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Contents

FLEXIBILITY STATUS OF THE SPORTSPERSONS AMONG THE DIFFERENT GAMES OF BKSP

Mohammad Aurongojeb Ul Reja*
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Abstract

The purpose of the research was to prepare a profile of the overall flexibility status of the male sportspersons of BKSP as flexibility is very important part of physical/motor fitness components. It was a quantitative study and the sample was taken from simple cross section data. The samples of the study were 84 sportspersons whose age ranged from 12 to 18 years. The subjects were male and seven samples were taken from each game on the basis of height. They were regular students of BKSP and pertaining regular sports program with warm up and cool down session where flexibility exercise took place routinely. The measurement was taken with the help of `Sit and reach test'. The collective data were transferred into flexibility percentage by the use of tables. Statistical analysis was done. The findings of the study has been drawn that, the flexibility status of the sportspersons among the games of BKSP is satisfactory. On the basis of level of low back – hamstring flexibility percentage, the present status of the subjects in different games (12 games) of the BKSP can be ranked as follows:

i) Most of the subjects are of 80% - 90% level.
ii) Then 70% - 80% level.
iii) Next 60% - 70% level.
iv) The least of the subjects are of 90% - 100% level.

Key words: Flexibility, Stretching, PNF.

INTRODUCTION

Flexibility is the ability to move a joint or a series of joints through an unrestricted pain free range of motion. It refers to the degree of "normal" motion. The term stretching and flexibility exercises are often used interchangeably. Stretching refers to any therapeutic maneuver or process designed to lengthen (elongate) pathologically shortened soft tissue structures and thereby to increase range of motion or flexibility (Kisner C. and Colby L. A. 1996).

Increased flexibility attained through stretching is believed to decrease musculotendinous injuries and minimize muscle soreness.(Brukner P. and Khan K. 2009).

Good flexibility usually indicates that there are no adhesions or abnormalities present in or around the joints and that there are no series muscular limitations. It permits greater freedom of movement in all direction. The ligaments and other connective tissues are not so easily strained or torn. There apparently is a deficit relationship between injury and joint flexibility. In some cases the very tight jointed athletes are more susceptible to muscle strains and tears.

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Good flexibility can facilitate proper development of other motor components namely strength, speed and endurance. It helps a sportsperson to minimize the effect while doing a movement thus saving energy. An increase in flexibility must accompany an increase of strength otherwise the range of motion may be considerably affected. Studies have shown that exercise of flexibility can achieve their goal without decreasing strength. Conversely, exercise for the acquisition of great strength such as is sought by some weight lifters will result in the condition known as "muscle – boundness". In this condition, because of the enormous bulk of the muscles, tendons and ligaments and their elasticity, there is a decided inability to obtain complete flexibility and freedom of joint mobility (Carl E. Klafs and Daniel D. Ar. 1979).

METHODOLOGY

The study was cross sectional, quantitative study. The subjects for the study were 7(seven) male sportspersons of each game at BKSP in sequence of more to less height, age ranged was 12 years to 18 years .The subjects were invited for their routine assessment in the exercise physiology department from 9th July to 23rd September of 2012.The subjects were regular students of BKSP, pertaining in flexibility exercise as a routine and would perform general and game specific stretching exercises during warm up and cool down sessions in sports.

Administration of test

The test was administered to the subjects: Sit and reach test.

Test objective:

The sit and reach test is designed to evaluate the low back – hamstring musculoskeletal flexibility.

Description:

The examinees must remove their shoes to be tested. To begin the test, the examinee sits in front of the test apparatus with feet flat against the end board. The knees should be fully extended and the feet shoulder wide apart. To perform the test, the examinee extends the arms forward with one hand placed on top of the other.

Instructions in the actual test the examinee reaches forward, palms down, along the measuring scale of the testing apparatus. The reach is repeated three consecutive times and on the fourth trial, the maximum reach is held for 1 second. The distance of the maximum reach is recorded as the best score.

Test area:

Any small testing area with adequate floor space would be suitable.

Equipment:

The test apparatus is a specially constructed box with measuring scale in which 23cm is set at the level of the feet.

Scoring:

The score measured to the nearest centimeter, is the most distant point reached on the fourth trial. The fingertips of the both hands should reach this point. If the reach of the two hands is uneven, the test should be re administered.

Preparation of profiles:

The performance of each subject was compared with the norms available in the department and marks were assigned. The marks received by each subject were plotted on the profile graph.

Results of the study

Comparing with norms, marks were awarded in percentile form for each subject of each group. The subjects were arranged in separate group of games on the profile graph prepared for the purpose.

Score (in Percentage)

Archery	Athletics	Basketball	Boxing	Cricket	Football
Ar-02=78	A-143=67	Ba-83=79	B-86=82	C-519=81	F-394=82
Ar-05=81	A-170=87	Ba-105=67	B-74=82	C-502=76	F-395=72
Ar-06=75	A-162=87	Ba-113=66	B-68=80	C-555=71	F-416=61
Ar-01=83	A-163=85	Ba-89=65	B-81=82	C-528=77	F-400=75
Ar-08=73	A-168=71	Ba-96=82	B-65=77	C-468=73	F-411=83
Ar-18=78	A-141=67	Ba-100=64	B-54=78	C-515=79	F-356=75
Ar-19=78	A-161=75	Ba-99=60	B-76=83	C-579=76	F-406=81

