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A Comparative Study of Anxiety among Sprinters and Long Jumpers of Osmania University

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Introduction:

Sport Psychology is the scientific study of people and their behaviours in sport. The role of a sport psychologist is to recognize how participation in sport exercise and physical activity enhances a person's development. Anxiety or feeling physically and mentally anxious can present in different ways, such as fear and nervousness, which creates hindrances to achieve high performance in sports.

Track and Field dominated the ancient Greek athletic festivals, and was also popular in Rome, but declined in the Middle Ages. In England track was revived sporadically between the 12th and 19th century the first college meet occurred in 1864 between Oxford and Cambridge universities. SPRINT involves the athlete to attempt to run at peak speed for the complete duration of the race. The period of the race is essentially short lasting fraction of seconds and even before this period of time is reached, the killing effect of lack of oxygen the vital fuel for moment is starting to paralyze the muscle involves it. In athletics and track and field, sprints (or dashes) are races over short distances. They are among the oldest running competitions. The first 13 editions of the Ancient Olympic Games featured only one event—the stadion race, which was a race from one end of the stadium to the other. There are three sprinting events which are currently held at the Summer Olympics and outdoor World Championships: the 100 metres, 200 metres, and 400 metres. These events have their roots in races of imperial measurements which were later altered to metric: the 100 m evolved from the 100 yard dash, the 200 m distances came from the furlong (or 1/8 of a mile), and the 400 m was the successor to the 440 yard dash or quarter-mile race.

The **long jump** is a track and field event in which athletes combine speed, strength, and agility in an attempt to leap as far as possible from a take off point. Along with the triple jump, the two events that measure jumping for distance as a group are referred to as the "horizontal jumps." This event has a history in the Ancient Olympic Games and has been a modern Olympic event for men since the first Olympics in 1896 and for women since 1948.

Methodology:

The sample for the study consists of 100 Sprinters and 100 Long Jumpers of Hyderabad District in Telangana those who have participated in various Athletics Events held in Hyderabad between the age group of 18-22 Years. Sinha's Comprehensive Anxiety Test is used for the study.

Results:

Table No. 1 Showing the Sprinters and Long Jumpers Shows the Mean, S.D, S. E. and t value of Anxiety

Group	MEAN	N	df
Sprinter	22.58	100	198
Jumpers	32.86	100	

Mean of anxiety score of the sprinters Mean is 22.58 and that of the Long Jumpers Mean is 32.86

Discussion:

It was found the Long Jumpers have significantly high anxiety than the sprinters. The Long Jumpers are more anxious about their success and defeat before and during the event. Whereas in sprints where muscle power and technique is playing vital role to achieve better performance. Anxiety differs from event and individual.

Conclusion:

It is concluded that Long Jumpers have significantly high anxiety than the sprinters. Because they concentrate more tactics to give level best performance to win the Competition, where as the Sprinters concentrate on technique at the start & finish and muscle power to give the high level of performance. It is recommended that special coaching is to be given to overcome Anxiety to achieve high excellence in sports. The Coaches must prepare all the sports persons with high level psychological preparation to excel in sports and games.

Recommendations:

1. While selecting the runners for specific event it is recommended that on the findings of the research regarding the specific anxiety should be considered.
2. This type of Study is useful to the Coaches and Physical Education Teachers to train the Students as per the requirements of the Psychological variables for the performance in sports.
3. Conducting a similar study, by adding other psychological factors such as goalsetting, Achievement motivation, concentration and imagery.
4. Doing a similar study on Individual and Team Games.
5. Comparing anxiety and self confidence between elite and non-elite athletes indifferent regions. Conducting a similar study among female sprinters and long jumpers.

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The governmental requirements of broadcasting rights in football of Iran

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Abstract:

The broadcasting rights is the recognized right of football in the world; in this regard, however, Iran still faces major challenges. This study aimed to provide practical solutions to solve the problem of broadcasting rights in football of Iran. This was qualitative-exploratory study and aimed to create desirable broadcasting rights in football of Iran. The grounded strategy was used in this study. Using open coding, axial coding, and selective coding, this study tried to summarize the data and ultimately, achieve a desirable model. The purposive sampling method and snowball technique were used for selecting samples and conducting deep interviews. Totally, 39 interviews were conducted. The sampling was continued until reaching a saturation point. After coding, finally, the data were classified into six groups: governmental requirements, economic and cultural requirements, designing alternative mechanism, management and structural requirements, designing solutions to resolve political, legal, and religious barriers, and designing the broadcast rights mechanism.

The governmental requirements included: lack of benefit in IRIB change for government, lack of political will in leader and heads of three branches, country's closed macro policies, domination of governmental climate, moving toward privatization, ignorance of subject by authorities, using state resources in both organizations, avoiding from securing this issue, football and Broadcasting interaction, interaction between government and parliament, the parliament role in presenting and approving bills and proposals, and the supporting role of Discernment Council.

Introduction:

The football with millions spectators and audiences is the most popular sport in the world. French 1998 World Cup and Japan and South Korea 2002 World Cup had a total of 37 and 50 billion audiences, respectively (Morrow, 200). Along with increasing interest, many changes have happened in football. However, the professional football in today world is not comparable to past. The multi-million dollar transactions for transferring players, sponsors with very large assets, selling equipment and goods with the logo of professional clubs, several hundred million dollars transactions in the world for advertising, earning huge revenues from broadcasting rights, activity of clubs in stock market, and many other factors play an important role in economic development of football in many countries (Sir Norman 2002). The broadcasting of football on TV or economically, the broadcasting right is one of the most important issues in sport, including football and impacted profoundly the football clubs.

Methodology:

This was a qualitative study. The qualitative research is a complex process that requires a relatively long time. In this process, focusing on opinions of participants, the data are analyzed using inductive inference. Then, the research report presents the results of research process (Bazargan, 2008). There are many qualitative research methods; the grounded theory is the most reliable method.

The population consisted of 39 experts in the field of broadcasting rights in Iran:

Findings:

The data analysis was performed using encoding method in three steps: 1) open coding, 2) axial coding, 3) and selective coding. Finally, the selective coding constituted the classes as follows:

Table 1: Extracted codes

Selective coding	No.
Change in IRIB does not benefit government	1
Lack of political will in leader and heads of three branches	2
Closed macro policy-making in Iran	3
Dominance of government	4
Move towards privatization	5
Ignorance of this issue by authorities	6
Use of state resources in two organizations	7
Avoiding from securing the issue	8
Interaction between football and IRIB	9
Interaction between government and parliament	10
Parliament role in presenting and approving bills and proposals	11
Supporting role of Discernment Council	12

Governmental requirements:

According to above, it can be concluded that there is no political will to provide broadcasting rights in Iran. The broadcasting rights are not considered as a fundamental priority in Iran. Perhaps, the change does not have benefit for government. When the sale of football broadcasting rights to other international networks is suggested, so, the security of issue is proposed. Securing the issue is one of the major challenges. Since football cannot sell its product to other television networks, it does not seem that this issue be resolved in lower levels. When the sale to other foreign networks is suggested, the security of issue becomes more prominent. In this case, one of the interviewees argued that: (The main issue is government system and macro management model in Iran. Politically and ideologically, Iran has a specific model of governance. The broadcasting rights debate is not complicated. This problem has not been resolved, because three branches have not the will to resolve it). It seems that there should be interaction between the two organizations to resolve this problem. One of the interviewees believes that the issue of broadcasting rights and environmental advertisement should be seen as a package and be managed by both organizations. He argued that: (We should place the broadcasting rights and environmental advertisement in a package and sign a contract for next three years. This interaction will create a good synergy. We may consult each other about the order of games, day of games and perform the attractive programs together).

The governmental nature of professional football clubs has caused some political considerations. These considerations have prevented the senior managers from pursuing their legitimate rights. In general, one of the problems in public companies is that the selection of managers is based on political attitudes. With the idea of keeping their jobs, the managers apply a more conservative political practices in their controlled processes. The public football clubs are not an exception. It is likely that the governmental nature of clubs and political selection of managers in these clubs have caused their conservative behaviors, and ultimately not pursuing the legitimate rights of club.

According to above, it seems that the only solution is the interaction between football federation and IRIB. At least for the next few years, there will not happen any political events in this area. In this regard, one of the interviewees believes that: (I think the same thing that happened to press in 60s will happen in television, too. I do not know its time, but I'm sure about its happening).

Regarding the use of free flow of Press, another interviewee believes that:

(The use of free flow of Press is a way to realize the football broadcasting rights. We should benefit from the potential of newspapers to show the football rights to everyone. After creating awareness in the society, good things will happen in this area).

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Effect of Circuit Training on the Performance Of Long Jumpers of Mangalore University

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Abstract

Circuit training is a type of physical exercise specializing in the use of resistance to induce muscular contraction which builds the strength, anaerobic endurance and size of skeletal muscles. The purpose of the study is to determine the effect of Circuit Training on long jumping performance. The sample for the present study consists of 20 male Long Jumpers out of which 10 are experimental group such as Eight station Circuit training like Full Squat, Squat Jump, Burpee Jump, Good morning, Step up on the box, Sit ups –Abdomen, Abdomen leg raise and Jump and arch back for six weeks along with general training of Long Jump and Long Jumpers Control group were given the general training of Long Jump. Pre Test and Post Test were conducted for Long Jump test for the Long jumpers by the qualified Technical Officials of Athletics. This Study shows that the experimental group of Long Jumpers has got rapid improvement due to strength Training in the Long Jump Performance compare to the controlled group of long jumpers. It is concluded that due Strength Training there is improvement in Long Jump Performance. It is recommended that the coaches must include the strength training for long jumpers.

Key words: Circuit training, Long jumpers, squat jumps etc.

Introduction:

Circuit training is a type of physical exercise specializing in the use of resistance to induce muscular contraction which builds the strength, anaerobic endurance and size of skeletal muscles. The purpose of the study is to determine the effect of Circuit Training on long jumping performance. The fundamental reason to train with plyometrics is to reduce the ground contact time that an athlete spends when running or jumping. This time is reduced as the athlete matures, gets stronger, and practices the skills of their game. To further enhance resistance training the athlete spends considerable time practicing the specific movement skills they wish to improve; namely, running and jumping. Eccentric Strength development is so important for Long Jumpers. Development of that Explosive and reactive strength is very important for the development of performance in long jump.

Significance of the Study:

This study would help the coaches to use the Circuit training exercises for increasing the performance in long Jump. Athletes would also get the knowledge about the effectiveness of Circuit training on athletic performance.

Methodology

The sample for the present study consists of 20 males Long jumpers out of which 10 are experimental group of Long jumpers and 10 are controlled group of Long jumpers of Mangalore university between the age group of 19-21 Years. Circuit training was given to Long jumpers Experimental group Full Squat, Squat Jump, Burpee Jump, Good morning, Step up on the box, Sit ups –Abdomen, Abdomen leg raise and Jump and arch back for six weeks along with general training of Long jump and Long jumpers Controlled group were given the general training of Long jump. Pre test and Post test were conducted to the Long Jump test for the Long jumpers by qualified Technical officials of Athletics.

LONG JUMP TEST:

The Long jump is a power event that comprises of the following four phases:

Approach run up, Take off flight through the air and Landing

To achieve maximum distance in the Long jump the athlete will have to balance three components- speed, technique and strength.

Results

Table 1: Showing the mean values and independent Samples Test of Long jump between experimental and controlled groups of Long jumpers.

Variables	Group	Pre Test	Post Test	t	P-Value
Long jump	Experimental	5.72 [±] 0.222	6.03 [±] 0.198	6.72	0.000
	Control	5.67 [±] 0.215	5.64 [±] 0.211		

Significant at 0.05 level

The Mean Values of Experimental Group Long Jumpers is 5.72 in Pre Test and Post Test is 6.03 in Long jump Test. There is a improvement of Experimental group Long jumpers Mean from 5.73to 6.03due to the due to Circuit training. The mean values of control group Long jumpers are 5.67 in pretest and post test is 5.64in long jump test. There is a decrease in the performance of control group long jumpers mean from 5.67 to 5.64 due to the due to the general training. Hence it is concluded that the long jumpers has increased in long jump Performance due to the Circuit training.

Conclusion

The result of the study concludes as follows:

Long jump performance was significantly improved through the Circuit training.

Circuit training contributed better in long jumpers.

Recommendation

Long jumpers can take advantage from Circuit training to exhibit better performance in Long jump event.

Reference

www.topendsports.com.

Comparative Study of Selected Physical Fitness Variables of High School Level Kabaddi and Handball Players

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Introduction

Health and physical fitness have a vital role in the life of men from time immemorial. The progress of the Nation lies in the hands of the people, who are healthy and physically fit. Every individual should develop physical fitness for a happy and effective living. In order to get physical fitness one has to involve in physical activities. Physically active people have a lower risk of heart disease, high blood pressure, diabetes, obesity and some type of cancer. Despite all the benefits of physical activity, most people in this country are a sedentary. Given that regular physical activity helps people enjoy better health. Advances in our modern society have greatly diminished necessity for physical activity to survive in our daily lives. In addition, technological advances provided numerous sedentary forms of entertainment such as television, movies and video games that are popular in public. Human body is a great computer. Combination of various parts of computer is gives well output. Proper using of various parts of our body can keep our body fit and healthy. Walking, brisk walk, running etc, a physical activity requires rapid breathings. Muscles take more oxygen and relieve carbon dioxide in the above activities. Walking a readily available form of exercise is advocated by many health authorities as a beneficial activity that can be incorporated in to every lifestyle. Toned physique, development of more stamina, reduction of high cholesterol level, increased metabolism increased lung capacity and endorphins releases are the benefits of walking.

Kabaddi

The modern kabaddi game was played all over India and some parts of South Asia from 1930. The first know frame work of the rules of Kabaddi as an indigenous sport of India was prepared in Maharastra in the year 1921 for the pattern of Sangeevini and Gemini in a combined form. There after a committee was constituted in the year 1923, which amended the rules framed in 1921. The amended rules framed were applied during the All India Kabaddi Tournament organized in 1923. The International Kabaddi Federation (IKF) was formed during the 1st world cup in Kabaddi 2004 at Mumbai in India.

Handball

Handball was first played in 1895 in Germany. It was introduced into the Olympic Games at Berlin in 1936 as an 11 aside outdoor games with Germany wining but when – introduced in 1972 it was an indoor game with seven a side, The standard six of the team since 1952. The international hand ball federation was formed in 1946. The first international match was held on 3rd September, 1925 it did not have its own governing body and it came under the jurisdiction of the international amateur athletic federation [IAAF].

METHODOLOGY

In this chapter, selection of variables, reliability of the data and the statistical technique for the data has been explained in detail.

Selection of Subjects

The purpose of the study was to compare the motor fitness variables of High School level Kabaddi and Handball players. For this purpose the subjects, 30 from each category were selected from the teams [including stand byes] of Udupi and Dakshina kannada district that participated in the inter district tournament under 16 years. The subject's average age, height and weight were 15 years 7 months 156Cms and 42 Kgs respectively.

Selection of Variables

The speed, endurance, strength endurance agility and balance performance of the subjects were measured as the dependent variables.

Analysis of Data and Results of the Study

Analysis of the data collected with regard to this study has been showed in the chapter. In this study motor fitness components between hand ball and Kabaddi players were studied. The data pertaining to the study was analyzed by following independent 't' test. The procedure of computation mentioned by Clarke and Clarke were utilized to analyze the data. The level of significance to test 'f' ratio obtained by one way analysis of variance was fixed at 0.05 level of confidence.

Analysis of the Data

The motor fitness components between handball and Kabaddi players were determined by subjecting the collected data to the 't' for each criterion variable separately and presented below.

The statistical analysis of data collected on speed of handball and Kabaddi players of Udupi and Dakshina Kannada district under 17 teams were

Table-1: 't' Test for the Data on Speed of Kabaddi and HandBall Players

Category	Mean Sec	Standard Deviation sec	Mean Difference	Standard error	't' ratio
Handball	4.38	0.256	0.28	0.06	4.47*
Kabaddi	4.10	0.223			

*significance at .05 level, 't' ratio for significance at .05 level with df 0.58 is 2.00

It shows that the mean of Handball and Kabaddi players are 4.38 sec and 4.10 sec respectively and the standard deviations are 0.256 sec and 0.223 sec. The obtained 't' ratio is 4.47 is greater than the table value required. It indicates that there is significant difference between the means of handball and Kabaddi players in speed. Further the examination of the means states that the Kabaddi players in speed. Further the examination of the means states the Kabaddi players were better in speed when compared to handball players.

Table-2: 't' Test for the Data on Pull Ups Kabaddi and Hand Ball Players

Category	Mean Sec	Standard Deviation sec	Mean Difference	Standard error	't' ratio
Handball	5.67	2.25	0.36	0.56	0.67
Kabaddi	6.03	2.04			

*significance at .05 level, 't' ratio for significance at .05 level with df 0.58 is 2.00

It indicates the mean values of handball and Kabaddi players are 5.67 and 6.03 respectively. The standard deviations of handball players are 2.25 and Kabaddi players is 2.04. There resulted a 't' ratio of 0.67 it is less than the table value for significance; it shows insignificant difference between the means. It reveals that there was no significant difference between handball and Kabaddi players in pull ups.

Table-3: 't' Test for the Data on 12 minutes Run/Walk of Kabaddi and Hand Ball Players

Category	Mean Sec	Standard Deviation sec	Mean Difference	Standard error	't' ratio
Handball	2413.7	148.3	245	47.51	5.16
Kabaddi	2658.7	213.8			

*significance at .05 level, table value for significance at .05 level with df 0.58 is 2.00

It shows that the mean of handball and Kabaddi players in 12 minutes run 2413.7 Mtrs respectively. The standard deviation of the handball players is 148.3 Mtrs and that of Kabaddi players is 213.8 Mtrs. The 't' ratio 5.16, which is higher than the table value required for significance. It shows that the means of Handball players and Kabaddi players differ significantly. Further the observation of the means states that Kabaddi players are better in endurance when compare to the handball players.

Table-4: 't' Test for the Data on Agility of Kabaddi and Hand Ball Players

Category	Mean Sec	Standard Deviation sec	Mean Difference	Standard error	't' ratio
Handball	17.6	3.96	2.3	0.82	2.80
Kabaddi	15.3	3.14			

*significance at .05 level, table value for significance at .05 level with df 0.58 is 2.00

It shows that the mean of handball and Kabaddi players in agility 17.6, 15.3 respectively. The standard deviation of the handball players is 3.96 and that of Kabaddi players is 3.14. The 't' ratio is 2.80, which is higher than the table value required for significance. It shows that the means of Handball players and Kabaddi players differ significantly. Further the observation of the means states that handball players are better in agility when compare to the Kabaddi players.

Table-4: 't' Test for the Data on Balance of Kabaddi and Hand Ball Players

Category	Mean Sec	Standard Deviation sec	Mean Difference	Standard error	't' ratio
Handball	33.66	6.36	6.5	1.0	6.5
Kabaddi	40.16	7.36			

*significance at .05 level, table value for significance at .05 level with df 0.58 is 2.00

It shows that the mean of handball and Kabaddi players in Balance 33.66, 40.16 respectively. The standard deviation of the handball players is 6.63 and that of Kabaddi players is 7.36. The 't' ratio is 6.5, which is higher than the table value required for significance. It shows that the means of Handball players and Kabaddi players differ significantly. Further the observation of the means states that Kabaddi players are better in balance when compare to the Handball players.

Summary:

The purpose of the study was to identify between High school Handball and Kabaddi players in the selected motor fitness components for this purpose 30 Kabaddi and 30 Handball players were selected from Udupi and Dakshina Kannada districts under – 17 football and handball teams that represented school games federation inter district tournament-2014.

The variables selected were speed, endurance, strength endurance, agility and balance. These variables were assessed by following 30 Mtrs flying star, 12 minutes run/walk, pull ups, Hexagonal jump test and balance beam walk test respectively. Prior to the collection of the data reliability of the data was established by establishing instrument and testers competency. The collected data was subjected to 't' test to find out the significance difference between handball and football players. The level of significance was – 't' at .05 level.

Conclusion

The analysis of the data facilitated the following conclusions;

Kabaddi players were significantly better than the handball players in speed endurance and agility.

Kabaddi players were better than the Handball players in balance.

There was no significant difference between handball and Kabaddi in strength endurance.

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A Study Of Selected Physical Fitness Variables Of Junior Kabaddi And Kho-Kho Players Of Bagalkot District Karnataka State

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Abstract

The purpose of the present study was to compare the selected physical fitness variables of junior state level kabaddi and kho-kho players of Bagalkot district who actively participate in State level age category tournaments organized by state association and other local institutions. Total sixty four (32 from Kabaddi and 32 from Kho kho) male players from Bagalkot district , were selected for this study. Their age ranged between 14-18 years. AAHPER youth physical fitness test was utilized to measure selected physical fitness components of players. It was hypothesized that no significant difference would be found between selected physical fitness variables of junior state level kabaddi and kho-kho players. For analysis of the data Mean & SD were calculated and to examine the significance difference between the group mean of different physical fitness variables, 'T' test was applied, and level of confidence was set at .05 levels. Study concluded that significant difference found between the means of selected physical fitness variables such as speed and agility (shuttle run), explosive strength of legs (SBJ), speed of lower extremities (50mt. dash) and explosive strength, cardio-vascular endurance (12 min run & walk) and no significant difference found between the means of muscular strength (dynamic) and endurance of arm & shoulders (Pull-ups), muscular strength and endurance of trunk (bent-knee sit ups) of school level kabaddi and kho-khopleayers.

Key words: Physical Fitness, kabaddi and Kho-khoPlayers, Bagalkot district

Introduction

The Kho-Kho game is an Indian sport commonly played in schools and colleges around the country. When it comes to Kho-Kho history, every Indian knows that the game was known to be played since the earliest of times. It is on a rectangular court, between two teams of twelve players each, of which 9 take the field and 3 are reserves. Kho-Kho is a great test of the participants' physical fitness, strength, speed and stamina and dodging ability. No one has exact knowledge on Kho-Kho history or when the first game was played, though many historians say that it is actually a modified form of 'Run Chase'. In the ancient era, a version of the Kho-Kho game was played on 'raths' or chariots in Maharashtra. This was known as RATHERA. There were no rigid rules and regulations for playing the game. The Kho-Kho rules were first framed in the early 1900's.

Kabaddi is a wrestling sport from India. Two teams occupy opposite halves of a small swimming pool or field and take turn sending a "raider" in to the other half, to points by opposing team; raider tries to own half. The raider must not cross lobby of his If he "out". There is a bonus line which be ensures extra points for the manages to touch it and return his side of the field successfully. The word Kabaddi is derived from a Tamil word meaning "holding of hand", which is indeed the crucial aspect of play It is the national game of Bangladesh, and the state game of Tamil Nadu, Karnataka, and Andhra Pradesh in India. In the international team version of kabaddi, two teams of seven each occupy opposite halves of a field of 10 m x 13 m in case of men and 8m x 12 m in case of .

Fitness is important at all levels of the game, whilst being essential for top level players. It is beneficial for beginners who will improve both their effectiveness and enjoyment through good standards of fitness.

Purpose of the study

Purpose of this study was to compare the selected physical fitness variables of Junior state level Kabaddi and kho-kho players of Bagalkot State who actively participated in various National and State level tournaments of India.

Significance of the Study

It is hoped that the data generated and interpreted in this study will one day help the Karnataka Kho-kho and Kabaddi Fraternity, the information collected can be used for monitoring the training programme as well as for counseling, providing information about the standard of motor fitness one should have among Kabaddi and Kho-kho Players. The author also assumes that this study will help the Karnataka kho-kho and Kabaddi to improve the standard of Kho-kho and Kabaddi in the State.

Methodology

Subjects Total 64 subjects were selected for this study. 32 players from Kabaddi game and 32 players from kho-kho game as sample for the study. Permission was taken from Bagalkot Kho-kho Association and Bagalkot Kabaddi Association, The test were conducted when they were practicing for preparing for the national games and state level tournament of India. Their age ranged between 14- 18 years.

Variables

Pull-ups. Muscular strength (dynamic) and endurance of arm & shoulders, Bent-knee Sit ups - Muscular strength and endurance (trunk), Shuttle-run - Speed and agility, Standing broad jump - Explosive strength of legs, 50 yards dash - Speed of lower extremities and explosive strength, 12 min. run & walk - Cardio-vascular endurance

Test : For measurement of selected physical fitness variables of junior state level Kabaddi and kho-kho players AAHPER youth physical fitness test was utilized. Data of subject's were collected in the month of July-August 2014, all the Test on Players were conducted at Shri Bashweshwar College ground Bagalkot to attain the objectives of the present study.

Statistical Procedure : For analysis of the data, collected from 32 kabaddi and 32 cricketers from State level Kho-kho and Kabaddi players of Bagalkot district, Mean and Standard Deviation was computed. Comparison was made on the basis of activity i.e. kabaddi and cricket. For this purpose 'T' test was applied. For testing the hypothesis the level of confidence was set at .05 level of significance.

Result and Discussion:

Table 1 shows the comparison of means of selected physical fitness variables of junior state level Kabaddi and kho-kho players. In pull-ups mean value of Kabaddi players is 7.47 and kho-kho player is 8.08. In bent-knee sit ups mean value of Kabaddi players is 29.34 and kho-kho player is 27.66. In shuttle-run -mean value of Kabaddi players is 10.12 and kho-kho player is 10.48. In standing broad jump mean value of Kabaddi players is 198 and kho-kho player is 175. In 50 yards dash mean value of Kabaddi players is 6.58 and kho-kho player is 7.49. In 12 min. run & walk mean value of Softball players is 2410.22 and kho-kho player is 1980.48.

Table-1. Comparison of Means of Selected Physical Fitness Variables of junior State Level Kabaddi and Kho-kho Players of Bagalkot State.

Components	Group	Mean	S.D.	t
Pull – ups (in counts)	Kabaddi	7.47	3.22	0.733
	Kho-kho	8.08	3.43	
Bent – knee sit ups (in counts)	Kabaddi	29.34	6.32	1.235
	Kho-kho	27.66	4.38	
Shuttle – run (in seconds)	Kabaddi	10.12	0.42	2.976*
	Kho-kho	10.48	0.54	
Standing Broad Jump (in CM)	Kabaddi	198	22.04	4.267*
	Kho-kho	175	21.07	
50 Yard dash (in seconds)	Kabaddi	6.58	0.54	6.495*
	Kho-kho	7.49	0.58	
12 Minutes Run & walk (in meter)	Kabaddi	2410.22	240	7.622*
	Kho-kho	1980.48	210	

Significance at .05 levels

"T" Value required to be significant at .05 levels with 62 degree of freedom is 1.98

There is significant difference found between the means of selected physical fitness variables (Speed and agility (Shuttle-run), Explosive strength of legs (Standing broad jump), Speed of lower extremities and explosive strength (50 yards dash), There is no significant difference found between the means of selected physical fitness variables {Muscular strength (dynamic) and endurance of arm & shoulders (Pull- ups), Muscular strength and endurance of trunk (Bent-knee sit ups) Cardio-vascular endurance (12 min. run & walk)} of junior state level kabaddi and kho-kho players, as "t" value required Pull-ups (in count) Kabaddi 7.47 3.22 0.733 Kho-kho 8.08 3.43 Bent-knee sit ups (in count) Kabaddi 29.34 6.32 1.235 Kho-kho 27.66 4.38 Shuttle-run (in seconds) Kabaddi 10.12 0.42 2.976* Kho-kho 10.48 0.54 Standing broad jump (in cm) Kabaddi 198 22.04 4.267* Kho-kho 175 21.07 50 yards dash (in seconds) Softball 6.58 0.54 6.495* Kho-kho 7.49 0.58 12 min. run & walk (in meter) Kabaddi 2410.22 240 7.622* Kho-kho 1980.48 210* Significant at .05 level "T" value required to be significant at .05 levels with 62 degree of freedom is 1.98 There is significant difference found between the means of selected physical fitness variables (Speed and agility (Shuttle-run), Explosive strength of legs (Standing broad jump), Speed of lower extremities and explosive strength (50 yards dash), There is no significant difference found between the means of selected physical fitness variables {Muscular strength (dynamic) and endurance of arm & shoulders (Pull- ups), Muscular strength and endurance of trunk (Bent-knee sit ups)} Cardio-vascular endurance (12 min. run & walk)} of school level kabaddi and kho-kho players, as "t" value required to be significant is 1.98 and calculated value is more compare to tabulated value. Of junior state level kabaddi and kho-kho players, as "t" value required to be significant is 1.98 and calculated value is less compare to tabulated value. Pate, R.R. (1990) also reported that physical activity and physical fitness are significantly, although moderately, associated in young children.

