmth and competence and their relationship with discrimination and stereotypes
Combinations of *warmth* and *competence* matter because they predict unique forms of *discrimination*. Not all bigotry is identical. Fiske and colleagues call this pattern of relationship BIAS, for Behaviors from Intergroup Affect and *stereotypes* (Cuddy et al., 2007). Because the *warmth* dimension is the primary factor in social perception, it predicts active behaviors towards the member of the *outgroup*: Active facilitation (helping) versus active harming (attacking). Because *competence* is the secondary factor in social perception, it predicts passive behaviors: passive facilitation (association) and passive harm (neglect). The typical societal *ingroup* usually receives both active and passive facilitation (i.e., helping and association), whereas the lowest *outgroup*s, such as homeless people receive both kinds of harm (i.e., active attacks and passive neglect). Some interesting observations result from the mixed combinations. For example, old and disabled people elicit active helping and passive neglect; institutionalization actively aids them but socially isolates them. By contrast, envied groups elicit passive association and active harm; for example, neighbors might shop at the stores of entrepreneurial outsiders, but, under societal breakdown, they might attack and loot these same shops. What best predicts these unique patterns of *discrimination*? Or put simply, what causes people to treat harshly members of another social group that seems to differ from theirs? Emotions drive *discrimination*. The *stereotypes* represent *warmth* and *competence*, but the *stereotypes* elicit emotional prejudices as well (e.g., envy, pity, or disgust). It is the emotions in and of themselves that direct behaviors such as *discrimination*.For example, stereotyping John McCain as an older man can lead to pitying and therefore not voting for him in the US 2008 presidential election, or resenting and therefore not voting for Barack Obama because of stereotyping based on the fact that he attended elite schools. The chain, then, is *stereotypes*-emotions-behaviors. However, the *stereotypes*, emotions, and behavior themselves all reflect groups' and individuals places' in society. That is, when one's ingroup goals clash with those of an *outgroup*, the ingroup perceives that *outgroup* as a foe—as unfriendly and untrustworthy (i.e., not warm)—but if there is no goal conflict between the ingroup and the *outgroup*, the *outgroup* is perceived as a friend—friendly and trustworthy (i.e., warm). The other dimension, stereotypic *competence*, comes from the group's perceived status. High-status groups are assumed to be competent, and low-status groups, not competent. People seem to endorse a meritocracy, where people get the status they deserve based on talent (Oldmeadow & Fiske, 2007). Jeff Dayton-Johnson (*December 2003)* Knitted warmth: the simple analytics of social cohesion. Self-interested agents are randomly matched to play a variant of the prisoners dilemma in which *social capital* increases the return to mutual cooperation. The stock of society-wide social-capital investments is *social cohesion*; the rate of return to social-capital investment increases with social cohesion. I derive sufficient conditions for equilibrium cooperation when agents know only the level of social cohesion. In *communities*, there exists better information and some social standard of behavior that supports equilibrium cooperation. I distinguish between characteristics of individuals and those of populations, and between mechanisms that favor cooperation in low-information "mass society" and in information-rich settings Joan M. Romano, Alan S. Bellack (*August 1980)* Social validation of a component model of assertive behavior. 20 women aged 23-47 yrs were videotaped role playing 10 scenes concerning negative assertion. Their responses were viewed in random order by 26 adults (13 males and 13 females), who rated each on the degree of social skill demonstrated. Judges also listed cues that they felt were influential in making their judgments. Trained raters scored the taped responses on a standard set of component behaviors and on categories derived from the judges' cue listings. Results show that paralinguistic and nonverbal behaviors were the best predictors of ratings of Ss' overall performance. Complex verbal categories emerged as the most significant predictors of skill across different situations. Results also show clear sex differences in degree and pattern of cue usage between male and female judges. .

Methodology
Aim of the study: To Examine the Relation between Social Warmth and residence of Interuniversity Football players.
Objectives of the study: To Examine the Relation between Social Warmth and residence of Interuniversity Football players.
Hypothesis: Rural Interuniversity Football players have significantly high Social Warmth than Urban Interuniversity Football players.Positive Relation between Social Warmth and Residence of Interuniversity Football players.
Sample : For the present study 200 players were selected from Maharashtra. The effective sample consisted of 200 subjects, out of which 100 subjects were male and 100 subjects were female. The age range of subjects where 18 to 25 years.

Tools

Multi Assessment Personality Series (MAPS): This scale was constructed and standardize by Psy Com. It consists 147 complete sentences and each item is provided three alternatives the subjects had to select one of the three alternative and complete sentences this test highly reliable and valid.

Procedures of data collection

Each of the three instruments could be administered individuals as well as a small group. While collecting the data for the study the later approaches was adopted. The subjects were called in a small group of 20 to 25 subjects and there seating arrangements was made in a classroom. Prior to administration of test or scale, through informal talk appropriate rapport form. Following the instructions and procedure suggested by the author of the scale and tests. the test were administered and field copies of each test was collected. Following the same procedure, the whole data were collected.

Variable

Independent variable- Residence a) Rural b) Urban

Dependent variable- 1. Social Warmth

Statistical Interpretation
Product Moment Correlation Table

Class interval	Rural	Urban	df	r
14-13	32	18	198	.43
12-11	40	33		
10-9	23	38		
8-7	05	11		
	100	100		

The results related to the hypothesis have been recorded. The difference between Two Group is highly significant r= .43, df =198.

Thus the hypothesis is confirmed Rural Interuniversity Football players have significantly high Social Warmth than Urban Interuniversity Football players. Positive Relation between Social Warmth and Residence of Interuniversity Football players.

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Effects of Aerobic, Anaerobic and Combined Training on Selected Serum Bilirubin Total, Aspartate Amino Transferase and Alanine Amino transferase Among Overweight School Children

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Meaning Of Obesity: The condition of being obese; increased body weight caused by excessive accumulation of fat. Obesity is a major health problem worldwide. Obesity rates continue to climb throughout the world, fatty liver disease has become a major epidemic yet one that often falls in the shadows compared to other more well known disease epidemics like heart disease and diabetes.

Types Of Obesity: The fat distribution in body is identified among three types of obesity Android, Gynoid and the third type. Android obesity is male type obesity where excess fat is accumulated in the upper half of the body like the shape of an apple. Gynoid type of obesity has fat accumulation in the lower part of the body, seen on both the genders but more commonly in women, and is similar to pear shape
Main Functions Of The Liver's: A brief summary of the liver's functions follows, but remember there are more than 500 functions:

1. processing digested food from the intestine
2. controlling levels of fats, amino acids and glucose in the blood
3. combating infections in the body
4. clearing the blood of particles and infections including bacteria
5. neutralizing and destroying drugs and toxins
6. manufacturing bile
7. storing iron, vitamins and other essential chemicals
8. breaking down food and turning it into energy
9. manufacturing, breaking down and regulating numerous hormones including sex hormones

Liver Function Tests: Common tests that are used to evaluate how well the liver is working (liver function) include: Albumin, Alpha-1 antitrypsin, ALP, ALT, AST, Gamma-glutamyl transpeptidase (GGT), Prothrombin time, Serum Bilirubin, Urine Bilirubin.
Statement Of The Problem: The purpose of the study was to investigate effects of aerobic anaerobic and combined training on selected liver profile status among overweight school children.
Materials And Methods - Selection Of Subjects: To execute this investigation, the investigator randomly selected forty five school children, belonging to the age group of 14- 17 years. They were divided in to three equal groups of fifteen subjects each and assigned as Experimental Group I, Experimental Group II and Control Group.
Selection Of Variables: The following variables were selected for this study:
Dependent Variables: Serum Bilirubin Total, Aspartate Amino Transferase and Alanine Amino Transferase

Independent Variables: 1. Experimental group I, 2. Experimental group II, 3. Experimental group III

Experimental Design: The study was formulated as a true random group design consisting of a Pre test and post test. For this purpose, forty five school children, were selected at random and assigned to three equal groups. The groups were assigned as Experimental group I, Experimental group II and

Experimental group III. Pre test were conducted for all three groups on selected Liver profile status. The experimental groups were participated in their respective Training for a period of eight weeks on alternate days. Post tests were conducted on the above Mentioned dependent variables after eight weeks of the training period.

Data Collection: Blood sample was collected from individual's ear lobe in the morning with empty stomach to check the value of the individual Serum Bilirubin Total, Aspartate Amino Transferase and Alanine Amino Transferase, in pre and post training session. The blood sample was analyzed in the biochemistry lab in Chennai.

Statistical Technique: Analysis of Covariance statistical technique was used, to test the significant difference among the treatment groups. If the adjusted post-test results were significant, the scheffe's post hoc test was used to determine the paired mean significant difference. Thirumalaisamy R. (2004)

.Result And Discussions:

The following tables illustrate the statistical results of effects of aerobic anaerobic and combined training on selected liver profile status among overweight school children and ordered adjusted means and the difference between the means of the groups under study.