Gymnastics	Judo	Shooting	Swimming	Tennis	Hockey
G-103=84	J-2=68	Sh-103=89	Sw165=86	T-107=65	H-247=83
G-101=86	J-15=87	Sh-101=81	Sw147=90	T-108=81	H-287=80
G-100=90	J-10=88	Sh-105=88	Sw167=88	T-115=80	H-244=83
G-109=89	J-9=78	Sh-95=78	Sw145=81	T-110=81	H-251=81
G-111=80	J-3=83	Sh-102=78	Sw164=82	T-117=81	H-275=81
G-104=82	J-14=87	Sh-81=76	Sw169=75	T-132=87	H-248=75
G-114=90	J-1=85	Sh-90=83	Sw173=61	T-126=85	H-293=90

Quantitative analysis of profiles of low back – hamstring flexibility status of the sportspersons of the different games and sports of BKSP:

Sports name	60% - 70%	70% - 80%	80% - 90%	90% - 100%
Archery		5 sportspersons	2 sportspersons	
Athletics	2 sportspersons	2 sportspersons	3 sportspersons	
Basketball	5 sportspersons	1 sportsperson	1 sportsperson	
Boxing		2 sportspersons	5 sportspersons	
Cricket		6 sportspersons	1 sportsperson	
Football	1 sportsperson	3 sportspersons	3 sportspersons	
Gymnastics			5 sportspersons	2 sportspersons
Judo	1 sportsperson	1 sportsperson	5 sportspersons	
Shooting		3 sportspersons	4 sportspersons	

Swimming	1 sportsperson	1 sportsperson	4 sportspersons	1 sportsperson
Tennis	1 sportsperson		6 sportspersons	
Hockey		1 sportsperson	5 sportspersons	1 sportsperson
Total= 84 sportspersons	**11 sportspersons**	**25 sportspersons**	**44 sportspersons**	**4 sportspersons**

DISCUSSION

To make the profiles; the performance of each subject was compared with the norms and the levels were assigned as percentage. The findings of the study has been drawn that, the flexibility status of the sportspersons among the games of BKSP is satisfactory. Though, only seven sportspersons cannot represent the actual condition of a team but eighty four sportspersons of an institute who are taken from in different games in a specific manner can give a gross idea about the matter of the institute. On the basis of level of low back – hamstring flexibility percentage, the present status of the subjects in different games (12 games) of the BKSP can be ranked as follows:

v) Most of the subjects are of 80% - 90% level.
vi) Then 70% - 80% level.
vii) Next 60% - 70% level.
viii) The least of the subjects are of 90% - 100% level.

The level may be achieved by each subject because they were regular students of BKSP and pertaining regular sports program with warm up and cool down session where flexibility exercise took place routinely. They had to assess their health status routinely and had no nutritional deficiency.

Usually research shows that the coaches, trainers and other multi approaches use their utmost capability to improve the performance of the sportspersons. The flexibility exercises suggested would be of immense benefit for enhancing the performance. Coaches should devote adequate time for the development of the flexibility as it is one of the very important motor components. In order to systemize the process of training, the coaches may carry periodic evaluation to assess the effect of the training program on flexibility.

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Injuries of Batsmen in Bangladesh Cricket

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Abstract

To describe and analyze the injuries of the batsmen occurring in Bangladeshi cricket.
From the 25 players, 75 injuries are recorded. A questionnaire is prepared for obtaining injury related information.
On an average, one player sustains 3 injuries. Injuries are freqnent in lower limbs (41.33%) than upper limb, (40%). Primary mechanism of the injury is direct blow of ball (33.33%). Over use is the second prominent cause of injury and the percentage is 18.18%. Batsmen face injury during fielding both in game and practice session. Injury in game is more than injury in practice session. 24% of all injuries is fracture. It is two times more than knee injury. Both back pain and dislocation shows the same percentage. Finger dislocation is common. Direct blow of ball is main cause of fracture. On the other hand, running on uneven surface is the main factor of ankle sprain.
Further study is required to reduce the risk of injuries. More attention should be given on fitness training that will help to prevent injuries of batsmen.

Key Words : Injury, Batsmen, Limb

Introduction

Cricket is now at zenith of the popularity among all games in Bangladesh, started since 1997, Bangladesh achieved the opportunity to play the Cricket World Cup for first time. Nowadays three versions (One day, T-twenty and Test) of cricket charge more physical demand to the players and players are more prone to injury than before. Along with this, for enhancing their skills, longtime repetitive practice make cricketers vulnerable to overuse injury [5].
Australia, West Indies and South Africa were undertaken the study on epidemiological nature of the injuries. On location and types of Injuries, India also published a paper.
The aims of this study are to present the profile of injuries of Batsman in Bangladesh and to analyze the impact factors to make them aware for preventing injuries.

Methods

In Bangladesh First Class Cricket is played mainly in late autumn and winter and occasionally in summer season. Tour to other countries is taken place in any season of the year.

An injury, could be acute or over use, was defined as any physical damage that occurre during match or training session and which prevente the player from completing the particular match, practice or training session [4].

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A questionnaire was prepared to get following information (a) anatomical sites of injuries (b) mechanism and diagnosis (c) treatment and (d) abstention due to injury. According to the anatomical region, injuries are further categorized into (a) Upper Limb (b) Lower Limb

(c) Head, neck and face and (d) Trunk. The data were taken from 25 batsmen directly by face to face interview who are involving in playing cricket at least 5 years. Further batsmen were categorized into batsmen and wicket keeper batsmen.

No medical record was obtained from cricketers. Analysis was done by Microsoft Excel (MS Excel).

Results

The seventy five injuries are recorded from twenty five batsmen. On an average one player sustains by three injuries. Among 25, maximum ten players were encountered by two injuries. After this, 7 cricketers reported four injuries.