Conclusion

Significant difference found between the means of selected physical fitness variables such as speed and agility, explosive strength of legs, speed of lower extremities and explosive strength, cardio-vascular endurance of school level kabaddi and kho-kho players. Mean value indicates that in shuttle run (speed and agility) kho-kho players are better than Kabaddi players, but in Standing broad jump (explosive strength of legs), 50 yards dash (speed of lower extremities and explosive strength), and 12 min. run & walk (cardio-vascular endurance) kabaddi players are better than kho-kho players. No significant difference found between the means of selected physical fitness variables {Muscular strength (dynamic) and endurance of arm & shoulders (Pull-ups), Muscular strength and endurance of trunk (Bent-knee sit ups)} of junior state level Kabaddi and kho-kho players Mean value indicates that in Pull- ups (Muscular strength and endurance of arm & shoulders) kho-kho players are better than Kabaddi players, but in Bent- knee sit ups (Muscular strength and endurance of trunk) kabaddi players are better than kho-kho players.

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Influence Of Yogic Practices And Physical Exercises On Stress Induced Working Women Patients In Tirupati

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Abstract

The working women include teaching and non teaching staff are working from morning to evening either in standing position or sitting position. Standing or sitting for the longer duration will lead to back pain. Besides taking classes no staff member will go for any physical exercise either in the morning or evening normally. They spend leisure time only in reading, writing, watching television, listening radio, etc. This ultimately results in the increase of body weight, weakening of all muscles around the Hip joint and leads to back pain. Hence in this context the investigators made an attempt to study the Influence of Yogic Practices and Physical Exercises on Stress Induced Working Women Patients in Tirupati. The results revealed that (i) No significant difference between pre-test means for yogic practice group, physical exercise group and control group.(ii) Significant difference between post-test means for yogic practice group, physical exercise group and control group.(iii) Significant difference between adjusted post-test means for yogic practice group, physical exercise group and control group

Introduction

Yoga is very ancient discipline. It is recognized as one of the most important and valuable heritage of India. Today the whole world is looking to yoga as the solution to various problems modern man is facing. Yoga is an art of living and yogasana is scientific procedure. This is the only practice which has an effect on the human body. Yoga develops the personality of an individual.

Yoga is universal benefiting people of all ages. The study of yoga is fascinating those with a philosophical mind and is defined as the "silence of the mind's activities which leads to complete realization of the intrinsic nature of the supreme being. The body is the suitable vehicle, with which the soul can undergo the divine journey, "I must be worthy of life, I'm being well fed, well exercised and well rested. Let me be well". Must be the slogan of everybody.

Physical exercise is any organized activity that involves continuous participation. Exercise occupies a leading role in keeping a person fit. It will be quite difficult to adjust one's life in terms of stress, diet, sleep and so on. Without proper exercise, according to plato, lack of activity destroys the good condition of every human being. Exercise builds and maintains physical fitness.

Physical exercise is capable of giving better living, exercise keeps muscular motions,. joints and tendons and circulation in motion. Exercise can also be used to control blood pressure. Hypertension (High blood pressure), causes an inordinate amount of pressure on the walls of the arteries in the brain which is called a stroke. If hypertensive individual exercises regularly he /she will be able to lower his or her blood pressure thereby helping to prevent stroke, one of the leading causes of death in the world.

Regular exercise helps to prevent obesity which is related to both coronary heart disease and hypertension. It helps for mental alertness regular exercise can be an effective way of lowering stress. It helps for emotional stability. Blood pressure increase heart rate which makes the muscles tense and increases blood glucose. Exercise is a catabolic or breaking down process. During the subsequent test period the anabolic or building up process takes places.

Methodology

Objectives

The objectives of the study are

To study the influence of the selected yogasanas on selected stress induced working women patients in Tirupati. To study the influence of the Physical exercise on selected stress induced working women patients in Tirupati.

To compare the influence of selected Yogasanas and Physical exercise in bringing the changes on selected stress induced working women patients in Tirupati.

Hypothesis

To study the present problem the researchers formulated the following null hypothesis

There would be no significant difference between pre-test means for the three groups namely experiment group –I(Yogic practice group), experimental group-II (Physical exercise group) and control group.

There would be no significant difference between post-test means for the three groups namely experiment group –I(Yogic practice group), experimental group-II (Physical exercise group) and control group.

There would be no significant difference between adjusted post-test means for the three groups namely experiment group –I(Yogic practice group), experimental group-II (Physical exercise group) and control group.

Method

Keeping in view the objectives and scope of the present study the investigators adopted experimental method to carry out the research.

Sample:Ninety working women of back pain patients, aged between 25 and 55 years working in private forms, teachers, business people working in Tirupati. Voluntarily were selected to take part in this study. The subjects were divided into three groups namely Yogic group, physical exercise group and control group, each group consisting of thirty subjects.

Selection of variables

For the relevance of the study and the feasibility criteria 'Back Pain' was chosen as a variable for this study

Tool

In this investigation Back Pain was measured by using the questionnaire. This questionnaire was specially intended for measuring back pain developed by Ransford et.al.

Collection of data

Initial data were collected from yogic practice group, physical exercise group and control group before the treatment by using questionnaire. The yogic group was treated with yogasanas, and the physical exercise group was treated with physical exercise programme and control group was kept ideal for eighty weeks. Forty five minutes training programme were administered in the experimental groups on all days except Saturday and Sunday. Immediately after the training period the questionnaire was administered to all the three groups to obtain the final data.

Statistical Techniques

To analyze the collected data the investigators Mean, S.D. and 'F' ratios statistical techniques were employed.

RESULTS AND DISCUSSIONS

The following Tables illustrate the statistical results of the influence of yogic practices and physical exercises on back pain among the subjects in the age group of twenty five to fifty five and the ordered adjusted means and the difference between means of the groups under study.

Table-1:ANALYSIS OF COVARIANCE OF DATA ON BACK PAIN BETWEEN PRE-TEST AND POST-TEST OF YPGIC PRACTICES, PHYSICAL EXERCISES AND CONTROL GROUP

	Experimental Group IYogic Practice	Experimental Group II Physical Exercise	Control Group	Source of Variance	Sum Of Squares	df	Mean Squares	F-ratio
Pre-test means	17.367	17.167	17.633	B: W:	3.29 288.10	2 87	1.645 3.311	0.497
Post-test means	9.367	12.10	17.767	B W::	1101.00 149.00	2 87	550.5 1.713	321.37
Adjusted post test means	9.375	12.185	17.67	B: W:	43.38 109.90	2 86	21.69 1.278	16.972
Means	2.8096	8.298	5.489					

The table value at 0.05 for df 2 and 87 and 2and 86 is 3.109.

It is observed from Table-1 the pre-test means for the three groups were 17.367 for experimental group-I (yogic practice group), 17.167 for experimental group-II (physical exercise group) and 17.633 for control group respectively. The calculated 'F' value (0.497) is less than the table value of 'F'(3.109) and it is not significant at 0.05 level. Hence the null hypothesis "There would be no significant difference between pre test means for three groups namely experimental group-I (yogic practices), experimental group-II (physical exercise) and control group" was accepted.

And also it is observed from Table-1 the post-test means for the three groups were 9.367 for the experimental group-I (yogic practice group), 12.10 for the experimental group -II (physical exercise group) and 17.767 for the control respectively. The calculated 'F' ratio (321.37) is greater than the table value (3.109) and it was significant at 0.05 level. Therefore the null hypothesis "There would be no significant difference between post-test means for the three groups namely experiment group – I (Yogic practice group), experimental group-II (Physical exercise group) and control group "was rejected. Therefore it is concluded that there is a significant difference post-test means for the three groups namely experimental group-I, experimental group-II and control group.

And it is also observed that from the table-1 the adjusted post test means were 9.375 for experimental group –I (yogic practice group) 12.185 for experimental group –II (physical exercise group), and 17.67 for control group respectively. The calculated 'F' ratio (16.972) is greater than the table value (3.109) and it was significant at 0.05 level. Therefore the null hypothesis "There would be no significant difference between adjusted post-test means for the three groups namely experiment group –I (Yogic practice group), experimental group-II (Physical exercise group), and control group" was rejected. Therefore it is concluded that there would be a significant difference adjusted post test means for the three groups namely experimental group-I, experimental group-II and control group.

Table-1(A)

SCHEFFES TEST FOR THE DIFFERENCE BETWEEN THE ADJUSTED POST-TEST PAIRED MEANS OF BACK PAIN

Experimental group I (yogic practice)	Experimental group II (physical exercise)	Control group	Mean Difference	F-ratio
2.8096	8.2983	-	5.4887	1.2454
2.8096	-	5.4886	2.679	95.082
	8.2983	5.4886	2.8079	829.39

It is observed from Table-I(A) Scheffé's post hoc test ordered adjusted final mean difference for different groups. The difference between the adjusted means for experimental group I (yogic practice), and control group was 5.49. The difference between experimental group I (yogic group) and experimental group (physical exercise) was 2.679. The difference between experimental group II (physical exercise) and control group was 2.8097.

The obtained 'F' ratio of the above three comparisons were 1.2454, 95.082 and 829.39 respectively. The table 'F' ratio was 3.109. Hence the first comparison was not significant and other two comparisons were significant of the three groups experimental group I (yogic Practice) was found better in reducing the back pain.

Conclusion

The statistical analysis of the data reveals that yogic practices and physical exercises reduce back pain. It was also known from statistical analysis that yogic practices have reduced the back pain than the physical exercise and control group. It may be due to the reasons that yogic practices aim at developing basic fitness components which are a pre-requisite for the back strength. The yogic practice produced positive changes in the general fitness, muscular power around the pelvic region. The accumulation of the mass around the pelvic region is one of the causes of back pain. Due to yogic practices the muscles around the pelvic region were strengthened. The suppleness of the muscles ultimately increases the flexibility of the back. The rigidity in the hamstring muscles was reduced by yogic practices. The vertebral column straightened due to yogic practice. In total, the muscles at the back were strengthened, the vertebral column was strengthened, the flexibility was increased, the rigidity was lowered, and ultimately it led to the reduction of back pain.

Recommendations

Yogic practices and physical exercises may be recommended for the improvement of general fitness and also reduce backpain. Yogic practices which does not require any equipment. Hence it may be recommended for school children as well as for middle and old aged persons for prevention and rehabilitation of back pain.

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Effect Of Selected Yogic Exercises On Cardiovascular Endurance And Lung Capacity Of Secondary School Children

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Abstract

The purpose of the present investigation is to find out the effect of selected yogic exercises on selected physiological variables among secondary school children. To achieve these purpose 60 secondary school students were selected from Government High School, Thondoti, Madhugiri Taluk, Tumkur District, Karnataka as subjects. Their age ranged from 12-16 years. They were divided into two groups of 30 subjects each and assigned to experimental group and control group. In a week the experimental group underwent selected yogic exercises and control group was not given any specific training. All the subjects underwent tests namely Lung Capacity and Cardiovascular Endurance. They were assessed before and after the training period of six weeks. The 't' test was used to analyze the data. The study revealed that the above said criterion variables were significantly improved due to the influence of six weeks of yogic exercises on selected Physiological variables among secondary school students.

Keywords : Yogic Exercises, Lung Capacity, Cardiovascular Endurance

Introduction

Asana means holding the body in a particular posture to bring stability to the body and poise to the mind. The practices of asana bring purity in tabular channels firmness to the body and vitality to the body and the mind. (Sharma, 1984). Yoga and yogic practices and their contributions towards the well being of human beings are gaining momentum and have attracted worldwide attention. Yoga has a universal appeal and proposition. It can be practiced, by every human being irrespective of age and sex, which provides total fitness for every individual. Yoga is the most ancient form of India's culture. In ancient days the Rishis considered the human body as the temple of the learning spirit and believed that it should be brought to the highest state of perfection. Yoga as spiritual, mental and physical culture is considered as one of the rich heritages of our country. The types of yoga are raja yoga, Karma yoga, Bhakti yoga, Kriya Yoga, Jnana Yoga, Mantra Yoga and Hata Yoga. Yoga is one which is concerned with physical and mental well being. (Sundar Raj Urs, 2001)

Kuvalyananda states that yoga has a complete massage for humans; it has a message to the human body, mind and soul. He believes that yogic saints cultivated muscles for physiological perfection. The yogic system of physical culture is an ideal system of body building and it has, perhaps the best aim for being called a system of physical culture in the modern sense of the world. It not only aims at the physiological perfection of human body as a whole, but it also pays adequately proportionate attention to the different systems working in the human organism. It is capable of increasing the vitality instead of lowering it and requires only the minimum expenditure of energy for under going the exercises. One will not only be blessed with health and longevity but will also find his brain working with the greatest efficiency. Surya Namaskar provides all of the key health benefits of yoga in a very succinct package. It is a holistic exercise that provides physical health benefits, but also mental or emotional as well as spiritual benefits.

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Statement Of The Problem:

The purpose of the present investigation is to find out the effect of selected yogic exercises on selected physiological variables among secondary school children and the topic entitled on "Effect Of Selected Yogic Exercises On Cardiovascular Endurance And Lung Capacity Of Secondary School Children"

Objectives Of The Study: To find out the significant difference in Lung Capacity of the subjects by practicing yoga among experimental group. To find out the significant difference in Cardiovascular Endurance of the subjects by practicing yogic exercises among experimental group.

Hypotheses: It was hypothesized that there would be a significant difference in Lung Capacity of the subjects by practicing yoga among the experimental group. It was hypothesized that there would be a significant difference in Cardiovascular Endurance of the subjects by practicing yogic exercises among the experimental group.

Methodology:

To achieve the purpose of the study, 60 secondary school students were selected from Government High School, Thondoti, Madhugiri Taluk, Tumkur District, Karnataka as subjects. Their age ranged from 12 to 16 years. They were divided into two equal groups of 30 subjects each and assigned to experimental group and control group. In a week the experimental group underwent selected yogic exercises namely Tadasana, Vakrasana, Padahasthasana, Trikonasana, Padmasana, Paschimothanasana, Vajrasana, Ustrasana, Shasankasana, Gomukhasana, Mathsyasana, Sarvangasana, and Suryanamaskar and control group was not given any specific training. All the subjects underwent two areas of test namely Lung Capacity (Peak Flow Measurement) and Cardiovascular Endurance (Harvard Step Test). They were assessed before and after the training period of six weeks. The analysis of 't' test was used to analyze the data. The study revealed that the above said criterion variables were significantly improved due to the influence of Asana and Suryanamaskar on selected physiological variables among secondary school children.

Training Program and Schedule:

Training Schedule For Yogic Exercise Training Group

The exercises programme was imparted systematically from simple to complex manner; they were practiced as per the subject's individual need.

A) I to IV Weeks

Sl. No.	Name of the Yogasanas	Repetitions	Duration in Minutes
1	Warming-Up and Stretching Exercises	-	15 minutes
2	Suryanamaskara	5 Rounds	10 minutes
3	Aradakati Chakrasana	Both Side Two rounds	4 minutes
4	Parivrutha Trikonasana	Both Side – Two rounds	5 minutes
5	Padahasthasana	Three Rounds	4 minutes
6	Vajrasana	-	3 minutes
7	Bujangasana	Two Rounds	3 minutes
8	Shavasana	-	8 minutes
9	Pranayama & medication	-	8 minutes
	Total		60 minutes

V to VIII Weeks

Sl. No.	Name of the Yogasanas	Repetitions	Duration in Minutes
1	Warming Up and Stretching Exercises	-	15 minutes
2	Suryanamaskara	4 Rounds	10 minutes
3	Aradakati Chakrasana	Both Sides – Two Rounds	3 minutes
4	Parivrutha Trikonasana	Both Sides – Two round	4 minutes
5	Veerabdrasana	Both sides - One Round	3 minutes
6	Padahasthasana	Two Rounds	3 minutes
7	Paschimottanasana	Two Rounds	3 minutes
8	Vajrasana	-	3 minutes
9	Bujangasana	Two Rounds	3 minutes
10	Shavasana	-	8 minutes
11	Pranayama & medication	-	5 minutes
	Total		60 minutes

C) IX to XII Weeks

Sl. No.	Name of the Yogasanas	Repetitions	Duration in Minutes
1	Warming Up and Stretching Exercises	-	15 minutes
2	Suryanamaskara	3 Rounds	12 minutes
3	Aradakati Chakrasana	Both Sides - One Round	2 minutes
4	Parivrutha Trikonasana	Both Sides – One Round	3 minutes
5	Veerabadrasana	Both sides – One Round	3 minutes
6	Padahasthasana	Two Rounds	2 minutes
7	Paschimottanasana	Two Rounds	2 minutes
8	Vakrasana	Both sides – One Round	3 minutes
9	Vajrasana	-	2 minutes
10	Ustrasana	Two rounds	3 minutes
11	Bujangasana	One Round	2 minutes
12	Dhanurasana	One Round	2 minutes
13	Navasana	Two Rounds	3 minutes
14	Shavasana	-	6 minutes
15.	Pranayama and Medication		5 minutes
	Total		60 minutes

Results And Discussions:

After the six weeks of yogic exercises there would be significant improvement in selected physiological variables of secondary school students.

Lung Capacity: The data on Lung Capacity before and after the yogic training of experimental and control groups are analyzed and presented in Table-1.

Hypothesis-1: It was hypothesized that there would be a significant difference in Lung Capacity of the subjects by practicing yoga among experimental group.

Table-1 Significance of differences between pre test and post test scores of Lung Capacity among experimental and control groups (N=30 each group)

Tests	Group	Mean	Standard Deviation	MD	't' value	Level of Significance
Pre Test	Control	2006.666	354.219	36.666	0.319	Not Significant
	Experimental	1970.000	519.382			
Post Test	Control	2026.666	336.240	216.667	2.010	Significant at 0.05 level
	Experimental	2243.333	485.431			

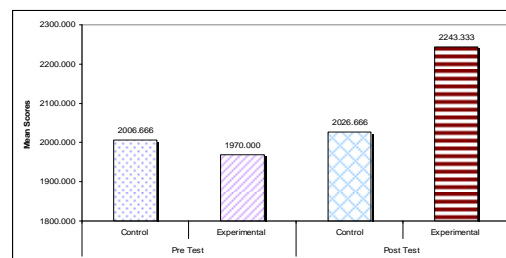
0.05 level of significance ()

From the above table, it can be observed that the obtained 't' value 0.319 is less than Table value 2.00 at 0.05 level of significance in the pre test scores. Hence it was not significant on lung capacity among the control and experimental groups of pre test scores. It was assumed that the two groups started out with equivalent mean scores.

It can also be observed from the above table that the obtained 't' value 2.010 is greater than Table value 2.00 at 0.05 level of significance in the post test scores. Hence the stated hypothesis is accepted that there was a significant effect of yogic exercises on Lung capacity among control and experimental groups. Hence, the hypothesis is statistically proved and stated hypothesis accepted.

The comparison of lung capacity mean scores of pre and post tests among groups is shown in graphical representation in Fig.1

Fig.1.: Bar graph showing comparison of lung capacity pre and post test mean scores of Lung Capacity among experimental and control groups



2. Cardiovascular Endurance: The data on Cardiovascular Endurance before and after the yogic training of experimental and control groups are analyzed and presented in Table-2.

Hypothesis-2: It was hypothesized that there would be a significant difference in Cardiovascular Endurance of the subjects by practicing yogic exercises among experimental group.

Table-2

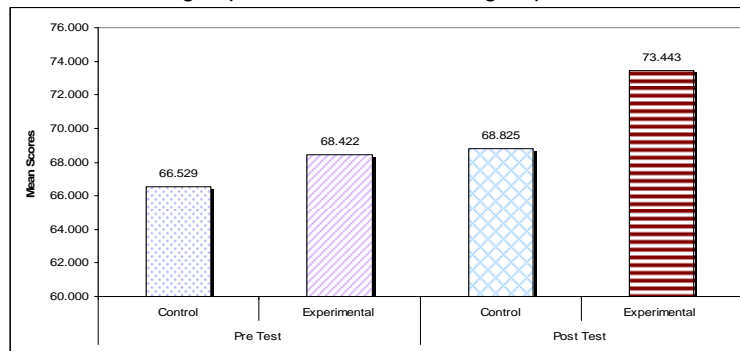
Significance of differences between pre test and post test scores of Cardiovascular Endurance among experimental and control groups (N=30 each group)

Group	Test	Mean	Standard Deviation	MD	t' value	Level of Significance
Pre Test	Control	66.529	9.739	1.893	0.876	Not Significant
	Experimental	68.422	6.734			
Post Test	Control	68.825	8.085	4.618	2.132	Significant at 0.05 level
	Experimental	73.443	8.676			

From the above table, it can be observed that the obtained 't' value 0.876 is less than the Table value 2.00 at 0.05 level of significance in the pre test scores. Hence it was not significant on cardiovascular endurance among the control and experimental groups of pre test scores. It was assumed that the two groups started out with equivalent mean scores. It can also be observed from the above table that the obtained 't' value 2.132 is greater than Table value 2.00 at 0.05 level of significance in the post test scores. Hence the stated hypothesis is accepted that there was a significant effect of yogic exercises on Cardiovascular Endurance among the control and experimental groups. Hence, the hypothesis is statistically proved and stated hypothesis accepted.

The comparison of cardiovascular endurance mean scores of pre and post tests among groups is shown in graphical representation in Fig.2

Fig.2: Bar graph showing comparison of lung capacity pre and post test mean scores of Cardiovascular Endurance among experimental and control groups



Conclusion

There was a significant difference between the control and experimental group on selected physiological variables namely Lung Capacity and Cardiovascular Endurance. There was significant improvement noticed on selected Physiological variables namely Lung Capacity and Cardiovascular Endurance due to six weeks practice of yogic exercises among secondary school children.

The result emphasizes the change of physiological parameter like lung capacity and cardiovascular endurance. This may be attributed to the fact that selected yogic exercises enhance the lung capacity and cardiovascular endurance of children keeping them physiologically fit.

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Comparative Study Of Attitude Of Senior College Men And Woman Towards Physical Education

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Abstract

The main purpose of the study was to find out the attitude toward physical education of Senior college man and woman of bhusawal city. The purpose of the study was to find out the attitude of senior college boys towards physical education. The purpose of the study was to find out the attitude of senior college man and woman towards physical education. It was hypothesized that, there would be significant difference of attitude in the senior college man and woman towards physical education. The study was delimited only to the senior college of bhusawal city. The study was delimited to the subjects of age group between 17-28 years old. Forty students from Nahata College were selected randomly. The study was further delimited to 20 man and 20 woman's. For the preset study the source of the subjects were selected from non-grantable as well as grantable college man and woman affiliated to North Maharashtra University. 20 male and 20 female subjects were selected from non-grantable as well as grantable senior college man and woman affiliated to North Maharashtra University. The subjects were selected by using simple random sampling method. The data pertaining to Attitude of Senior college male and female towards physical education was collected through standard questionnaire prepared by (G.P. Thakur and manju thakur containe 16 items) For the collection of Data, subject were given full administration of the test which was used for the collection of data in the study. The data can be obtained by using the Questionnaire of scale respectively. After the collection of data from the students of senior college male and female affiliated to north Maharashtra university the raw data were converted into standard one by using a statistically technique 't' test for testing of hypothesis

Key words: Attitude, Physical education

Introduction

Physical education provided the rationally required foundation for each individual to enable to develop their personality domains on the concept of all-round development. Physical education provide significant contribution to become as integral part of the total education development process which aim to development of physically, mentally, spiritually, emotionally and socially fit citizens through the medium of physical activities. The researcher is of the view that attitude and interest towards physical education having the big importance in the day to day life. Because attitude is the way of thinking is the favorable attitude towards object, so the researcher wants to know the takes keep interest in taking the study entitled as "Comparative Study of Attitude of Senior College Men and Woman towards Physical Education."

Purpose of the Study

The main purpose of the study was to find out the attitude toward physical education of senior college man and woman of bhusawal city. The purpose of the study was to find out the attitude of senior college boys towards physical education. The purpose of the study was to find out the attitude of senior college man and woman towards physical education. The purpose of the study was to compare attitude of senior college man and woman towards physical education.

Hypothesis

It was hypothesized that, there would be significant difference of attitude in the senior college man and woman towards physical education.

Delimitation

The study was delimited only to the senior college of bhusawal city. The study was delimited to the subjects of age group between 17-28 years old. Forty students from Nahata College were selected randomly. The study was further delimited to 20 men and 20 women.

Limitation

Limitations are those conditions beyond the control of the researcher that may place restriction on the conclusion of the study and the application to other situation. All those things which are not under control of researcher. So the following were the limitations of the study. The level of achievement of the subject was unknown. The socio economic status of the subjects was not taken into consideration. There was no control over the diet of the subjects. The environmental factors were not under the control of the researcher.

Selection of the subjects

For the preset study the source of the subjects were selected from non-grantable as well as grantable college man and woman affiliated to North Maharashtra University. 20 male and 20 female subjects were selected from non-grantable as well grantable senior college man and woman affiliated to North Maharashtra University.

Sampling Methods

The subjects were selected by using simple random sampling method.

Equipment used for collection of Data: The data pertaining to Attitude of Senior college male and female towards physical education was collected through standard questionnaire prepared by (G.P. Thakur and manju thakur contain 16 items).

Collection of Data

For the collection of Data, subject were given full administration of the test which was used for the collection of data in the study. The data can be obtained by using the Questionnaire of scale respectively. After the collection of data from the students of senior college male and female affiliated to north Maharashtra university the raw data were converted into standard one by using a statistically technique 't' test for testing of hypothesis. The data for the mentioned study was collected from the students of senior college of jalgaon region which are affiliated to North Maharashtra university.

Comparison of attitude between senior college male and female towards physical education

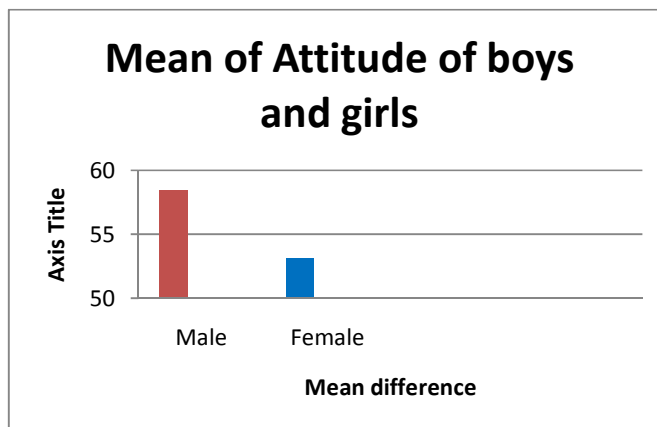
Gender	Mean	S.D	M.D	D.F	O.T	T.T
Male	58.44	7.48	4.42	38	1.33	2.02
Female	53.13	6.23	4.40			

Level of Significance= 0.05

Tabulated 't' 0.05 (38) = 2.02

Table reveals that there was difference between mean of between senior college male and female because mean of male= 58.44. Which is greater than the mean of senior college girls = 53.13. so the mean difference where found as 4.42 and 4.40 respectively male and female. To check the significance difference male and female the data was again analyzed by applying 't' before applying 't' test standard deviation was calculated between male and female where SD male =7.48 and SD female =6.23 and finally calculated value of 't' where found 1.33 which is greater than tabulated value t= 2.02 at 0.05 level of significance. Hence the pre assume of the researcher has been rejected.

Graph Showing the Mean Score of Attitude of Male and Female Towards Physical Education



Conclusion

With the limitations of the study and from the statistical analysis of the collection data it is concluded that there is found insignificant difference of attitude of senior college male and female towards physical education, hence researcher pre-assumed hypothesis is rejected because in major cases the value of tabulated' exceeds calculated 't'.

Discussion of hypothesis

In the earlier time the researcher was hypothesized that there will be a significant difference in attitude of senior college males and females towards physical education. The finding of the present study has revealed that there is insignificance difference in attitude of senior college males and females towards physical education. Hence the hypothesis given by the researcher is rejected

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The Study On Health Related Fitness Of Post Graduation Students Of Mangalore University

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Introduction

All living beings are naturally active, they move and they live because they move. Life is characterized by movement. Even the plants which seem obviously inherent also move. All function of the organism depends upon movement. Movement is the cosmic principle matter and mind. The inherent energy is that matters generates movement, in turns, generates and sustain life. Each atom of the universe and each cell of the organism are blessed with vital energy which causes them 'move'. Movement is an inform quality of the organism when movement erases life causes to exist.

Physical movement is the biological necessity; physical education has devised organized games and sports in a systematic way within educational institutions. A student learns a lot when he takes part in any sports events.

As we enter the 21st century. One of the greatest accomplishments to be celebrated is the continuous pursuit of fitness since the beginning of man's existence. Throughout pre-historic time. Man's quest for fitness has been driven by a desire to survive through hunting and gathering. Today, though no longer driven by subsistence requirements. Fitness remains paramount to health and well-being. This article will highlight historical events and influential individuals who have shaped the history of fitness beginning with primitive man up to the foundation of the modern fitness movement.

The history of fitness portrays some fascinating themes that relate closely to the 21st century. One commonality is the strong association of military and political might with physical fitness through out (11th) mankind's advancement. In many ways, this shows how impacting our world leaders can be on health and fitness. The body mind-body concept has had a tenuous development. At times, some cultures prescribed spirituality at the expense of the body here as others, such as Greek society, upheld the ideal a sound mind can only be found in a healthy body. Another interest rig development from history is the concept of exercise for the body and music for the soul. Present day fitness programs have evolved this concept harmoniously. With music being a distinctive component to the exercise experience. It appears that as societies become too enamored with wealth, prosperity and self-entertainment that fitness levels drop. In addition is technology has advanced with man. The levels Mt physical fitness have decreased. History offers little insight how to prevent or turnaround these recourses. Thus this is a resolution we are challenged within the today's society. Perhaps utilizing all of the extensive research completed on health and fitness in combination with the creative minds now in the. Fitness industry, we now can solve this part of the fitness puzzle.