TABLE I

COMPUTATION OF ANALYSIS OF COVARIANCE OF SERUM BILIRUBIN DIRECT (Scores in Unit / Liter)

MEANS	EXP- I	EXP- II	EXP-III	S.V	S.S	D.F	M.S	O.F	T.F
Pre test	16.67	16	16	B	4.44	2	2.22	0.06	3.23
				W	1453.33	42	34.60		
Post test	13.33	16	10.01	B	269.87	2	134.93	6.37*	
				W	889.37	42	21.18		
Adj.Pt test	16.02	10.03	13.29	B	269.51	2	134.76	6.29*	
				W	877.84	41	21.41		

Discussions And Findings Of Serum Bilirubin Direct:

This result indicated that the Effect of Aerobic Training, Anaerobic Training and Combined Training had significantly decreased the Serum Bilirubin Direct among overweight school children.The present study shows that all three different Training methods had decreased the total Serum Bilirubin Direct among the Experimental Groups due to the influence of six weeks of period because of liver glycogen utilized during the six weeks training period.During the training period liver profile values may be converted and utilized by the muscles and other systems in our body. So the six weeks of Training influenced and optimized the Serum Bilirub in Direct

TABLE II

COMPUTATION OF ANALYSIS OF COVARIANCE OF SERUM BILIRUBIN INDIRECT (Scores in Unit / Liter)

Means	**EXP- I**	**EXP-II**	**EXP-III**	**S.V**	**S.S**	**D.F**	**M.S**	**O.F**	**T.F**
Pre test	42	40.66	42	**B**	17.78	2	8.89	**0.04**	3.23
				W	8573.33	42	204.13		
Post test	32	33.33	24.67	**B**	653.33	2	326.67	**10.19***	
				W	1346.67	42	32.06		
Adj.Pt Test	31.91	33.51	24.58	**B**	679.35	2	339.68	**13.62***	
				W	1022.67	41	24.94		

Discussions And Findings Of Serum Bilirubin Indirect:

This result indicated that the Effect of Aerobic Training, Anaerobic Training and Combined Training had significantly decreased the Serum Bilirubin Indirect among overweight school children.This present

investigation shows that all three different Training methods had decreased the total Serum Bilirubin Indirect among the Experimental Groups due to the influence of six weeks of period.The further findings of the study indicated that Aerobic Training had significantly greater reduction in Serum Bilirubin Indirect than that of Anaerobic Training and Combined Training because of carbohydrate and fat energy sources utilized by exercising muscle. During the training period liver profile values may be converted and utilized by the muscles and other systems in our body. So the six weeks of Training influenced and optimized the Serum Bilirubin Indirect.

TABLE III
COMPUTATION OF ANALYSIS OF COVARIANCE TOTAL PROTEIN

Means	EXP - I	EXP- II	EXP-III	S.V	S.S	D.F	M.S	O.F	T.F
Pre test Mean	61	60.66	59.20	B	27.51	2	13.76	0.47	3.23
				W	1241.73	42	29.57		
Post test	58	59.26	60.27	B	36.40	2	18.20	0.53	
				W	1450.80	42	34.54		
Adj.Pt test	58.93	61.24	57.43	B	108.66	2	54.33	4.97*	
				W	448.64	41	10.94		

Discussions And Findings Of Total Protein:

This result indicated that the Effect of Combined Training and Anaerobic Training had significantly decreased the Total Protein level and Aerobic Training had significantly increased Total Protein level among overweight school children.Combined Training and Anaerobic Training methods had decreased the Total Protein among the Experimental Groups due to the influence of six weeks of period.The further findings of the study indicated that Combined Training had significantly greater reduction in Total Protein than that of Anerobic Training and Combined Training. The present investigation shows that Aerobic training had significantly increased the Total Protein and it is correlated with already published articles. Matthew A.Pikosky et.al (2006) conducted study on Aerobic Exercise Training increases Skeletal muscle protein turnover in Healthy Adults at Rest. From their investigation they concluded that aerobic training for four week increases skeletal muscle protein. So the present investigation shows that Aerobic training influenced with Total protein.

TABLE IV
COMPUTATION OF ANALYSIS OF COVARIANCE OF SERUM ALBUMIN

Means	EXP - I	EXP- II	EXP-III	S.V	S.S	D.F	M.S	O.F	T.F
Pre test	39.93	41.33	39.93	B	19.60	2	9.80	0.21	3.23
				W	897.20	42	21.36		
Post test	36.73	37.60	40.67	B	128.13	2	64.07	3.11	
				W	865.87	42	20.62		
Adj.P test	36.89	37.28	40.83	B	140.55	2	70.28	3.58*	
				W	759.17	41	18.52		

Discussions And Findings Of Serum Albumin:

This result indicated that the Effect of Combined Training and Anaerobic Training had significantly decreased the Serum Albumin level and Aerobic Training had significantly increased Serum Albumin level among overweight school children.

Combined Training and Anaerobic Training methods had decreased the Serum Albumin among the Experimental Groups due to the influence of six weeks of period.

Overall, the reported beneficial effects of training on Serum Albumin have important clinical implications and make changes in Serum Albumin concentration.

Conclusion

The following conclusions were drawn within the limitations of this study.

1. The obtained results showed that there was a significant improvement in liver profile status, among overweight school children due to the influence of six weeks of aerobic, anaerobic and combined training.
2. It was concluded that Aerobic Training had significantly decreased the liver profile variables such as Serum bilirubin total, Serum bilirubin direct, Serum bilirubin indirect, Alanine amino transferase, Asparatate amino transferase, Serum alkaline phosphate and significantly also increased the Total protein and Serum albumin due to the influence of six weeks of Aerobic Training among overweight school children.
3. It was concluded that Anaerobic Training had significantly decreased the liver profile variables such as Serum bilirubin total, Serum bilirubin indirect, Asparatate amino transferase, Serum alkaline phosphate and also significantly increased Total protein, Serum albumin and no significant change in Direct bilirubin due to influence of six weeks of Anaerobic Training among overweight school children.
4. Finally the researcher concluded that the combination of Aerobic training will increase the functional ability of the liver and maintain optimal range of function, secretion and action of liver enzymes.

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Effects Of Strength Training And Plyometric Training On Elastic Power

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ABSTRACT: The purpose of the study was to find out the effects of strength training and plyometric training on elastic power. To achieve this purpose of the study, forty five men students studying in the Department of Physical Education, Andhra University, Visakhapatnam, Andhra Pradesh and India were selected as subjects at random. Their age ranged between 18 to 24 years. The selected subjects were divided into three equal groups of fifteen each namely strength training group, plyometric group and control group. The experimental group I underwent strength training, group II underwent plyometric training for three days per week for twelve weeks whereas the control group (Group IV) maintained their daily routine activities and no special training was given to them. The following variable namely elastic power was selected as criterion variable. The subjects of the three groups were tested on elastic power using bunny hops at prior and immediately after the training period. The collected data were analyzed statistically through analysis of covariance (ANCOVA) to fund out the significant difference, if any among the groups. Whenever the obtained "F" ratio was found to be significant, the scheffe's test was applied as post hoc test to find out the paired mean difference, if any. The 0.5 level of confidence was fixed to test the level of significance which was considered as an appropriate. The results of the study showed that there was a significant difference exist among strength training group, plyometric training group and control group on elastic power. And also strength training group and plyometric training group showed significant improvement on elastic power when compared to control group.

Key Words: strength training, plyometric training, elastic power, analysis of covariance (ANCOVA).

INTRODUCTION

Physical fitness refers to the organic fitness of the individual to perform a daily task with vigorous their by implying the degree of fitness one has to maintain his life with reserved energy. Training is a systematic process of repetitive progressive exercise of work involving learning and acclimatization. Training is the net summation of adaptations induced by regular exercise. Students on the exercises with reference to fitness state that it enables the tolerate more effectively, subsequently stresses of similar nature. The process of stressing the sports-man and his adaptation to these stress is called sports training and it is the mean by which sports performance is improved. Strength training is the use of resistance to muscular contraction to build the strength, anaerobic endurance, and size of skeletal muscles. There are many different methods of strength training, the most common being the use of gravity or elastic/hydraulic forces to oppose muscle contraction. See the resistance training article for information about elastic /hydraulic training, but note that the terms "strength training" and "resistance training" are often used interchangeably.

METHODOLOGY

The purpose of the study was to find out the effects of strength training and plyometric training on elastic power. To achieve this purpose of the study, forty five men students studying in the Department of Physical Education, Andhra University, Visakhapatnam, Andhra Pradesh and India were selected as subjects at random. Their age ranged between 18 to 24 years. The selected subjects were divided into three equal groups of fifteen each namely strength training group, plyometric group and control group. The experimental group I underwent strength training, group II underwent plyometric training for three days per week for twelve weeks whereas the control group (Group IV) maintained their daily routine activities and no special training was given to them. The following variable namely elastic power was selected as criterion variable. The subjects of the three groups were tested on elastic power using bunny

hops at prior and immediately after the training period. The collected data were analyzed statistically through analysis of covariance (ANCOVA) to find out the significant difference, if any among the groups. Whenever the obtained "F" ratio was found to be significant, the scheffe's test was applied as post hoc test to find out the paired mean difference, if any. The .05 level of confidence was fixed to test the level of significance which was considered as an appropriate.

TRAINING PROGRAMME

During the training period, the Group I underwent strength training, and group II underwent plyometric training for three days per week (alternative days) for twelve weeks. Every day the workout lasted for 45 to 60 minutes approximately including warming up and warming down periods. Group III acted as control who did not participate in any strenuous physical exercises and specific training throughout the training period. However, they performed activities as per their curriculum.

ANALYSIS OF DATA

The analysis of covariance on elastic power of strength training group, plyometric training group and control group have been analyzed and presented below.

Elastic power: The analysis of covariance on elastic power of the pre and post test scores of strength training group, plyometric training group and control group have been analyzed and presented in Table I.

TABLE I
ANALYSIS OF COVARIANCE OF THE DATA ON ELASTIC POWER OF PRE AND POST TESTS SCORES OF STRENGTH TRAINING, PLYOMETRIC TRAINING AND CONTROL GROJUPS

Test	Strength Training group	Plyometric Training group	Control Group	Source of Variance	Sum of Squares	df	Mean Squares	Obtained 'F' Ratio
Pre Test								
Mean	10.71	10.68	10.70	Between	0.006	2	0.003	
S.D.	1.10	1.12	1.09	Within	0.66	42	0.0157	0.058
Post Test								
Mean	10.82	10.79	10.71	Between	0.989	2	0.445	
S.D.	1.08	0.99	1.08	Within	1.69	42	0.04	11.125*
Adjusted Post test								
Mean	10.80	10.81	10.70	Between	0.762	2	0.381	9.645*
				Within	1.62	41	0.0395	

*Significant at .05 level of confidence.
(The table values required for significance at .05 level of confidence for 2 and 42 and 2 and 41 are 3.222 and 3.226 respectively).