Table 1: Number of Injuries

Number of Injuries	Number of Players	Total Number of Injuries
1	3	3
2	10	20
3	2	6
4	7	28
5	1	5
6	1	6
7	1	7
Total	25	75

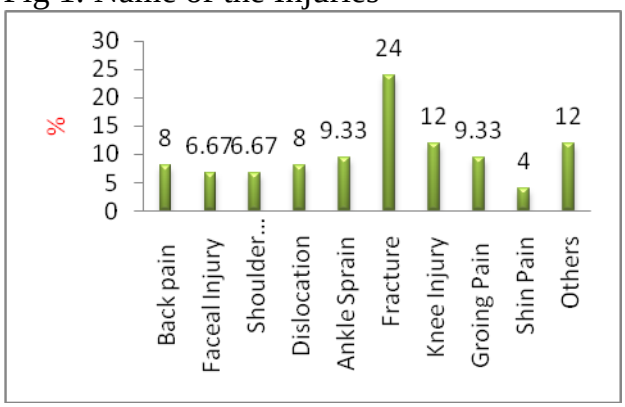
On regional distribution, the percentage difference between upper limb (40%) and lower limb (41.33%) is only 1.33. Trunk and Head, neck and face are less commonly injured area in batsmen.

Table 2: Regional distribution of Injuries

Sites of injury	Number	Percentage
Upper limb	30	40
Lower Limb	31	41.33
Trunk	8	10.67
Head, Neck and face	6	8

In Figure 1 it can seen that percentage of fracture (24%) is at the peak of the incidence of injuries and almost doubled than knee injuries (12%) and other injuries (12%). Here other injuries are comprised of cut injury, laceration, muscle pull etc.

Fig 1: Name of the Injuries



Both ankle sprain and groin pain is in third position by acquiring the same percentage 9.33. The percentage of back pain is eight (8) which is similar to dislocation. Batsmen complained 6 dislocations.

Out of this, accordingly finger dislocation and shoulder dislocations are 3 and 2. And rest of them is inferior radius-ulna dislocation. Approximately more than 13% injury is consisting of both facial and shoulder injury and they demand the equal percentage.

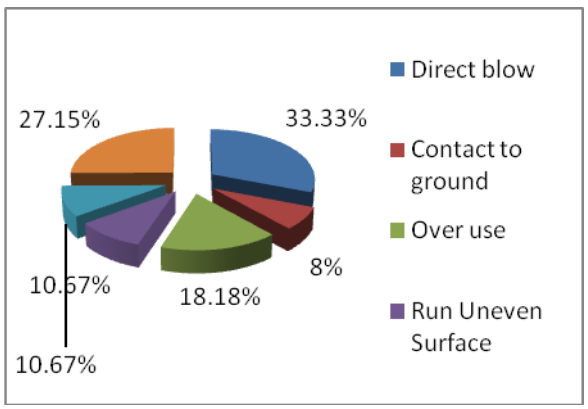


Fig 2: Percentage of Mechanism of Injury

According to the pie chart in Fig 2, main cause of the injury in direct blow of ball,33.33%. Percentage difference between overuse (18.18%) and contact to ground (8%) is 10.18. Running on uneven surface and less strength bear the equal percentage, 10.67%. Other causes, are responsible for facing injury, is 27.15%. Other causes are comprised of over stretch, running on hard surface, cross training, less warm up etc.

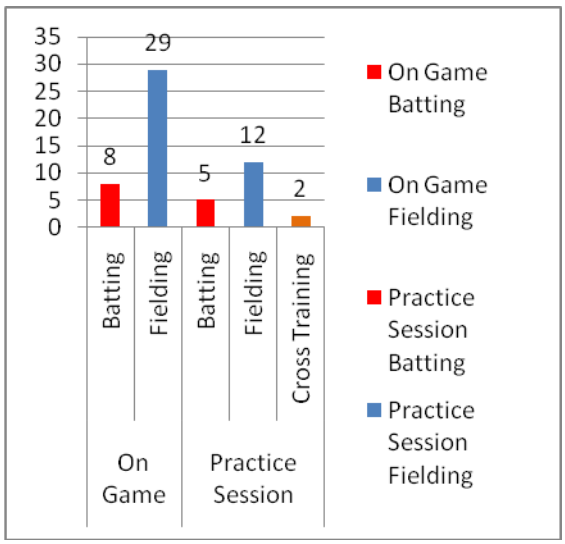


Fig 3: Time of Encountering Injury

Among seventy five injuries, times of encountering injury of fifty six are anthologized. Missing data on this regard are nineteen. The above depicted Figure shows maximum injury (37) is occurred in competitive game, mainly in fielding session,29. In practice time, the same scenario is seen. Among 19,twelve injuries occurred in practice session. The number of injury during batting cross training respectively is five and two.

Discussion

A large number of injuries are acute in nature. Like the injuries incidence of other countries e.g South Africa, Australia West Indies, most of injuries are soft tissue injury. Batsmen mainly face injuries during fielding. During batting hematoma also seen. Primary mechanism of the injury is Direct blow of ball,33.33%, is most striking feature. More fielding practice can solve the problem by enhancing reflex action. For sharpening the skills, batsmen pay more attention on repetitive training without adequate rest. This triggers the overuse injury.

Running on uneven surface is one of utmost important mechanism of ankle sprain. Cross training specially foot ball is also responsible for that injury as it is highly body contact game. After facing this injury, every player should undergo proper rehabilitation. Otherwise it can be happened in several times .Fracture is in the top of all injuries and capital cause of this is direct blow of ball. Either game or practice batsmen have to pass a long period of time. In this case groin pain is really irritating for batsmen to bat for long time.

Both upper and lower limbs are vulnerable for injury for batsmen. Respectively head, neck and face injury is less common. Only teeth broken is seen in batsmen come wicket keepers. After injury, rehabilitation is most important as it treats injury as well it also reduces recurrence injury. More attention is needed on rehabilitation.
Coaches and fitness trainers should be concerned about the cause of injury and should include the necessary training program for prevention of injuries.