Sport is one of the striking features of twentieth century life;

As evidenced by the variety and popularity of sporting events in the most diverse parts of the world. This new phenomenon is society has attracted the interest of researchers in many fields, and ever more urgently calls upon historians to contribute to a deeper understanding of sport through their knowledge of the past.

1.3PHYSICAL FITNESS

"Physical fitness is one's richest profession. It cannot be purchased. It has to be earned through a daily routine of physical exercise."

-Dr. A. K. Uppal

Physical Fitness is one of the main mottoes of physical activities. Physical fitness is defined as the ability of the body to adopt and recover from strenuous exercise. The sports performance depends largely on physical fitness speed, agility. Explosive power, the process of improvement of motor ability is also called conditionally.

Methodology

In this chapter, selection of variables, reliability of the data and the statistical technique for the data has been explained in detail.

Selection of Subjects

The purpose of the study was to study the health related fitness of Mangalore university post graduation students

Selection of Variables

There are five areas of health-related fitness they were Cardiovascular Endurance, Flexibility, Body composition, Muscular strength and Muscular endurance.

The Hypothesis Of Study

It was hypothesized that Mangalore university men Post Graduation students were physically fit or some students were not fit in some of the health related Physical fitness components

Analysis of the Data

The data was collected by conducting Health related Physical fitness test in different test the collected total data was calculated and converted to percentage according to the fitness of the individuals in different Health related physical fitness components.

Results and Discussion

Illustration No: 1 Area-Wise Distribution Of The Respondents

Sl. No.	Residential Area	No. of Respondents	Percentage (out of 100%)
1.	Urban	22	44.00%
2.	Rural	28	56.00%
Total		50	100.00%

Many of the studies were found that population of the rural portion were more strengthen in all aspect with compare urban sects hence the researcher was keen to bring out the information of both urban and rural population in comparative aspect. Therefore the researcher has made an attempt to include both the respondents for better understanding. As per the data is revealed the researcher has included 22 number of respondents from the urban population that is 44% and 28 respondents were from rural sect. It is clearly says that the majority of the respondents were from rural area with compare to urban amalgamation. Though the study area comes under semi-urban but majority of the respondents are staying in rural areas.

Illustration No: 2 Discipline-Wise Distribution Of The Respondents

Sl. No.	Discipline	No. of Respondents	Percentage (out of 100%)
1.	Science & Technology	22	44.00%
2.	Social Science	21	42.00%
3.	Commerce/Management	07	14.00%
Total		50	100.00%

Since the researcher has given equal importance to include the respondents equally from all the discipline which are existed within the Mangalore University the researcher has taken keen interest in finalizing the sample size from discipline wise such as Science and Technology, Social Sciences and finally Commerce or Management. The study has taken 22 numbers of respondents (44%) from Science and Technology and followed by 21 (42%) respondents are from purely Social Sciences and

in the last the researcher has covered a marginal number of respondents from Commerce/Management that is 7 (14%) respondents. In comparative aspect from all the disciplines it is science and technology is dominated in study by participating maximum. Though the researcher has given equal importance to choose the respondents from each discipline but in the final the sample distribution became unequal due many issues such as lack of interest in participation. With compare to social science and management students the science and technology students have shown maximum interest to be the part of the study.

. Illustration No: 3 Age-Wise Distribution Of The Respondents

Sl. No.	Age Category	No. of Respondents	Percentage (out of 100%)
1.	21	07	14.00%
2.	22	09	18.00%
3.	23	22	44.00%
4.	24	07	14.00%
5.	25	02	4.00%
6.	Above 26	03	6.00%
Total		50	100.00%

The researcher for the purpose of scientific study has taken the respondents from the age between 21 years to 26 years of age. In the study it is found that the average age of the respondents is 23 and half years. However since the study covers limited number of respondents the researcher make an attempt to take exact age of the respondents. According to the data the majority of the respondents (44%) were falls under the age category of 23 years which is considered as mean age of the respondents. Followed by this 18% of the respondents were falls under the category of 22 years. A least number of respondents (4%) were from the category of 25 years followed by 6% from the age group of above 26 years.

Illustration No: 4observational Reading Of Sit-Ups Test

Sl. No.	Sit Ups	No. of Respondents	Percentage (Out of 100%)
1.	11-20	04	8.00%
2.	21-30	26	52.00%
3.	31-40	15	30.00%
4.	41-50	05	10.00%
Total		50	100.00%

While measuring the physical fitness in any one examining the stability of sit-ups is essential to check out the overall strength of the body hence the researcher have taken all precautions to measure it under the scientific guidelines. In the experience of the researcher according to the collected information of the respondents it is found that majority of the respondents (26) were found sit up rate between the category of 21-30 and a countable number of respondents that is 30% (15) were falls under the sit-up rate of 31-40. However it is observed from the data a marginal number of respondents of 8% were comes under the range from 11 to 20 followed by 10% of them are in rage of 41-50 category. The debatable issue is here that testing the sit ups is criteria for the measurement of fitness hardly a matter of assessment in the view of researcher with scientific methods of which the researcher have taken assistance of research guide along with experts. Hence in the table it depicts that the average value of the sit up test among the respondents were running under normal stage. Further it can be suggested to the respondents who are having poor status of sit ups to improve and modification with the help fitness exercises.

Illustration No: 5 Measurement Of Resting Heart Rates

Sl. No.	RHR	No. of Respondents	Percentage (Out of 100%)
1.	40-50	08	16.00%
2.	51-60	32	64.00%
3.	61-70	04	8.00%
4.	71-80	04	8.00%
5.	Above 80	02	4.00%
Total		50	100.00%

RHR: Resting Heart Rates.

A healthy rate of heart beats can depicts the overall health status of a person hence while measuring the physical fitness it is required to examine the resting heart rates. Therefore the researcher included all the respondents for the testing of resting heart rates in scientific aspect out of the total number of respondents around 32 respondents (64%) were falls under the rate of 51-60 which is considered here as average rate of heart rest and followed by 16% of the respondents were falls lesser the average rate that is between 40-50. Around 8% of them are rectified in the group of above average rate in the range of 61-70 followed by another eight percentage in category of 71-80 and

At last marginal number of respondents are comes under the resting heart rate of above eighty group. Though in the study it is found that more than half of the samples size was comes under the average level it is equally importance to suggest the respondents to maintain equilibrium in terms of resting heart rates in benefit of maintain good health and sound fitness for the growth and development of personality.

Illustration No: 6 measurement Of Maximum Heart Rates

Sl. No.	MHR	No. of Respondents	Percentage (Out of 100%)
1.	171-180	06	12.00%
2.	181-190	12	24.00%
3.	191-200	32	64.00%
Total		50	100.00%

MHR: Maximum Heart Rates.

While counting the heart rate between the intervals of resting the examiners should keep in mind that minimum and maximum rates of the heart rates and in a way this will help in finding the average rate in an given sample size or among the respondents. Keeping this factor as a prime concern the researcher attempted to measure the maximum heart rates from the respondents and it is found that a sixty four percentage (32 respondents) of the respondents are having the heart rate between the ranges of 191 to 200 which is considered as maximum here. Around twenty four percentage (12) are of comes in the category of 181-190 and remaining 12% of the respondents are belongs to the group of 171-180 which is considered here as a least observation among the maximum rate. As the physical exercises increases the heart rates are also going to be increase in meager level due to body workout. Hence in the view of researcher it can assume that maximum numbers of respondents are well enough in maintaining the good health in terms of maintain maximum heart rates.

Illustration No: 7 comparative Measurement Of Sit And Reach Test

Sl. No.	Sit & Reach Values	No. of Respondents	Percentage (Out of 100%)
1.	-10 to -20	02	4.00%
2.	-21 to -30	03	6.00%
3.	+10 to +20	21	42.00%
4.	+21 to +30	19	38.00%
5.	Above 30 +	05	10.00%
Total		50	100.00%

Working on issues which are related to measurement of physical fitness independently is an easy task but while doing the same in comparative aspect is bit tougher and requires additional knowledge and information too for the researcher. Tracing both the values of positive and negative observation in one column will definitely gives sound result to audience of academic hence the researcher had make an effort to examine the sit and reach in both the aspect of positive and negative. In the study the primary data depicts that majority of the respondents (42%) were found in category of positive aspect of observation that is in the range of +10 to +20 which is known for the healthy fitness and their personality sounds energetic and strength enough. Around thirty eight percentages (19 respondents) of them are fall again under the category of positive observation which is ranges between +21 to +30 and these are respondents who are known for having good fitness.

Only 10% of the respondents are above average in maintaining stability in sit and reach who are fall in rate of above 30+ categories. In one side it is positive at a same time the negative aspect of the data is that 4% of the respondents are falling in range of -10to -20 which is considered here as negative observation. In the view of the researcher it can be concluded that this type respondents body condition in related to physical fitness is somewhat problematic and the body reaction will be less and unhealthy too. At last hardly six percentage of the respondents are comes under the group of -21 to -30 who are known for poor fitness. In conclude around 10% of the respondents are need special focus to improve their sit and reach capacity to increase the body stability rate for the maintenance of healthy and energetic personality for the normal function.

Illustration No: 8 MEASUREMENT OF MUSCULAR ENDURANCE

Sl. No.	Muscular Endurance Rate	No. of Respondents	Percentage
1.	11-15	06	12.00%
2.	16-20	24	48.00%
3.	21-25	16	32.00%
4.	26-30	04	8.00%
Total		50	100.00%

In medical endurance while doing the personality test there will be muscular endurance test to measure the strength of the body according to the age. It also helpful in measuring the development of body with cross-sectional comparison of age and height. In some special cases even this test can be used to identify the exact age of the person in case of he or she doesn't know the exact age. Hence the muscular endurance test is much useful in all aspect of human being. In the study it is found that forty eight percent of the respondents were found their endurance of muscular test in the range of 16-20 category it means nearer to the half of the sample size were fall under this category and remaining thirty two percent of the them are having muscular endurance rate between 21- 25 rate. More than twelve percent of the respondents are having endurance of 11 to 15 rates and at the last only eight percent are having the rate of endurance between 26-30 which is considered here as highest number observation among all the respondents in testing of muscular endurance. As sum up the overall observation of muscular endurance the maximum number of respondents are comes under the above average level and only a marginal proportion of the respondents are needs to improve further to improve their muscular endurance stability for the growth and development of their personality

Illustration No: 9measurement Of Skin Fold Caliper Test

Sl. Nor	Fat content Skin in (mm)	Nor. of Respondent	Percentage (%)
1	30-40	3	6 %
2	41-50	7	14 %
3	51-60	26	52 %
4	61-70	12	24 %
5	71-80	2	4 %

Measuring skin fold caliper is one of the essential components in assessing the physical fitness of human body hence the researcher has taken this independently as part of significance for the presents study. In the above illustration it is defected that out of total number of respondent there were 52% of the respondents were falls between the ranges of 51 to 60. And other 24% of the respondents were comes under the range of 61 to 70 were the significance level of fat contents in the skin was above the average. A considerable portion of the respondents that is 14% were rectify from the range group of 41 to 51% followed by 6% in category of 30 to 40% and at last 4% were falls in rang of 71 to 80.

Conclusion

The analysis of the data facilitated the following conclusions;

Summing up of the present research in the beginning the researcher knows the concept of physical fitness in general and there were no much insight into the practice. But in the present study the researcher has gained lot of information from both primary and secondary sources. Further the tests which are conducted with the respondents are fruitful in gaining the practicum of different measurements.

At last as part of conclusion the following inferences can be adopted to improve the backwardness of poor physical fitness amenities such as proper monitoring, feeding of sufficient information on fitness, evaluation of endurance with the application of mind and finally comparative analysis with different aspect and domains of physical activities and physical fitness.

Recommendation

Other than the information collected from the respondents with the help of entry sheets and testing in the observation of researcher it is found that there is a dearth of information about physical fitness among the respondents hence there is need for taking up the initiatives to remove this gap.

In the study it is found that there is lack of awareness on fitness maintenance and its importance hence the university can establish separate cell to fulfill the dearth of this.

Since the study covers much of the rural population it was unable to understand the scenario of problems of urban students in terms of physical fitness hence the similar study can be taken up where the enormous chance needs to be given for urban students.

A micro level study can be done again on the issue to know the reason behind irregularities of commerce and management students in participation of physical fitness activities.

There should have the provision for evaluative assessment in understanding the problems which the respondents are facing in maintain the sound endurance and needs to identify the reasons for it.

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A comparison study for the response of the respiratory system variables before and after performing the air exercise for the players of the specialist school of Basketball

.Dr. Huda Badowi Shibib Rafal Mohamood

Abstract:

The research aimed to:

Identifying the values of the respiratory system. Variables before and after performing the physical effort. Identifying the differences of the responses of respiratory system variables before and after performing the air exercise for the players of the specialist school of basketball.

The research sample consisted of players of specialist school of basketball and they were totaled to (10) players. Where they exert physical effort on treadmill, and the variables of the respiratory system were identified before exerting the effort and then after that and that for the identification of the physiological responses of the respiratory system variables.

Throughout the results which were reached

The researchers infer:

The appearance of moral differences between the before and the after tests and for the benefit of the after test for the sample under study in the responses of the respiratory system variables under the study.

The researchers recommend:

The necessity of making similar researches on different samples.

Making periodic tests for the respiratory system and for the blood circulation as they are consider the most important functional systems and the most respondent systems with the effort exerted by the players.

Introduction:

The achievement performed by the sportsmen in the championships and breaking the records did not come by chance more than they come as results of scientific researches, thematic study, and depending on other sciences.

Where the biological side when exercising the sports activities, take big space in the thinking of the scientists especially the scientists of the physical education in that they take care in the studying of the strong bond among the different systems of the human body and the responses resulting from exercising the different physical efforts.

And as the respiratory system is one of human body's systems and the most effective one in exercising the physical efforts where it is one of the important indicators of the sportsman physical efficiency from the point of view of improving of consuming the oxygen or breathing rate, and for the biologic capacity, and the ultimate oxygen consuming, and monitoring these responses by using techniques or tools like spirometer and fitmat which supply us with the functional variables that have relation to the respiratory system in addition to creating modern training ways for identifying the range of the sportsman physical systems response whether it was the respiratory system or blood circulation and the range of the adaptively for the effort exerted on these systems and which participate in one way or another in making achievements.

And here lay the important of the research in identifying the resulting responses for practicing the air physical exercise and what are the differences among these responses before and after making the effort.

Research problem:

The respiratory system is considered one of the functional systems by which the level of the sportsman is evaluated for its importance in preparing the sportsmen and for the adaptability of the effort where that any effort requires functional preparing by the breathing operation, aggrandizing of oxygen consuming, and on increase in the biologic capacity. Here and for this end and for entering in the parts of the respiratory system, came the research problem in studying the responses resulting from the physical effort by using modern tools before and after making the physical effort.

The research's two goals:

Identifying the values of the respiratory system variables before and after making the air exercise.
Identifying the differences in the responses of the respiratory system variables before and after performing the air exercise for the players of basketball specialist school.

Research assumption:

There are differences of a statistical references for the responses of the respiratory system responses before and after performing the air exercise.

The Research's domains:

the humane domain: a sample consisted of the players of basketball from the specialist school and the totaled to (10) players.

Domain: the basketball inner pitch at the specialist school.

time interval: for the period from 1/1/2016 to 7/3/2016.

Part two

Demonstrating, analyzing, and discussing the results
Demonstrating, analyzing, and discussing the results of the respiratory system variables before and after performing the effort.
Demonstrating, analyzing, and discussing the results of the rate of heart pulses before and after performing the effort.

Table (1)

The variables	The before test		The after test		Calculated T	Statistical reference
	Speed	No.	Speed	No.		
The rate of heart puls	69.463	7.3	62.63	3.69	24.62	moral

* the value of the table T under reference level 0.05 and freedom degree $N-1=9$ to be equal to 1.833
Through table (1) it was clear that there are differences of statistical references between the before and the after test and for the benefit of the after test where when comparing the value of the calculated T and which was equal to 24.62 and its bigger than the table T under reference value 0.05 and freedom degree 9 equal 1.833 which refer to the existence of moral difference, and that the researchers allude the moral differences to:

To the nature of the effort which was performed by the players and that refer to the heart adaptability of the heart for the training where the organized training led to lessen the rate of heart beating in addition to that the continuation on training for uniformed periods keep the heart economy and developing its level of functional efficiency and increase the act of the parasympathetic nerve which work to slow the heart beating

Table (2) Showing the results of the before and the after tests

The variables	The before test		The after test		Calculated T	Statistical reference
	Speed	No.	Speed	No.		
Vo2 max mil./min	3412.20	358.69	5114.28	327.58	3.59	moral

* the value of table T (1.833) under reference level 0.05 and freedom degree of 9.

Through table (2) it is clear that the calculated T is bigger than from the table T under reference level of 0.05 and freedom degree (9). And this allude to the existence of differences between the before and the after tests and for the benefit of the after test.

Where the calculate T was 3.59 and when compare it to the table value 1.833 which refere to the existence of moral difference for the calculated value bigger than the table, the researchers ascribe this to:

To the type of the effort practiced by the players where when practicing any type of efforts will lead to improve the intrapulmonary aerating and increase the level of the ultimat consuming of oxygen which lead to lessen the content of lactic acid in the blood through the exerted physical effort for the trained blokes than for the non trained

Table (3): Showing the reference of the difference between the before and the after tests in the vital capacity variable

The variables	The before test		The after test		Calculated T	Statistical reference
	Speed	No.	Speed	No.		
Vital capacity ml	4143	0.597	4836	0.684	2.95	moral

* the value table T 1.933 under reference level 0.05, and a freedom degree 9.

Through table 3 the value of T calculated T bigger than the table T under reference level 0.05 and freedom degree 9.

And this refer to the existence of moral difference between the before and the after tests and the researchers ascribe these moral differences to:

To the type of performed effort exerted by the players and as any type of efforts will lead to changes to take place in the functional systems and especially the respiratory system where the power of the diaphragm muscles, and the power of in between Ribs muscles in addition to improvement accompanied intra pulmonary ventilation through the physical effort or increase the breathing air size.

The biologic capacity is an important indicator to know the size of the ultimate breathing air when performing the physical effort where as the size of breathing air the breathing rate will be less through the minute and as result the rate of consumed oxygen will increase in the minute and as a result lead to the increase of the oxygen size consumed in the work of the breathing muscles and this will be on the account of the consumed oxygen in the rest of the player

Inferences and Recommendations

inferences and recommendations:

the inferences:

Through the results which were reached, the researchers inferred the following:

There are differences of statistical references between the before and the after tests i.e. "before the effort" "and after the effort" in the variables related to the respiratory system "the rate of heart puls, the ultimate oxygen consuming, and the vital capacity".

the Recommendation:

According to the results which were reached the researchers recommend the following:

The necessity of making similar researches on other samples t o asses their level.

Identifying the physiological variables which are affected in a clear way by the physical efforts.

Making periodic tests to limit the negatives which the sportsmen may suffer from in their functional systems.

Physical Education And Sports Sciences: Future Trends Current Issues And Challenges

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Abstract

The aim of this paper is to identify the current trends and challenges in physical education and sports and based on these current challenges, future trends and challenges would be discussed. There are various factors which are diminishing the interest of students in physical education activities. Although the physical education is being taught as a part of curriculum in all the schools but lack of adequate time and trained teachers, good facilities are responsible for little interest in this field. The future challenges to make this field interesting involves an adequate curriculum, sufficient funds allotment for holding various competitions and role of technology to create awareness about the importance of physical activities and sports in our daily life.

This is an advanced subject where readings and discussions of current problems in physical education and sport are expected of the students. The focus will be on critically analyzing issues and trends in the field of physical education and sport, with an emphasis on understanding the impact of the field to education and society. Implications for the future are also explored.

The importance of physical education has never been emphasized more than it is today. It is widely recognized that physical education is relevant and important in developing an active and healthy lifestyle and the solution to rising obesity rates worldwide. In the school context, there is a need therefore to fully understand the theoretical basis behind curriculum planning, development and innovation. This course also addresses other issues and challenges facing physical education especially in the light of developing 21st century competencies and skills in students as well as the advent of new media and how they can be used to engage students more effectively.

On the sporting front, specifically in the local scene, the development of the Sports Hub, setting up of the Singapore Sports Institute, and recent announcements such as the Goal 2016 and Vision 2030 signals a greater emphasis on sports in Singapore. The aim of making Singapore the World's foremost Sports City means developing the sports industry, sports medicine and sports Science fields. The courses look at these developments and examine how they have implications for Physical Education and Sport in Singapore in the future.

Keywords: Physical education, sports, curriculum, technology.

Introduction

The importance of physical education has never been emphasized more than it is today. It is widely recognized that physical education and sports is relevant and important in developing an active and healthy lifestyle and the solution to rising obesity rates worldwide. Although in most countries, physical education is part of the school curriculum, lessons are not given, thus leading to a reduced experience of physical activity for children and youth. The practice of a physically active lifestyle in combination with healthy nutrition, however, needs to be started in early childhood. Therefore, ensuring that all children engage in regular physical activity is crucial, and the schools are the only place where all children can be reached. Quality Physical Education is the most effective and inclusive means of providing all children, whatever their ability/disability, sex, age, cultural, race/ethnicity, religious or social background, with the skills, attitudes, values, knowledge and understanding for lifelong participation in physical activity and sport and is the only school subject whose primary focus is on the body, physical activity, physical development and health. The present study will identify the current trends, issues and challenges in Physical Education and sports based on which future challenges will be addressed.

Current trends, issues and challenges in physical education and sports

The “reality check” reveals several areas of continuing concern regarding current trends in PE and sports. These areas embrace: physical education not being delivered or delivered without quality, insufficient time allocation, lack of competent qualified and/or inadequately trained teachers, inadequate provision of facilities and equipment and teaching materials, large class sizes. It is noted that the amount of time dedicated to physical education has been diminished in the school curriculum throughout the world. Physical educators have failed to ensure that the linkage between their efforts in the classroom and the health and cognitive development of their students. The responsibility rests directly on the shoulders of physical educators to ensure that the importance of their subject matter is understood and embraced as a part of their schools’ overall curriculum.

Today, more than ever, the physical education curriculum needs to be linked to the overall well-being of children and youth as they matriculate through the curriculum. As has been noted, lessons learned at an early age carry into adult life. Furthermore, the importance of physical activity as a way of creating greater attentiveness in the classroom has not been recognized. The opportunity for schools to provide Brain Breaks, which stimulate students and reenergize their efforts, has largely been ignored in the overall curriculum.

Therefore it is dire need to generate student’s interest in sports and other physical activities by making these studies more interesting and creating awareness about the importance of such activities.

Developing 21st Century Skills and Competencies in Physical Education and Sports

“The aim of Physical Education is to develop physical competence so that all children are able to move efficiently, effectively and safely and understand what they are doing. The outcome, physical literacy, along with numeracy and literacy, is the essential basis for learners to access the whole range of competences and experiences.” Linkages to community-based organizations, agencies, and institutions are an essential component of the 21st century health and physical education curriculum (Pate et al., 2006; Sallis, Floyd, et al., 2012). Schools often work with community agencies in all sectors of society— private and commercial, non-governmental and government organizations—to plan and develop programs on a cooperative basis. An important component in developing the joint use of resources is the establishment of a program of communication and interaction. As the joint use of resources implies a sharing of human fiscal and physical resources, it requires that the leaders of cooperating organizations develop close relationships and partnerships among people, agencies, and institutions. A key factor in building cooperative relationships is the importance of leadership that is willing to overcome issues related to territoriality, inertia, legal mandates, tradition, fear of the loss of power, feelings of ownership, the misunderstanding of programs, and others.

Such cooperative activities improve the accessibility to programs and services, as well as areas and facilities. In this way, the talented students will be sponsored through different agencies to take part in different competitions. In India specially where there is so much talent but due to lack of financial funds, many students lack behind even being so talented. The co-operation from different agencies will help needy students to showcase their talent at different world level competitions. Thus, adequate training through well-defined curriculum as well as funding from different agencies is necessary to promote the PE and sports activities.

Role of technology

Children born in the early part of this millennium are known as the “iGeneration” (Rosen, 2010, 2011). This group of individuals has access to forms of technology unheard of just two decades ago. They have never known life without wireless high-speed internet connections, cellular phones with data connections, texting or video gaming consoles. Most of them are very familiar with technology interfaces, using apps and social media on a regular basis. The implications of such dramatic changes in access to technology among children and youth should be self-evident in all learning areas. Applications in health and physical education pedagogy are available and can be applied to enrich and enhance curricular offerings in most school settings. Numerous technological applications focused on promoting physical activity and fitness is available and easily accessible. However, application of various technologies will require new student and teacher competencies and practices. Students will be required to demonstrate competency in basic motor skills and also competence in using technology. In addition, such technology will enable individuals to learn in a student-centered self directed fashion; students will be required to gain greater time management skills in order to enable appropriate time on a task. Teachers will also be required to gain knowledge of contemporary, technology-based instructional strategies.

Furthermore, teachers will need to gain a greater awareness of teaching strategies that support anytime, anywhere learning and leverage technological applications. Technology holds promise for the way that students learn and also for the way in which teachers teach. Physical and health educators are challenged to become more responsive to a technology-driven environment that provides enhanced opportunities for learners well beyond the walls of the traditional classroom setting. Technology thus can play vital role in generating the interest in physical education and sports activities.

Current trends in school PE and sports

Physical education trends have developed recently to incorporate a greater variety of activities besides typical sports. Introducing students to activities like bowling, walking or hiking, or Frisbee at an early age can help students develop good activity habits that will carry over into adulthood. Some teachers have even begun to incorporate stress-reduction techniques such as yoga, deep-breathing.

Recommendations

The future of physical education: we must change now the following are some recommendations for change which we can make NOW:

1. We must adopt the philosophy that physical education is- for all people, regardless of ability.
2. We must put every effort into requiring elementary school physical education in every school.
3. At the middle, junior, and senior high school level we must provide problem solving courses in fitness which teach all students to become good fitness and exercise consumers. Such courses must be based on personal needs, interests and abilities (Corbin, 1978).
4. We must modify middle, junior, and senior high school programs to allow students to make personal choices of skills and activities.
6. We must realize that physical education does not stop after the school years. Those who will work in fitness centers, hospitals and other similar settings are teachers even though they will not teach in schools. They are NOT exercising scientists or exercise physiologists as they would like to call themselves! If we do not teach these professionals to realize that they are teachers who must meet the needs of their clients, we will lose out to less qualified "exercise" enthusiasts.
6. We must police our profession. We must certify all professionals to make sure they are qualified. We must do something to rid ourselves of those who do not do the job.

Conclusion

The current practices and present curriculum needs to be modified to generate interest of students in physical education and sports activities. The future challenges will mainly be the appropriate curriculum to be made and followed and to make available adequate funds from various organizations in order to support the needy but intelligent children so that they can only focus on their game without worrying about the funds. The technology will also play an important role in expanding and creating the interest in physical activities. The importance of physical education and sports activities are being identified in today's world and efforts are being made to improve the situations so that more and more talent can be recognized.

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“A Comparative Study On Selected Physical Fitness Components Of Kabaddi And Kho-Kho Players Of Vijayapur School Children.”

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Abstract

The main purpose and objective of the present study is to compare the Physical Fitness Components of Kabaddi and Kho-Kho player abilities. The purpose of the study is to measure the Physical Fitness Components of one hundred players, out of hundred 50 players from Kabaddi and 50 players from Kho-Kho has been selected on purposively and randomly basis. Who has won medal/position in Vijayapura dist School Zonal, Inter-Zonal and participated in State School Games during the 2013 to 2015. All the subjects were regularly practicing and competing in their respective sports competition. The following variables were found significant at 0.05 level of such as Body Mass Index “t” value 7.11, speed test by 40m dash the “t” value 5.89, Standing Broad Jump the “t” value 4.24, the flexibility test- Sit & Reach “t” value 4.96, the test of Strength Endurance- 1 minute Sit-Ups the “t” value 5.29, cardiovascular endurance in form of 12min Run/Walk Test, the “t” value 5.61, which was significant at 0.05 level. The similar study may be undertaken for female players or counter part of male Kabaddi and Kho-Kho players. The similar study may be conducted by taking others important variables which affects the performance of the Kabaddi and Kho-Kho players along with others important physical variables.

Introduction

The main purpose and objective of the present study was to compare the Kabaddi and Kho-Kho players on the selected physical abilities. In comparing the Kabaddi and Kho-Kho players of Delhi Schools, who has obtained position at Zonal and inter-Zonal or participated in National Scholl Games (SGFI)/ Junior National in their respective sports competition on selected physical such as Body Mass Index (BMI), Speed, Standing Broad Jump, Sit and Reach, Sit-Ups, 12minutes Run/walk, between the players of Kabaddi and Kho-Kho. The necessary data was collected with standardized procedure by administering selected abilities tests.