The adjusted post-test means of strength training group, plyometric training group and control group on elastic power are 10.80, 10.81 and 10.70 respectively. The obtained "F" ratio of 9.645 for adjusted post-test means is greater than the table value of 3.226 for df 2 and 41 required for significance at .05 level of confidence on elastic power. Since, three groups were compared whenever the obtained "F" ratio for the adjusted post test was found to be significant, the scheffe's test was applied as post hoc test to find out the parired mean differences, if any and it was presented in table –I.A

TABLE – A
THE SCHEFFE'S TEST FOR THE DIFFERENCES BETWEEN PAIRED MEANS ON ELASTIC POWER

Strength Training Group	Plyometric Training Group	Control Group	Mean Differences	Confidence Interval Value
10.80	10.81	-	0.01	0.03
10.80	-	10.70	0.10*	0.03
-	10.81	10.70	0.11*	0.03

*Significant at .05 level of confidence.

The table –I –A showed that the mean difference values between strength training group control group, plyometric training group and control group on elastic power were 0.10 and 0.06 respectively which were greater than the required confidence interval value 0.03. And also the mean difference value between strength training group and plyometric training group on elastic power 0.01 which was lesser than the required confidence interval value 0.03 for significance. The results of the study showed that there was a significant difference between strength training group control group, plyometric training group and control group on elastic power. And also it showed that there was no significant difference between strength training group and plyometric training group on elastic power.

RESULTS AND DISCUSSIONS Based on the results of the study, the following conclusions were made, the results of the study showed that there was a significant difference among strength training group, plyometric training and control group on elastic power. And also it was showed that there was a significant improvement on elastic power due to strength training group, plyometric training. Plyometric training group was better than strength training group. The results of the study are in correlated with the results of Bobber, Cheng and Fetcher which they resulted the significant improvement on selected criterion variables due to strength and plyometric training.

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A Study on Differences of Hand Timing and Electronic Timing in 100 M Run

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Abstract. The aim of the present study was to study the difference in Hand Timing and Electronic Timing in 100 M Run in All India Inter Univesity Athletics Meet in India. The study was conducted in the All India Inter University Athletics Meet held in India during the year 2010-11. It is concluded that there is a difference of 0.04 Sec between Electronic Timing and Hand Timing in 100 M Run for Men and 0.09 Sec difference between Electronic Timing and Hand Timing in 100 M Run.The Electronic Timing is higher compare to Hand Timing. Hence it is recommended for Athletes to practice more with Electronic Timing Equipment for the precise results in Track Events in Athletics.

Keywords: Hand Timing, Electronic Timing,, Athletics etc.

Introduction: Track and field is one of the oldest of sports. Athletic contests were often held in conjunction with religious festivals, as with the Olympic Games of ancient Greece. Track and Field as a modern sport started in England during the 19th centuryIn 1896 the first Modern Olympic Games were staged. Although initially of limited appeal the Olympics captured the imagination of athletes and grew steadily, making track and field an international sport for the first time. In 1913 the International Amateur Athletic Federation was formed by representatives from 16 countries.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 Olympics featured only one event – the stadium 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 Meters, 200 Meters and 400 Meters.

Two alternative methods of time keeping shall be recognized official in Athletics in sprints.

a)Hand Timing

b)Fully Automatic Timing obtained from Photo Finish System.

c**Methodology:**

Aim:

To find out the differences between Electronic Timing and Hand Timing in Athletics.

Sample:

The Sample for the present study is Eight Finalists in 100 M for Men in the All India Inter University Athletics Championships for the year 2010-11.

Tools:

Fully Automatic Photo Finish System and Stop Watch.

Procedure of data Collection:

The data is collected during the finals of 100 M Run for Men and Women and 800 M Run for Men andWomen in the All India Inter University Athletics Championships held at Guntur, A.P. India for the year 2010-11. The timing was taken by qualified Technical Officials by using the Fully Automatic Photo Finish system and Hand Timing with the Stop Watch.

Results and Discussion:

The Table No.1 is showing the performance of Men and Women athletes in 100 M. The Performance were analyzed through Electronic Timing and Hand Timing. There is a Mean difference of 0.04 Sec in Electronic Timing and Hand Timing in 100 M Run for Men and 0.09 Sec for Women. The Electronic Timing is higher than Hand Timing.

Table No.1

Group Statistics	T-Test				
	Group	N	Mean	Std. Deviation	Std. Error Mean
Electronic Time	100 Meters Run Men	8	11.10	0.18	0.06
	100 Meters Run Women	8	12.40	0.15	0.05
Hand Time	100 Meters Run Men	8	11.06	0.26	0.09
	100 Meters Run Women	8	12.31	0.19	0.07

Independent Samples Test		t-test for Equality of Means		
		t	df	Sig. (2-tailed)
Electronic Time	Equal variances assumed	-15.24	14	0.00
Hand Time	Equal variances assumed	-10.62	14	0.00

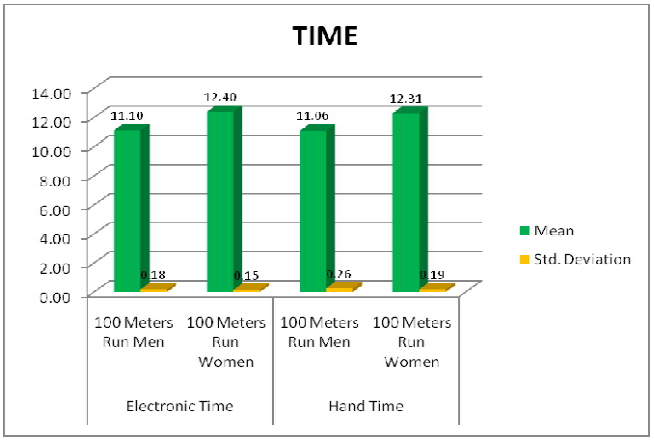

Figure - 1

The figure is showing the 100 Meters Timing through Electronic Timing and Hand Timing of Men and Women Athletes. The figure is showing the 11.10 Sec of Electronic Timing and 11.06 Sec of Hand Timing of Men Athletes and 12.40 Sec of Electronic Timing and 12.31 of Hand Timing of Women Athletes. The Performance in 100 M Run is higher of Electronic Time compare to Hand Timing

Conclusions:

It is concluded that electronic timing is higher than Hand Timing and athletes must do practice regular training along with the photo finish system for improvement of performance. It is concluded that the Electronic Timing with fully automatic photo finish will give precise and accurate results and Hand Timing operated by different time keepers will give different according to their reaction ability.

Recommendations: It is recommended that similar studies can be conducted on different events in athletics.

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A Comparative Study of Speed among Foot Ball Players and Hockey Players of Kakatiya University

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Introduction:

Speed is a key component of Physical fitness which is very important for Foot Ball and Basket Ball Players for giving the high level of performance in competition.Speed is the performance pre requisite to do motor actions under given conditions in minimum of time. Speed is the quickness of movement of a limb, whether this is the legs of a runner or the arm of the shot putter. Speed is an integral part of every sport and can be expressed as any one of, or combination of, the following: maximum speed, elastic strength and speed endurance.

Foot Ball Players are incredible athletes they are fast,agile,strength,speed and they also have excellent endurance and power of recovery. The game of football is any of several similar team sports of similar origins which involve advancing a ball into a goal area in an attempt to score. Many of these involve kicking a ball with the foot to score a goal, though not all codes of football using kicking as a primary means of advancing the ball or scoring. The most popular of these sports worldwide is association foot ball , more commonly known as just "football" or "soccer" Unqualified, the word *football* applies to whichever form of football is the most popular in the regional context in which the word appears, including American football, Australian rules football etc.

Hockey like games involving sticks and balls have been played for thousands of years. Historical records show that a crude from of hockey was played in Egypt 4000 Years ago and in Ethiopia around 1000 B.C. Various museums offer evidence that a form of the game was played by Romans, Greeks and by the Aztec Indians of South America.Several centuries before Columbus landed in the New world. Over the last 500 Years, Soft Hockey has been played in Ancient countries under different names, especially inIndia and has been one of the most popular sports in the villages where there is no proper infrastructure to cope with field Hockey. This sport is very popular in rural areasand also with Urban schools Children. Earlier, Villagers used to make the Hockey Sticks with Bamboo. Soft Balls were also made of bamboo and homemade rubber and the reason it was so popular was that the game required few player, either men or women or both, with minimum equipment and a small ground. The chances of injury were less in comparison to other games. The game used to be played by pushing the ball and not hitting it as this would lead to a longer period in recovering the ball, which would probable go into pondsor bushes. The plough able field used to act as the play ground and the border of the fields acted as boundary. Thus the game of soft hockey came into being with speed,stamina and skill being the associated qualities.

Purpose(s) :

The Purpose of the the present study to find out the speed among Male Foot Ball Players and Male Hockey Players of Kakatiya University in Warangal.

Method(s):

The sample for the present study is twenty Male Foot Ball Players and twenty Male Hockey Players of Kakatiya University. The Male Foot Ball Players and Male Hockey Players were made to run 50 Meters in each batch of two members in standing start from stationery position. The Hand Timing is were taken by the Technical Official of Athletics.

Result(s):

This study shows that the Foot Ball Players are having good speed compare to the Hockey Players. The average speed in 50 Meters is 6.677 in Foot Ball Players compare to Hockey Players those who are having the average speed of 6.893.

Table 1 :

50 Meters Run	N	Mean	SD	SE	t	table value	df	P-Value
Hockey Players	20	6.893	0.658	0.120	14.994	2.045	29	0.0000
Foot Ball Players	20	6.677	0.637	0.116				

Conclusions(s):

It is concluded that Foot Ball Players are having good speed than Hockey Players. The speed training must be given to Foot Ball Players and also to Hockey Players to improve their speed ability in the game.It is also expected Foot Ball Players are good Sprinters compare to the Hockey Players.

Recommendations;

1. Similar studies can be conducted among females and also in different sports and games to find the speed among sports persons.