CONCLUSION

Injury surveillance is the fundamental process behind successful injury prevention [5]. Further

study is necessary to lessen the risk of injury. Cricket ground should be even.

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A comparative study on achievement motivation in individual sports and team sports

Nusrat Sharmeen*

Abstract

The study was conducted on 118 BKSP sportsperson belonging to three individual sports and three team sports. The individual sports are (Archery = 18), (Shooting = 20) & (Swimming = 20). On the other hand team sports are Basketball, Cricket & Football. All team sports are having 20 players. The age of the subjects ranges from 15- 20 years. A modified verson of sports Achievement motivation Inventory (SAMI) prepared by Kamlesh (1990) was administered to to all the subjects to assess sport Achivement Motivation. Mean & Standard Deviation were calculated for finding out the central tendency and variability respectively. The obtained values of means & Standard Deviations clearly reveal that in Achivement motivation the highest mean scores were in Shooting (41$\pm$ 5.43) among Swimming (38$\pm$3.52) and Archery (36.7$\pm$7.68). One other hand, achipment motivation highest mean score in football (38.25$\pm$3.52) amont cricket (28.8$\pm$4.27) and basketball (27.8$\pm$4.29). The data were further analyzed by F-test to find out the significant difference of Achivement motivation within the team.

Introduction

Achievement motivation, refered to as the need for achievement is an important determinant of aspiration, effort and persistence when an individual expects that his performance will be evaluated in relation to some standard of excellence such behavior is called achievement oriented. Achievement motivation is a person's effort to master a task, achieve excellence, overcome obstacles, perform better than others and take pride in exercising talent (Murry 1983). It is a person's orientation to strive for task success, persist in the face of failure and experience pride in accomplishments (Gill, 1986). It also keeps directing and pursuing an individual towards his goals (Franker 1998). Achievement motivation in sport is popularly called competitiveness.

A motivation or motive that induces a person to direct his or her behavior towards the attainment of certain goals: for example, the motivation that predisposes an athlete to avoid a particular complication. It is regard as a fundamental drive that can motivate athletes to commit large proportions of their lives to achieve particular personal goals. It is associated with a number of behavior characteristics of an athlete during a sporting situation, such as the effort applied, the ability to continue trying, the choice of action possibilities (e.g. decision to approach or avoid achievement situations) and the performance outcomes. Achievement motivation is effected by a number of factors, including an individual's desire for success and failure.

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According to McClelland-Atkinson model (1953), achievement motivation as a concept of both a motive to achieve success and a motive to avoid failure. The motive to achieve success is a positive motive and is very strong in outstanding players. Their dedication is high. They work harder than others, and they have in intense desire to win. The motive to avoid failure is associated with high anxiety. It may mean that the individual avoids competition altogether, or

adopts a cautious defensive strategy in competition with the main emphasis on avoiding failure. Actually in the process of motivation, a conflicting situation arises, which may relate both to approaching a competitive situation as achievable or winnable. Otherwise, it may give rise to a feeling of avoidance from facing the competitive situation, for the outcome of competition may be failure. In the non-anxious players who have a high motive to achieve success, a contingent achievement situation will be highly motivating. However, for those anxiety prone players with a high motive to avoid failure, a performance situation with high-percieved contingency will be motivating. A key element in achievement motivation is self-confidence. It is a major factor discriminating between those who are high or low in achievement motivation.

Materials and Method

One hundred & eighteen players of BKSP in different sports (Archery =18), (Shooting = 20), (Swimming = 20), (Basketball = 20), (Cricket = 20) & (Football = 20) were selected as subjects for the present study. The age of the subjects ranged from 15 through 20 years. Sport Achievement Motivation Inventory (SAMI) was used to evaluate the achievement motivation perceived by young sportspersons. Sports Achievement Motivation Test (SAMT) developed by Kamlesh (1990), carrying e test – retest reliability of .70 is a test of 20 statements, the response value of which ranges between 0 – 40. The validity of SAMT with the actual performance of the sportspersons had been worked out to be .55, which is marked. On the basis of percentile points norms suggested in the said test, subjects securing bellow 24 could be characterized "low" in sport achievement motivation, those scoring bellow 30 but above 24 as "moderate" and those scoring above 30 as "highly" motivated.

The data was analyzed using appropriate statistical procedures. Means and Standard Deviations were calculated for finding out the central tendency and variability respectively. F-test was used to judge the significance of the difference among the means.

Result

The result of the statistical analysis of data of various system of achievement motivation of sportsperson (Team sports) of Basketball (BB), Cricket (Crik), Football (FB) and individual sports Archery (AR), Shooting (Sh), Swimming (SW) have been presented hereunder.

Table – 1

The means and standard deviations of each sport are presented in table 1

Sports	Mean	SD
Archery	**36.7**	**7.68**
Shooting	**41.8**	**5.43**
Swimming	**38.25**	**3.52**
Basketball	**27.8**	**4.29**
Cricket	**28.8**	**4.27**
Football	**38.25**	**3.52**

Table – 2 (Indiviual sports)

Significance of mean difference of achievement motivation in different Indiviual sports

Source of varience	df	ss	mss	F –test
Treatment	**r-1 = 3-1**	**1330.6**	**665.3**	**5.72**

	=2			
Error	**N – r = 60 – 3 = 57**	**6629.58**	**116.31**	

F- value of df (2,57) at 0.05 level = 2.76 **Significant**

Table 3

Singnificance of mean difference of achievement motivation in different team sports

Source of varience	**df**	**ss**	**mss**	**F –test**
Treatment	**r-1 = 3-1 =2**	**1739.5**	**869.75**	**70.19**
Error	**N – r = 60 – 3 = 57**	**681.4**	**12.39**	

F- value of df (2,57) at 0.05 level = 2.76 **Singnificant**

Discussion

Achievement motivation is task oriented behavior that allows the sportspersons, performance to be evaluated according to same internally or externally imposed criterion that involves sportspersons to complete with others or that otherwise involves some standard of excellence in training as well as in competition. Achievement motivation is influenced by personal disposition, social environment and developmentally related parameters (Horn, 1992). The findings of the study show that there exists a high level of sports achievement motivation among BKSP sportspersons. Understandably, the sportspersons joining Bangladesh Institute of Sports should be high in driving force that guides the sportspersons into achieving excellence. The result also indicates that there is statistically significant differenct between different individual sports and between team sports.