The kabaddi players group was have more BMI showing greater body mass than the Kho-Kho players group. The significant difference was found in the speed ability- 40m sprint test the Kho-Kho players group had better speed in comparison to the Kabaddi players group. The significant difference was found in the Standing Broad Jump a test of explosive strength in relation to the Kabbadi and Kho-Kho players. The kabaddi players group had high explosive strength, showing greater jumping ability than the Kho-Kho players group. The significant difference was found in the Sit and Reach test in the Kho-Kho players group had better hips and legs flexibility in comparison to the Kabaddi players group. The significant difference was found in the 1 minute Sit-Ups test of muscular strength endurance in relation to the Kabaddi and Kho-Kho players. The kabaddi players group had better muscular strength endurance of abdomen muscles group, showing greater muscular endurance ability than the KhoKho players group.

The significant difference was found in the 12minutes Run/Walk test of cardiovascular endurance in relation to the Kabbadi and Kho-Kho players. The Kho-Kho players group had better cardiovascular endurance, showing greater heart and lungs capacity than the Kabaddi players group. The safety precautions should always be adopted for the Kabaddi and kho-Kho training and competition for the safety of the players. A study may be undertaken with fully residential subjects of different age groups junior senior, men and women, who were regular in their professional type of training.

Objectives

The main objective of the present study will be to find out the difference between Kabaddi and Kho-Kho players at senior secondary school level in regards to their physical variables. The formally, the objectives of the study will be as under:

To find out the different between physical fitness components of Kabaddi and Kho-Kho players such as speed, explosive strength, cardiovascular endurance, coordinative ability, and flexibility.

Delimitations

The study will be delimited as following:-

The study will be delimited to purposively select 100 male subjects age ranging from 16 to 19 years of Vijayapura schools, participated at Inter-Zonal and School National (SGFI) Kabaddi and Kho-Kho competition.

The study will be delimited to 100 male players" at schools levels and 50 male players of Kabaddi and 50 male kho-kho players.

The investigation will be delimited to selected physical variables as under:-

1. Physical :a. Height b. Body weightc. BMI

2. Physical Fitness Components

a. Speed- 40m. Sprintb. Explosive Strength- standing broad jump

c. Cardiovascular endurance- 12min. run/walk testd. Coordinative ability- 4X10m. = 40m. Shuttle run

e. Flexibility- Sit/bend and reach test

Limitations

The findings of the study will be understood by considering the following limitations.

Availability of small number of sample size will be one of the limitation of the study.

Sophisticated testing equipment and sophisticated equipment for exercises will also be one of the limitation for the present study.

Individual differences among the subjects and other factors such as- Life Style, dietary habits, daily routine, will also considered limitations for the present study.

Methods

For the purpose of the study one hundred players- 50 from the game of Kabaddi and 50 from the Kho-Kho has been selected on purposively and randomly basis, who has won medal/ position in Vijayapura Scholl Zonal, Inter-Zonal and participated in State School Games during the 2013 to 2015. All the subjects were regularly practicing and competing in their respective sports competition. Health and Physical Education is defined as the process by which individuals and groups of people learn to behave in a manner conducive to the promotion, maintenance or restoration of health. It is a continuing process of informing people how to achieve and maintain good health; of motivating them to do so; and of promoting environmental and lifestyle changes to facilitate their objective. The research scholar gleaned through all the scientific literature pertaining to Kabaddi and Khokho from books, magazines, journals, periodicals available in the various libraries of Vijayapura and internet surfing/sites. Keeping the feasibility criterion in mind, especially in the case of availability of instruments, the following physical abilities were selected i.e. Body Mass Index (BMI), Speed, Standing Broad Jump, Sit and Reach, Sit-Ups, 12minutes Run/walk.

Discussion

The significant difference was found in the Body Mass Index- in relation to the Kabaddi and Kho-Kho players. The Kabaddi players group was have more BMI showing greater body mass than the Kho-Kho players group. The significant difference was found in the speed ability- 40m sprint test the Kho-Kho players group had better speed in comparison to the Kabaddi players group. The significant difference was found in the Standing Broad Jump a test of explosive strength in relation to the Kabaddi and Kho-Kho players. The Kabaddi players group had high explosive strength, showing greater jumping ability than the Kho-Kho players group.

The significant difference was found in the Sit and Reach test in the Kho-Kho players group had better hips and legs flexibility in comparison to the Kabaddi players group. The significant difference was found in the 1 minute Sit-Ups test of muscular strength endurance in relation to the Kabaddi and Kho-Kho players. The Kabaddi players group had better muscular strength endurance of abdomen muscles group, showing greater muscular endurance ability than the KhoKho players group. The significant difference was found in the 12minutes Run/Walk test of cardiovascular endurance in relation to the Kabaddi and Kho-Kho players. The Kho-Kho players group had better cardiovascular endurance, showing greater heart and lungs capacity than the Kabaddi players group.

Conclusion

The similar study may be undertaken for female players or counter part of male Kabaddi and Kho-Kho players. The similar study may be conducted by taking others important variables which affects the performance of the Kabaddi and Kho-Kho players along with others important physical variables. Similar study may be undertaken by comparing the players of the other team individual sports competition and comparing the players belonging to different socio-economic status, geographical conditions and variation in ethnicity.

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The Politicians' Roles In The Development Of Professional Football Clubs In Thailand

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Abstract

This research aims to study 1) the reasons attracting the politicians to take part in the development of Thailand's professional football club, and 2) expected social roles of politicians in the development of Thailand's professional football club. This is quantitative research. The populations in the research are presidents of football clubs, managers of Thailand's professional football clubs, coaches of Thailand's professional football clubs, footballers, football spectators, sports reporters, and management of Football Association of Thailand (FAT). The number of population is 517. The research tool is questionnaire. The statistics applied in data analysis are frequency and percentage.

The research findings reveal that 1) politicians participate in the development of Thailand's professional football club to seek personal fame and honor, and 2) expected social roles of politicians in the development of Thailand's professional football club, that is, they have more exposure to opportunities in giving supports such as fund, equipment, venue, training field, and competition field which are useful for football clubs.

Key words: roles of politician, professional football, professional football development

Introduction

Presently, sports become a part of public relations of state or locality in order to demonstrate its superiority, national existence, or identity for all countries (MacClancy, 1996). Previously, some proposed an idea to separate sports from politics (Feliciano-Ortiz, 2012; Coakley, 1994) or enable "politically free sports". Nonetheless, it is almost impossible to follow this idea in reality because sports and politics are likely to be in parallel (MacClancy, 1996),

The politicians are likely to foster sports team, clubs, or any kind of sports in order to create memoir and familiarity with people (Arnaudand Riordan, 1998). The relation with politicians gives benefits to the sports in terms of financial support, increase in opportunities of sponsorship, improvement of sports fields including relevant facilities, and media attraction. However, the relation has problems caused by difficulties in the sports business such as Olympic boycott in 1980 and 1984, rooted by politics (Dousti et al., 2012).

As for Thailand's sports business, national and local politicians have participated in the sports both directly and indirectly (Panikabutr, 2011). This can be seen from a list of provincial president of sports associations. A politician is likely to hold the position by himself or send his reliable subordinate to take it, which is considered as holding the position indirectly. Such trend leads to a phenomenon in Thailand's professional footballer, that is, many politicians are interested to become management of professional football club in Thai Premier League, Division 1, and Division 2. The 2013 survey on professional sports club in Thailand revealed that the politicians took a position of president or manager of 65 from a total of 121 teams or 53%.

Objectives of the study

To study the reasons attracting the politicians to take part in the development of Thailand's professional football club.

To study the expected social roles of politicians in the development of Thailand's professional football club.

Literature Review

Cohen and Orbuch (1990) mentioned about the theory of role that a role means behaviors which an individual expects another individual to perform according to his position, status, and role properly. The individual learns and absorbs this role from social practices. This can be classified into three types e.g. expected social role, expected personal role, and actual practice.

Vroom (1964) explained about Expectancy Theory that it is feeling of individual towards his appropriate behavior or status or those of others. It is expectation expressed as a feeling of how to behave in a situation or scope of work. He mentioned that an employer need to understand his thinking process and perception in order to motivate an employee to work harder. An employee would consider about the return of working harder. The employee would try harder once he thinks that his actions would lead to some satisfied outcomes. For instance, if he works harder, he would receive good assessment which leads to promotion and higher income. On the contrary, if an employee views that he would receive any attentions from his supervisor although he works harder and there is no way to acquire promotion or higher income, it is no need for him to increase his work. The expectancy is an individual feeling to himself and others of how to take actions with the task.

Chien-Yu, Ping-Chao and Hui-Fang (2008) clarified about relations between politics and sports in detail. In addition, Dousti et al. (2012) explained about causes including pros and cons about politicians participating in sports in Iran.

Research Methodology

This quantitative research used questionnaire as research tool. The structure of questionnaire can be split into two parts e.g. a set of questions to explore the reasons attracting the politicians to take part in the development of Thailand's professional football club, and another set of questions to explore the expected social role of politicians in the development of Thailand's professional football club. The questionnaire was constructed on the ground of related documents studied. The researcher verified validity of the content based on IOC (Index of Item Objective Congruence) by selecting questions whose average were exceeding 0.5 from five members of committee. The reliability relied on Cronbach's alpha not less than 0.8. The data analysis adopted frequency and percentage.

Sample Group

The population of this study relying on purposive sampling comprised presidents of football clubs, managers of Thailand's professional football clubs, coaches of Thailand's professional football clubs, footballers, football spectators, sports reporters, and management of Football Association of Thailand (FAT). The number of population is 517.

Data Collection

The researcher distributed questionnaires. The filled-in questionnaires were analyzed and processed. Its results were presented in descriptive form. The research findings and recommendations were then summarized. The research project was conducted during July 2014- December 2015.

Scope of Research

The researcher studied Thailand's professional football clubs only in Premier League, Division 1, and Division 2 totaling 121 teams in 2014 season.

Result

Table 1 Frequency and percentage related to the reasons attracting the politicians to participate in the development of Thailand's professional football club

Topic	Frequency(Percentage)	
1. Seeking for personal fame, honor, and success	183	(35.40)
2. Winning election or gaining popularity	77	(14.89)
3. Participating in development of football career	61	(11.80)
4. Proving personal ability beyond politics	56	(10.83)
5. Supporting personal business	41	(7.94)
6. Fulfilling personal morale	39	(7.54)
7. Gaining reputation in local areas	26	(5.03)
8. Promoting political perception to fan club	15	(2.90)
9. Stimulating local economy by professional football	12	(2.32)
10. Promoting good health among people	7	(1.35)
Total	517	(100)

Table2Frequency and percentage of social expected role of politicians in the development of Thailand's professional football club

Topic	Frequency(Percentage)	
1. The politicians have ample opportunity to foster the sports club such as finance, equipment, venue, training field, and competition field which are useful for football club.	193	(37.33)
2. Politicians can use political power to develop professional football clubs rather than non-politicians.	107	(20.70)
3. Politicians can promote harmony in a community through their roles in developing football clubs through creating pride which can help reduce social problems.	45	(8.70)
4. Politicians bring wider reputation to the clubs and communities.	36	(6.96)
5. Politicians can coordinate other related parties to develop the clubs.	34	(6.58)
6. Politicians can provide prizes and different forms of benefit to elevate morale of the footballers compared with non-politicians.	27	(5.22)
7. Politicians can apply skills and experiences to better manage the clubs.	24	(4.64)
8. Politicians can enhance economy in the community through club development.	22	(4.26)
9. Politicians can administer the clubs complying with regulations of Football Association, AFC, and FIFA	18	(3.48)
10. Politicians would not create conflicts among the stakeholders of club development.	11	(2.13)
Total	517	(100)

Discussion

The research found that the most important reasons attracting politicians to participate in the development of Thailand's professional football club are seeking personal fame, honor, and success and create positive image in the society. The less important reasons are winning election or gaining popularity, or direct and indirect promotion in personal political status. The findings correspond to the study carried out by Dousti et al. (2012) specifying that participation of politicians in the sports are driven by increase in personal fame and advantage in elections.

The expected social role of politicians in the development of Thailand's professional football club is the politicians have ample opportunity to foster the sports club such as finance, equipment, venue, training field, and competition field which are useful for football club supported by their political status, especially politicians in upcountry. They have partisan, power, and prestige compared with others. They can coordinate and allocate government budget or request for financial support from private sector to develop the teams. They also can use the political power to make a request on using fields for competition which are mostly provincial football fields easier compared with non-politicians. This aligns with Phra Sri-Ariya(2011) finding that politics and sports in Si Racha municipality are importantly related. The local politicians of Si Racha use sports to gain votes and popularity. The politicians use direct and indirect methods to support and promote sports in the area. The direct method is putting it in a policy of SiRachaMunicipal Council and sponsoring sports in the locality, Si Racha Football Club in particular. In terms of indirect method, the politicians seek sponsors and provide facilities such as venue, material, equipment, and welfare to the local footballers. They also give medical treatments and prizes. The players receive salary and allowance, and outstanding players acquire prize.

Recommendations

1. The politicians taking part in the development of Thailand's professional football clubs need to realize their role that they have higher potential compared with that of others in coordination to develop the football club, particularly budget, competition field, and training field. If the football clubs have sufficient budget and facilities, they would have more opportunities to be successful in competitions. The success in election by gaining more votes or popularity which is the main drive of politicians in playing a role in development of Thailand's professional football clubs is by-product.

2. The participation of politicians in the development of Thailand's professional football clubs would promote economy in the communities. When the team is successful, the community would be reputational and attracting tourists. The community earning income would have well-being, criminal reduction, and pride. This is integrating sports as a part of local development plan.

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Using multi-direction information to evaluate Rhythmic Gymnastics teaching and learning quality at The University of Physical Education and Sports of Bac Ninh

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Abstract

Building criterion for evaluating Rhythmic Gymnastics teaching and learning quality of 2 groups of subjects- teachers and amateur students of The University of Physical Education and Sports of Bac Ninh- in order to analyze and accumulate opinions to evaluate the efficiency of teaching Rhythmic Gymnastics at this school.

Key words: Rhythmic Gymnastics (RG); students; evaluating learning and teaching quality

Introduction

Evaluating educational quality includes many matters. Among them, there are two most essential factors: evaluating teachers' teaching quality and evaluating students' learning quality (Darling-Hammond 1997, Darling-Hammond 2000). The Physical Education subject at The University of Physical Education and Sports of Bac Ninh needs to be objectively evaluated in terms of learning and teaching quality after 4 years of being taught to amateur students to make sure that the educational efficiency is going the way given by the program. For many years, the evaluation method for the subject's educational quality is quite one-sided. Teachers only need to depend on the scores of the final semester exam to classify the students and evaluate the teaching quality through that (Biggs 2011). This form of evaluation has not solved the problem of one-sided evaluation: teachers- the ones who evaluate and students- the ones being evaluated. Applying a new model of evaluation with the combination of the teachers' evaluation and the students' responses, which use general evaluation criterion about objectives; contents; teaching and learning methods in order to make the evaluation progress more objective and universal.

Methods

- Analyzing and accumulating documents in order to define the theoretical background of criterion selection. Interviews: The objects of interviews are 14 experts in the field of RG and Physical Education with the purpose of selecting criterion and determining factors of each criteria.
- Survey for evaluation: This method is used to collect the opinions of 9 regular teachers of RG and 161 K47 students who just finish RG subject to evaluate RG teaching and learning quality. The assessor will mark the standards and criterion following their personal views. The highest mark of each standard is 100.- Mathematical statistics for processing numerical data.

Results and Discussion

Defining criterion for evaluating RG teaching and learning quality.

Based on the theoretical background of criterion selection and documents accumulation, the researchers use the interview methods with questionnaires after summing up all the contents that need to be evaluated. This method is used to collect experts' opinions about the contents we define. The interviews result in 70% of agreement. The researchers are able to choose 4 standards, 14 criterion of teachers' evaluation about the students and 3 standards, 13 criterion of students' evaluation about the teachers. After determining that the relativity of the 2 interviews and all the

standards is at $r > 0.8$, which ensure the reliability, we start evaluating the teaching and learning quality of RG at the Physical Education department at The University of Education and Sports of Bac Ninh.

3.2 RG teaching and learning quality evaluation from teachers

- Standard 1: Evaluating the efficiency of carrying out the learning targets

The results of carrying out the learning targets are evaluated through test and exam results of the students. Our evaluation and comparison of the results of the students from course 46, 47 and 48 is shown in the table below

Table 1: Classifying academic results in both theories and practice of RG of non-professional students of The University of Physical Education and Sports of Bac Ninh in 3 years

Course		Classification (number of students/%)									
		Excellent (9-10)đ	Rate %	Good (7-8)đ	Rate %	Average (5-6)đ	Rate %	Bad (3-4)đ	Rate %	Very Bad < 3đ	Rate %
Course 46 (n =348)	Theories	22	6.3	65	18.7	143	41.1	66	19	42	12,1
	Practice	48	13,8	48	13.8	168	48.3	84	24.1	0	0
Course 47 (n =312)	Theories	17	5.4	51	16.3	141	45.2	61	19.6	42	13.5
	Practice	24	7.7	72	23.1	168	53.8	48	15.3	0	0
Course 48 (n =364)	Theories	23	6.2	65	17.9	161	44.3	69	19	46	12.6
	Practice	48	13.2	73	20.1	168	46.2	48	13.2	0	0

The statistics show that all the students from 3 courses do not have a good grasp of the RG theories. This is shown through the low rate of Good and Excellent students (21.7%-25%). In contrsh, the portion of Bad and Very Bad students is large (31.6-33.1%). This is due to the lack of knowledge and the rate of students with 0 in test because of copying is high. The rest of the students are at Average level, which shows their shallow understanding of the lessons.

In terms of practice, it is obvious that students cannot have good practical performance if they have bad theoretical knowledge. Even though there is no students with Very Bad level, the rate of Good and Excellent students is not high. On the othe hand, the rate of Average students is stii high (46.2%-53.8%). The reason why their results are not good is the lack of creativity that makes their performances not so different from the examples given to them during the lessons.

The results show that the subjects should modify the targets and the contents of the subject to suit the low capacity of non-professional objects.

Standards 2, 3 : Evaluating students' theories and practice learning methods

To evaluate the RG learning attitudes of the studetns, we acumulate the results collected from the evaluation given by 9 regular teachers who offer teach RG with 7 criterion chosen through the interviews. The results are calculated through the average score of each criteria.

Table 2: Teachers' evaluation of theoretical and practice learning methods of non-professional students of The University of Physical Education and Sports of Bac Ninh

Order	Criterion	Component scores	Average score \bar{x}	$\pm \delta$
	Theories learning method evaluation			
1	Enjoy researching related documents	25	7.4	1.8
2	Expressing opinions about the subjects	25	11.61	2.1
3	Completing the assignments	25	8.11	2.3
4	Being creative in setting up and performing	25	5,18	1.7
	Σ score of the criterion	100	32,3	
	Practice learning method evaluation			
5	Paying attention to the teachers' teachings and demonstrations	30	23.46	3.1
6	Quickly carrying out the teachers' requests	30	18.33	2.9
7	Creatively applying theories into practice	40	16.21	3.3
	Σ score of the criterion	100	58	

The evaluation shows that teachers do not appreciate students' theories learning methods. In terms of component scores, it can be seen that no criteria is higher than 50%. The average score for all of the criterion is only 32.3/100, really low in comparison to the requirement. Teachers think that most students do not have a good learning attitude. They do not take the effort of researching related documents so they have nothing to express to the teachers' subjects. They also do not bother completing their homeworks.

In terms of practice, there are 2/3 criterion with average score higher than 50 %. This can be explain by the fact that during practices, the lively examples from teachers and friends make students pay more attention and get the lessons more easily than the abstract theoretical knowledge. The criteria that receives the lowest score from the teachers is students' creativity with $16.21 \pm 3.3/40$. The lack of creativity in exams shows that it is necessary to equip the students with the methods of improving their RG knowledge by themselves and improve their self-study spirit and skills. This will help them achieve higher academic performance. The results show that teachers are not happy with their students' attitudes, awareness and academic results.

3.3 Students' evaluation of the efficiency of RG teaching and learning

Standard 1 : Evaluating the efficiency of carrying out the subject's targets

To evaluate the results of carrying out RG's targets through the students' evaluation, we distribute survey forms to 161 students of course 47 who just finish RG. This group consists of students from the Sport Medicine department, Sport management department, 1 class of Coaches major and 1 class of Physical Education major. The contents of evaluation are the criterion determined through interviews. The final statistics are shown below:

Table 3.3: Students' evaluation of teachers' efficiency of carrying out RG's learning and teaching targets (n=161)

TT	Criterion	Component scores	\bar{x}	$\pm \delta$
	Efficiency of carrying out the subject's targets			
1	Students understand the subject's basic knowledge	30	15.52	2.3
2	Students get the skills of planning and teaching RG	40	18.41	2.6
3	Students find the subjects interesting and enjoy researching it	30	12.81	1.7
	Σ score of the criterion	100	46,74	

Students' self evaluation about their results after finishing the subjects ends with a low score of 46.74/100. This means that more than 50 % of the students think that they cannot grasp the basic knowledge of RG. This could also mean that the target of giving students knowledge, skills and interest in the subject fails with the total average score of all criterion of only 12.81-18.41/40. This completely matches the test and final exam results from the teachers with almost 50 % of the students only reach above average level and 30 % of them are at Bad and Very Bad. The interview results from the students show that it is necessary for the teachers to improve the subject's targets to specify the requirements of knowledge, skills and attitudes to fit the need to change the methods of higher education as well as training quality evaluation.

Standard 2, 3 : Evaluating the efficiency of the teachers' methods and contents of teaching RG

The assessors are 161 randomly chosen students from course 47 (as specified in table 3.3). The results are shown below

Table 3.4: Students' evaluation of the efficiency of the teachers' methods and contents of teaching RG

Order	Criterion	Component scores	\bar{x}	$\pm \delta$
	RG teaching contents			
1	-Specific contents that direct learners to change their awareness, skill, attitudes.	20	10.5	1.3
2	-Lessons are organized into different activities to make it easier for learners to study	20	8.7	0.8
3	-Suitable contents for the students	20	10.2	1.2

4	-The contents are educational and able to equip students with enough knowledge to improve their understanding and their potential	20	13.6	1.3
5	-Practical and beneficial contents that focus on the learners' needs.	20	15.4	0.9
	Σ score of the criterion	100	58.4	
	Teachers' teaching methods			
1	-Suitable methods that make the lessons easy to understand.	20	12.5	1.2
2	-Effective use of teaching tools that interest the students	20	10.8	1.7
3	-Creating chance for students to train and improve their mind and awareness.	20	14.4	1.3
4	-Effective guidance and encouragement that motivates students to find the best ways to solve their academic assignments	20	12.1	1.4
5	-Students are active during classes	20	15.1	1.3
	Σ score of the criterion	100	63.9	

The results show that students do not appreciate teachers' teaching methods and contents with the average score of teaching contents at 58.4 and teaching methods at 63.9. The highest score belongs to the criteria of practical and beneficial contents that focus on learners' needs while the criteria with the lowest score is about lessons being organized into different activities to make it easier for learners to study. In general, the program's compatibility with the students is only average and learners have not been able to change their attitudes and awareness after learning. It is also difficult for learners to develop their potential.

In terms of teaching method, the students seem to quite appreciate the teachers' methods since the scores are better than those of the teaching contents. The methods help students train and improve their mind and awareness (14.4/20). They also make them active during classes (15.1/20). However, learners believe that teachers have not really give them effective guidance and encouragement to motivate them to find the best ways to solve their academic assignments.

As a result, we believe that the Physical Education subjects is in neef of a change in methods and teaching tools to make the students more interested and active in learning lessons.

From the teachers and students' evaluation about targets, contents and teaching methods of RG, we have come to some conclusions.

4. Conclusions

1. Caring out the subject's target has not meet the requirements. It is neccessary to adjust the targets to suit the capability of non-professional objects in a way of specific knowledge, skills and attitudes that meet the requirements to conduct small and average RG performances in school.

2. In terms of teaching contents and methods, the teachers are not happy with the students' attitudes and academic results. On the other hand, students have not yet grasped the contents and learning methods so the Physical Education subject is in need of a change of contents to meet the training targets and program and ensure that the subject is scientific, modern, practical and suitable for the students.

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The Model Of Transformation Leadership To Institute of Physical Education Leader In Thailand

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Abstract

The quantitative research on “The Model of Transformational Leadership to Institute of Physical Education Leader in Thailand” aims to create a model of cause relation influencing transformational leadership of Institute of Physical Education. The population and sampling are 967 consisting of management, teacher, and education personnel of Institute of Physical Education covering 17 entire campuses. The sampling size based on Yamane’s formula is 517. This is proportional quota sampling in each campus of Institute of Physical Education. The research found that the model of transformational leadership to institute of physical leader in Thailand comprises 1) emotional intelligence, 2) organizational engagement, 3) empowerment at work, and 4) effectiveness of group or team. Any institution intending to apply this research result needs to take its objectives, goals, and contexts into consideration so as to be the most effective and useful for people, society, and nation.

Key words: Transformational leadership, Institute of Physical Education, Model

Introduction

All countries worldwide give importance to education of people as it is significant to development of moving forward and stronger economy. A society would be developed into the knowledge based society. People would be more equal. (Office of the Education Council, 2009). The changes in political and international affair circumstances are more prominent unavoidably impacting on government policy and adaptation of Thai society (Phagaphasvivat, 2000).

The administration of education institutions is similar in a way that it requires services from professional education leaders in order to achieve missions and goals. Therefore, the leaders need to be professional with specific qualification adopting participatory administrative approach of all related personnel both internal and external (Spreitzer & Quinn, 2001). The administrative leader is the most important mechanism because he translates a policy into practices. The good operation would yield good results to teachers, students, parents, community, and education institution. The successful leader requires appropriate administrative behaviors and change including development of institution in parallel. Taweasantaneekul (2005) mentioned that transformation counts on important factors. Nonetheless, the most important factor influencing effectiveness is the leader having leadership and administrative skills.

According to the importance as mentioned above, the researcher is interested in studying “The Model of Transformational leadership to Institute of Physical Education leader in Thailand”. This would lead to creating knowledge which is useful for appropriate development of transformational leader and become a direction in formulating policy and planning for education institution increasing efficiency of administrative leader.

Objectives of Research

To create a model of cause relation influencing transformational leadership of Institute of Physical Education.

Literature Review

It is agreed that leader is significant to survival, safety, and peace of society and nation. This is crucial for development in every level (Daft, 2005). In level of organization, its success from results based management, effectiveness, and efficiency all depend on wisdom, capacity, and creative operation of leaders. The study on leadership appropriate for the changing era has been made. The new theory which is well known and widely accepted is transformational leadership. It is a new paradigm. Bass (1990) mentioned that leader in the new era needs to develop himself to achieve two significant leaderships, that is, transactional leadership and transformational leadership. Getkham (2003) specified that new leadership paradigm focuses on encouraging leaders of all levels in all work units to transform themselves to become change agents and using new management skills increasingly. Kaejornnan (2003) explained about the importance of change agent which would bring advancement in economic globalization from complexity of current competitions, leading to uncertainty and instability of organization. The example of this is some organizations used to be successful and recognized, but have problems, mistakes, and failures afterwards. The reason is current circumstance different from that in the past. The management fail to adapt themselves to the changing circumstances, particularly the management who do not change themselves and organization to be appropriate to the circumstance (Yuki, 1994).

Research Methodology

This is quantitative research. The research tool is questionnaire. Its findings are used to create the model of transformational leadership to Institute of Physical Education leader in Thailand.

Data Collection Tools

The questionnaire explored opinions relevant to level of importance of factors influencing transformational leadership to Institute of Physical Education leader in Thailand in a form of rating scale and content validity based on expert's opinions by means of IOC (the Index of Item Objective Congruence). The validity of each item is over 0.70. The try-out questionnaires were filled in by 30 management of the Institute of Physical Education. The collected data is used to measure quality of tool by means of reliability analysis based on Cronbach's alpha (Cronbach, 1974). The reliability in each category consists of transformational leadership (0.919), organizational engagement (0.903), empowerment at work (0.911), emotional intelligence (0.914), and effectiveness of group or team (0.918). Therefore, the research tool had high reliability which can be used to actual sampling group. The construct validity was analysed through LISREL program to test relations between observable variable and latent variable. The relation of variables under analysis needs not less than 0.30.

Area, population, and quantitative sampling group

1. The focus area of research covers all 17 campuses of Institute of Physical Education.
2. The research population consists of management, teacher, and education personnel.
3. The sampling group of the research is population of the Institute of Physical Education in 17 campuses amounting to 967 in total. The calculation of sample size was based on Yamane's formula (Yamane, 1973). Its reliability was 97% and error was 3% of population. The sampling group amounted to 517 by means of proportional quota sampling in each campus of Institute of Physical Education.

Data Collection Tools

The close-ended questions were used and created by the researcher with 106 topics.

Data Collection

The researcher delivered questionnaires to the sampling group of the entire 17 campuses of Institute of Physical Education and then collected them. The delivery and collection period was during March 2014 – January 2016.