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"Effect of Area of Residence on Enthusiasm among Athlete and Non-athlete"

Mr. Shinde M P

INTRODUCTION

Enthusiasm originally meant inspiration or possession by a divine afflatus or by the presence of a god Johnson's Dictionary the first comprehensive dictionary of the English language, defines *enthusiasm* as "a vain belief of private revelation a vain confidence of divine favour or communication." In current English vernacular the word simply means intense enjoyment interest or approval. In contemporary usage, enthusiasm has lost its meaning that someone is over excited and irritable. The Enthusiast also refers to the "Type Seven" personality type (not to be confused with the "Type Three"/"Type A" personality) (Daniels & Price 2000). Some who fall into this modern definition of "enthusiasts" are adventurous, constantly busy with many activities with all the energy and enthusiasm of the Puer Aeternus (Peter Pan Complex). At their best they grab life for its different joys and wonders and truly live in the moment but, at their worst, they dash trepidatiously from one new endeavor to another, too scared of disappointment to actually enjoy themselves. Enthusiasts fear being incapable to provide for themselves or to experience life fully.

Patricia S. Miller, Gretchen Kerr (2002). The Athletic, Academic and Social Experiences of Intercollegiate Student-Athletes. There is a great deal of literature on the experiences of college students, particularly college and university student-athletes. Researchers have investigated numerous questions related to the career planning, motivation, and later life satisfaction of intercollegiate student-athletes. An area that has generated considerable scholarly interest is the relationship between participation in university athletics and academic achievement. In fact, researchers have investigated this question for over 80 years (Curtis & McTeer, 1990).

A review of the existing research reflects a discernible progression in the scope and complexity of research questions about the relationship between athletics and academics. Early studies generally compared the grades and graduation rates of athletes with non-athlete peers (Figler, 1987; Henschen & Fry, 1984; Shapiro, 1984). Several researchers continue to monitor the grade point averages (GPAs) and graduation rates of student-athletes in comparison to non-athlete peers (Fizel & Smaby, 1999; NCAA 1997a, b, c; Pascarella & Smart, 1991), yet others have extended this line of research by considering important control variables such as high school GPA, ACT and SAT scores (Hood, Craig, & Ferguson, 1992) and by examining the influence of factors such as competitive level, race and gender.

Many of the early studies focused on the academic achievements of athletes in big time football and men's basketball programs, likely as a result of highly publicized cases of falsification of SAT scores, the recruitment of football and basketball players underprepared for the academic rigors of university, and the apparently successful graduation of athletes who were functionally illiterate and ill-equipped to enter the workforce (Shapiro, 1984). Researchers gradually turned their attention to the academic performance of more diverse groups of student-athletes including African-American (Eitzen & Purdy, 1986; Siegel, 1994; Walter, Smith, Hoey, Wilhelm & Miller, 1987; Young & Sowa, 1992), Hispanic (Melnick, Sabo & Vanfossen, 1992a, b) and female student-athletes (Blinde, 1989), as well as athletes competing at the Division II and III levels (Blann, 1985) and two-year colleges (Knapp & Raney, 1988).

Method:

Aim and Objective of the study:

- To find out the effect of area of residence on enthusiasm among athlete and non-athlete.

Hypothesis:

- Athlete have significantly high enthusiasm than the non-athlete.
- There will be significant difference of enthusiasm between urban players as compare to rural players.

Sample

For the present study 160 Sample were selected from various College in aurangabad, Maharashtra State. The effective sample consisted of 160 subjects, out of which 80 subjects were athlete and 80 subjects were non-athlete. The age ranges of the subjects were 18 to 25 years.

Tools

Multi Assessment Personality Series (MAPS):

This scale was constructed and standardize by Psy Com. It consists 147 complete sentences and each item is provided three alternatives the subjects had to select one of the three alternative and complete sentences this test highly reliable and valid.

Procedures of data collection

Each of the two instruments could be administered individuals as well as a small group. While collecting the data for the study the later approaches was Adopted. The subjects were called in a small group of 20 to 25 subjects and there seating arrangements was made in a classroom. Prior to administration of test, through informal talk appropriate rapport form. Following the instructions and procedure suggested by the author of the tests. The tests were administered and a field copy of each test was collected. Following the same procedure, the whole data were collected.

Variable

Independent variable- Area a) Urban b) Rural

Players a) Athlete b) Non-athlete

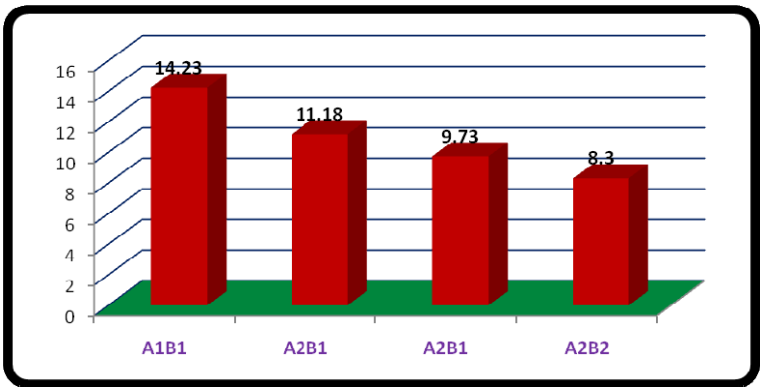
Dependent Variable 1. Enthusiasm

Athlete and non-athlete shows the mean S.D and't' value of Enthusiasm

Factor	Group	A1B1	A2B1	A2B1	A2B2
Enthusiasm	Mean	14.23	11.18	9.73	8.3
	S.D.	0.86	1.22	1.38	1.9

A = Area of Residence B = Players

A1 = Urban A2 = Rural B1 = Athlete B2 = Non-athlete



Summary of Two Way ANOVA

Source	Ss	df	MS	F	P
A Area	543.91	1	543.91	281.77	< 0.01
B Players	200.26	1	200.26	103.74	< 0.01
A x B	26.39	1	26.39	13.67	< 0.01
Within	301.13	156	1.93		
Total	1071.69	159			

From the Summary and graph it is seen that main effect A is highly significant main effect A refer to the factor area of residence. It was varied at two levels i.e. urban and rural it was assumed urban and rural differs significantly with regards to Enthusiasm. Since the main effect A is highly Significant (F = 281.77, df = 1and 159, P < 0.01) It is Clear that urban and rural Subjects Differ Significantly From each other from the mean scores and graph it was found that the urban players have Significantly high Enthusiasm than the rural players. This Result Support the Hypothesis.

The Second Independent Variable the Factor of players It was also varied at two levels. The effective sample was divided in to two groups, athlete and non-athlete. Main effect has yielded highly significantly result and F = 103.74 for 1 and df 159 is significant beyond 0.01 level (P < 0.01). And Support the athlete has Significantly high Enthusiasm than the non-athlete.
Interaction Ax B is (f = 13.67, df = 1 & 159, P < 0.01), Which suggest that all the two dependant variable namely area of residence and players are interdependent on each other.

Results:

- Athlete have significantly high enthusiasm than the non-athlete.
- Urban players have significantly high enthusiasm than the rural players.

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A Comparative Study of Achievement Motivation among Female Athletes and Female Basket Ball Players of Osmania University

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Introduction:Achievement Motivation defined as the need to perform well or the striving the success as the need to perform well or the striving for success and evidenced by persistence and effort to achieve high performance in sports. Achievement Motivation is the desire to excel at task.

Athletics, also called track and field sports or track and field, a variety of competitions in running, walking, jumping and throwing events.Although these contests are called track and field in the United States. Track and field athletics are the oldest forms of organized sport, having developed out of the most basic human activities – running, walking, jumping and throwing.From the earliest times running has been a natural part of Mans existence, Whether he was catching animals for food or escaping from predators. However, he also began to run for pleasure and then competitively, leading to a desire to improve on his speed or ability to run farther. In time, running came to be used as a means of communication and the fastest runners became messengers between villages or countries, carrying news of important events or war. Later there were long distance messengers who ran for a whole day bearing tidings affecting the lives of their compatriots, such as the legendary Pheidippides who is supposed to have run from Athens to Sparta to request help against an invading Persian force

Basketball is a team sport in which two teams of five players try to score points by throwing or "shooting" a ball through the top of a basketball hoop while following a set of rules. Basketball is one of the world's most popular and widely viewed sports. Basketball has evolved many commonly used techniques of shooting, passing, and dribbling, as well as specialized player positions and offensive and defensive structures (player positioning) and techniques. Typically, the tallest members of a team will play "center", "small forward, or "power forward positions, while shorter players or those who possess the best ball handling skills and speed play "point guard" or "shooting guard.While competitive basketball is carefully regulated, numerous variations of basketball have developed for casual play. Competitive basketball is primarily an indoor sport played on carefully marked and maintained basketball courts, but less regulated variations are often played outdoors in both inner city and rural areas.

Purpose(s) :

The Purpose of the the present study to find out the Achievement Motivation among Female Athletesand Female Basket ball players of Osmania University,

Method(s):

The sample for the present study is 30 Athletes and 30 Basket Ball Players of Osmania University, Hyderabad..The standardized Dr.B.N.Mukarji Scale were used in the study to determine the achievement motivation. The Questionnaire were administered in small groups during the Osmania University Inter College Athletics and Basket Ball Tournaments during the year 2011-12

Result(s):

This study shows that Athletes are having more achievement motivation compare to Basket Ball Players.

Conclusion(s)

It is concluded that the Athletes are having more achievement motivation than Basket Ball players because the Individual sports persons are having more drive to excel in the competition than the Team Game Players.

Recomendations:

The similar studies can be conducted on other sports and games

References:.

Wikipaedia, Basket ball, Athletics et

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Statistical Applications used for evaluation of talent identification programme

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Abstract: Statistics is used in sports to measure a player's ability in all aspect such as motor fitness, performance in specific skill or techniques and his potentials to future development. Statistics is the art of gathering, analyzing and making conclusions from data. Sports recruiters use statistics to check out potential athletes. Sports teams also use statistics to prepare for upcoming opponents. They look to see which players on the opposing teams are doing well at that time. They also use statistics to decide which players are doing well and they try to predict which players will bring the best results for the game. The sporting success achieved by increased deployment of systematic talent identification processes worldwide (Abbott and Collins, 2002). A review of the typical procedures highlights a talent identification approach that promotes systematic and objective measures on physical and performance factors perceived to be correlated with success in sport. Any successful program can be identified by applying the suitable statistical technique. The physical and performance-based talent identification model can be evaluated through the four basic statistically (Thomas & Nelson, 2001) and theoretically (Abbott et al., 2002) based principles. The tool to be effective at identifying children who have talent to excel at senior level sport.