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Ligaments and Meniscus injuries of knee joint in the players of Bangladesh institute of sports (BKSP) -A survey

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Abstract

The aim of the study is to find out the ligament and meniscus injuries of knee joint in BKSP players in deferent events. Total 390 players (boys & girls) were tested who were in age range of 9-17 years. For this purpose six tests were selected and these are Range of motion (ROM) test for mobility. Valgus stress test and Varus stress test for Medial collateral ligament (MCL) and Lateral collateral ligament (LCL) sprain. Anterior drawer test and Posterior drawer test for Anterior Cruciate ligament (ACL) and Posterior Cruciate ligament (PCL) sprain. Mcmary test & duck test for meniscus injury. MRI test were required for some case. Among these 310 players are normal, 80 players are injured. The percentage was MCL (9.23%), LCL (4.0%), ACL (3.58%), PCL (0.51%) & Meniscus injury (3.07%). Maximum ligament injuries of knee joint to place in Football (30.61%), and others game namely Hockey (28.12%) Swimming (26.66%), Basketball (24.0%) Athletics (22.22%), Cricket (21.0%), Gymnastics (16%), Judo (13.33%), Tennis (20%), Archery (10%) Shooting (9.09%, Boxing (5%). Mimimum injuries to place in Boxing.

Key words : Ligaments, Meniscus

Introduction

Acute injuries affecting the knee joint cause considerable disability and time off sport. They are common in all sports that require twisting movements and sudden changes of direction, especially the various football, basketball, hockey, and cricket etc.

The knee contains two joints, the tibiofemoral joint with its associated collateral ligaments, cruciate ligaments and menisci, and the patellofemoral joint, which obtains stability from the medial retinaculum and the large patellar tendon passing anteriorly over the patella.

The two cruciate (cross) ligaments, anterior and posterior are often referred to as the `cruciat` ligaments such in their importance in sporting activity. They are named anterior and posterior in relation to their attachment to the tibia. The role of the ACL is to prevent forward movement of the tibia in relation to the femur and control rotational movement. The ACL is essential for control in pivoting movements. Without an intact ACL, subluxation of the tibia may occur when an activity such as landing from a jump is attempted.

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The two collateral ligaments, the medial and lateral, provide medial and lateral stability to the knee joint. The medial collateral ligaments (MCL) originates from the medial epicondyle of the femur 3cm above the joint line and passes downward as a thickened band to attach to the anteromedial aspect of the tibia. The MCL prevent excessive lateral tilting of the tibia in relation to the femur during valgus stress.

The lateral collateral ligament (LCL) arises from the lateral epicondyle of the lateral border of the femur and passes downwards the attach to the head of the fibula.
The (LCL: in a narrow strong and cord with no attachment to the lateral meniscus. It prevents excessive medial tilting of the tibia on the femur during varus stress.

The two menisci, medial and lateral, are intra-articular and attach to the tibial plateau.The menisci have an important role as a buffer absorbing some of the forces placed through the knee joint. Thus protecting the otherwise exposed articular surface for damage.

Materials and Methods

Subjects for the study were 390 players (boys &girls) of BKSP belonging to 12 Sports events that is Archery. (20), Athletics. (27), Basketball (25), Boxing (20), Cricket (100), Football (49), Gymnastic (25), Judo (15), Swimming (30), Shooting (22) Tennis (25), Hockey (32).The age of the subjects ranged form 9-17 years. For this purpose there are six test are selected, these are Rom test, Valgus test, Varus test, anterior drawer test, posterior drawer test and Mcmary and Duck test. The evaluation of the stability test was done using the guidline of (Brukner, P and Khan, K clinical sports medicine) to find out tear or sprain in ligament .

Survey period-From 01-1-2012 to 31-12-2012.

Rom Test –The Knee joint is the largest joint in the body and classified as a synovial hinge joint. The motion possible at the knee are flexion and extension from 0 degrees of extensions these are approximately 120 to 135 degrees of flexion.
Goniometer was used to measure Rom of knee joint.

Valgus test : This test was done to find out tear or sprain in MCL.

Varus test : This test was done to find out tear or sprain in LCL.

Anterior drawer test : This test was done to find out tear or sprain in ACL.

Posterior Drawer test : This test was done to find out tear or sprain in ACL.

Mcmary and Duck test: This test was done to find out tear or sprain in Meniscus.

MRI : For 100% confirmation MRI investigation were done to find out tear of ligament injury in some case.

Result

Table – 1

Number and percentage of different game of ligament injury of knee joint among BKSP player.