Data Analysis

The analysis of primitive data of variables was carried out by measures of variation covering average, standard deviation, kurtosis, skewness, and prediction coefficient (R^2). Also, the variable relations were verified through LISREL.

Summary

In terms of analysis on variables directly and indirectly influencing factors of the model of transformational leadership to Institute of Physical Education leader in Thailand, the researcher used LISREL to carry out path analysis of the model. The researcher analyzed factor loading of observable variables in order to consider common compositions which can explain about variable relations. The analysis results are shown in Table 1.

Table 1 Analysis on factor loading relation of variables of transformational leadership to Institute of Physical Education leader in Thailand

Component/ Variable	Factor Loading					Factor Score Coefficient
	b	B	SE	t	R ²	
ENGAGE						
EG1	3.99	0.68	-	-	0.47	0.06
EG2	0.70**	0.60	0.07	9.92	0.36	0.22
EG3	3.48**	0.56	0.37	9.37	0.31	0.04
EMPOWER						
EP1	2.35	0.61	-	-	0.37	0.03
EP2	0.61**	0.60	0.05	11.53	0.36	0.08
EP3	1.38**	0.62	0.12	11.81	0.38	0.04
EP4	1.04**	0.60	0.09	11.55	0.36	0.05
EMOQ						
EQ1	2.15**	0.56	0.17	12.88	0.31	0.03
EQ2	0.57**	0.58	0.04	13.62	0.34	0.12
EQ3	0.55**	0.57	0.04	13.33	0.33	0.14
EQ4	0.56**	0.61	0.04	14.51	0.38	0.14
EQ5	0.60**	0.61	0.04	14.44	0.37	0.14
EQ6	0.62**	0.60	0.04	14.20	0.36	0.12
EFFICIENT						
EF1	0.66	0.65	-	-		0.15
EF2	0.64**	0.65	0.05	12.54	0.42	0.15
EF3	5.96**	0.59	0.52	11.53	0.35	0.01
EF4	0.58**	0.63	0.05	12.26	0.40	0.15
EF5	0.60**	0.61	0.105	11.29	0.37	0.13

Remarks: * p < .05 ** p < .01

From Table 1, the analysis on factor loadings of observable variables found that they all had positive value during 0.56-0.68. The factor loadings at 0.01 is significantly different from zero. The observable variable having the highest value of factor loading was organizational engagement (ENGAGE) of emotional engagement (EG1) of 0.68. The observable variable having the lowest factor loadings is emotional intelligence (EMOQ) consisting of emotional self-awareness (EQ1) of 0.56. The consideration to standardized factor loadings (B) by each factor found the results as the following.

(1) The organizational engagement (ENGAGE) consists of emotional engagement (EG1) having factor loadings of 0.68 and concomitant variation with organizational engagement of 68%, and continuance engagement (EG2) of 0.60 with 60%. The normative commitment (EG3) has factor loadings of 0.56 and concomitant variation with engagement of family business's descendants of 56%.

(2) Empowerment at work (EMPOWER) in terms of self-determination (EP3) has factor loadings of 0.62 and concomitant variation with empowerment at work of 62%, meaning (EP1) of 0.61 with 61%, capacity (EP2) of 0.60 with 60%, and impact (EP4) of 0.60 with 60%.

(3) The emotional intelligence (EMOQ) consists of emotional self-awareness (EQ1) having factor loadings of 0.61 and concomitant variation with emotional intelligence of 61%, interpersonal relation (EQ5) of 0.61 with 61%, social skills (EQ6) of 0.60 with 60%, managing emotion (EQ2) of 0.58 with 58%, self-motivation (EQ3) of 0.57 with 57%, and self-awareness (EQ1) of 0.56 with 56%.

(4) The effectiveness of group or team (EFFICIENT) in determining missions and goals (EF1) has factor loadings of 0.65 and concomitant variation with the effectiveness of group or team of 65%, delegation based on job functions (EF2) of 0.65 with 65%, distributed leadership (EF4) of 0.63 with 63%, codecision (EF5) of 0.61 with 61%, and candid communication (EF3) of 0.59 with 59%.

Discussions

Given the model of transformational leadership to institute of physical leader in Thailand, the transformational leadership can influence organizational management and engagement (ENGAGE) in a way that making education personnel engaged in terms of emotion and continuance. The leader needs to understand changing circumstance. The changing circumstance is then change the practices of personnel. It is very important for the leader to focus on change to prepare new working process to support this. The idea aligns with Allen and Mayer (1990) proposing that the engagement would make people happy to work and continue working. The current information should be circulated for personnel to understand, tolerate, and accept the problems. The leader should have risk management plan.

The transformational leadership of Institute of Physical Education should focus on empowerment at work (EMPOWER) by allowing personnel to have self-determination which is important to operational performance. This in line with Spreitzer and Quinn (2001) mentioning that self-empowerment at work requires self-determination. All leaders perceive that knowledge and experience of staff affect operations. The management capacity can be increased to achieve success without limits. The important characteristic of administrative leaders is emotional intelligence (EMOQ) so as to understand feelings of the others. This would lead to personal relations. This is because the leader develops social skills, emotional management, and emotional self-awareness. This concept complies with Goleman (2000) proposing about understanding feelings of others and development their knowledge by promoting knowledge and capability in the right way. In addition, the leader needs to create self-motivation for effectiveness of group or team (EFFICIENT). The leader should determine missions and goals, delegation based on job functions, distributed leadership, and codecision. This requires candid communication. This concept corresponds to Hackman and Wageman (2005) mentioning about the social process that the staff use for operation and increase in capability of colleagues to work together.

Consequently, the model of transformational leadership has higher value compared with the others. The transformational leadership appreciates value of all personnel. The leader needs to sacrifice his personal interest. He needs to stimulate staff to see the value of idealized influence and honor in order not to work just merely for salary or remunerations. He tries to change attitudes and beliefs. The leader can work until achieving goals.

Recommendations of research

The outcome of developing model of transformational leadership to institute of physical leader in Thailand covers all elements of leadership. It is possibly to apply the model to other types of education institution. Nonetheless, each factor loadings of each institution may be differ. Therefore, the researcher proposed that the factor loadings of each element should be measured before reordering priority. This enables acquisition of transformational leadership appropriate for that institution

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The Importance Of Talent Identification In Athletics

By

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Introduction:

Over the course of the past twenty years an increasing amount of attention has been devoted to the field of athletics. Whether it be at a collegiate or professional level, organizations have been faced with public pressure to be successful. As a result, athletic directors and general managers have been faced with the question of how to improve their teams' success. One obvious way of doing this is to select qualified personnel for the tasks at hand. The method by which athletes are selected for a team can have a significant impact on that team's success. In the past, decisions have been made based largely on judgments of an individual's physical characteristics with little attention given to the psychological factors that contribute to athletic success. Coaches are experts in identifying the physical characteristics needed for success in their field; however, they lack the skills necessary to assess the psychological factors that have been proven to have a significant impact on athletic performance. Coaches have relied on informal judgments of constructs such as an athlete's motivation and level of aggression to determine their potential to succeed. The identification, quantification and implementation of these psychological attributes in selection decisions can therefore have a significant impact on a program's success. This paper will review the factors that have been associated with athletic success, measures of these factors, and use of these factors in making selection decisions.

For the most part, athletes can be characterized as being psychologically sound, effectively functioning people. However, some studies have shown that athletes have a tendency to be less anxious, more independent and aggressive, more extroverted, and more achievement oriented than the population in general (Peterson, Weber & Trousedale, 1967). A large proportion of the research that has been conducted in the field of sport psychology has been descriptive and is therefore well suited for the identification of the psychological skills necessary for success. Descriptive information involves comparisons of highly skilled athletes with lesser-skilled athletes for the purpose of identifying differences. This information is useful in the hypothesis generation phase of selection programs. By identifying the presence of certain characteristics that are uniquely associated with the success of certain groups, we are able to identify those factors that are most likely to be correlated with the success of future athletes. In many ways this descriptive research can be thought of as a job analysis. That is to say, the knowledge, skills, and activities that are important to the job of an athlete are identified in this way.

The relation of Knowledge, Skills and Abilities with Success:

Researchers focusing on the psychological attributes of successful athletes whose sport is individual in nature have identified several characteristics not identified by researchers focusing on sport in a team frame of reference. For example, Mahoney and Avenier (1977) focus on the field of gymnastics. They compared the psychological profiles of members selected for the 1972 United States Olympic gymnasts. Their results indicated that those selected to the team had a higher rate of positive self verbalizations and better methods for coping with competitive stress than those not selected. These findings were supported when comparisons were made between qualifiers and non-qualifiers for elite Canadian wrestling teams (Highlen & Bennett, 1979).

Qualifiers had a significantly better ability to block anxiety 1 hour prior to competition and had fewer negative self-thoughts 1 hour prior to competition. In addition, qualifiers were significantly higher on ratings of self-confidence and believing themselves closer to achieving their athletic potential. Most importantly for the purposes of selection, the researchers were able to correctly identify qualifiers based on their psychological profiles 85% of the time (Highlen & Bennett, 1979).

Much of the research in the field has been anecdotal in nature, gathered primarily through the analysis of unstructured interviews. However, the information that has been acquired in this fashion is quite compelling and useful in identifying the psychological skills necessary for success in sport. It can be thought of as asking subject matter experts the qualities that are most important for successful on the job performance. By analyzing the statements of present champions (SME's) as to their psychological abilities, characteristics, opportunities and family role we can differentiate between successful and unsuccessful performers. Meyers, Cooke, Cullen, and Liles (1979) reported that successful athletes were self-confident and had thoughts of their sport throughout their daily thoughts and dreams. Garfield and Bennett's (1984) study of anecdotal reports supported earlier research. They stated that elite athletes do have predictable feelings during peak performances including: confident and optimistic, in control, mentally relaxed, physically relaxed, extraordinarily aware, and in the "cocoon" (intense sustained concentration). Bloom (1985) also used an anecdotal approach with both successful swimmers and wrestlers. Almost all of his subjects reported that they were determined to excel, were willing to work hard and had families that were supportive of their endeavors. Bloom suggested that parents helped to generate enthusiasm, motivation and created the opportunities for the children to develop their skills. Some of the other personal factors that have been identified as being related to the potential to accomplish include perceptions of locus of control, attributional style, self-efficacy, goal-setting ability, and achievement motivation (Singer, 1988). The type of attribution that an athlete makes, the level of self-efficacy that the individual feels and other perceptions have been associated with the motivation to persevere and to achieve. That is to say, the way that an individual explains their performance influences whether they will quit, continue half-heartedly, or persist and achieve.

Personnel Selection :

Now that we have identified the KSA's necessary for success in the field of athletics , it is necessary to design a program that will make use of this information. The following psychological constructs seem to be most relevant to all competitors: vigor, aggression, leadership, ability to cope with stress, coachability, confidence, social support and positive self concept. In addition, the ability to interact with others seem to be an important psychological skill within the team setting. Because prior performance and physiological data have been found to have such a significant impact on predicting those individuals that eventually qualify for a team, it is important to consider these variables as well. In order to develop a valid selection procedure, it is important to find measures of these constructs that are both reliable and valid.

The AMI is one way of assessing the psychological constructs identified above. It is a particularly useful tool since it is designed to measure traits within a sports frame of reference. With 190 questions, the time necessary to complete is one limitation of this instrument. Another limitation is the lack of research about the instrument's predictive validity. Additional research would have to be conducted to assess this. Although Morris (1975) did not examine the predictive power of the AMI, she did recognize the importance of gathering additional information to discriminate between successful and unsuccessful individuals. Perhaps the inclusion of a biographical data questionnaire would be of assistance in making selection decisions. Factors that should be considered include previous experience, presence of siblings, and family dynamics. Such an instrument would have to be developed and validated before it would be of any use in making athletic selection decisions.

For team sports, the inclusion of the TAIS might be useful in assessing how an individual will interact with others. After all, a team won't be very successful if the members are unable to get along. Again, the lack of research concerning the instrument's predictive validity limits its use for selection decisions. Because the AMI includes coachability and conscience development scales, it may be more appropriate for use within the field of athletics. Research needs to be conducted to assess the ability of the instrument to differentiate between successful and unsuccessful athletes.

As we have seen, prior athletic performance is a powerful predictor of athletic success. It is important to develop a means for quantification of an individual's prior performance in order to make appropriate selection decisions. Many coaches will have already identified the physical KSA's they consider to be most important in recruits. However, mechanical approaches for selection decisions that make use of quantified data are more effective than judgmental approaches in identifying those individual with the necessary KSA's to succeed. Development of a weighted application blank that measures these abilities would result in an increase in the reliability of selection decisions. Of course, this would need to be empirically validated before it could be used. Reviewing coach's records of prior recruits may provide most of this information thus facilitating the validation process.

In summary, it appears that a selection program that takes into account psychological variables, biographical data and prior performance would be both a valid and reliable predictor of athletic success. Singer (1988) supports this notion recommending that psychological tests not be used as the only basis for determining team membership. This information can be useful in understanding athletes and their potential strength's and limitations. A battery of composite tests is recommended that measures skill level, tactical knowledge, morphology, body composition, physical condition and attributes, and psychological attributes. Quantification of these constructs would be necessary in order to make a decision. Validation of the process would be an important final step in the development of a selection program for the field of athletics.

Conclusions :

Because the field of athletics has become so competitive, it has become increasingly important to make appropriate selection decisions in order to be successful. This paper has demonstrated the importance of considering psychological variables, prior performance and physiological data in selection decisions. Although Morgan's 1980 research had short-term prediction as its goal, it demonstrated the power of a program that takes into account all three of these variables. One can only speculate that in the future, the attention that is given to sports will continue to grow. The pressure to succeed will leave many athletic directors and general managers looking for any edge that they can gain over their competition. One way of doing this will be to make accurate selection decisions. Therefore, researchers in the field should attempt to validate a selection process outlines in this paper which include psychological, physiological and prior performance data.

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Integrated Marketing Communications of Hotels' Fitness Clubs in Thailand

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Abstract

The main objective of this research is to study integrated marketing communication of fitness centers in Thailand which bears an impact on the services of fitness centers in Thailand. The analysis of the result is detailed, using average means, standard deviation and comparison of achievement test based upon statistic, the ANOVA and T value. Findings :-Users put much emphasis upon many marketing elements such as location, products, services as well as staff which is the main factor of customers' choice. This is in accordance with the interview with the fitness center's manager that the main strengths of running a fitness center are products, location and staff. Based upon this study, it dictates that fitness centers can specify target group and utilize appropriate marketing mixed to create channels and integrated marketing communication in order to succeed.

Key Words : Integrated Marketing Communications, Hotels' Fitness Clubs, Thailand

Introduction

Fitness center business is continually being established but most of them charge higher fee so it becomes popular with people with more income. These fitness centers bear a lot of expenses due to their locations either they are located near customers' residences, offices or in the department stores. Being in such locations, rental fee is usually expensive, equipment has to be modern, exercise courses have to be at international standard level with professional trainers. Those who focus on equipment only, have to provide high quality equipment as well as professional trainers. The problem is that if it is not located in a good location and the service fee is high, the investment will be worth it. Trend in 2016 shows that fitness center business still makes money for investors but competition will be very stiff. If you do not introduce new things to compete with competitors and still charge high fee, there is a possibility that you will not get many customers because nowadays customers choose to spend their money and have many choices to choose from. (<https://moneyhub.in.th/article/2559-healthy-trend/>, May 10, 2016.)

With aforementioned reasons and work experience in the fitness center industry, the researcher is willing to study and focus on integrated marketing communication in Thailand's hotels, applying marketing mix which is comprised of Product, Price, Place to respond to consumers' demand for satisfaction. Nonetheless, since fitness center business is in service industry, it is different from other products. Thus, to make it successful, it is necessary to apply another 4 service related marketing mix, consisting of Process, Productivity and Quality, People and Physical Evidence. This is introduced through a variety of communication channels i.e. advertisement, promotion and internet. Thus, this is to ensure that it is communicated to the target group so as to receive behavioral reaction from the target group in accordance with the required objectives and to generate more income from fitness center service and membership.

Objectives of Research

The objective of this research is to study the use of integrated marketing communication of fitness centers in Thailand's hotels. The study collects data from the fitness centers in the hotels and members through in depth interview with management of fitness centers in 4 star hotels which welcome membership only. This is to study the usage of integrated marketing of fitness centers in Thailand's hotels 1) Marketing mix 2) marketing communication tools and 3) content of marketing communications.

Hypothesis

- 1. Every aspect of personal information is related to customer satisfaction in terms of marketing communication service.
- 2. Behavioral usage of fitness center is related to customer satisfaction in terms of marketing communication service.

Literature Review

Kotler and Armstrong (1999: 439) said marketing communication means a combination of a variety of marketing communication channels to communicate precise organization's information and products.

Shimp (1997: 10) said as long as marketing is still important to running a business, marketing communication and targeted customers remain fundamental as an indicator of success in running a business of every organization. Whatever size the business is, it is necessary to do marketing promotion against targeted customer group in order to achieve the main objectives 1) to provide product and service details as well as sales channels to targeted customer group. 2) To urge targeted customers to buy the organization's stamped products. 3) to urge so as to get prompt behavioral reaction from targeted customers through marketing activities or after activities. The objectives of this marketing communication can be achieved through application of marketing communication tools in the likes of advertisement, public relations, sales promotion, sales representatives, direct marketing and product design.

Seri Wongmontha (1997) defined Integrated Marketing Communication: IMC as a process of designing marketing communication plan which requires a variety of marketing communication to continually attract targeted customers.

Based upon the aforementioned definitions, it can be concluded that marketing communication is a process of conducting activities about products or services to communicate to target group in order to attract or to urge behavioral reaction to purchase or use services through marketing communication tools. Integrated Marketing Communication of fitness centers in Thailand's hotels is required to communicate news to target group through many channels of communication in order to generate interest from customers so that they respond in such a way that the fitness center communicates to.

Application of IMP will benefit business and marketers

Application of IMP will benefit businesses and marketers in the following ways (Chattayaporn Samerjai, 2004: 147-148)

- 1. IMC will help to build better image and stronger position of products.
- 2. IMC will help to change and build new image to products.
- 3. IMC will help to change customers' attitude and negative feelings towards products
- 4. IMC will help to create continual impact of products upon consumers.
- 5. IMC will help to make relationship marketing more effective in maintaining continual relationship between customers and products.

Fitness centers in Thailand's hotels have introduced marketing communication as a means to communicate with many customers and consumers. Thus, marketing communication is fundamental when it comes to expanding more communication channels to a variety of customers and consumers. This enables them to reach target group, helps to promote images and makes communication more effective.

There are 6 components of a Heart of Service. They are as follows: (Witthaya Danthamrongkul, 2004 : 18)

- | | |
|-------------------------|---------------------|
| 1. Vision of Service | 2. Skill of Service |
| 3. Empathy of Customers | 4. Responsiveness |
| 5. Vigor | 6. Evaluation |

How to deliver impressive customer service

Prapin Wattanakij (1998: 81) said that delivery of customer service excellence is the heart of service which leads to the company's success. The following factors should be taken into consideration.

1. Good Personality

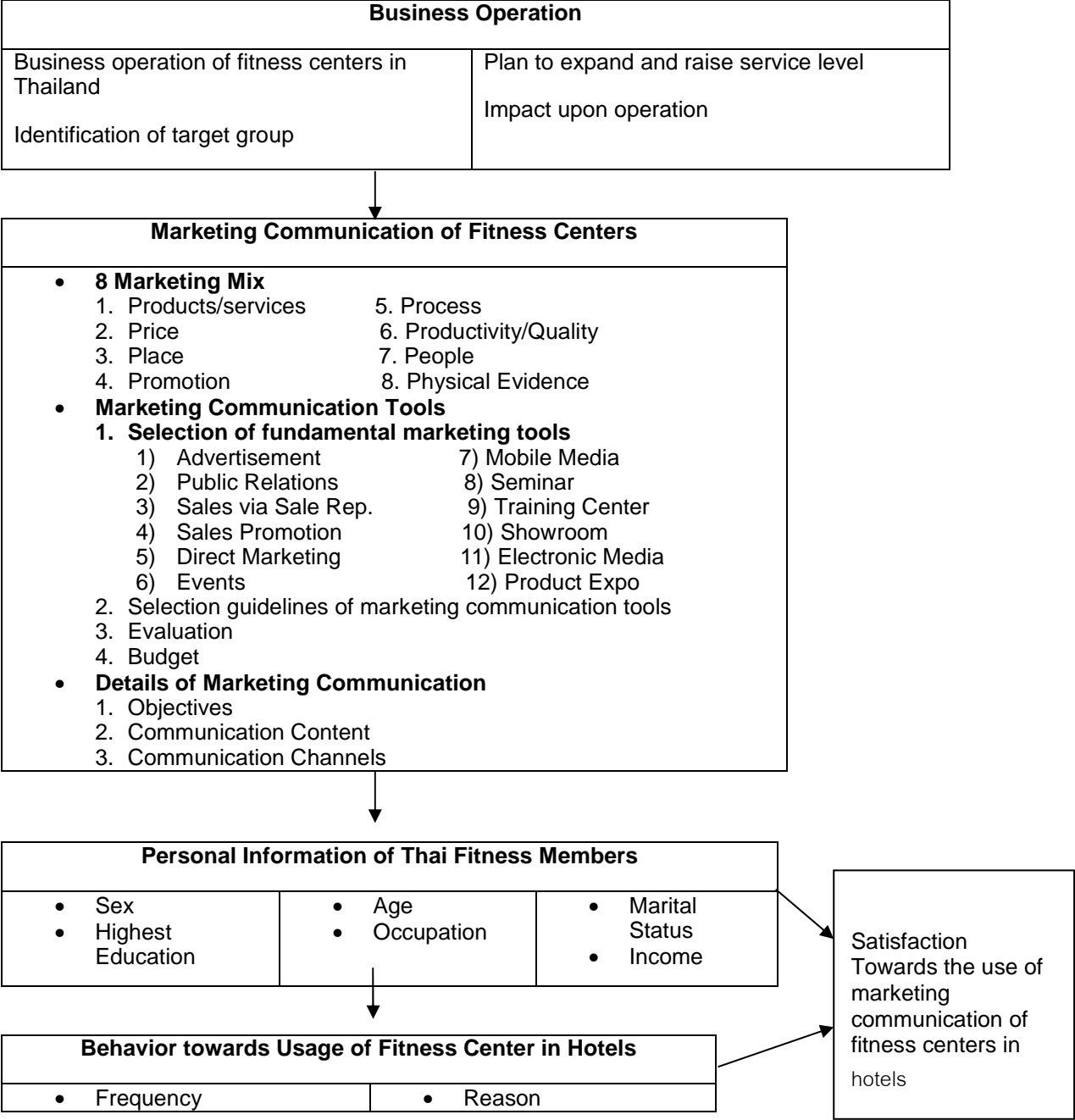
2. Understand customers' needs
3. Good communication skill

4. Being responsible
5. Being Knowledgeable

6. Being trustful

The fundamental variables used in this research on “Integrated Marketing Communication of fitness centers in Thailand’s hotels” are as follows: Concept of Integrated Marketing Communication is used by the researcher through different communication channels to deliver messages from the fitness center to the targeted customers. This is to inform the customers of the type of marketing communication, the marketing mix, marketing communication tools and information. The researchers uses the concept of service to support an explanation on marketing communication from fitness centers to targeted customers. Through this concept, the researcher is also more capable of explaining customer satisfaction toward the service provided. Concept of hotel management is used by the researcher to make an explanation on service planning as well as impact upon the operation of fitness centers.

Research Framework



Population and quantitative sampling group

This research divides the population into 2 groups. They are as follows:

1. 5 fitness experts from fitness centers in Thailand's hotels who are directly involved in promoting fitness center business

2. Members of fitness centers of 4 star hotels and above which welcome membership only. Based upon the research on Thailand's fitness center industry in 2015, customer base was at least 200,000 people, following a trend of health consciousness and it was believed to be continually increasing at the rate between 10 – 15% per year. Thus, the sample group of this research would be 400 people. (Yamane Taro: 1967)

Data Collection Tools

Interview and questionnaire are 2 types of tools used to collect data.

1. Interview Structured interview with open questions is used to interview 5 management members of the fitness centers of 4 star hotels and above which require membership only.

2. Questionnaire Questionnaire is used to collect data from a sample group who are members of the fitness centers of the hotels. The questionnaire is divided into 4 parts which are 1) to inquire about personal information 2) to inquire about member behavior towards usage of the fitness centers of the hotels 3) to inquire about members' satisfaction towards marketing communication through marketing mix 4) to inquire about recommendations towards marketing communication of the fitness centers of the hotels.

Data Analysis

Statistical analysis is conducted to study relationship between personal information of members and their towards marketing communication of the fitness centers of the hotels in Thailand and to study relationship member behavior towards usage of fitness centers, using average means, standard deviation, achievement test, the ANOVA and T value.

Research Conclusion

The management of the fitness centers put much emphasis upon marketing communication towards products in order to learn of service provided to members as much as possible. The main strengthens of fitness centers are a variety of facilities and classes, swimming pool as well as expertise and human relations of trainers. Furthermore, they choose to directly contact members through e-mail or SMS so as to update news and information.

In the sample group, most of them are single males, aged between 31 – 40 years. They are employees of private companies with bachelor degree qualification and income of between BHT30,000 – 50,000.

Travelling convenience is that main reason for the sample group to choose a fitness center. This is followed by service excellence, a variety of modern and high quality equipment and machines, modern venue and reasonable fee. Communication channel that they get to know their fitness center is reference from their family and friends.

Satisfaction level towards the use of marketing communications through marketing mix is moderate with personnel on the highest average. This is followed by the venue. On the other hand, marketing promotion has the lowest average with low satisfaction level.

Based on the analysis of the relationship between personal information and customer satisfaction towards integrated marketing communication, personal information in the likes of sex, age, income, occupation and marital status has an effect on satisfaction level with age being the least. It has the effect on service and venue. The other aspects of personal information are factors which determine different levels of satisfaction towards marketing communication of the hotels.

Based on the analysis of the relationship between member behavior towards their exercise and satisfaction towards the use of integrated marketing communication, frequency of exercise has no overall effect on marketing communication of the hotels. As far as other aspects are concerned, it is found that different scores of satisfaction are on personnel and marketing promotion.

Debate on the result of the research

Based upon the study on qualitative data of fitness centers and quantitative data collection from members, the members put emphasis upon marketing mix such as place, product, service and people. These are factors which the members take into consideration when it comes to choosing a fitness center. This is in accordance with the survey result derived from the managers of the fitness centers that the main strengths of running fitness center business are products, service, place and people. The result of the research reflects that fitness centers can determine customer group and can employ appropriate marketing mix. This provides an opportunity to select channels and methods of integrated marketing communications, resulting in a high possibility of success in the business.

Recommendations of research

1. Fitness centers of hotels must develop new form of marketing communication which is interesting, different and appropriate for members in order to receive maximum satisfaction.
2. Fitness centers must use various marketing tools to communicate regularly in order to attract members. This will generate image, difference and income o the hotels.
3. Since many fitness centers have potential in terms of place, equipment/machines, staff, personal trainers, courses, healthy food and fashion workout clothes, they should be run in full.

Recommendations for further research

The next study should make a comparison with outside fitness centers or fitness centers in overseas so that result can be used to design a development plan to generate revenue and successful strategy for the fitness centers in the hotels.

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Relationship between Motor Achievement and Selected Personality Factors of Junior and Senior High School Boys

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Abstract

This study was conducted for the purpose of determining the relationship between specific factors of personality adjustment and levels of motor achievement in a selected group of junior and senior high school boys in Mandya. Pertinent scales from the 16 Personality Factor Questionnaires and the Temperament Survey were administered to 154 subjects for the purpose of determining existing personality characteristics. The motor achievement data were collected from administration of the McCloy General Motor Ability and Motor Capacity Test. The data were statistically analyzed through the use of the Pearson product-moment correlation technique, the t test, and the multiple regression technique. The study concluded that, (a) individual group dependence was a factor in extent of exhibited motor achievement and, (b) that levels of motor achievement were predictable with the use of grouped measured personality characteristics.

Introduction

Modern day physical education is concerned with the development of the individual to as near his innate motor potentialities as possible. Many physical educators also consider the development of desired characteristics of individual personality structure as an important outcome of physical education. Since the degree of motor achievement and extent of personality development are desired outcomes of physical education, the relationship of selected factors of personality to levels of motor achievement should be of great importance to the profession.

Review of Literature

Related literature revealed few studies which were concerned with the relationship of motor achievement and selected factors of personality. However, there are studies which appear to be of particular interest to this study. The effects of athletic participation upon personality adjustment have been the subject of numerous studies, with conflicting results. Based upon these studies, there did not appear to be an accepted viewpoint on this issue.

A review of the literature revealed few studies which were concerned with the relationship of motor achievement and selected factors of personality, there was revealed some information which was directly pertinent to the hypothesized personality factors of this study. Numerous studies also concluded that there was relationship between general motor ability, or athletic ability, and degree of individual extroversion. Tillman, (9) in his study of high school boys, concluded that there was a significant relationship between levels of general motor ability and degrees of surgency. For the same age group Slusher (8) found that characteristics of femininity were lower for the athletic group as compared to the nonathletic group. Wells (10), in his study of adult males, concluded that men possessing athletic physiques and a high degree of strength exhibited such personality characteristics as enthusiasm, adventurism, and a high level of acceptance.