Keywords: Talent Identification, Statistical Evaluation, Prediction,

Introduction

Statistics is a mathematical science pertaining to the collection, analysis, interpretation or explanation, and presentation of data. It is applicable to a wide variety of academic disciplines, from the physical and social sciences to the humanities. Statistical methods can be used to summarize or describe a collection of data; this is called descriptive statistics. In addition, patterns in the data may be modeled in a way that accounts for randomness and uncertainty in the observations, and then used to draw inferences about the process or population being studied; this is called inferential statistics. Both descriptive and inferential statistics comprise applied statistics. Stats or statistics are used in all sports as well as in all aspects of life. Statistics is used in sports to measure a player's ability in specific areas of the game. Statistical techniques lend themselves to endless applications in sports, where statistics are collected on almost all aspects of player performance. Traditionally, Talent identification models have measured children on physical and performance variables that are perceived to be a requisite for success within a given sport. A typical example of a traditional model is the Australian Talent Search program. In fact, the programme highlights the physical qualities that distinguish top athletic performance how these features are still of greater importance of an individual even when predicting current performance capacity.

Evaluation of the proposed talent identification model through a combination of analysis techniques as follows.

1. Discriminability.
2. Appropriate norms.
3. Appropriate algorithms and weightings.
4. Relative performance stability on selection criteria.

Statistical Evaluation

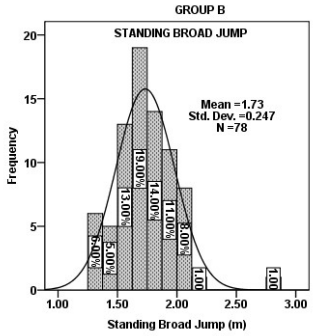
The evaluation of talent identification program can be done with four continues steps; each steps have specific statistical application to ensure the reliable results.

Discriminability

This principle provides a selection of the algorithms employed to calculate the performance capabilities of children in specific sports. They equated adequate discriminabilty with the need for normal distribution of scores to be apparent. Normal distribution implies adequate discriminability between performances; non-normal distribution may not necessarily imply an inability to discriminate. In order to allow this process to occur, the program converts raw data to T scores. This process to be effective it would be expected that data be normally distributed once converted to T scores. The performances achieved in particular test that was not normal, the tasks was unable to adequately discriminate. The non-normal distribution of T scores for the children, biased sport recommendations to scare the reliability.

The formulae T score = 50+ 10 (X-M)/S.D is used to convert the raw scores into standard scores.

Example



Appropriate norms

The results on each of the physical and performance tests do not necessarily have to be normally distributed at each age group, provided the results can be meaningfully interpreted by comparing them to an appropriate norm of given population. In order to establish the appropriateness of the norms employed, the given children's data was converted to T scores based on the specific population norms and the frequency with which children were classified into each of the T Scores was calculated. From this comparison, the standard of children's physical qualities can be categorized according to the appropriate norms.

Appropriate algorithms and weightings

The algorithms and weightings employed must be appropriate and justifiable. That is, within the specific sports, the relative importance attributed to height, weight, and other physical qualities must be appropriately correlated with particular sports performances. Even if physical and performance variables are found to predict success within a sport, Regnier et al. (1993) highlights that these performance determinants will differ according to age. The sports performance is predicted from the relative physical qualities by using the multiple regression analysis. **The model $Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 \ldots\ldots \beta_n x_n$** can be used to predict the performances. The Multiple Regression Analysis describes the effect of the two or more physical qualities variables acting jointly on the sports performances. Linear models are appropriate when the outcome variable is normally distributed. The prediction made for two or more dependent variables with independent variables by using multivariate regression analysis. The scatter plots can be obtained prior to regression data analysis in order to display the relationship between performance and independent variables. This is a useful first step, and often reveals associations between variables which would be otherwise missed if one were to plunge into regression analysis straight away.

Relative performance stability on selection criteria

If the above criteria are met, a talent identification program could then only effectively identify those children with the most potential to excel at the senior level if relative values on the variables remain into adulthood. Based on data these four pre-requisites the performance will be predicted effectively.

Conclusion

The relationship between performance on the Sport, relative physical quality and performance in various sports has been explored adequately. Additionally, different variables have been found to be prominent at different stages in the same sport and for females and males at the same stage. Against these criticisms, it is important to note that we are not advocating that an evaluation procedures based on different ages since the aim should be to identify those with the capacity to develop as opposed to promoting age group excellence. As such, Talent identification models must be combined processes that acknowledge that success in childhood will not necessarily lead to success in adolescence and adulthood since an individual's potential will be affected by a range of variables associated with growth, maturation and development (Malina, 1997). Therefore, to account for this dynamic nature of talent, it appears that determinants of excellence must go beyond the physique and age related performance capacities of a child. So the evaluation can be done in category wise and with respect to the sex and growth and development.

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A Comparative Study of Physical Fitness among Government and Private employees in Hyderabad

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Introduction:Physical fitness is composed of general and specific fitness. It can be health And skill related fitness. The term physical fitness implies soundness of body organs such as heart and lungs, a human mechanism that performs efficiently under exercise or work conditions and a reasonable measure of skill in the performance of selected physical activities. 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 and enough restPhysical fitness commonly defined as the capacity to carry out the day's activities without undue fatigue. However, as automation increased leisure time, changes in lifestyles following the industrial revolution rendered this definition insufficient. In current contexts, *physical fitness* is considered a measure of the body's ability to function efficiently and effectively in work and leisure activities, to be healthy to resist hypokinetic diseases and to meet emergency situations.

Purpose(s) :

The Purpose of the the present study to find out the Physical fitness among Private and Government Employees of Hyderabad between the age group of 19 to 21 Years.

Method(s):

The 20 Male government employees and 20 Male private employees between the age group of 19-21 Years are taken as sample for the Study. .To assess the Physical Fitness the AAPHER Youth Fitness Test consisting of Pull ups, Sit ups, Shuttle Run, Standing Broad Jump,50 Yard Dash, 600 Yard Run/Walk are used. The Twenty Government and Twenty Private Employees were given the general training of Physical exercises in the morning for the six week before conducting the AAHPER Youth fitness Test.

Result(s):

This study shows that Private employees are having good physical fitness than government employees. The Private employees has performed well in sit ups, Shuttle Run, Standing Broad Jump, 50 Yard dash, 600 Yard Run and Government employees are performed well in Pullups.

Conclusion(s)

It is concluded that the Private employees are having good physical fitness than government employees because the private employees are having the keen interest to develop the physical fitness.

Recomendations:

The similar studies can be conducted on other employees on corporate, Colleges, Schools etc.

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Wikipaedia,Physical fitness

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A Study on Speed among Swimmers and Cyclists in Hyderabad

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Abstract: The Purpose of the study was to find out the speed among Swimmers and Cyclists of Hyderabad. 20 Swimmers and 20 Cyclists were taken for the study.The 50 M Run is used to assess the speed. It was found the Cyclists are having good than Swimmers.

Key words:speed, swimmers, cyclists etc.

Introduction:Speed like strength and endurance is a conditional ability. Speed abilities are trainable to a very limited extent due to its marked dependence on the functioning of the central nervous system. important to be specific so that the athlete and coach understand which specific aspects of sports performance they are training. The definition of speed from a scientific standpoint is simply distance / time, but this is a rather simplistic view of speed. A more accurate definition of speed is this: speed is the ability of an athlete to move as fast as possible, through the optimal range of motion, in a deliberate and intentional manner, in a particular direction. Speed is not just measured on how fast a person is either; there are several components of measurement that give a complete picture of an athlete's speed.

Types of Sports Speed

There are four main components of speed:

- **starting speed** - Starting speed is the ability of an athlete to go from a stopped or non-moving state to a moving or mobile state. Starting speed is a crucial opponent of sports and is often referred to as the "first step". For many sports, it takes just that one step to blow by your opponent, so it should come as no surprise that training starting speed is very important in sports. The second component of speed is acceleration.
- **acceleration** - Acceleration is defined as the ability of an athlete to reach maximal speed in the shortest amount of time, under control. The two typical ways to improve acceleration are by improving the athlete's stride length and stride frequency. Stride length is the amount of distance covered by one full stride of an athlete, and stride frequency is how fast an athlete can turn over the limb to produce another stride.
- **speed efficiency** - Speed efficiency covers both the range of motion of the athlete and the deliberateness of the athlete's movement. A flexible athlete will have improved speed efficiency because the body will be able to move through the optimal range of motion with less drag from a tight muscle. Also, by being flexible, an athlete can utilize the optimal movement patterns that will lead to increased stride length
- **speed endurance** - Ask this question, is being fast if you can't keep it up? Speed endurance is the ability to maintain top levels of speed while performing repeated bouts of your sports skill without becoming fatigued. Speed endurance is usually dictated by the three energy systems in the body.

STATEMENT OF PROBLEM:

To find out the speed among Swimmers and Cyclists of Hyderabad.

SAMPLE: For the present study 30Male Swimmers and 30 Male Cyclists are taken for the study of Hyderabad District.

TOOL:

To measure the speed the 50 Meters Test of AAHPER Youth Fitness Test were used for the study.

Delimitations: The study is delimited to 30 Male Swimmers and 30 Male Cyclists of Hyderabad. To Measure the speed the 50 Meters Test is used.

Procedure of Data Collection:

The Swimmers and Cyclists are made to run of 2 Members in each batch at Osmania University Grounds.

Results and Discussion:

Table:I

	Group	N	Mean	Std.Deviation	Std.Error Mean
50 M Run	Cyclists	30	7.023	.6564	.1468
50 M Run	Swimmers	30	7.323	.6216	.1390

The table I is showing the Mean, standard deviation and standard error of Mean of Cyclists and Swimmers. The cyclists Mean Performance in 50 M is 7.023 compare to Swimmers Mean Performance is 7.323 and there is a difference of 0.3 in the performance.

Table – II
Independent Samples Test

		t-test for equality of means	t-test for equality of means	t-test for equality of means
		t	df	Sig.(2tailed)
Performance of 50 M Run	Equal variances assumed	-1.487	38	.145

Conclusions:It is concluded that Cyclists are having good speed compare to Swimmers.