Game	Injury of knee joint								
	Number of Player		MCL	LCL	ACL	PCL	Meniscus injury	Total	
Archery	20	n	2	-	-	-	-	n	2
		%	10%	0%	0%	0%	%	%	10%
Athletics	27	n	3	1	1	-	1	n	6
		%	11.11%	3.70%	3.70%	0%	3.70%	%	22.22%
Basketball	25	n	2	2	1	-	1	n	6
		%	8%	8%	4%	0%	4%	%	24%
Boxing	20	n	1	-	-	-	-	n	1
		%	5%	0%	0%	0%	0%	%	5%
Cricket	100	n	10	3	4	-	3	n	20
		%	10%	3%	4%	0%	3%	%	20%
Football	49	n	8	2	2	-	3	n	15
		%	16.32%	4.08%	4.o8%	0%	6.12%	%	30.61%
Gymnastics	25	n	1	1	1	1	-	n	4
		%	4%	4%	4%	4%	0%	%	16%
Judo	15	n	1	1	-	-		n	2
		%						%	13.33%
Swimming	30	n	2	2	2	1	1	n	8
		%	6.66%	6.66%	6.66%	3.33%	3.33%	%	26.66
Shooting	22	n	-	-	2			n	2
		%	0%	0%	9.08%			%	9.08%
Tennis	25	n	2	2	-	-	1	n	5
		%	8%	8%	0%	0%	4%	%	20%
Hockey	32	n	4	2	1	-	2	n	9
		%	12.5%	6.25%	3.12	0%	6.25%	%	28.12%
Total	390								

From the table 1 it is clear that occurrence of ligament injury of knee joint namely MCL, LCL,ACL, PCL,and Meniscus injury presents in all Sports events. Maximum ligament injury of knee joint to place in Football (30.61%), and others game namely Hockey (28.12%) Swimming (26.66%), Basketball (24.0%) Athletics (22.22%), Cricket (21.0%), Gymnastics (16%), Judo(13.33%), Tennis (20%), Archery (10%) Shooting (9.09%). Boxing (5%).Mimimum injury to place in Boxing.

Table – 2

Number and percentage of different type of ligament injury of knee joint among BKSP player.

Sl.No	Injury of the knee joint	Number of Case	Percentage
1	Medial collateral ligament (MCL)	36	9.23%
2	Lateral collateral ligament (LCL)	16	4.0%
3	Anterior Cruciate ligament (ACL)	13	3.58%
4	Posterior Cruciate ligament (PCL)	2	0.51
5	Meniscus	12	3.07%

The above table reveals the occurrence of the MCL injuries among the subjects is the highest (9.23%), and it is closely followed by LCL (4.0%) injury. In the respect of other selected injuries namely ACL (3.33%), PCL (0.51%) and Meniscus (3.07%).

Discussion

Injury to the MCL usually occurs as a result of a valgus stress to the partially flexed knee. This occurs in downhill running and in contact sports when an opponent falls across the knee from lateral to medical MCL tears are classified on the basis of their severity into grade I (mild) First degree, grade II (moderate), Second degree or grade III (complete), third degree)

In patients with a grade MCL tears, there is local tenderness over the MCL on the medial femoral condoyle but usually no swelling. When a valgus stress is applied at 30^0 flexion, there is painful but no laxity.

A grade II MCL tear is produced by a more severe valgus stress. Examination shows marked tenderness, sometimes with localized swelling. A valgus stress applied at 30^0 knee flexion course pain. Some laxity is present but there is a distinct end point.

A grade III tear of the MCL results from a severe valgus stress that couse a complete tear of the ligament fibers.

LCL tears are less common than MCL tears. They are usually due to a direct varus stress on the knee and are graded and treated in similar fashion to MCL sprain complete tears of the LCL are usually associated with other injuries and may result in posterio lateral rotatory instability of the knee.

Tears of the ACL are not uncommon. They occur in footballers, basketballer, hochey players, cricketer and downhill runner. ACL tears are the most common cause of prolonged absence from sport. Most ACL tears occurs when the athlete is landing from a jump, pivoting or decelerating suddenly. Occasionally, a tear will occur as the result of another player falling across the knee.

The mechanism of PCL injury is either a hyperextension injury or, more commonly, a direct blow to the anterior tibia with the knee in a flexed position. The patient complains of poorly defined pain, mainly posterior, some times involving the calf. The most important time in the treatment of ligament injuries is the 24-48 hours immediately following the injury. The most appropriate method of doing this is summarized by the letters -**PRICED –MM**

P- Protection, R- Rest, I-Ice, C- Compression, E- Elevation, D- Diagnosis, M- Medication, M- Modalities

Conclusion

For the better treatment the patient should consult with doctor or physiotherapist. Rehabilitation is required to return the athlete to the previous level of function. So every player should complete their rehabilitation program.

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SPORTS COMPETITIVE ANXIETY AND STATE - TRAIT ANXIETY STATUS AMONG THE DIFFERENCES SPORTSPERSONS IN BKSP

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ABSTRACT

The purpose of the present study was to find out of psychological status among Archers, Athletics Gymnastics and Shooters players in BKSP. 80 sportspersons were selected for this purpose among them 20 players from Archers,24 from gymnastices , 25 from Shooters and 11 from Athletices. They were all regular and residential students of the institute. Their age were between 10 to 20. There are two variables selection for measuring Sports Competitive Anxiety and State - Trait Anxiety. Sports Competitive Anxiety Test (SCAT Martin et al., 1990) was used to measure sports competitive anxiety and Personality State Trait Anxiety Inventory (STAI Spielberg et al., 1970) was used to measure state trait anxiety. Mean, Standard Deviation and Independent t- test were used to analysis the data, and level of significant was set at 0.05. There were no significant differences found among the players.

Key Words: Sports Competitive Anxiety, Personality State -Trait Anxiety.

INTRODUCTION

Anxiety is a common emotion and is thought to be normal as long as it does not become completely debilitating. Anxiety has been viewed as feelings of nervousness and tension associated with activation or arousal of the organism. Therefore, anxiety may be defined as negative emotional feelings characterized by apprehensions, worries caused due to relatively non-threatening events or situations. Anxiety relating to sport psychology is defined both in terms of stable and transient characteristics i.e. trait anxiety and state anxiety.