This study was conducted for the purpose of determining the relationship between motor achievement and specific factors of personality adjustment in a select group of junior and senior high school boys.

The hypothesis for the study was pit high motor achievers possess particular personality characteristics in contrast to low motor achievers.

Procedure

Subjects

Subjects for this study were 150 male junior and senior students enrolled at Govt. High school, Thaggahalli, Mandya, 2016.

Tests

The 16 Personality Factor Questionnaire (16 PFQ) and the Guilford Zimmerman Temperament Survey (GZTS) were utilized for the gathering of data in regard to the hypothesized areas of personality adjustment pertinent to this study. Nine scales from the 16 PF Questionnaire (Scales E, I, C, A, Q2, H, G, F, and O) and seven scales from the Guilford Zimmerman Temperament Survey (Scales A, O, E, S, R, G, and M) were selected for personality data collection within this study, as they were applicable to the original 10 hypothesized personality factor continua.

The McCloy General Motor Ability Test (GMAT), the McCloy General Motor Capacity Test (GMCT), and the resulting McCloy General Motor Achievement Quotient (GMAQ) were utilized to determine levels of motor achievement of the subjects. The GMCT attempted to measure the limit to which the individual may be potentially developed and, therefore, his capacity to learn new skills. The items used were as follows: classification index, Sargent Jump Test, Iowa Brace Test, and squat thrust test. The GMAT was indicative of the motor ability presently developed by the individual and consisted of the following items: 60-yd. dash, standing broad jump, 12 lb. shot-put, running high jump, and pull-ups. The GMAQ was a composite score, based upon the individual's GMAT score and GMCT score. The quotient was in terms of the percentage relationship of actual developed ability to the innate or potential ability.

Results and Discussion

The .05 level was established as the critical statistical value for all analyses. The relationship between motor achievement and factors of personality adjustment correlations were computed by use of the Pearson product-moment technique between the data obtained for each personality scale and the data obtained on the motor achievement of the subjects. Fifteen of these 16 correlations were not significant. The correlation between scale Q2 of the 16 PFQ, which measured the Independence versus Dependence tendencies of the subjects, and motor achievement was $-.17$, which was significant.

It can be theorized that possibly the high number of participants in team activities as opposed to individual activities, and the importance of group functioning in team activities as opposed to independent functioning, may be the explanation for this significant relationship.

In order to determine the significance of predictability of motor achievement from all of the pertinent personality adjustment scales the multiple regression technique was utilized. The significance of predictability was determined for both a full personality adjustment data model, and a limited personality adjustment data model.

The full prediction model consisted of all the applicable data of the 16 scales from the GZTC and the 16 PFQ. A significant correlation of $.37$ was obtained for the prediction of motor achievement by use of the full model.

The scales involved in the limited prediction model were A, Q2, and G of the 16 PFQ, which measured Extroversion versus Introversion, Independence versus Dependence, and Perseverance versus Discontinuance tendencies, respectively. These scales were formulated into a limited model for determination of predictability. It was felt that the limited model was necessary because the involved scales correlated the highest on an individual basis with the motor achievement criterion, and because they came from the same test battery, indicating low intercorrelations. A significant correlation of $.25$ was obtained for the prediction of motor achievement by use of the limited model.

This correlation and the full model R of $.37$ were not great enough to warrant a firm commitment to the prediction of motor achievement with use of personality adjustment information. In order to determine the significance of the differences between personality tendencies of upper and lower motor achievement groups a comparison was made between the upper and lower 25% of the subjects. The important point of consideration was that in the prediction analysis the investigator was dealing with personality adjustment data involving more than one scale, and in the remaining analyses, being nonmultiple techniques, only the data from one personality adjustment scale were involved.

Conclusions

The following conclusions appear to be justified: 1. The degree of individual group dependence, and lack of independence, was a factor in the extent of exhibited motor achievement. 2. Other than group dependence, there was little relationship between individual personality adjustment factors and motor achievement. 3. Level of motor achievement was predictable with the use of grouped measured personality characteristics.

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The Factor Analysis for the Excellence of Athletes in the National Games

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Abstract

Purposes of this research were: 1) To examine the causal relationships that affect the excellence of athletes in the national games and 2) To create a causal relationship that affects the excellence of athletes in the national games by using quantitative research method. Research data was analyzed with confirmatory factor analysis that contributed to the excellence of athletes in the national games in which data was collected by questionnaires. Samples from three groups including 1) 30 experts and executives, 2) 30 male team officials and coaches, and 3) 419 athletes.

The findings indicated that: The result of the factor analysis was the second factor contributing to the excellence of athletes in the national games. With structural equation modeling analysis and validation of models or coherence indicator based theory with empirical data, pattern of variables associated with linear structure revealed causal relationship and the influence of a single variable. The analysis results in this research have led to the creation of a model called "3 EX" consisted of three main areas: 1) management 2) environmental factors and 3) the inner self. Organizations are directly related with others and can be applied with discretion to meet the purpose and set goals based on the circumstances at that time to be the most productive and be useful to the relevant sports associations, athletes and the country.

Keywords : National Games, the excellence of athletes

Introduction

National Games are held every year and they become stages for different athletes to challenge themselves with different kinds of sport (Ministry of sport and tourism, 2559 B.E.). Sport competitions are held in different provinces in order to attract and motivate people to watch and play sport increasingly. Many morning stars also come from national games at present. Competent and young athletes are recruited into Sport Hero project and older competent athletes will be supported to join with the national teams for international competitions.

Sport competence development is the way to develop sport personnel in the province. Athletes are highly appreciated by the Provincial Sport Associations because awarded athletes are empirical index of the province. Sport Authority of Thailand (SAT) has been promoted and launched strategy to develop competent athletes (2553-2559B.E.) for international competitions (SAT, 2554 B.E.) and sport industry in Thailand by coordinating and mobilize different resources like personnel, instrument, equipment, facility and budget for the maximum working performance. Successful national sport development required three factors including 1) personnel referred to population number or persons related with sport who appreciate the fundamental of sport development and promote youths and citizens to play sport and work out as a part of their life. 2) basic structure including stadium, sport equipment and other structures that promote and provide good chance for sport and physical activities along with competitions for youths, athletes and citizens, and 3) financial budget was very important and necessary for arranging sport and physical activities successfully (Bureau of Policy and Strategy, 2555 B.E.).

Sakchai Pitakwongs (2551 B.E.) pointed out that a successful sport development for excellence depended on different factors particularly sport personnel like athletes, coach, referee, administrator and sport organization or association. It also depended on competition system development which was advancing, suitable for that sport, using standard and universal technology and good management for a proper understanding about the role and process of sport excellence development. In order to have proper sport excellence development, we had to concern about development of strong sport association and network to achieve the target and effectiveness (SAT, 2554 B.E.:2).

Provincial Sport Associations in Thailand were playing critical role in developing and promoting national sport from individual to provincial representative and from basic sport to sport for competition. Sport development and promotion had to comply with the policy and objective of the 3rd category in Thailand sport act 2558 B.E. dealing with provincial sport committee based on section 32 which mentioned that the committee are responsible for 1) promoting sport in the province 2) proposing sport promoting project in the province to the SAT 3) coordinating with SAT in arranging sport completion 4) proceeding other duties assigned by SAT, and 5) enacting the regulation of the committee meeting and organization based on section 33 for 2 year term committee assigned by the governor and enforcing section 16 and 17 with provincial sport committee. Further to sport development and promotion, provincial sport association was able to produce competitive athletes for SAT and these athletes were recruited into national sport competition like 1) 30th Olympic Games in 2012 in London, England. 37 Thai athletes from 16 sports had joined the Olympic Games and Thailand was ranked the 57th and won 2 silver and 1 bronze medals 2) 17th Asian Games in 2014 in Incheon, South Korea. 518 Thai athletes from 23 sports had joined the games and Thailand was ranked the 6th and won 12 gold, 7 silver and 28 bronze medals, and 3) 27th Seagames in 2013 in Nippon, Myanmar. 746 Thai athletes including 419 males and 327 females and Thailand was ranked the 1st and won 107 gold, 94 silver and 81 bronze medals (Ministry of Sport and Tourism, 2559 B.E.).

The operation and administration of provincial sport association revealed that most of them were still having different problem which was the same mentioned by SAT (2553:1) that sport promotion especially for athlete development for excellence was still low, athletes were tempted and bought by the hosts. Athlete abducting had been problematic for a long time. SAT have been trying to solve this problem by determining different regulation and qualification of athlete like transcript and work place but they can solve only some problem. Sponsorship was the first influencing factor which athlete emphasized on. Supit Samahitoh et al (2554 B.E.) pointed out that provincial sport associations should focus on personnel development the most and develop some plan for human development as the strategy of the association along with precise and constant monitoring plan.

Further to the above mentioned problems, the researcher was interesting in studying "The Causal Relationship Model for the Excellence of Athletes in the National Competition" and reviewed related research paper in order to investigate what factors influencing the excellence of athletes and applied the findings with the excellence of athletes development which was very important for provincial sport associations to reach their goals effectively and sustaining.

Research Objectives

1. To study the causal relationship influencing the excellence of athletes for national games.
2. To develop causal relationship model for the excellence of athletes in the national games.

Research Framework

Further to literature review, we had found 3 major factors influencing the excellence of athletes in the national competition including; 1) Management factors (the excellence of athletes) included the development of sport personnel, coach, athlete, facility, management of provincial sport association, network of sport organization and sport science and technology 2) Circumstance factors (atmosphere of the organization) included structure of the organization, responsibility of personnel, support and confidence, motivation and punishment procedure, conflict and endurance towards the conflict, working standard and expectation, harmony and loyalty, risk and risk management. 3) Internal factors (readiness to learn) including love to learn, thought about effective self-learning, problem solving skill, creativity, life long learning process, learning initiation, self-understanding and self-responsibility in learning. Finally, we came up with the causal relationship model for the excellence of athletes in the national competition.

Populations and Sampling

The populations and samples of this study are the athletes who have won a gold medal 1- 10 in National Games of Thailand 41st, 42nd, and 43rd including 15 provinces; Bangkok, Chonburi, SuphanBuri, Chiangmai, NakornRajshima, Nonthaburi, KhonKaen, UbonRajthanee, Chumporn, Sumutprakarn, Samutsakorn, Nakornsrihammaraj, Srisaket, Surin and Saraburi. The samples of this study is calculated by using Taro Yamane formula with 96% confidence level. In order to obtain reliable of data, researcher has increased sample size to 419 persons and considered with causal analysis at least 20 persons per 1 variable with including 23 variables.

Methodology

We used quantitative research with this research in order to analyze data related with causal relationship model for the excellence of athletes in the national competition and collected data with questionnaire from 3 sample groups including 1) 30 administrators and veterans 2) 30 team staff and coaches 3) 419 athletes attending the 41st, 42nd and 43th national sport competitions in 15 provinces and 5697 athletes attending 43th Nakornrajsrima Games.

Applied Tools to Collect Data Applied tool to collect data was questionnaire asking about opinion towards priority of confirming elements influencing the excellence of athletes in the national competitions.

Responses in the questionnaire were rating scales. Questions were chosen by using item response theory and calculated structural validity of the tool with interval confidence. The developed questionnaire was revised and improved based on theoretical idea including 3 sections as the following;

Section 1 : questions about general information of the sample in term of determined check lists.

Section 2 : questions about opinion towards influencing factors towards the excellence of athletes in national competition as five point likert scales ranged from the highest, high, fair, low and the lowest.

Section 3 : questions about opinion towards atmosphere in the organization and the readiness to learn as five point likert scales ranged from the highest, high, fair, low and the lowest.

Quality Assurance of the Tool

The researcher had calculated questionnaire validity and reliability to improve its precision and goodness as below;

1. Validity Testing

1.1 We had inspected the quality of the tool by using confirmatory factor analysis or CFA to prove its validity and goodness.

1.2 We had inspected the quality of the tool by submitting the questionnaire to 5 veterans for their content validity inspection and calculate Consistency index value or IOC of the questions and different properties to be measured (Bryman, 2008).

2. We tested the reliability or internal validity with Cronbach's alpha coefficient and tested the questionnaire with 30 samples. Questions with more than .70 were considered confident (Bryman, 2008).

3. We had improved the tool after testing process to verify its completeness based on research objectives and applied with the sample groups later on.

Data Analysis

1. Descriptive statistics method was applied to analyze data about characteristic of the responders with frequency and percentage.

2. Inferential statistics method was applied to analyze the following data;

2.1 Mean average (), standard deviation (S.D) were analyzed for likert scales

and tested mean comparison among sample groups in order to test hypotheses of different factors in the questions.

2.2 Confirmatory factor analysis or CFA was done to prove the goodness and validity of influencing factors towards the excellence of athletes in national sport competition.

In addition, we had tested data compliance by estimating parameters using maximum likelihood and chi-square, goodness of fit index, adjusted goodness-of-fit index or AGFI, root a square error of approximation or RMSEA which were statistic values to test compliance of empirical data before and after adjustment with Lisrel program. The analysis of relationship of different variables was presented at the end.

Conclusion

We concluded the analysis of the causal relationship for the excellence of athletes in the national competition by using structural equation model or SEM to test the validity and goodness of the model by considering different indexes based on theory and empirical data. Variable relationship was shown linear structural relationship and causal relationship influencing recursive models. We had used Lisrell program that enabled us to apply theory with empirical data as much as possible. After we had done model modification by adjusting some parameters with model modification indices or MI, we had adjusted and reposed some parameters for a relevant deviations until AGFI complied with empirical data as shown in table 1.

Table 1 AGFI and empirical data after research model adjustment

index	criteria	statistic	result
p- value of χ^2	> 0.05	0.00	fail
χ^2/df	< 3.00	267.83/129 = 2.08	past
GFI	> 0.90	0.97	past
AGFI	> 0.90	0.96	past
CFI	> 0.90	0.99	past
SRMR	< 0.05	0.04	past
RMSEA	<0.08	0.051	past
CN	> 200	298.55	past
Q-plot	steeper than diagonal	steeper than diagonal	past

Suggestions:

1. Responsible organizations can implement the Factor Analysis for the excellence of athletes in the national games in order to motivate the excellence of athletes effectively and efficiently.
2. There should be promotion and support for different activities concerning the participation in developing sport organization network or alliance, sport policy and planning development, sport management, monitoring and evaluation.

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The Business Management Model of Taekwondo Training Center in Thailand

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Abstract

The objectives of this research were to explore and develop the model of Taekwondo Training Center management in Thailand and to analyze the structural management of the Center. This research used Delphi method, self-administrative instrument, which was validated by experts. Data were collected through the interview with successful entrepreneurs of 18 Taekwondo Training Centers in Thailand.

The results of this research showed that there were five major factors relating to the operation of Taekwondo Training Center. Five factors were prioritized as follows: Entrepreneur's background, Instructor's qualification, Center location, Pricing model, and Promotion. There were two models of Taekwondo Training Center management in Thailand, classified by entrepreneur's background. For the first model, entrepreneurs ever were Taekwondo students for a long time until they were engaged to this sport and saw the way of operating the Taekwondo Training Center. They began with considering instructor's qualification and emphasized on specialization in Taekwondo skills. It was followed by fundamental qualification of instructor. The second factor was to consider the location. They chose location located in a community or school, as well as convenient location, and affordable rent. Lastly, they considered the size of center in order to support learning activities. The third factor was pricing model. They considered the pricing strategy of rivals within the same area and break-even point. The fourth factor was promotion aimed to stimulate customer loyalty. For example, the Center sent its students to participate in competitions, held the test for measuring student's progress. For the second model, entrepreneurs were former national high-level athletes such as former national athlete representative or coaches. They began to run the Taekwondo Training Center to meet the needs of athletes and parents. The most important factor was instructor's qualification. They considered only qualifications of being instructor. The second most important factor was center location. They considered the size of center that support learning activities. It was followed by rent and convenient location. The third factor was pricing. They considered the ability of instructor and pricing strategy of rivals in the same area. The fourth factor was promotion. They focused on differentiation in terms of learning quality and competition performance

Key words: Business Management Model, Taekwondo Training Center

Introduction

Martial art sports have been very popular. There are always international competitions. Martial arts are a discipline that focuses on the study and practice of combat and self-defense. They are currently being studied widely both as a sport to cultivate a healthy body and to train the mind. Martial Art studies can be classified in two categories: 1) martial arts as sports. Besides being taught to fight and self-protection, the violence is often reduced to become a sport. There are rules imposed in competitions such as Karate, Kendo, Kung Fu, Vovinam, and Taekwondo. 2) Martial Arts based on the original form with no competition. The teaching was only for fighting and self-defending such as taekwondo, aikido, and Jiu-jitsu. Martial arts that are popular in Thailand are Kung Fu, Karate, Judo and Taekwondo.

One of the reasons that sparked martial art class popularity is safety for life and property. It is done by practicing to prevent surrounding harms from criminals such as theft, robbery, and mugging, etc. These offenses are increasing all the time. When critical or mayhem event happens, the person would be ready to safely evade, prevent, and respond. The important thing in learning martial arts is there must be a teacher that teaches the skills on how to train for the event and the students must keep training until become skillful for the skill to be used safely. It is no surprise at all that more people have turned their attention to studying martial arts. It can be seen that all ages are interested in learning martial arts.

Taekwondo in Thailand originally was taught to the American military in bases in Thailand such as U-Tapao, UbonRatchathani, and Nakhonratchasima, etc. American soldiers hired Taekwondo instructors from Korea. It was subsequently open to the public to learn. Taekwondo was later taught at Arpassa martial art school located across from the British Embassy, led by ManlikaKhamphanon, who has serious interest and love for the sport of taekwondo. She also is the developer and publisher of taekwondo in Thailand. This was done by inviting instructors from Korea to teach at the school. She is also the first president of the Taekwondo Association of Thailand. Taekwondo was then accepted more widely. Taekwondo movements emphasize on the beautiful and fast kicks so it became a global sport that has gained popularity around the world. Taekwondo has been receiving support from the government to find an athlete who can build a reputation for the country. Those who practice Taekwondo are healthy, discipline, concentrated, and witty. Taekwondo is also a good self-defense art. The instruction is controlled and standardized. The Kukkiwon Institute and the World Taekwondo Federation have set the skill level of the practitioners. The belt color is the skill level mark: white, yellow, green, blue, brown, red, and black, respectively. Students will receive a certificate as a proof when the skill level test is passed. The certificate can be used to further study anywhere worldwide. The Institute also supports the development of an athlete who wants to go national or global. Athletes will be sent to compete in various competitions as amateurs and professional both at home and abroad.

The results of the poll in martial arts popularity by the Sports Authority of Thailand in 2011 found that Taekwondo is the most popular martial arts. It was as high as 32 % of all form of martial arts. The popularity results in numerous Taekwondo training center business opening. They can be found in places such as the mall, around schools, main streets and a prime location. Each place is unique, such as the ease of traveling to school, size, quality of trainers, equipment, cost of the class, and the results after the training as well as other related services. Parents and students who are interested in learning recognize the importance of practicing martial arts such as Taekwondo. This results in lots of their attention to study Taekwondo. There are classes after school and Saturdays and Sundays. This is to use the free time to benefit and improve physical fitness including training to participate in competitions. It is also done to build a profile to continue the study in both the public and private sectors. The main goal of Taekwondo training centers is to increase the number of students and sending them to compete in various competitions to build the reputation of the center and the students. Therefore, Taekwondo training center try to find different tactics to achieve the advantages in the market. It can be through marketing and creating uniqueness to attract and build credibility for those who use the service. This will result in increasing the number of students. There are also developments and improvements of service management in the Taekwondo training center business to be efficient to satisfy all users. This is done to achieve a continuous and long-lasting relationship with the service users.

The Taekwondo training center business competition results in athletes or those interested in learning Taekwondo want to be a Taekwondo training center entrepreneur in the future. There will be risks of investing and businesses failure. The researcher is interested in studying the factors of doing Taekwondo training center business as well as creating the right model in Taekwondo training center in Thailand business management. The information will be used to promote and improve Taekwondo training center business. This will drive the development of Taekwondo training center in Thailand standards to survive in the highly competitive conditions in the future.

Research design

Research Objectives

1. To study the factors affecting the successful Taekwondo training center.
2. To create an appropriate business model for Taekwondo training center in Thailand.

Scope of Research

The researcher has determined the scope of the research to be a qualitative research. It was conducted by studying, analyzing the Taekwondo evolution and value. Study was also conducted on Taekwondo knowledge transferring process from past to the present and Taekwondo training center business management condition by creating a Taekwondo training center business management model.

Population and sample

The sample of this study was those with expertise and success in Taekwondo training center business, Kwanjangnim or Saboemnim. The sample was selected based on purposive sampling determined by the properties of the operator that meets any of the following:

1. Taekwondo training center registered a martial arts school with the Ministry of Education.
2. Taekwondo training center with a commercial registration and knowledge management or has been in business for no less than 5 years.
3. Taekwondo training center with a commercial registration and the trainers are fourth degree black belt and up.

From that process, the researcher came up with 18 Taekwondo training center operators that meet the requirements and are willing to provide information in the study.

Related documents and researches

The researcher was conducted studied on the following related documents and researches to conduct this research to develop Model of Taekwondo Training Center Business Management in Thailand. Studies were conducted on the general condition and the history of Taekwondo, personnel involved in the teams, the equipment used in training, Taekwondo competition management training, the concept of process management, the trend for the future development of Taekwondo, and the concept of creating a new business

Creating research instruments

1. The research instrument was depth interview with questions to guide operation. However the questions and the sequence are flexible. The interview guidelines are as follows:

- 1.1. The status of the interviewees,
- 1.2. The general situation of Taekwondo training center business, and
- 1.3. The key factors of Taekwondo training center business.

2. The created interview was tested on the index of item objective congruence(ICO) by 3 experts. 1 was the expert on the business side of sports, 1 was the expert on the measurement and evaluation, and the last one was the expert on Taekwondo business administration.

3. The complete interview was prepared to complete the research.

Data Collection

1. The research collected data from the following documents:

- 1.1. Related researches on Taekwondo both domestic and abroad,
- 1.2. Taekwondo history evolution, business problems from past to present, and Taekwondo commercial business model, and
- 1.3. Qualitative research with related theories.

2. Field Studies: the researcher conducted interview, observation, and record the conversations with images in order to get the most accurate data

3. Data collected by using Delphi Technique, divided into 3 based on information received each round.

- 3.1. The first round was on an open-ended broad inquiry questions
- 3.2. The second round was on rating scale questions
- 3.3. The third round was on model confirmation

Scrutinizing data

1. The first round of data collected was tested by peer examination by asking a friend to for opinions, criticism and observation on the evidence and information substance on the analysis of the data collected from field research.

2. The data from the first round of questions was prepared in Rating Scale and then Delphi Technique was performed.

3. The data from the second round of questions was prepared in Rating Scale for model confirmation.

Conclusion

Main factors affecting successful Taekwondo training center business in the following order of priority included:

1. Course and Service2. Location3. Price4. Promotion

No.	Factor	Median	Mode	Q3	Q1	IQR
1	Qualification of trainer	5.00	5.00	5.00	5.00	0.00
2	Training method	5.00	5.00	5.00	4.00	1.00
3	Service mind	5.00	5.00	5.00	4.25	0.75
4	Urban area	5.00	5.00	5.00	4.00	1.00
5	Space	5.00	5.00	5.00	4.00	1.00
6	Convenient	5.00	5.00	5.00	4.00	1.00
7	Breakeven point	5.00	5.00	5.00	4.25	0.75
8	Base price in area	4.50	4.00	5.00	4.00	1.00
9	Experience	5.00	5.00	5.00	4.00	1.00
10	Participation consumers	4.50	5.00	5.00	4.00	1.00
11	Event participation	5.00	5.00	5.00	4.00	1.00
12	Event owner	4.00	4.00	4.75	4.00	0.75
13	Quality of service	4.50	5.00	5.00	4.00	1.00

Table 1 Factor Data

There were two main type of business management model of Taekwondo training center based on entrepreneurs background as follows:

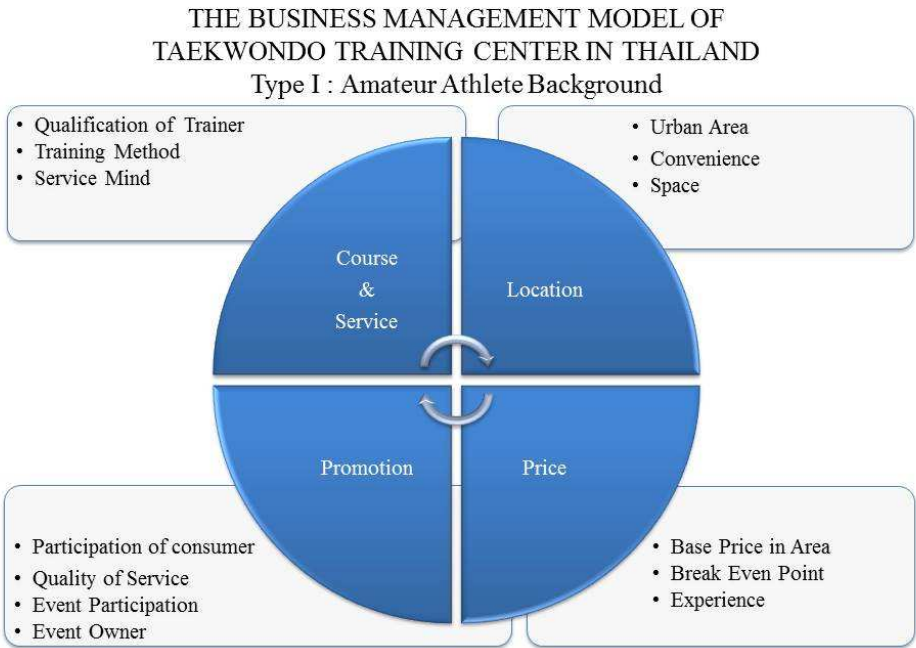


Figure 1: Amateur Athlete Background

Type I: Amateur Athlete Background: It was a group of entrepreneurs with background as an amateur. Those who have studied Taekwondo for a long time until they have the knowledge and understanding on Taekwondo. They are committed to Taekwondo and can see ways to do business. It was started with the determination on the following factors:

The first factor was 1) the course & service with the focus on the qualification of trainer. The qualification must conform to what the World Taekwondo Federation imposed. 2) The Taekwondo training method. 3) The instructor must have the basic attributes of service mind. The second factor was the location of establishment with a focus on first it should be located in an urban area or near a school, second it should be convenient to get to with rental costs that the business can bear, and lastly the space can support teaching activities. The third factor was the price based on the base price in area with the calculation of breakeven point to do business and may include the experience of the instructor. The fourth factor was the Promotion in Taekwondo training center business. The objective is to stimulate product and service royalty. This can be done by letting parents of the students participate in setting the learning goal, and the care of athletes competing in various competitions including holding their own tournament.

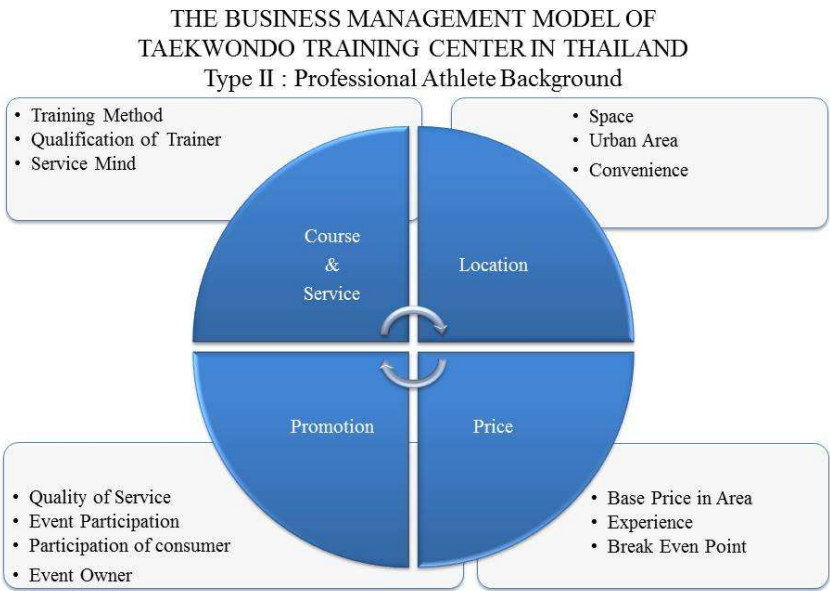


Figure 2: Professional athlete background

Type II: Professional athlete background: It was a group of entrepreneurs with a background as professional athletes such as former Thailand national team members or coaches. The Taekwondo school business was mainly started to meet the needs of athletes and parents. The first factor was 1) The course & service with the focus on the qualification of trainer. The qualification must conform to what the World Taekwondo Federation imposed. 2) The Taekwondo training method. 3) The instructor must have the basic attributes of service mind. The second factor was the location of establishment. This group will mainly focus on the size of the place that can support teaching and learning activities as well. The second is the location. The final was the convenient of the students to get to. The third factor was the price is mainly determined by the ability of the instructor and a comparison with prices in the same area and to consider the cost of doing business. The fourth factor was the promotion will focus on the parents seeing the difference in the quality of service and the athlete competition results. This factor will prevent the problem with competitors using pricing strategies.