Recommendations: It is recommended that Cyclists and Swimmers must be given good training for speed for the development of speed for improvement of performance.

References:

Science of Sports Training, Dr.Hardyal Singh.

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Plyometric Training for Foot Ball

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Introduction:

Strength is a conditional ability i.e. it depends largely on the energy liberation process in the muscles. Strength is the ability to overcome resistance or to act against the resistance. Strength should not be considered a product of only muscular contractions. It is in fact, a product of voluntary muscle contractions caused by the neuro-muscular system. The different types of physical exercises are used with or without additional resistance to improve and maintain. Strength. Most commonly used and most effective exercises with additional resistance eg.barbel, dumbbell, iron shoes, cattle bell etc. exercises with heavy weights are not advisable for children and beginners. There are innumerable exercises in which the body weight of the sportsman acts a resistance for improving the strength such as all type of jumps, wall bar exercises, pull ups, push ups, sit ups, rope climbing etc.

Discussion:

Plyometric exercises are typified by hopping, bounding and jumping movements. These exercises demand a high force of contraction in response to a rapid loading of lengthening muscles. For this reason, they should be more accurately called reversible action or rebound exercises. The training effort increases the force production in the muscles, but the movements are performed at faster speeds than weight-training exercises. Thus rebound exercises are more specific to the sprinting and jumping movements in football. These exercises should be done in 3-5 sets of 8 repetitions for each leg, with at least one minute's rest between sets. The quality and speed of the movement is the priority. The other training element that is required for improving sprinting speed is sprinting itself. This should be done with maximum efforts over 30-60m. Again, at least one minute's rest between runs should be allowed so that quality can be maintained. Remember, with this kind of training the aim is to develop the maximum speed; endurance should not become a factor. Sprinting done uphill, with weighted jackets, or towing weights is also useful because it adds resistance to the sprint movement, placing greater load on the muscles in the most specific manner. Again, short distances with long rests are recommended.

The best way for a player to develop his strength would be to start a strength-training program in the off-season. Three strength workouts a week would result in improvements. Once the pre-season training starts, the player can reduce to twice weekly and then fit in workouts when possible during the season. This way the player can maintain the strength gains made during the summer.Maximum strength exercises should only be targeted during the off-season. Afterwards, they should be done only once a week to maintain strength during the season. Maximum strength can only be achieved if it is concentrated on, and training for it can interfere with other important activities.With careful planning and careful selection of exercises, keeping sessions short but high quality, extra training should be practicable, although sensitivity to the training status of the players is important when prescribing extra sessions.

Recommendations:
It is recommended that Plyometric exercises are very useful for foot ball Players.
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Assessment And Comparison Of Stress Coing Styles And Psychic Adptability Between Male And Female Athlete And Non-Athlete Adolescents

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Abstract: Stress and stressful events are inseparable particle of competitive sports. For years sport psychologists have been of the view that improvement of cognitive skills for copying with competitive stress is a major component for achievement in sport. The aim of the present study was to compare stress coping styles and psychic adaptability between male and female athlete and non- athlete adolescents. The sample consisted of 100 persons. Cluster sampling was used for selection of non-athletes samples. The tools used in this research involved CISS questionnaire (1990) and AISS questionnaire (sinha 1993). Finally data was analyses through SPSS using independent T- student and hypotheses were tested at $P<0.05$. The results indicated there is a significant difference between athlete and non- athlete female and male students in problem – focused coping style. In avoidance coping style there is a significant difference between athletes and non- athletes male students, but this difference is not significant between athlete and non- athlete female students. The results also suggested that except emotional adaptability in which the difference between athlete and non- athlete female students is not significant, in other levels of adaptability between group difference is significant.

Key Word: Stress Coping Styles, Psychic Adaptability, Athlete and Non- athlete Adolescents.

Introduction

Nowadays modern life involves too much stress that can bring about many dangers for individual (5, 2). These stressful circumstances are in most of situations which without acquiring styles of coping them, one may encounter with many physical and psychic problems (6). Researchers have acknowledged that different types of stress (such as mistakes, receiving unfavorable responses from coaches or pros...), athletes individuals differences (like age, background, past record, anxiety and self confidence) and kind of sport (such as individual or team sports, close and open skill) demand various strategies for coping with stress (4). An athlete who wrangles with the referee after being fined either positively (asking the reason for penalty) or negatively (objecting to the referee), applies problem – focused coping approach. In emotion – focused coping style, individual targets directly the emotions resulted from stress. This approach affects person's trend or policy toward the stressful factor and his evaluation and interpretation of it (1, 5). Assessing the previous related literature indicates there is no decisive agreement concerning consistancy of stress coping approaches in athletes. It seems that this subject is relevant to other variables like: skill level, experience and culture in addition to gender and sport field. Every human being poses various behavior or patterns and personal traits. One of these characteristics which plays an important role in human survival and his psychic health is adaptability (7). So importance and necessity of more exercises and encouraging the youth for active participation in sport activities and also obligating coaches to instruct stress coping approaches among adolescents can be accentuated.

Methodology

Statistical population in this research included all high school male and female adolescents studying in Ferdows city from which 100 persons (50 athletes and 50 non-athletes) were selected. Cluster sampling was used for selection of non- athletes samples. Athlete subjects were selected from the students who had participated in their relevant sport field actively for at least 3 years. Because of few numbers of such samples, only available samples were used as athlete subjects.The tools used in this research involved CISS questionnaire (1990) and AISS questionnaire (Sinha 1993). CISS questionnaire was developed by Adler & Parker in 1990 for evaluating individual's approach when confronting with problem (3). Finally data was analyzed through SPSS using independent T- student and hypotheses were tested at $P<0.05$.

Table.1. the results of T test for athlete and non-athlete groups for coping styles and psychic adaptability variables.

Variables	Groups	Mean	SD	T	P-Value
Problem-focused coping style	Female athlete Female Non-athlete	-67.12 43.24	-12.377 10.174	7.452	0.001
	Male athlete Male Non-athlete	-67.80 62.52	-5.0916 6.976	2.886	0.006
Emotion-focused coping style	Female athlete Female Non-athlete	-43.24 65.84	-10.177 12.608	-6.975	0.001
	Male athlete Male Non-athlete	-39.88 50.28	-4.106 7.396	-6.147	0.002
Avoidance coping style	Female athlete Female Non-athlete	-41.28 46.35	-15.200 7.696	-1.491	0.143
	Male athlete Male Non-athlete	-39.88 44.36	-4.106 3.352	-4.226	0.001
Emotional inadaptability	Female athlete Female Non-athlete	-6.20 5.80	-1.471 2.886	0.617	0.54
	Male athlete Male Non-athlete	-3.56 5.80	-1.044 2.724	-3.649	0.001
Social inadaptability	Female athlete Female Non-athlete	-6.20 11.04	-1.471 2.051	-9.586	0.002
	Male athlete Male Non-athlete	-4.88 10.96	2.25-0.927	-13.506	0.001
Educational inadaptability	Female athlete Female Non-athlete	-6.20 12.16	-1.473 1.863	-12.548	0.001
	Male athlete Male Non-athlete	-5.72 12.64	-0.979 1.753	-17.228	0.001
Total inadaptability	Female athlete Female Non-athlete	-18.60 29.00	-4.415 3.785	-8.940	0.001
	Male athlete Male Non-athlete	-14.16 29.40	-2.624 3.547	-17.268	0.003

Results: The results indicated there is a significant difference between athlete and non- athlete female students and between athlete and non-athlete male students in problem – focused coping style. Additionally there is a significant difference between male and female students regarding problem-focused coping style.In avoidance coping style there is a significant difference between athletes and non-athletes male students, but this difference is not significant between athlete and non- athlete female students. The results also suggested that except emotional adaptability in which the difference between athlete and non- athlete female students is not significant, in other levels of adaptability between group difference is significant.

Conclusion

The research showed that athlete adolescents use problem -focused coping style more than emotion-focused and avoidance coping style compared to non-athlete adolescents (both male and female).Furthermore the results indicated that athlete adolescents have higher level of adaptability in comparison with non-athletes except emotional adaptability that was more for female adolescents, but not significant. Generally, kind of sport and athletes' traits affect their reaction and psychological responses. Regular and long term participation in physical activities can change some personal traits (like anxiety) and prepare individual for a calm and happy life. Coaches and athletes can improve their performance via more familiarity with coping approaches specifically the level of each approach efficacy.Moreover exercise and regular activity have much positive influence on social, psychological and spiritual well- being and health of adolescents and affects their adaptability with society and personality (6). Sport can be one of methods at decreasing stress and preparing individual for optimal coping (problem –focused), against stress and stressful conditions.

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A Comparative Study On Speed Among Kabbadi Players And Kho Kho Players Of Osmania University

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Abstract: The aim of the present study the speed among Kabbadi Players and Kho Kho Players of Osmania University, Hyderabad. 30 Male Kabbadi and 30 Male Kho Kho those who have participated in the O.U.Inter College Kabbadi and Kho Kho Championships for the year 2011-12 were taken for the study. The 50 Meters Run Test is used to measure the speed among Kabbadi Players and Kho Kho Players. The study is limited to the Male Kabbadi Players and Male Kho Kho Players of the Osmania University. This study shows that the Kho Kho Players are having good speed compare to Kabbadi Players.. This study shows that the speed training is good among Kho Kho Players.
Key Words: Speed, Kabbadi, Kho Kho etc.

Introduction:

Kabbadi derived from two words Kai means hand pidi means catch. Two Teams occupy opposite halves of a field and take turns sending the raider into the other half, in order to win points by tackling members of the opposing team, the raider then tries to return to his own half , holding his breath chanting “kabbadi, kabbadi” during the whole raid. Kabbadi is the game of attack and defense. Attack is also known as raid and attacker is called the raider in kabbadi.