State anxiety is an existing or current emotional state, characterized by feelings of apprehension and tension (negative emotional feeling) and associated with activation of the organism.

According to Spielberger (1966), "State anxiety is an emotional state characterized by subjective consciously perceived feelings of apprehension and tension, accompanied by or associated with activation or arousal of the autonomic nervous system. State anxiety is the immediate reaction to relatively non-threatening transitory situation.

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Trait is a mental structure which accounts for regularity and consistency in behavior; it is a force within an individual or an accumulation of personal experience as a stable predisposition, from which personal action can be perceived for given situations (Cattell, 1950). Trait anxiety is a predisposition to perceive certain environmental stimulation as threatening or non-threatening and to respond to these stimulation with varying levels of state anxiety.

The ability to cope with pressure and anxiety is an integral part of sports, particularly among elite athletes (Hardy, Jones, & Gould, 1996; Orlick & Partington, 1988). Researchers have reported that over 50 of consultations among athletes at an Olympic festival were related to stress or anxiety related problems (Murphy, 1988). A great deal of research has been conducted examining the relationship between anxiety and performance within the field of athletics. This paper will review the relevant research from a cognitive-behavioral perspective. Landers (1980; Landers & Boutcher, 1986) suggested that unpleasant emotional reactions may accompany arousal of the autonomic nervous system and that this maladaptive emotional condition has been labeled anxiety. Martens (1977) suggested that anxiety reactions would result from an objective environmental demand interpreted as threatening (a perceived imbalance between the demand and one's response capabilities) by an individual. Hence, anxiety has been viewed as feelings of nervousness and tension associated with activation or arousal of the organism.

Spielberger (1966, 1972) has further noted that for a theory of anxiety to be adequate. It must differentiate between anxiety as a mood state and as a personality trait. Additionally, it must differentiate among the stimulus conditions antecedent to these forms of anxiety. Based on this argument, Spielberger (1966) proposed the state-trait theory of anxiety, which differentiates between state and trait anxiety. This condition varies from moment to moment and fluctuates proportional to the perceived threat in the immediate situation. Trait anxiety, on the other hand, is “a motive or acquired behavioral disposition that predisposes an individual to perceive a wide range of objectively nondangerous circumstances as threatening and to respond to these with state anxiety reactions disproportionate in intensity to the magnitude of the objective danger” (Spielberger, 1966). The state-trait theory of anxiety predicts that high-trait-anxious individuals will perceive more situations as threatening and react with greater state anxiety in greater variety situations those low- trait-anxious individuals.

Anxiety has typically been measured with self-report questionnaires. Although there are many criticisms of self-report measures, especially in regard to their susceptibility to social desirability bias (Hackfort & Schwenkmezger, 1989; Neiss, 1988; Williams & Krane, 1989), psychological inventories have become the more popular measure of anxiety because of the ease of administration, especially in field settings. Martens defended their use by stating "the assessment of A-state through self-report measures tells us more about the subject's general state of arousal than any single or composite index of physiological measures" (1977). Martens et al. (1990) and Williams and Krane (1989), researchers need to be aware of the potential for social desirability bias and take steps to minimize it. This can be accomplished by developing a good

rapport with athletes using anti-social desirability instructions with questionnaires, and using a social desirability scale to identify athletes likely to repress their true feelings.

Singh (1987) administered SCAT (Marten`s) to Indian athletes and hockey players and found significant differences between the two samples on sport competition anxiety. Hockey players, both male and female, were found to have less competition anxiety as compared with the players of individual events. Males exhibited less anxiety in competitive situations as compared with the females. Radha (1995) studied the selected psychological variable namely anxiety aggression, motivation and personality traits in relation to basketball performance. If psychological factors, aggression is highly correlated with the playing ability (r =.941) further, it is noted that the coefficient of multiple correlation (r = .981) revealed that psychological factor put together play an important role in the basketball performance.

Weinberg (1980) investigated the relationship between competition trait anxiety and state anxiety and golf performance in a field setting. Test low moderate and high CTA collegiate golfer (10 per cell) performed in a practice round one day and day 2 of competitive tournament. Co-relation between SCAT and state anxiety indicated that SCAT was good predicator of pre-competitive state anxiety. The direction of state anxiety and performance CTA main effects provide support for oxedine`s (1970) contentions that requiring fine muscle coordination and precision (e.g. golf) are performed best at low level of anxiety.

Dowthwaity (1984) administered Spielberger‘s State and Trait Anxiety Inventory and SCAT to 22 women hockey players. Consistent differences in A-State Score were found in the 1st XIth for the extreme group of high and low score on SCAT and the high SCAT group showed the greater increase from the coaching to the competitive condition. Over both teams A-State correlated significantly with SCAT.

A great deal of research has been devoted to the effect of anxiety on sports performance. Researchers have found that competitive state anxiety is higher for amateur athletes in individual sports compared with athletes in team sports (Simon & Martens, 1977). In addition, participants in individual non-contact sports have been found to report lower levels of state anxiety than participants in individual contact sports (Lowe & McGrath, 1971).

Butler (1996) suggests a mnemonic device called PRESSURE who has a hard time coping in competitions that incorporates all three phases of intervention. The word can be broken down as follows:

Prepare - Athletes must psychologically prepare for what they will face during the competition.

Relax - Diaphragmatic breathing exercises may be necessary prior to competition in order to prevent over arousal, which would result in deterioration in performance.

Externalize - This involves the belief that problems are not within yourself. This can be of assistance when athletes feel that there are too many demands that are being put upon them.

Stays Positive - Acknowledgement of the importance that individuals should have confidence in their abilities.

Single Minded - Stay focused on the task at hand. This can be used both in training and competition.