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Relationship of Selected Motor Fitness to Performance of High School Male Kabaddi Players in Mandya District

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Abstract

Introduction: Kabaddi is a team as well as a combat game. Kabaddi is characterized by discreet movement execution on the part of both offensive and defensive players. The role of motor abilities, such as, strength, endurance, speed, flexibility, agility and coordinative abilities are the prerequisites for motor actions in all sports. No prediction study of Kabaddi performance in Motor Fitness variables among High School Male Kabaddi Players in Mandya District was conducted. The purpose of the study was to predict the performance of Kabaddi players from selected Motor Fitness variables.

Objectives: a) To assess the relationship between selected Motor Fitness variables and performance among Kabaddi players. B) To know which Motor Fitness variables majorly predict game performance among Kabaddi players

Methodology: To achieve this purpose, 150 High School Male kabaddi players who were participated in the inter district high school kabaddi tournaments were selected randomly from different schools of Mysore district. The age of the subjects ranged from 14-16 years. In the present study Motor fitness variables speed, explosive strength of legs, cardio respiratory endurance, flexibility, static strength of arm, agility were selected. The data collected has been tabulated and analyzed with the help of statistical techniques viz., mean, standard deviation, coefficient of correlation, multiple correlation, regression equation and One-Way ANOVA (Analysis of Variance) and scheffe's post hoc test.

Results: There is a significant relationship between Motor Fitness variables Explosive strength of legs, Cardio respiratory endurance, Flexibility, Static strength, Agility and performance of the kabaddi players. However, speed and performance of the kabaddi players were not significantly related to each other. Of the 6 motor fitness variables entered into the equation, only three variables, i.e., Agility, Cardio Vascular Endurance and Static Strength of Arm were found to predict the game performance.

Introduction

Kabaddi is a team as well as a combat game. Kabaddi is characterized by discreet movement execution on the part of both offensive and defensive players. The role of motor abilities, such as, strength, endurance, speed, flexibility, agility and coordinative abilities are the prerequisites for motor actions in all sports. Their improvement and maintenance is crucial in sports training (L. Matveyev 1981). Evidence proves that successful competitors in different sports possess physique, strength, endurance, speed, flexibility and agility and are reasonably distinct. Likewise, their contribution to the performance is different for each sports (Dietrich Harre 1982).

No prediction study of Kabaddi performance in Motor Fitness variables among High School Male Kabaddi Players in Mandya District was conducted. The purpose of the study was to predict the performance of Kabaddi players from selected Motor Fitness variables.

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To assess the relationship between selected Motor Fitness variables and performance among Kabaddi players
To know which Motor Fitness variables majorly predict game performance among Kabaddi players

Methodology

To achieve this purpose, 150 High School Male kabaddi players who were participated in the inter district high school kabaddi tournaments were selected randomly from different schools of *Mandya District* The age of the subjects ranged from 14-16 years. In the present study Motor fitness variables speed, explosive strength of legs, cardio respiratory endurance, flexibility, static strength of arm, agility were selected.
The data collected has been tabulated and analyzed with the help of statistical techniques viz., mean, standard deviation, coefficient of correlation, multiple correlation, regression equation and One-Way ANOVA (Analysis of Variance) and scheffe's post hoc test.

Table-1Relationship of selected Motor Fitness with Kabaddi Game Performance of High School Male Kabaddi players

Sl. No.	Variable 1	Variable 2	Coefficient correlation 'r' value	Sig. Level	Interpretation
1.	Speed	Performance	-.158	.054	Non significant
2.	Explosive strength of legs	Performance	.309	.000	Sig at .001 level
3.	Cardio-respiratory endurance	Performance	-.714	.000	Significant at .01 level
4.	Flexibility	Performance	.252	.002	Sig at .01 level
5.	Static strength of Arm	Performance	.323	.000	Sig at .05 level
6	Agility	Performance	-.869	.000	Significant at .01 level

*Significant at 0.01 level with df 58 is 0.174
Note: Negative significance is due to the fact that the variable correlated involved in percentage
Results
There is a significant relationship between Motor Fitness variables Explosive strength of legs, Cardio respiratory endurance, Flexibility, Static strength, Agility and performance of the kabaddi players.
However, speed and performance of the kabaddi players were not significantly related to each other.

Table-2:Variables entered in stepwise multiple regression taking game performance as dependent variable and motor fitness variables as Independent variables

Model	Variables entered	R	R Square	Adjusted Square	R
1	Agility	.869	.754	.753	
2	Cardio vascular endurance	.885	.783	.780	
3	Static strength of Arm	.893	.798	.794	

Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100)

Results

Of the 6 motor fitness variables entered into the equation, only three variables, i.e., Agility, Cardio Vascular Endurance and Static Strength of Arm were found to predict the game performance.

Discussion

H1: There is a significant relationship between the motor fitness with performance of high school Kabaddi players
Hypothesis formulated for Motor *fitness* and Performance is accepted as the analysis revealed that, among Motor Fitness variables Explosive strength of legs, Cardio respiratory endurance, Flexibility, Static strength, Agility and performance of the kabaddi players.
A study conducted by Ashish Kumar Singh, Kannan and Singh (2014) revealed that, there were high correlations existing between playing ability against Agility, Explosive leg Power, Muscular strength and Moderate correlations exist between playing ability versus Muscular endurance, Flexibility and low correlations exist between playing ability versus Grip Strength.

A study conducted by Jeyaraj and Gopinathan (2014) reveals that the physical fitness variables of speed, agility, explosive power, shoulder strength, endurance and flexibility were significant relationship with Kababdi playing ability.

The result of the present study was in accordance with the findings of previous studies. Many studies have revealed that Kabaddi game requires many essential motor ability components such as strength, power, aerobic-anaerobic capacity, neuro-muscular coordination and muscular endurance. Kabaddi is an intermittent type of sports and it demands all motor qualities specially strength, agility, flexibility and endurance to “Cant holding”. So the present study result is in agree with the above said facts.

H2: Only few motor fitness variables best predict the performance of high school kabaddi players.

Hypothesis formulated for Motor *fitness* and Performance is partially accepted as the analysis revealed that, of the 6 motor fitness variables entered into the equation, only three variables, i.e., Agility, Cardio Vascular Endurance and Static Strength of Arm ¹ were found to predict the game performance.

A study conducted by Devaraju and Needhiraja (2013) revealed that there was a correlation exists between the playing ability versus leg length, arm length, speed, Leg Explosive strength, Breath holding time, Muscular endurance and Muscular Power. The results also revealed that Leg explosive strength, Speed, Muscular endurance and Muscular power become the common characteristics which can predict the playing ability in Kabaddi players.

A study conducted by Devaraju and Kalidasan (2012) revealed that an inter-relationship exists significantly between the anthropometrical, physical and performance variables among male inter-collegiate Kabaddi players. The results also revealed that speed and flexibility become the common characteristics which can predict the playing ability in Kabaddi players.

The result of the present study was in corroborated with the findings of previous studies. It's because in Kabaddi fine flexibility and agility is developed as one needs to move faster in a small court. Here more than speed acceleration is paramount. Strong leg muscle gives more punch to the player. So these qualities become the common characteristics which can predict the playing ability in Kabaddi players.

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Influence Of Specific Yoga And Aerobic Exercise On Physical Fitness Of Athletes

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Introduction

Physical fitness plays a vital role in the sports and an optimum level of it is essential for maintaining sports performance. In the modern games & sports, a player is required to be in movement continuously over a certain period of time at a varying pace, from fast to slow or medium and vice-versa, many a time hopping, jumping and changing direction while in movement, which puts a great deal of demand in terms of physical efforts on the part of each player.

In the arena of International competition, one can hardly differentiate the top notch contenders from another in terms of their levels of fitness. However, the deciding factor sometimes remains with physical fitness. The world's top most sporting nations are very much conscious of the basic physical fitness and the related components.

Besides physical fitness, technique training also plays an important role in the total training process of the sportsperson. It has been fully recognized by all experts including sports scientists that performance in Games & Sports, not only depends directly on the mastery of skills, but also on the optimum development of physical and physiological factors of players.

Research work on the development and maintenance of physical fitness of athletes and Students is an important area which requires a lot of investigation. Some pioneering research works have already been done in this area.

Giri (1996) reports that Yogic training improves the physical fitness, Rakesh Giri and Navain Prakash (1988) observe that Yoga improves the performance of Sportsmen in sports. Bera (1991) found that Yogic training improved the performance in track & field. The Indian Hockey team, prior to 1996 champion Trophy were given yogic practices at Coimbatore, Taddorio (1996) and others found that a programme of Calisthenics Exercise definitely played significant role in improving physical fitness of children. Dr. M.L. Ghorate and others found significant results with short term yogic practice on the improvement of physical fitness and motor fitness too for the different age groups. Fabricius (1964), observe the effect of added calisthenics on the physical fitness of forth grade boys & girls. Maity SN and Subhas Chandra Samanta (2001) reported the improvement of calisthenics and yogasanas on motor fitness status of fifth grade girls.

Purpose Of The Study

To observe the influence of specific yoga and aerobic exercise programme on selected physical fitness ability of Athletes of Mysore District.

Material And Methods

Subject
Sixty athletes who are undergoing training in Mysore District were randomly selected (30 boys and 30 girls) for this study. They were divided two groups; boys and girls. Their mean age was 17.5 yrs. for boys and 16.0 yrs. for girls, and mean height were 172.8 cm for boys and 156.4 cm for girls. They are from Track & field dicipline

Aerobic Exercise
Aerobic exercise classes were given twice in a week i.e. on Monday and Thursday in the early morning 5.30 - 6.30 a.m. The selected aerobic exercises consists of simple free hand exercise with running, interval running, continues running paracurese training and modified fartleck training in track. Load aerobic exercise was not considered because they were training athletes. The subjects were verbally motivated to perform better while in exercise. And also they were fully supervised by the teacher during the class and none of them reported about any injury.

Yogasana
Yoga classes were given twice a week, i.e. on Tuesday and Friday in the early morning 5.30-6.30 a.m. The selected yogasanas consists of swastikasana, birasana, uthethta padmasana, nankasana, brikshasana, tadasana ardhachandrasanan, utkatasana, bakasana, sabangasanana, ustrasana and sabasana.

Testing Procedures
For observing the influence of yoga and aerobic exercise on physical fitness, Six physical fitness items were selected and test was conducted on the subjects. The selected physical fitness items are, vertical jump, (explosive power), push ups and situps (Strength endurance) sit-reach (Flexibility), 50 yard dash (speed) and 12 min run-walk (endurance). All these tests were taken thrice on both boys & girls according to the standard procedure : (I) T₁ was taken before onset of class (i.e. first week of November 2000), (II) T₂ was taken after the two month (i.e. first week of January 2001), (III) T₃ was taken after 2 months of class from the 2nd test, ((i.e. first week of March 2001). The tests were conducted after proper equipments and facilities were ready with the help of SAI coaches in the morning of the same days.

Results And Discussions
The data of the 1st test, T₁, conducted onset of class of yoga & aerobic exercise. T₂ after two months of class and T₃ after 2 month, from the 2nd test for boys & girls are presented in the Table (II) & (III) separately.

Table 1:Mean, SD of Physical fitness parameters & Variation among the means of three test states including intra-group deference of boys group

PHYSICAL FITNESS PARAMETER	TEST STATE			F	MEAN DIFERENCE		
	T _s	T ₂	T ₃		T ₁ -T ₂	T ₁ -T ₃	T ₂ -T ₃
VERTICAL JUMP (cm)	40.73 ±4.55	44.23 ±3.92	45.77 ±4.00	5.37 *	3.50*	5.04*	1.54
PUSH-UPS (no)	27.87 ±3.21	35.37 ±4.20	38.67 ± 4.49	26.77 *	7.50*	10.80 *	3.30*
SIT- UPS(no)	42.40 ±5.67	49.93 ±6.62	53.47 ±7.26	10.44*	7.53*	11.07*	3.54
SIT-REACH (cm)	18.00 ±2.35	19.27 ± 2.48	20.34 ±2.33	3.36*	1.27	2.34*	1.07
50 YARD DASH (sec)	6.84 ±0,30	6.50 ±0.10	6.31 ±0.17	22.91*	0.34*	0.53*	0.19*
12.min Run & Walk	2394.33 ±9.98	2410.33 ±7.85	2440.00 ±9.13	92.25*	16.00*	45.67*	29.67*

Table 2:Mean, of SD of Physical Fitness Parameters & Variation among the means of three test states including intra-group deference of girls group

PHYSICAL FITNESS PARAMETER	TEST STATE			F	MEAN DEFERENCE		
	T ₁	t ₂	t ₃		T - T ₁ / 2	T - T ₁ / 3	T - T ₂ / 3
VERTICAL JUMP (cm)	30.17 ±6.13	37.93 ±6.34	41.50 ±6.54	11.71 *	7.76*	11.33*	3.57
PUSH-UPs (no)	20.73 ±3.84	28.13 ±4.88	31.07 ±4.73	19.55 *	7.40*	10.34 *	2.94*
SIT- UPs(no)	30.10 ±6.12	37.90 ±6.30	41.50 ±6.51	11.70*	7.67*	11.30*	3.50
SIT-REACH (cm)	18.77 ±3.07	19.83 ±2.19	20.67 ±2.73	1.51	1.06	1.90	0.84
50 YARD DASH (sec)	6.76 ±0.42	6.46 ±0.46	6.28 ±0.30	3.48*	0.21	0.39*	0.18
12.min Run & Walk	2395.67 ±11.53	2410.65 ±8.92	2416.65 ±7.41	21.42*	15.00*	23.00*	5.89

It has been observed from & (III), that vertical jump (explosive power) was improved significantly after 2 months of class but no further significance improvement occurred afterwards for both the sexes. For strength endurance push-ups & sit-ups almost similar result on both sexes, that is improved significantly after 2 months class respectively. In case of flexibility tests (sit and reach), improvement was observed on both the sexes, but significant improvement was only for boys. Regarding speed (50 yard dash) significant improvement in timing was observed on both the sexes. However, improvement was more significant among boys.

Conclusion

With the finding, from the present study, the following conclusion may be drawn:Improvement of physical fitness assessed on three selected physical fitness tests after four months of yoga and aerobic exercise has justified the fact that both yoga & aerobic exercise were effective in developing physical fitness. With yoga & aerobic exercise classes, boys were found superior to girls group on performance improvement, which can be seen from some tests like, sit and reach, (flexibility), 12 minutes run walk (endurance), 50 yard (speed).

Recommendation:

From the above findings of the present study the investigators recommend exercise as a part in their training programmes to improve the physical fitness of the athletes. That other games may introduce class/ programme on yoga & aerobic classes on yoga & aerobic exercise along with their long and intensified training programs. It will be useful to give classes of yoga & aerobic exercise on different sex, age and levels of athletes, to maintain their performance. It will be very helpful to induce classes on yoga and aerobic exercise along with their long and intensified training programme.

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Comparative Study on selected Conditional abilities to 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 conditional abilities of high, mediocre, and low performance group of 30 male sub-Junior gymnasts who had participated in 27th 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 . 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 were 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).

Fukushima (1981) Logan (1961) has also expressed that the strength is necessary for the stability of the joint particularly of the extremities. Speed is the ability to react quickly and execute the motor movements under the given condition Harre (1979).

In gymnastics, the pure speed is mainly required for approach run for vaulting table faster and smoother. Smooth approach run play a decisive role in the execution of different vaults. The levels of conditional abilities are prime importance for leaving and perfection of different skills on various apparatus. The investigator, being himself a national player for 5 years and having participated in this beautiful sport discipline for about 10 years, feels that this aspects that this aspects that a conditional abilities and coordinative abilities are being neglected in our country. Perhaps, this may be one of the important factors of the poor performance of our Gymnasts when compared with other international gymnasts. Thus, the investigator was motivated to compare level of conditional abilities of better performance gymnasts and poor performance gymnasts yet there is a dearth of data on physical performance attributes. In fact, in the sub-junior gymnast investigator did not come across and study reported in literature describing conditional ability and performance attributes of sub-junior male gymnasts.

Methodology:

Present study has been conducted on 30 male sub-Junior gymnasts who had participated in 27th Sub-Junior National Championship held at National Sports Academy Allahabad UP. 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.)
 - (ii)
4. Measurement of Flexibility
 - (i) Trunk Flexion (Sit and Reach. Cm.)

Results And Discussion:

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

Table -I

** Significant at 0.01 Level.	* Significant at 0.05 Level
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Results And Discussion:

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

Table -I

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S. No.	Variables	Source of Square	Sum of squares	Df.	Mean of Squares	'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	<i>Sit and Reach</i>	<i>Between group</i> <i>With in the group</i>	<i>404.52</i> <i>195.35</i>	<i>2</i> <i>27</i>	<i>202.26</i> <i>7.24</i>	<i>27.96**</i>

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

Table – II

S. No.	Variables	High Performance Group (N=10)	Mediocre Performance Group (N=10)	Mean Diff	SE	Sig. P.Value
1	Competitive Performance	48.965 \pm 1.89	43.86 \pm 1.53	5.10	0.72	.0**
2	Jack knife Sit-Ups (One Min.)	35 \pm 3.27	26.50 \pm 3.75	8.50	1.69	.0**
3	Standing Broad Jump (Cm)	230 \pm 12.91	200 \pm 25.60	30.00	10.42	.027*
4	30mts. Speed (S.S)	5.31 \pm .477	6.26 \pm .15	0.95	0.27	.0**
5	Sit and Reach (cm)	23.95 \pm 2.89	16.45 \pm 2.81	7.5	1.20	.0**
6	<i>Pull-Ups Max.No.</i>	14.20 \pm 2.86	11.60 \pm 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)	Low Performance Group (N=10)	Mean Diff	SE	Sig P. Value
1	Competitive Performance	48.965 \pm 1.89	39.29 \pm 1.32	9.68	0.72	.0**
2	Jack knife Sit-Ups (One Min.)	35 \pm 3.27	25.70 \pm 25.7	9.30	1.69	.0**
3	Standing Broad Jump (Cm)	230 \pm 12.91	198.5 \pm 28.38	31.5	10.42	.02*
4	30mts. Speed (S.S)	5.31 \pm .477	6.5 \pm .527	1.19	.27	.01**
5	Sit and Reach (cm)	23.95 \pm 2.89	15.9 \pm 2.33	9.3	1.69	.0**
6	<i>Pull-ups Max No.</i>	14.20 \pm 2.86	10.80 \pm 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 \pm SD	Low Performance Group (N=10) Mean \pm SD	Mean Diff	SE	Sig. P. Value
1	Competitive Performance	43.86 \pm 1.53	39.29 \pm 1.32	4.57	.72	.00**
2	Jack knife Sit-Ups (One Min.)	26.50 \pm 3.75	25.70 \pm 25.7	0.80	1.69	.00**
3	Standing Broad Jump (Cm)	200 \pm 25.60	198.5 \pm 28.38	1.50	10.42	.99
4	30mts.Speed (S.S)	6.26 \pm .15	6.5 \pm .527	0.24	0.71	.68
5	Sit and Reach (cm)	16.45 \pm 2.81	15.9 \pm 2.33	0.55	1.20	.90
6	<i>Pull-ups Max No.</i>	11.60 \pm 3.69	10.80 \pm 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 knives sit-ups than the mediocre and low performance group (P=0.00, p<0.01 and P=0.00, p<0.01respectively) 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<0.01respectively). 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 in following 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 than its counter parts.

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Comparison Of Aggression And Anxiety Among Defensive And Offensive Female Kabaddi Players

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Introduction

Psychology plays a vital role in the present time of advance industrialization, mechanization and sports studying of Psychology gives perfect picture about the person's in that we can conduct the study on the mental aspects of players. Even the fastest, strongest, smartest and most skilled will under achieve if they concentrate on the wrong things, one unable to qualify, let go of mistakes or bad breaks, lack of self confidence or can't handle the pressure of competition.

Kabaddi is a combative team game, played with absolutely no equipment on a rectangular court, either out doors or indoors with seven players on the ground in each side. It requires skills, agility, good lung capacity, muscular coordination, presence of mind, and quick responses, courage etc, for a single player to take on seven opponent is no mean task. It requires courage as well as ability to concentrate and anticipate the opponent's moves. In order to facilitate further growth of kabaddi game, valid assessment procedures to comprehensively estimate the players physical physiological and psychological abilities are needed.

Statement of the Problem

The purpose of the study was to find the comparison of aggression and anxiety among defensive and offensive female Kabaddi players who were participated in state level tournaments.

Delimitation

The study was delimited to female state level kabaddi players.

The study further delimited to the assessment of the anxiety level by using sports competition anxiety questionnaire (SCAT)

The study was delimited to the assessment of aggressiveness by using aggression questionnaire of Anand Kumar and Prem Shankar Shukla.

Limitation

The authenticity of response given by the subjects in questionnaire technique was considered as a limitation of the study.

Hypothesis

On the basis of evidence available in the literature and on personal experience the following hypothesis were formulated.

There may not be any significant difference in aggression level among offensive and defensive players.

There may not be any significant difference in anxiety level among offensive and defensive players.

Review Of Related Literature

Milne conducted a study to determine the relationship between anxiety and motor performance of young children. The sample of one hundred boys and one hundred girls each from kindergarten, grade one and grade two as randomly determined by proportional stratification by school in Battle Creet, Michigan. Each child was administered the Motor Performance Battery which included items for agility, power, flexibility, endurance and reaction time. Anxiety measurements were obtained by the Palmar Sweat Test, the General Anxiety Scale for children, the test Anxiety Scale for children and the Teacher Rating Scale. Kindergarten children were not administered the Test Anxiety Scale for children as they had not yet encountered the "testing experience". The results of the present study suggest that a high level of anxiety has a detrimental effect upon motor performance of young children.

Kenneth conducted a study on prediction of performance from selected personality traits, and State Anxiety Levels of competitive male and female gymnasts. Subjects 21 for the study were male and 23 female gymnasts. Path analysis, a multiple regression technique was used in the treatment of the data. Based upon the findings and within the limitations of this study, the following conclusions can be drawn (1) The personality 'anxiety' model supported by was explaining over 51 percent of the variability in the. criterion, (2) precompetitive anxiety was not a statistically of gymnastics performance, (3) the hypothesis related to the personality performance relationships were not supported since the model explained only 38.1 percent of the total variability in gymnastics performance.

Methodology

Selection of Subjects
60 female Kabaddi players who are participated in state level Kabaddi tournaments were selected as subjects for the study. The age of the subjects ranged between 18 to 25 years.

Criterion Measures
The criterion measures chosen to test the hypothesis were:
The anxiety score of the subjects will be obtained by using Sports Competition, Anxiety Questionnaire A form developed by Renier Marten. -
The aggression score of the subjects will be obtained by Sports Aggression using Inventory developed by Anand Kumar and Prem Shanker Shukla.

Analysis And Interpretation Of Data

To fulfill the purpose of the study. The following statistics hypotheses were framed and tested subsequently by using "t-test"

H₁ : there was no mean difference in anxiety among offence and defensive kabaddi players.

H₂ : there was no mean difference in aggression among offensive and defensive players

Test conducted to n=30 subjects, related to the above hypothesis following components were collected and tabulated on Table-1.

Table - 1; t-Test

	Type of players	Mean	S.D	t-value	p-value
Anxiety	Offensive	16.10	2.280	-0.215	0.830
	Defensive	16.23	2.515		
Aggression	Offensive	12.73	1.911	-0.257	0.798
	Defensive	12.87	2.097		

From the above findings, infer the following;

Since the calculated t -value was less than 1, we reject the null hypothesis H_1 at 5% level of significance. That is; there was no significant mean difference in anxiety among offensive and defensive female kabaddi players at 5% level of significance.

Since the calculated t -value was less than 1 we reject the null hypotheses of H_2 at 5% level of significance. That is, there was no significant mean difference in aggression among offensive and defensive female kabaddi players at 5% level of significance.

Conclusion

There was no significant mean difference in anxiety among offensive and defensive female kabaddi players at 5% level of significance.

There was no significant mean difference in aggression among offensive and defensive female kabaddi players at 5% level of significance.

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Relationship Of Selected Physical Variables To Performance Ability Of Forwards In Football

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Introduction

Sports as a social and cultural phenomenon, is a fundamental activity involving every human being. A game must include some kind of competition against an individual or team. Furthermore, the outcome of the competition must be dependent on physical skill, strategy or chance. The game has been classified into different groups. For example, indoor games, outdoor games, games of low organization, games of high organization, equipment games, non-equipment games, paper and pencil games, board and table games etc., (T. Mathveyev).

The origin of football is known as soccer, the worlds most popular and spectacular team game in profoundly obscure. Since kicking ball is a simple and inborn human activity, claims for its origin can be made in many an ancient. Soccer is an excellent activity for participation because of the continuous moving; unique skills involved, and team work that it requires. Also, it is very inexpensive activity when compared with other sports.

Biancotti, P.P., et. al., Many of the athletes that come to the academy compete in sports other than tennis, in order to best meet the needs of our athletes, the IFPA tennis and fitness academy offers several clinics within the camp programme. The need to develop all 11 components of fitness is critical. However, different sports require the development of different fitness components, gymnastics and martial arts require more flexibility, power lifters require more strength, sprinters require more speed, football players require more power, marathon runner require more aerobic endurance, soccer players require more anaerobic and aerobic endurance, basketball players require more agility, baseball players require more quickness etc. Each sport and each different position within each sport requires different fitness components.

Huber Vogel Singer (1970), The full backs style at play has changed considerably; it is no longer enough to be just a destroyer, dominating through pure physical strength aggressive tackling and powerful boots. Then, they must be capable all-round performers with very sound ball control and a keen sense of awareness as to when he should add his skill to the attack.

The centre half always has been a dominating figure of the team. In the offensive system he is the motor of the team and the initiates of the attack, and in defence his responsibility is to take care of the opposing centre forward. In the 'W'/'M' system he is strictly a defensive player, the king pin of the defensive being responsible for the opposing centre forward and the vital areas. The immediate goal mouth, close covering of the centre forward led to his being called a stopper.

Absolute mobility of centre forward is an answer to the deep and disciplined defender. The awareness around the goal the scoring instinct sharpness on the ball will enable him to take advantage of the half chances. The harking strikes must have wonderful ball control. Ferocious acceleration aerobatic agility and relentless determination, this final thrust the shot on the run. The 1st time crash volley the leaping or diving headed must all be deadly.

This study is carried out some relationship between physical variables and performance ability of male forwards in the game football for purpose of evaluation and also to know about their ability levels. And the coacher can use this one for feedback purposes to obtain the better performance in their future competitions by the training programme.

Statement of the problem

The purpose of the present study was to find out the relationship of selected physical variables to performance ability of forwards in football.

Limitations

The differences among the subjects in their sports background, their participation experience and levels of competition, their training age and age might have influenced the data collected and subsequently on the results of the study. These factors could not be controlled.

All the tests could not be conducted under completely identical and controlled conditions, as the tests were to be conducted in different places.

The health status and motivation levels of the subjects at the time of test performance were identified as limitation of the study.

The influence of the differences in the modes of training of subjects and their influence on the data collected was a limitation of the study.

Performance ability was determined by the rating of players by coaches which was purely a subjective rating.

Delimitations

The study was delimited to male foot ball players only in the age group of 17 -25 years.

The study was delimited to only thirty one (N=31) football players those who were specialized as forwards in football.

The study was further delimited to players performing at intercollegiate, interuniversity and state level competitions, who were drawn from different football clubs from Mysuru, Hassan and Mandya Districts of Karnataka state.

The study was delimited to eight physical variables tested and measured through eleven test items.

The study was delimited only to players who were rated by expert coaches as good performers.

Performance ability was measured only through coach's subjective rating of players.

The study was delimited only to a correlation research study.

Hypothesis

H0 - The selected physical variables and the performance ability of forwards in football may not be significantly related to one another.

H1 - The selected physical variables and the performance ability of forwards in football may be related significantly to one another.

Methodology**Selection of subjects**

The subjects for the present study were male forward football players performing at intercollegiate, interuniversity and state level competitions, who were drawn from different football clubs from Mysuru, Hassan and Mandya Districts of Karnataka state in the during 2008-2013. The subjects were in constant touch with the sport and only those players who were rated as the best in performance by their coaches were considered for the present study.

Sample Size

The sample size for the present investigation consisted of 31 male forward football players who were in the age group of 17-25 years who were specialized in forwards in football game.

Sampling Technique

Purposive sampling technique was employed for the purpose of the present study.

Selection of Variables

The independent variables selected for the present study were strength, power, muscular endurance, cardiovascular endurance, flexibility, speed, agility and co-ordination which were measured by eleven test items(X1.....X11). The dependent variable 'Y' was the performance ability of the subjects as rated by a panel of three expert coaches on a 20 point scale. This represented the criterion measure in the present study.