Kho Kho played by team of twelve players who try to avoid being touched by members of the opposing team, only nine players of the team enter the field.Speed is to do motor actions under given conditions in minimum of time. Kho Kho is one of the most popular tradition sports in India. The game is greatest test of participants physical fitness,strength,speed and stamina. In Kho Kho the participants simply need to chase and touch there opponents to win the game. Kho Kho is quite a simple game where the player do dodging, feinting and burst to controlled speed to make this game quite interesting

METHODOLOGY:
AIM: To find out the Speed between Male Kabbadi and Male Kho Kho Players .

Sample: The sample for present study consists of 30 Male Kabbadi Players and
30 Male Kho Kho Players between the age group of 19 to 22 years of Osmania University who has taken part in the O.U.Inter College sports and games during the year 2011-12

Tools: 50 Meter Run is used to collect the data for speed.

Limitations: The study is limited to students of the Osmania University and 50 Meters Run is chosen for the study to find out the speed among Kabbadi And Kho Kho Players.

Procedure Of Data Collection:

The Kabbadi and Kho Kho Players are made to run 50 Meters in each batch of two members. The timing is taken by the IAAF qualified technical official in Athletics at Osmania University Grounds, Hyderabad.

50 Meters Run:

Purpose: To measure the speed among the Kabbadi and Kho Kho Players.

Equipment:
Two stop watches or one with a split second timer.

Description:
It is preferable to administer this test to two players at a time. Both have to take standing start position behind the starting line. The starter will use the command on your marks and gun will be fired

Rules:
The starter may take any position behind the starting line. On the command on your marks and gun fire the student runs as fast as he can across the finishing line. Do not slow up until you across the finish line. Then he may down slow gradually.

Scoring: The score is the elapsed time to the nearest tenth of a second between the starting signal and the instant the student crosses the finish line.

RESULTS AND DISCUSSION:
Table – I is showing the speed among the Kabbadi and Kho Kho Players.

Table - I

Test Item	Group	Number	Mean	Std. Deviation	Std.Error Mean	t	df	Sig.(2tailed)
50 M Run	Kho Kho	30	7.02	0.24	0.08	-1.81	18.00	0.09
50M Run	Kabbadi	30	7.30	0.46	0.15			

It was found that the average speed of Kho Kho Players are 7.02 and Kabbadi Players are 7.30. Kho Kho Players are having good speed compare to the Kabbadi players because the Kho Kho Players are running in the court and Kabbadi Players are playing on court.

Conclusions:
It is concluded that Kho Kho Players are having good speed compare to the Kabbadi Players . Speed Training must be given to all Kho Kho and Kabbadi Players to enhance the performance.

Recommendations:
The similar studies can be conducted on different sports and games.

References: Science of Sports Training, Hardayal Singh

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A Comparative Study of Speed among Basket Ball Players and Korf Ball Players of Osmania University in India

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Abstract:

Speed is a key component of Physical fitness which is very important for Basket Ball and Korf Ball Players for giving the high level of performance in competition.Speed is the performance pre requisite to do motor actions under given conditions in minimum of time. Speed abilities are trainable to a very limited extent due to its marked dependence on the functioning of the central nervous system. Basket Ball Players are incredible athletes they are fast,agile and lean and they also have excellent endurance and power of recovery. Basket Ball Players possess strength,speed and power along with the endurance. Korf Ball is a mixed gender sports with physical qualities required similar to Basket Ball. Korf Ball Player also possess speed,strength and endurance. Korf Ball is a mixed gender sports originated from Netherlands and much famous in Europe.

Purpose(s) :

The Purpose of the the present study to find out the speed among Male Basket Ball and Male Korf Ball Players of Osmania University.

Method(s):

The sample for the present study is twenty Male Basket Ball Players and twenty Male Korf Ball Players of Osmania University. The Male Basket Ball Players and Male Korf Ball Players were made to run 50 Meters in each batch of two members in standing start from stationery position. The Hand Timing is taken by Technical Official of Athletics at Osmania University Grounds, Hyderabad, India.

Result(s):

This study shows that the Male Basket Ball Players are having good speed compare to the Male Korf Ball Players.

Conclusions(s):

It is concluded that Male Basket Ball Players are having good speed than Male Korf Ball Players. The speed training must be given to Basket Ball Players and also to Korf Ball Players to improve their speed ability in the game.

Recommendation(s):

It is recommended that similar studies can be conducted on different sports and games.

References:

Science of Sports Training, Dr.Hardayal Singh

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Comparison Of Agility among Fast Bowlers and Batsman in Cricket Players

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Abstract:
The Purpose of the present study to find out the Agility among Fast Bowlers and Batsman in Cricket Players of Rayalaseema Region. The sample for the present study consists of 20 Male Bowlers and 20 Male Batsman of Rayalaseema Region Cricket Players age about 19-22 years. To assess the Agility the Zig Zag Run test were conducted among fast Bowlers and Batsman. It was found that Fast Bowlers are having good Agility compare to the Batsman.. It is recommended the Agility training must be given to bowlers and batsman in cricket. Key Words: Bowlers, Batsman, Cricket etc.

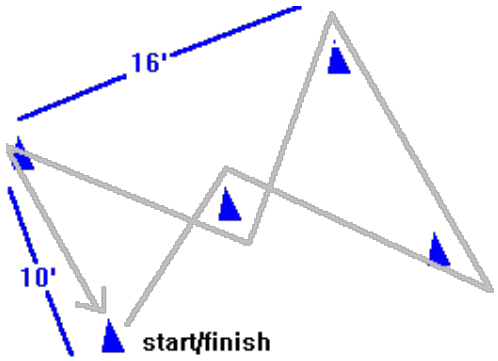
Introduction:

Cricket is one of the most popular sports in India. It is a game played by both male and female across many age groups and levels of participation from recreational to professional sports. In India, thegame also is played at all levels from amateur to professional competitions. India has been adequately represented at both levels, from intercollegiate to world championship, in both junior and senior men and women categories

Cricket is a bat-and-ball game played between two teams of 11 players each on a field at the center of which is a rectangular 22-yard long pitch. The game is played by 120 million players in many countries, making it the world's second most popular sport. Each team takes its turn to bat, attempting to score runs, while the other team fields. Each turn is known as an innings. The bowler delivers the ball to the batsman who attempts to hit the ball with his bat away from the fielders so he can run to the other end of the pitch and score a run. Each batsman continues batting until he is out. The batting team continues batting until ten batsmen are out, or a specified number of overs of six balls have been bowled, at which point the teams switch roles and the fielding team comes in to bat.
Cricket has become has one of the most popular game in the world and of all the major game in India it is the only one that has been jealously preserved by all those who player supported. Physical variables are the most important contributing factors for better performance in all sports and games so is in cricket. The game of cricket requires considerable amount of physical fitness and mastery of skills. A cricket player ought to possess specific speed , strength ,power ,agility ,flexibility and endurance in abundance so as to learn and master the techniques of the game.
Agility is One of the most important factors influencing movement is agility. This factor is revealed by the ability of the body or parts of the body to change directions rapidly and accurately. It is connected with the motor qualities in a different way. Each simple motor action demands agility. The sportsperson requires it when action are to be combined or when movement has tube performed by changed and unaccustomed conditions. Agility is the ability to change the direction of the body rapidly and accurately. Certainly agility plays an important role in sports specially cricket. It is required to a great extent in cricket involving efficient footwork and quick changes in body position

Methodology:
The Purpose of the present study to find out the Agility among Fast Bowlers and Batsman in Cricket of Rayalaseema Region. The sample for the present study consists of 20 Male Bowlers and 20 Male Batsman in Cricket of Rayalaseema Region. Cricket Players age about 19-22 years. To assess the Agility the Zig Zag Run Test Were conducted among Bowlers and Batsman.

Zig Zag Test
equipment required: marker cones, stopwatch, non-slip surface.
procedure: Similar to the Shuttle Run test, this test requires the athlete to run a course in the shortest possible time. A standard zig zag course is with four cones placed on the corners of a rectangle 10 by 16 feet, with one more cone placed in the center. If the cones are labeled 1 to 4 around the rectangle going along the longer side first, and the center cone is C, the test begins at 1, then to C, 2, 3, C, 4, then back to 1.



Results:

This study shows that Fast Bowlers are having better agility compare to the Batsman in Zig Zag run Test.

Table-I: Mean values and Independent Samples Test of Shuttle Run Test between Fast Bowlers and batsman in Cricket

Variables	Group	Mean	SD	t	Sig(2-tailed)
Zig Zag Run Test	Fast Bowlers	13.15	0.56	2.51	0.02
	Batsman	14.58	1.21		

*Significant at 0.05 level

In Table –I the Mean Values of Zig Zag Run Test of Fast bowlers is 13.15 and Batsman is 14.58 The Average Mean of fast bowlers in Zig Zag Running Test is lesser than the Batsman. The Standard Deviation of fast bowlers 0.56 and Batsman is 1.21 and t value is 2.51

Conclusion:

1.It is concluded that Bowlers are having better Agility than Batsman.
2.Conditioning Exercises plays a major role for improvement of Agility among Cricketers.
3. Sprint training is not all about running fast. It is important to have a good fitness base to build Agility upon, and to have the capacity to train regularly.

Recommendations:

1. Similar studies can be conducted on other Events and among females.
2.This study also helps the physical educators and coaches to improve their training regime to excel in Cricketers.

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A Study Of Endurance Ability Among Handball Players And Basket Ball Players Of Rayalaseema Region

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Abstract:

The purpose of the study to find out the Endurance ability Handball Players and Basketball players of Rayalaseema Region. To achieve the purpose of the present study, N=60Basketball and Handball players of Rayalaseema region were selected as subjects at random and their ages from 18-23 years. The subjects divided in to the two Groups each group consists N=30 subjects. Group I is for Basketball players and Group 2 is for Handball players.. Both the groups gone for Cooper test to know endurance ability.. It was concluded that handball players having good endurance compare to basketball players. Keywords: Enduranceability, Basketball, Handball

Introduction:

Endurance is the amount of oxygen intake during exercise. Aerobic Endurance is the time which you can exercise, without producing lactic acid in your muscles. During aerobic (with oxygen) work, the body is working at a level that the demands for oxygen and fuel can be meet by the body's intake. The only waste products formed are carbon-dioxide and water which are removed by sweating and breathing. Aerobic exercise is physical exercise of relatively low intensity and long duration, which depends primarily on the aerobic energy system. Aerobic means "with oxygen", and refers to the use of oxygen in the body's metabolic or energy – generating process. Many types of exercise are aerobic, and by definition are performed at moderate levels of intensity for extended periods of time.

Handball is a team sport in which two teams of seven players each (six out court players and a goalkeeper) pass a ball using their hands with the aim of throwing it into the goal of the other team. A standard match consists of two periods of 30 minutes, and the team that scores more goals wins.Modern handball is played on a court of 40 by 20 metres (131 by 66 ft), with a goal in the middle of each end. The goals are surrounded by a 6-metre (20 ft) zone where only the defending goalkeeper is allowed; goals must be scored by throwing the ball from outside the zone or while "diving" into it. The sport is usually played indoors, but outdoor variants exist in the forms of field handball, Czech handball (which were more common in the past) and beach handball. The game is fast and high-scoring: professional teams now typically score between 20 and 35 goals each, though lower scores were not uncommon until a few decades ago. Body contact is permitted for the defenders trying to stop the attackers from approaching the goal. No protective equipment is mandated, but players may wear soft protective bands, pads and mouth guards.The game was codified at the end of the 19th century in Denmark. The modern set of rules was published on 29 October 1917 in Berlin, which is seen as the date of birth of the sport, and had several revisions since. The first official handball match was played in the same year in Germany.

The first international games were played under these rules for men in 1925 and for women in 1930. Men's handball was first played at the 1936 Summer Olympics in Berlin as outdoors, and the next time at the 1972 Summer Olympics in Munich as indoors, and has been an Olympic sport since. Women's team handball was added at the 1976 Summer Olympics.

Basketball is a team sport in which two teams, most commonly of five players each, opposing one another on a rectangular court, compete with the primary objective of shooting a basketball (approximately 9.4 inches (24 cm) in diameter) through the defender's hoop (a basket 18 inches (46 cm) in diameter mounted 10 feet (3.048 m) high to a backboard at each end of the court, while preventing the opposing team from shooting through their own hoop. A field goal is worth two points, unless made from behind the three-point line, when it is worth three. After a foul, timed play stops and the player fouled or designated to shoot a technical foul is given one, two or three one-point free throws. The team with the most points at the end of the game wins, but if regulation play expires with the score tied, an additional period of play (overtime) is mandated. Players advance the ball by bouncing it while walking or running (dribbling) or by passing it to a teammate, both of which require considerable skill. On offense, players may use a variety of shots – the layup, the jump shot, or a dunk; on defence, they may steal the ball from a dribbler, intercept passes, or block shots; either offense or defence may collect a rebound, that is, a missed shot that bounces from rim or backboard. It is a violation to lift or drag one's pivot foot without dribbling the ball, to carry it, or to hold the ball with both hands then resume dribbling.

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Methodology:

The sample for the present study is Male 30 Handball Players and Male 30 Basketball Players from various colleges of Rayalaseema region in India. The data will be collected separately from Handball and Basketball Players. The Subjects were made to Run 12 Min Run Cooper Test for endurance

The Cooper test is a test of physical fitness. It was designed by Kenneth H. Cooper in 1968 for US military used in the original form; the point of the test is to run as far as possible within 12 minutes. To undertake this test, you will require:

- 400-meter track
- Stop Watch
- Whistle
- Technical Official

- The subjects given 10 minutes for warm up.
- The assistant gives the command “GO”, starts the stopwatch and athlete commences the test
- The Technical Official keeps the athlete informed of the remaining time at the end of each lap
- The Technical Official blows the whistle when the 12 minutes has elapsed and records the distance the athlete covered to the nearest 10 meters

Results and Discussion:

The Table No.1 Showing the Mean, S.D, Standard Error, t-ratio of Handball Players and Basketball Players in Cooper Test.

Results of 12 min Cooper Test	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Handball Players	30	3020.00	219.71	49.13	1.69	58.00	0.10
Basketball Players	30	2950.00	137.71	30.79			

The Handball Players Mean Performance is 3020 Meters and the Basketball Players Mean performance is 2950 Meters. There is mean difference of 70 Meters between Handball Players and Basketball Players. The Results of the study shows that Handball Players are having the good endurance compare to Basketball Players.

Conclusion

This study shows that Handball players are having the good endurance compare to Basketball players.: It is concluded that Male Handball players are having good endurance compare to Basketball Male Players. Coaches will be able to analysed the results and be able to enhance the future performances. At such feedback is very crucial for the improvement in performance players. I concluded the assessment process can be conducted every 3 months and 6 months to update the progress of players performance and to ensure that it is up to date with the plyers training needs requirements. It is recommended that coaches assess their player's performance on a regular basis in order to ensure better compliance with the training programme.

Recommendations

Similar studies can be conducted on female players and other team game players and individual game players.

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Boost Mental Health Through Chess

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Abstract:
The research was tried to find out the influence of chess, were having the positive effect on the mental health of sample group of , India. In this research study the investigator used the metal health scale to measure the mental health of the sample group, At first the investigator took 50 Bachelor of Physical education students than the pre measurement of mental health of the sample group, after that the he organized two weeks indoor games like chess for the same sample group, after two weeks of involvement In indoor games the investigator was again collected the data from sample group, the collected data was Statistically analyzed to find out influence of chess games on the mental health of the sample group. Key words –chess, Mental Health.

Introduction:

Mental health is a term used to describe how well the individual is adjusted to the demand and opportunities of life. People differ in their adjustment to the problems of life; some people are able to adjust well and derive more satisfaction in socially approved manner. They are 'normal' or mentally healthy people.Chess is often thought of as a cerebral game for intellectuals, but new research has shown that you don't need to be a genius to start playing chess. In fact, just the act of regularly playing chess can actually make you smarter! So, it's possible that high level chess players didn't start out as intelligent as they are today, but it was actually the practice of playing chess regularly that helped them increase their IQs, among other things. There are actually several different types of mental benefits that come from playing chess.

Chess Keeps Your Brain Healthy

There is a lot that we don't yet know about mental health and degenerative brain diseases like dementia and Alzheimer's, but what we do know is that chess can help keep your brain healthy longer. Regular "exercise" of your brain with a thought-provoking game like chess can prevent degenerative brain diseases from taking root. It's also been found that patients with schizophrenia show improvement in their condition and reduced symptoms when they play a daily game of chess. Just one game per day increased their ability to focus their attention, plan, and reason logically. That's amazing!

It Also Helps You Focus and Maintain Concentration

Chess games are well known for their longevity and the way that they can sometimes last hours and hours on end. During such a long game, you need to keep focused on your goals so that you don't overlook a detail and make a costly mistake. At the same time, games sometime come down to the wire, when the clock is ticking and you need to make the right decision, fast. At times like these, it helps to bring all of your concentration to bear on the task at hand, rather than being distracted by other things. Matches played with chess clocks can be some of the most strenuous for your mind, offering the best benefits. These are skills that chess hones in its players that can be widely applied in all other areas of life.

Chess Contributes to Improved Memory

As all serious players know, the game of chess involves a lot of memorizations, particularly when you are first starting to learn it. Not only do you have to remember the rules of the game and how each chess piece moves, but you'll need to know at least a few of the most common openings, middle games, traps, and end games by heart. You'll need to be able to employ them yourself as well as recognize them when your opponent starts to use them against you, which requires a high level of memorization. On top of all that, you'll also want to remember which moves work best against each of these play styles! All of these things quickly add up into a memorization nightmare, but luckily for beginner chess players everywhere, the simple act of playing the game can help expand and improve one's memory. That's a big plus!

Mental health means ability to balance in one's daily living. In other words, it is the ability to face and balance the reality of life (Bhatia, 1982). Mental health is a complex phenomenon depends on a set of familiarly personal, psychological and social variables. Mental health is as n important feature as the physical health of a person to make him complex with balance mental disposition of the children to cope with life more effectively and productively. Good mental health depends on the good state of both mind and body.

The role of mental health is increasingly recognized in the discussion about health. In this article, health is considered to be a dynamic balance between resources and potential risk factors. Sport and physical activity may represent resources that do not only contribute to an increased well-being, but also to an improved self-concept as a cognitive representation of one's health-status. To study the most important aspect of sport- a means of promoting interpersonal, national and international understanding. It would provide clue whether sports are truly fulfilling this much-publicized purpose or the differences in their mental health status are defeating the fundamental purpose of sports promotion.

Objectives Of The Study

- To examine the level of Mental Health of Bachelor of Physical students Rayalaseema region
- To find out the influence of chess games on mental health of sample group.

Hypothesis Of The Study

- There would be significant difference between in the Mental Health level of Bachelor of Physical students Rayalaseema region
- There would be significant effect of indoor games on mental health of Bachelor of Physical students Rayalaseema region
- Independent: Two weeks involvement in chess games

  Dependent: Level of Mental Health,

Tool

1. Mental Health scale Inventory was used in the present study. The inventory contains 54 questions. The responses are scored with the help of manual.

Collection Of Data

The data were collected from the Bachelor of Physical students Rayalaseema region who were administered the Mental Health scale during the chess games competitions. The data was collected twice before chess games two weeks involving in chess activities. Low score means High mental Health.

Analysis And Interpretation Of Data

Table -1 Mental Health levels before & after involving in the Chess

Paired Samples Statistics

	Mean	N	Std. Deviation	t-value
Before indoor games-Chess	134.40	50	9.97	9.04
After indoor games Chess	109.70	50	12.54	

Significant at 0.05 level*

This table were shown score of mental health of the Bachelor of Physical students Rayalaseema region the indoor games the researcher was taken the mental health data was higher, (134.40) After the involvement in indoor games for two weeks again the data was taken the mean score of post measurement of mental health was 109.70 (mean score) this study revealed that the chess. were positive impact on the mental health of Bachelor of Physical students Rayalaseema region

Conclusion

This study found that the chess game was having the positive impact on the mental health of the Bachelor of Physical students Rayalaseema region

Recommendation

This study may extend to the various sample groups like teachers, bank employee`s, & patients those suffering from low mental health.

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