Analysis And Interpretation Of Data

The statistical analysis of data have revealed the following results which are presented in table - 1.

Table - I Correlation Co-efficient of physical variables with Performance ability for forwards.

Sl.No.	Variable X	Variable Y	R	Df	Significance
01	Strength	Performance ability	.003	29	.988
02	Standing broad Jump	Performance ability	.423	29	.018
03	Vertical Jump	Performance ability	.233	29	.207
04	Bent Knee	Performance ability	.161	29	.388
05	Burpee 30	Performance ability	.750	29	.000
06	Flexibility	Performance ability	.273	29	.148
07	Speed	Performance ability	.397	29	.027
08	Burpee 10	Performance ability	.192	29	.302
09	Shuttle run	Performance ability	.736	29	.000
10	Co-ordination	Performance ability	.085	29	.648
11	Run 1500 Mts.,	Performance ability	.720	29	.000

CONCLUSION

Physical variables such as, Speed (as measured by 60 yard dash test), Muscular endurance (as measured by burpee test), Power of legs (as measured by standing broad jump test), Agility (as measured by 6x10 mts shuttle run test), Cardio vascular endurance (as measured by 1500 mts run test), have shown a statistically significant positive correlation to performance ability of forward in football. They were significant at 0.05 level. Hypothesis formulated in the study was rejected and an alternate hypothesis formulated in the present study was accepted.

Physical variables such as strength (as measured by bench squat test), flexibility (as measured by sit and reach test), muscular endurance of abdominal muscles (as measured by bent knee), Power of legs (as measured by vertical jump test), Agility (as measured by burpee for 10 second), Coordination (as measured by squat jump test), have not shown any significant relationship to performance ability of forwards in football. Hypothesis formulated in the present study was accepted in respect of these variables and the alternate hypothesis was rejected.

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A Comparative Study of Explosive Strength among 100 M Runners and 400 M Runners of Hyderabad District

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Introduction

In athletics and track and field, sprints are races over short distances. They are among the oldest running competitions. The first 13 editions of the Ancient Olympic Games featured only one event—the stadion race, which was a race from one end of the stadium to the other. There are three sprinting events which are currently held at the Summer Olympics and outdoor World Championships: the 100 metres, 200 metres, and 400 meters. These events have their roots in races of imperial measurements which were later altered to metric: the 100 m evolved from the 100 yard dash, the 200 m distances came from the furlong (or 1/8 of a mile), and the 400 m was the successor to the dash or quarter-mile race.

Explosive Strength is a Physical quality displayed in sprinting events in 100 M and 200 M Run. Explosive Strength is highly specialized the production of great power and force produced in a minimum amount of time.

Methodology:

The sample for the present study consists of 15 Male 100 M Runners and 15 Male 400 M Runners those who have participated in the Hyderabad District Junior Athletics Championships between the Age group of 16-20 Years. To assess the Explosive strength the Vertical Jump Test is conducted.

Vertical Jump Test (Sargent Jump, Vertical Leap)

This procedure describes the method used for directly measuring the vertical jump height jumped. There are also timing systems that measure the time of the jump and from that calculate the vertical jump height.

- **purpose:** to measure the explosive strength of Legs.
- **equipment required:** measuring tape or marked wall, chalk for marking wall (or Vertec or jump mat).

- **procedure :**
- the athlete stands side on to a wall and reaches up with the hand closest to the wall. Keeping the feet flat on the ground, the point of the fingertips is marked or recorded. This is called the standing reach height. The athlete then stands away from the wall, and leaps vertically as high as possible using both arms and legs to assist in projecting the body upwards. The jumping technique can or cannot use a countermovement (see vertical jump technique). Attempt to touch the wall at the highest point of the jump. The difference in distance between the standing reach height and the jump height is the score. The best of three attempts is recorded.

Results and Discussion:

The results of the study shows that the 100 M Runners is having more Explosive Strength compare to 400 M Runners

Table I showing the Mean values of Sargent Jump of 100 M Runners and 400 M Runners

GroupStatistics		Table - I			
Area		N	Mean	Std. Deviation	Std. Error Mean
Sargent Jump (Explosive Strength)	400 M Runners	15	19.51	7.208	.832
	100 M Runners	15	22.45	5.857	.676

In Table –I the Mean Values of 100 M Runners is 22.45 compare to 400 M Runners is 19.51. The mean of 100 M Runners is Higher than 400 M Runners.

Conclusions:

It is concluded that the 100m Runners are having better Explosive strength compare to 400 M Runners because 100 M Runners requires more Strength to Run faster whereas 400 M Runners requires more speed endurance .

Recommendations:

Similar Studies can be conducted among other sprints in Athletics.

Acknowledgements:

Special thanks to Mr. A.Xavier Athletics Coach and Prof.Rajesh Kumar, President, Hyderabad District Athletics Association for their help in accomplishment of the Study.

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Effect of Strength Exercises for development of Shoulder Strength Among Rowers of Osmania University

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Introduction:

Competitive rowing is a serious sport that requires athletes to have the right amount of muscle, functional strength and endurance to get the edge over other competitors. This requires specific muscles that are needed to perform the rowing motion which results in consistent momentum with the perfect speed required for rowing faster while also being able to synchronize movements with their teammates.

Competitive rowers will usually work on building up muscle mass in their back and legs rather than the arms since these two areas are the largest muscles groups involved with the sport. Secondary muscles involved in the rowing motion consist of the biceps, triceps and shoulders which all come into play. As you can see, rowing is one of the best overall body exercises you can do since it incorporates so many different muscles groups with each repetition and it's an excellent exercise for burning lots of calories and fat.



Strength training exercises can improve speed and endurance by using weights. Weight training exercises increases the intensity of training and builds strength because of the resistance they offer when training. Weight training will strengthen the muscle as well as and will boost the player's power and is ideal for all players and other athletes who depend on high speed running. To reduce the possibility of injury systematic weight training should be conducted once to the player has a good solid base of strength and endurance.

Weight Training offers the following benefits.

- a). Helps develop power and muscle elasticity.
- b). Improves stride frequency and length.
- c). Develops co-ordination, encouraging the proper use of arm action during the batting phase and feet in Support phase.
- d). Develops control and stabilization as well as improves speed
- e). Promotes strength endurance.
- f).Develop maximum speed and strength.
- g).Improves lactate tolerance.

Significance of the Study:

The Significance of the present study to find out the significant effect for the development of Shoulder Strength among Rowers of Osmania University.

Objective of the Study:

The Objective of the present study to find out the for the development of Shoulder Strength among Rowers of Osmania University.

Method:

The purpose of the present study to find out the effect of strength exercises for the development of Shoulder Strength among Rowers of Osmania University, Hyderabad.

The sample for the present study consists of 20 Male Rowers of Osmania University in India out of which 10 are experimental group and 10 are controlled group. Strength exercises such as biceps curls, bench press, front press, back press etc. were given to experimental group on alternate days i.e. three sessions per week and controlled group were given the general training for six weeks during the Osmania University Rowing Coaching Camp.

The following strength exercises are used for training the Experimental group:

- | | | |
|-------------------|------------------------|---------------------------|
| 1. Arm Row | 2. Biceps Curl | 3. Bench Press |
| 4. Lateral Raise | 5. Close arm Press ups | 6. Normal Fly |
| 7. Shoulder Press | 8. Half Squat | 9. Front Raise lunge |
| 10. Heel Raise | 11. Squat Jumps | 12. Dumbell Sideward bend |

Result:

Table I showing the Pull ups Test of Experimental Group in Pre and Post Test for shoulder strength among Rowers.

Pull ups	N	Pre Test	Post Test	t	Sig.
Experimental	10	10.10	12.50	6.19	0.000
Control	10	10.10	9.00		

The Experimental Group Pre Test Mean Score in Pull ups is 10.10 compare to post Test Score is 12.50,there is a improvement of mean score 2.40 between Pre Test to Post Test due to Weight Training. The Control Pre Test Mean Score in Pull ups is 10.10 compare to post Test Score is 9.00,there is a decrease of mean score timing 1.10 between Pre Test to Post Test due to General Training. The results of the study shows that the Experimental group of Rowers had improve in shoulder strength due to the strength training

Conclusions:

Strength training is important in Rowing. Naturally the muscles used in rowing need to be strong, but the muscles of posture, which may not get well trained in the rowing action, also need toning to avoid imbalances. Many rowers perform strength training in circuit fashion but the value of such work has to be questioned. First, if increase in strength is the goal, the load should be high, the reps low and the recovery sufficiently long. This is rarely the case in rowing training, where lots of reps from one exercise to the next, with little or no recovery, is far more usual. Some might argue that this works on strength endurance, but a more pertinent counter argument is that the most specific way to work on strength endurance is on the water.

Recommendations:

Similar Studies will be conducted on other sports and Games. This study is useful for coaches in Rowing and other Water sports.

Acknowledgements:

Specially acknowledgements to Mr.Ismail Baig and Mr.Rao, Rowing Coaches for their help in this study.

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A Comparative Study of Speed among Boxers and Rowers of Osmania University

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Abstract:

The purpose of the present study to find out the Speed among Boxers and Rowers of Osmania University. The sample for the present study consists of 20 Male Boxers and 20 Male Rowers of Osmania University. group. To assess the Speed the 50 M Run Test Were conducted among Boxers and Rowers. It was found that Boxers are having good speed compare to Rowers.

Key Words:Speed,Boxers,Rowers etc.

Introduction:

Boxing in the combat sport were the two boxers – box each other with their both hand knuckles that is firsts, the boxers were 10 ounce gloves in a ring square that is 24 feet, height 3-4 feet, inside rope to rope is 20 feet inside with 4 ropes. The both boxers-box when a referee is fully control, without any infringements. One bout 3 consist of rounds, 3 minutes one round and 1 minute interval between the three rounds. The boxers throws powerful, legitimate punches on target that is from face to wrest belt above the shash. A good bout between two well matched boxers is a violent is a vast, skillful, speed with good foot work, The three or five Judges score in electronic gadgets that is computers scoring. The best boxer should be very strong quick, highly skillful with a good foot work and with excellent physical condition with coverage in spite of pain and exhaustion.

Attacking boxing skills – each boxer develops an attacking style, for example some boxers rely on speed and others on strength. One the basic stance second the straight right punch third the uppercut. Four leftjab, and five is left hook.

Defence boxing skills – In defence boxing a boxer use number of techniques to avoid his opponents punches or make them ineffective,
One clinching, two ducking, third slipping, four parrying and the five blocking

Rowing is one of the oldest Olympic sports. It was on the programme for the 1896 games but the rowing did not take place due to bad weather. It has been competed since 1900. Women's rowing was added to the Olympic programme in 1976. Today, only fourteen boat classes are raced at the Olympics, across men and women. Each year the World Rowing Championships is held by FISA with 22 boat classes raced. In Olympic years only the non-Olympic boat classes are raced at the World Championships. The European Rowing Championships are held annually, along with three World Rowing Cups in which each event earns a number of points for a country towards the World Cup title. Since 2008, rowing has also been competed at the Paralympic Games.

Methodology:

The sample for the present study consists of 20 Male Boxers and 20 Male ‘Rowers between the age group of 20-22 Years those who have participated in the O.U.Inter College Boxing and Rowing Camp.To assess the speed the 50 M Run were conducted on Boxers and Rowers.

50 M Run:

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

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

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

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

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

Results and Discussion:

This study shows that Boxers are having better Speed compare to the Rowers

Table-I
Mean values and Independent Samples Test of 50 M Run between Boxers and Rowers

Variables	Group	Mean	SD	t	P - Value
50 M Run	Boxers	7.21	0.262	4.58	0.000
	Rowers	7.71	0.408		

*Significant at 0.05 level

In Table –I the Mean Values of 50 M Run of Boxers is 7.21 and Rowers is 7.71 .

Conclusion:

- 1.It is concluded that Boxers are having better speed than Rowers.
- 2.Strength exercises plays a major role for improvement of speed among boxers and Rowers.

Recommendations:

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

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www.topendsports.com

Analysis Of Physical Fitness Norms Of Students Aged 10-15 With Learning Disabilities Using Eurofit Tests (Erzurum City Sample)

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Abstract

The objective of this study is to research the physical fitness norms of female and male students aged 7-15 with learning difficulties in Erzurum using Eurofit tests. The research was conducted on the students studying in private education and vocational schools in Erzurum. The research population consisted of 26 students randomly selected among 80 students studying at schools. Students were aged 10-15. These students were subjected to height and weight, flamingo balance, plate tapping, sit-and-reach, standing broad jump, handgrip, sit-ups in 30 seconds, bent arm hang and 10x5 meter shuttle run tests. After the first measurements were performed on the students as preliminary tests, they were subjected to a 4-month (16 weeks) specially designed exercise training program. Exercises were performed for 50-60 minutes twice a week. At the end of program, the last test measurements were taken and their improvements were compared. SPSS 16.00 packaged software was used for the statistical analysis of the data obtained from the research. Minimum and maximum values of children, their arithmetic mean and standard deviation and Z-scores were evaluated as a statistical method. As a result of the research, a significant improvement was detected in flamingo balance test, sit-and-reach, standing broad jump, handgrip, bent arm hang test results of the students. No significant improvement was observed in plate tapping, sit-ups in 30 seconds and 10x5 meter shuttle run tests. In conclusion, it was found out that regular physical exercise positively contributed in the physical features in students with learning disabilities.

Keywords: Learning Disability, Disabled, Eurofit Tests, Fitness

Introduction

As is known, sports are a necessary activity for a healthy and happy life and important for all people. However, sports have a rather different importance for disabled people. This is because sport can open a new door for disabled people who already encounter many obstacles in their life and live with the stress caused by such obstacles (1).

Children with mental disabilities cannot find the opportunity to do physical exercise that is necessary for using and improving large and small muscle groups due to several reasons. However, physical exercise they may take part in starting from preschool period may greatly contribute in their developmental features. Physical education and sports lessons offer the best environment where they can have the chance to exercise at school age (8).

Participation in sports activities makes an individual happy and the pleasure taken in exercising is a great means for the individual to meet his needs to have fun and succeed while it increases life motivation. Sports contribute in the social integration of the disabled by improving them physically, mentally and socially (7).

It is a stubborn fact that individuals canalized to sports will adapt to society faster while sports will have a positive effect on their physical and physiological capacities. The problems experienced by the disabled are not only a concern for the disabled but also their environments, families and all members of the society²⁻³.

Many studies report that muscular force power of an individual with mental disability is lower than that of an individual without ant disabilities (4). When they are engaged in a physical activity, they fail to show the sufficient motivation and easily get bored (5-6).

This study uses an exercise and physical activity training program specifically designed for children with learning disabilities and investigates its contributions in the physical features of children.

Methodology

The research was conducted on the students studying in private education and vocational schools in the city center of Erzurum. The research population consisted of 26 students (6 female + 20 male students) randomly selected among 80 students (54 male + 26 female) studying at schools. Students were aged 10-15. Students were allocated to three groups as age 7-9, age 10-12 and age 13-15.

Prior to starting the research, we obtained the necessary permissions of both the Directorate of National Education and the parents of the students. We obtained the necessary medical reports of the students that would participate in the activity and exercise program from relevant healthcare institutions, and the group allocations were performed as per these reports.

A special exercise program was prepared together with the academic members of the Department of Special Education and Faculty of Sports Science Department of Recreation. This program was prepared considering the physical features of children (force, speed, balance, skill and coordination).

These students were subjected to height and weight, flamingo balance, plate tapping, sit-and-reach, standing broad jump, handgrip, sit-ups in 30 seconds, bent arm hang and 10x5 meter shuttle run tests.

After the first measurements were performed on the students as preliminary tests, they were subjected to a 4-month (16 weeks) specially designed exercise program. Exercises were performed for 50-60 minutes twice a week. At the end of 3 months of exercise program, the last test measurements were taken and their improvements were compared.

SPSS 16.00 packaged software was used for the statistical analysis of the data obtained from the research. Minimum and maximum values of children, their arithmetic mean and standard deviation and z-scores were evaluated as a statistical method.

Results

Table 1: Sex, age, height, weight and grades of subjects

SEX	N	%
Male	20	67
Female	6	23
AGE	N	%
Age 7-9	4	15,3
Age 10 -12	8	30,7
Age 13 -15	14	54
HEIGHT	N	%
110-120 cm.	4	15,3
121-130cm.	6	23
131-140 cm.	12	46,4
141 and more	4	15,3
WEIGHT	N	%
30-40 kg.	8	30,7
41-50 kg.	14	54
51 and more	4	15,3
GRADE	N	%
5 th grade	14	54
6 th grade	6	23
7 th grade	6	23

According to Table 1, the subjects of the study was comprised of 20 (67%) male and 6 (23%) female students. 4 (15.3%), 8 (30.7%) and 14 (54%) subjects were allocated to groups of age 7-9, age 10-12 and age 13-15, respectively. Heights of the subjects were measured as 110-120 cm for 4 students (15.3), 121-130 cm for 6 students (23%), 131-140 cm for 12 students (46.4%) and 141 cm or more for 4 students (15.3%). Weights of the subjects were measured as 30-40 kg for 8 students (30.7%), 41-50 kg for 14 students (54%) and 51 kg and more for 4 students (15.3%). 14 subjects (54%) went to 5th grade, 6 students (23%) went to 6th grade and 6 subjects (23%) went to 7th grade.

Table 2: Preliminary and final test results of the subjects

Tests Performed	Preliminary test $\bar{X} \pm s$	Final test $\bar{X} \pm s$	Z	Significance Level
Flamingo Balance Test	14,21±13,31	18,52±13,90	-7,615	,000 ***
Plate Tapping Test	14,99±2,75	14,70±2,49	2,256	,975
Sit-and-Reach Test	7,20±3,01	8,50±3,19	-13,186	,000 ***
Standing Broad Jump Test	1,39±,11	1,45±,14	-3,079	,000 ***
Right Handgrip Test	18,00±4,65	20,19±5,32	-8,417	,000 ***
Left Handgrip Test	17,91±4,97	17,41±4,99	1,925	,619
Sit-ups in 30 Seconds Test	19,11±2,57	20,75±2,88	-10,935	,000 ***
Bent Arm Hang Test	7,53±7,89	9,32±7,97	-10,944	,000 ***
10x5 meter Shuttle Run Test	21,64±3,30	21,09±3,07	4,540	,000 ***

Results of the preliminary and final tests performed on subjects and significance levels (p>0.001) are given in Table 2.

Discussion And Conclusion

According to the results of the study, it was found out that a specially designed exercise program applied for children with learning disabilities positively contributed in many of their physical features. A significant improvement was detected in the results of the students in flamingo balance, sit-and-reach, standing broad jump, handgrip and bent arm hang tests. No significant improvement (p>0.001) was observed in plate tapping, sit-ups in 30 seconds and 10x5 meter shuttle run tests. No significant improvement was observed in plate tapping, sit-ups in 30 seconds, 10x5 meter shuttle run and 1500 m endurance shuttle-run tests.

Scientific studies conducted also indicate that sports activities and exercise programs contribute in the physical, social and mental improvement of individuals with learning disabilities.

As a result of a fitness exercise Un et. al (9) conducted on children aged 11-18 with mental disabilities, they found out significant improvements in knee flexion-extension muscular forces.

Rimmey and Kely (10) observed a significant improvement in lower extremity muscular force as a result of the weightlifting exercise. They suggest that a force exercise program for these individuals should include progressive activities specially designed for and enjoyed by such individual and that aim for special muscle groups in body, arms and legs (11).

In their studies, Azeem, K. and Ameer, A. A. (2011) indicated that starting physical exercise at the earliest age increased success to a greater extent in terms of physical and motor performances of disabled students. Furthermore, they did not detect any significant difference between male and female students in terms of improvement.

Ozbar and Kayapinar (2006) detected significant improvements in hand-eye coordination of children as a result of six-month exercise program in their studies for preschool children.

In conclusion, it can be said that exercise and sports activity training programs contribute positively in children with disabilities, improve their coordination and hand skills and result in significant improvements particularly in muscular force.

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The Investigation Of Effect Of The Basic Skills Of Gymnastic Which Is Applied To Preschool Autistic Students

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Abstract:

The aim of this research is to investigate the physical development in 3-6 aged group of boys and girls students of fitness training which is applied to autistic students who take the special education in Erzurum. The research has been formed with 25 (12 girls and 13 boys) students. The groups have been created in two groups which were 3-4 aged and 5-6 aged. The tests of gross motor development which are walk, run, jump, splash, horizontal jump, gallop leap and the tests of object control skills which are hitting the ball with bat, bouncing ball, thrown ball catch, hitting the ball with foot, throwing ball, ball rolling and height, body weight have been performed to this students. After the measurements of students were made, the training has been done two months (8 weeks) with tailor-made movement education program. After that two months training the measurements were made again and the developments were compared. The statistic analysis of datas in research were obtained with using the SPSS 16.00 software package. In statistical methods, the minimum and maximum values, arithmetic average and standard deviation of students was evaluated. In the research results, the significant improvements have been reached in the tests of walk, run, bouncing ball, thrown ball catch and ball rolling of 3-4 aged group students. ($p>0.05$) It has been reached that the group of 5-6 aged students have significant improvements ($p>0.05$) in all of the tests.
Key words: gymnastic, euorfit tests, physical fitness.

Introduction:

The basic features of autistic disorder are social interaction and significant impairment in communication, consisting of restricted interests and activities. The progress of the disorder shows big changes depending on the individual's chronological age and development level. Deterioration in reciprocal social interaction is very significant and continuous in autism. The deterioration which is in the use of non-verbal behavior and regulate the social interaction and communication is very apparent. (for example; make eye contact, facial expression, taken body position, made arm and hand movements.) (Fazlıoğlu and Yurdakul, 2005)

Autism can see an estimated one in 150 children. It occurs in boys 4 times more than girls. The symptoms in autism children are listed in three major areas. These are social interaction, communication and behavior. (Robertson and Long, 2008).

The physical education and sport programs which are for people with pervasive development disorder include exercises to increase the cardiorespiratory endurance at all levels of development. During infancy and toddler, it is required designed various activities to improve balance, stimulate

sensory motor system, improve and promote the basic locomotor and non-locomotor skills which were prepare to active lifestyle. (Özer, 2010)

Autisim children’s features are diffirent from each other. They are evaluated in toward lighter than the heaviest spectrum because of diffirent development characteristic from each other. While some symptoms which is seen in autism observed intensely in one child, in other child it can not seen or rarely seen. Some autism symptoms may disappear in time or leave the place to the diffirent behavior.(Fazlı oğlu and Yurdakul, 2005)

The other characteristic features of autistic children are repetitive activity labors, stereotypical uniform movements, to react the enviromental changes and daily routines, showing unusual responses to sensory experiences. (Eripek,S. and friends, 1998)

Pre-school period is the period when children’s imagination and creativity is at the highest level. In this period children play a lot. However, due to lack of imagination in children with autisim, creative game and lack of social playing skills are observed extensively.

The two-five aged period is a very important period fort he most prominent features of autism and diagnosis. Autisim children have quiet normal physical development and they are beautiful, attractive. Children’s normal physical appearance make it diificult to understand what is the problem of child by family and enviromental. It is observed that autisim children learn in time some movements of dance, swim and jumping rope which requires the use of large muscle skills because of depending on too little or not ability to imitate. (Fazlı oğlu and Yurdakul, 2005)

Our study was planned that specifically autistic children in pre-school age benefit from exercises and movement education. Research has focussed on the development skills of children’s big and small muscle groups, balance and coordination.

Material And Method:

This research has been formed from 25 students (12 girls and 13 boys). Research groups were created in two groups which were 3-4 aged and 5-6 aged. The movement and exercise training program was prepared with targeting the development of small muscle groups needed to control objects with large muscle groups of children.

From the test of gross motor development which are walking, running, jumping, leap, vertical jump, gallop leap and from the test of object control skills which are hiting the ball with the stick, bouncing ball, catch the thrown ball, hitting the ball with feet, throwing the ball and ball rolling were appliedto students and datas were saved. At the end of the study same tests were performed again and the last test datas were obtained.

After the measurement of students’ , two month(8 weeks) training program was conducted with tailor-made movement tarining program. The tailor-made movement training program is planned as a eight-week program and two study per week. Every study was made three days in week and 60 minutes per day. After the two month study datas were saved again and development were compared.

Findings:

Table1: Gender, age, height and weight status of respondents participating to the survey

FEATURES		N	%
Gender	Boy	13	48
	Girl	12	52
Age	3-4 age	8	32
	5-6 age	17	68
Height	100-105 cm	5	20
	106-110 cm	4	16
	111-115 cm	8	32
	116-120 cm	4	16
	121 cm and above	4	16
Weight	20-25 kg	6	24
	26-30 kg	7	28
	31-35 kg	7	28
	36 kg and above	5	20

Table2: Tailor-made gymnastics movement training program

Weeks	Days	Goals and Activities	Gains	Materials
1. week	Saturday	Balance and coordination skills in walking, running, jumping, leap.	The ability of walking, running, jumping and leaping.	Gymnastic pad, funnel and gymnastic settle.
	Sunday			
	Wednesday			
2. week	Saturday	Educational games about balance and coordination skills in walking, running, jumping, leap.	The ability of working in a group and creating competitive.	Gymnastic pad, funnel, gymnastic settle and mini trampoline.
	Sunday			
	Wednesday			
3. week	Saturday	Balance, coordination and improving self-confidence.	To stand in the balance in different body positions, to make successive different movements.	Gymnastic pad, funnel, gymnastic settle and mini trampoline
	Sunday			
	Wednesday			
4. week	Saturday	Educational games about balance, coordination and improving self-confidence.	The ability of racing to stand in the balance in diffirent body positions, the ability of playing games with making succesive different movements.	Gymnastic pad, funnel, gymnastic settle and mini trampoline
	Sunday			
	Wednesday			
5. week	Saturday	Balance, coordination and promptness	Doing exercises about balance, coordination and promptness.	Gymnastic pad, funnel, gymnastic settle, mini trampoline and pilates ball.
	Sunday			
	Wednesday			
6. week	Saturday	Force and strenght	The ability of doing to improve the force and strenght.(to carry medicine ball, throwing ball, push-ups and sit-ups etc.)	Gymnastic pad, funnel and gymnastic settle. barfiks, min medicine ball
	Sunday			
	Wednesday			
7. week	Saturday	Force and strenght	The ability of doing to improve the force and strenght.(to carry medicine ball, throwing ball, push-ups and sit-ups etc.)	Gymnastic pad, funnel and gymnastic settle. barfiks, min medicine ball
	Sunday			
	Wednesday			
8. week	Saturday	Individual and group demonstrations.		
	Sunday			
	Wednesday			

Table3: The first and last tests results of respondents to the survey

Tests	First- Last Test	N	Min.	Max.	Z
Walking 25m	First test	25	6.07	8.15	,000
	Last test	25	5.45	7.05	
Running 25m	First test	25	5,25	8,60	,000
	Last test	25	5,00	6,45	
Jumping	First test	25	8	15	,000
	Last test	25	12	518	
Jump by stepping	First test	25	35	55	,000
	Last test	25	55	175	
Standing long jump	First test	25	20	35	,000
	Last test	25	35	55	
Gallop leap	First test	25	35	55	,000
	Last test	25	45	65	
Hitting the ball with stick	First test	25	5	7	,000
	Last test	25	7	10	
The ball bounced	First test	25	4	7	,000
	Last test	25	7	10	
Catching the trown ball	First test	25	4	8	,000
	Last test	25	8	10	
Hitting the ball with feet	First test	25	4	6	,000
	Last test	25	8	10	
Throwing tennis ball	First test	25	4	12	,000
	Last test	25	10	20	
Ball rolling on line	First test	25	2	5	,000
	Last test	25	4	9	

Conclusion And Evaluation:

According To Research Results, It Is Achieved That Students have significant development ($p<0,001$) in tests of gross motor skills which are running, walking, leap, jumping, vertical jumping, gallop leap and in tests of object control skills which are hitting the ball with stick, bouncing ball, catch the thrown ball, hitting the ball with feet, throwing ball and ball rolling.

The prepared special movement training program, made a positive impacat to students' large muscle groups and small muscle groups. As a result of this, a significant development on students' basic skills was determined.

Also in scientific studies related to special children in pre-school , people with learnind difficulties have positive development in physical, social and mental with exercise program and sport activities.

Ün and friends (9) were determined the significant development in knee flexion-extensin of the muscle force as a result of physical fitness tarining which is done by them for mentally handicapped children in 11-18 aged.

Rimmy and Kelly(10) were observed the significant development in lower extremity muscle strenght with the weight training which is done by them. They were stated that fort his people this weight traning must include the activities of person likes, progressive, a custom-designed, targeting specific muscle groups which are legs,body,arm.

In their study Azeem, K. Ameer A. A. (2011) were determined that if disabled students start young for their physical and motor performances, their success increase more. Also in development it is not determined a significant difference between girls and boys.

Özbar and Kayapınar (2006) were achieved to significant development of students' hand-eye coordination in 6 month movement training program in their research about pre-school children.

As a result, if movement training program in pre-school children is planned well and gam and exercise program about the large and small muscle groups is seriously included, students' education and social life will be easy.

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