Unite - Particularly useful within the framework of team's sports, this component encourages athletes to consider what roles others will fulfill and the importance of working together as a team throughout the competition.

Re-evaluate - How important is this event in the real world?

Extend yourself - Give your best performance every time no matter how important, or unimportant, the competition is.

Use of this mnemonic device is warranted with individuals that have problems with the three components of athletic anxiety: cognitive, somatic, and self-confidence.

MATERIALS AND METHOD

The subject of the present study was 80 sportspersons among them were Archers 20, Athletics 11, Gymnastics 24 and Shooters 25 of BKSP. They were all regular and residential students of the institute. They were following same training and academic schedule. In this study Sports Competitive Anxiety Test (SCAT Martin et al., 1990) was used to measure sports competitive anxiety and Personality State Trait Anxiety Inventory (STAI Spielberger et al., 1970) was used to measure state trait anxiety. Data were collected from athletes using a Sports Competitive Anxiety Test - (SCAT) consisting of fifteen items which include 5 spurious items, 8 positive items and 2 negative items and State Trait Anxiety Inventory (STAI) contains 20 statements using 4 point ordinal scale. Descriptive statistic Mean and Standard Deviation and Independent t- test were used to analysise the data, and level of significant was set at 0.05.

RESULTS

Mean, Standard Deviation and t – ratios were computed in order to analyze the separation for Archers, Athletics, Gymnastics and Shooters in BKSP. The level of significance chosen was .05 levels. The statistical analysis of data has been separately presented for Sports Competitive Anxiety and State - Trait Anxiety Inventory in Tables 1, 2, 3 and 4.

Table 1

Means, Standard Deviation and t – ratios of Sports Competitive Anxiety of the Archers and Shooters in BKSP

Group	Size	Mean	Mean Difference	SD	t – ratio
Archers	20	13.75	-1.21	2.93	-0.278
Shooters	25	14.96		2.85	

The Table 1 reveals that there is no significant difference in Sports Competitive Anxiety and Sports Competitive Anxiety between Archers and Shooters in BKSP**.** The obtained t-value of -0.278 is less than the table value of 2.02.

Table 2

Means, Standard Deviation and t – ratios of State - Trait Anxiety Inventory of the Archers and Shooters in BKSP

Group	Size	Mean	Mean Difference	SD	t – ratio
Archer	20	39.45	1.05	5.11	0.088
Shooter	25	38.40		6.25	

From The Tables 2 reveals that there is no significant difference in State - Trait Anxiety Inventory between Archers and Shooters in BKSP. The obtained t-value of 0.088 is same as the table of value of 2.02.

Table 3

Means, Standard Deviation and t – ratios of Sports Competitive Anxiety of the Athletics and Gymnastics in BKSP

Group	Size	Mean	Mean Difference	SD	t – ratio
Athletics	11	16.81	-1.52	2.91	-1.47
Gymnastics	24	18.33		2.64	

Another Table 3 shows that there is no significant difference in Sports Competitive Anxiety between Athletics and Gymnastics in BKSP**.** The obtained t-value of -1.47 is less than the table of value of 2.04.

Table 4

Means, Standard Deviation and t – ratios of State - Trait Anxiety Inventory of the Athletics and Gymnastics in BKSP

Group	Size	Mean	Mean Difference	SD	t – ratio
Athletics	11	44.90	1.15	2.84	0.95
Gymnastics	24	43.75		4.48	

Tables 4 show that there is no significant difference in State - Trait Anxiety Inventory between Athletics and Gymnastics in BKSP. The obtained t-value of 0.95 is same as the table of value of 2.04.

DISCUSSION

The purpose of the present study was to find out of psychological status among Archers, Athletics Gymnastics and Shooters players of BKSP. 80 sportspersons were selected for the purpose of the study. They were all regular and residential students of the institute. Their age ranged of between were 10 to 20. There were two variables selection for measuring Sports Competitive Anxiety and State - Trait Anxiety Inventory. Mean and Standard Deviation and Independent t- test were used to analyze the data, and level of significant was set at 0.05. After analysis of data the result indicated that there was no significant difference in sports competitive anxiety and state – Trait anxiety between Archers and Shooters and Athletices and Gymnastices players of BKSP. Only a little difference have found in sports competitive anxiety between Athletics and Gymnastics.

One of the most important issues which has attracted the attention of sports scientist and psychologists are to identify the factors affecting sports performance, and it has been recognized that psychological factors, in particular anxiety play an important role in competition. Researchers have found that high level of anxiety can have deteriorating effects on athlete's performance (Parnabas, 2010). Anxiety is a negative emotional state in which feeling of nervousness, worry, and apprehension are associated with activation or arousal of the body (Weinberg, 1999).

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COMPARATIVE STUDY OF PERSONALITY OF PHYSICAL EDUCATION TEACHERS AND OTHER SUBJECT TEACHERS OF PUNE CITY

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ABSTRACT

The present research explores the relations of personality between physical education teachers and other subject teachers. The purpose of this study was to compare physical education teachers and other subject teachers on their level of personality factors. Total number of 76 Teachers were selected as the samples for the study from 38 secondary schools of Pune city. In which 38 were physical education teachers and rest 38 were other subject teachers. The data collection tools used in the study were the Dr. Tom Buchanan's 'Big five personality Inventory' for personality variables. Results shows, that the mean and standard deviation scores of physical education teachers & other Subject teachers on Personality factors like Extraversion, Agreeableness Conscientiousness, Neuroticism and Openness, are 28.815818(±4.82592) & 28.5526 (±4.14401), 24.6842(±3.09407) & 25.0526(±3.36875), 34.5263(±4.89201) & 34.3684 (±4.13568), 20.7895(±2.95148) & 20.8684(±3.94675), 23.7105(± 3.84783) & 24.2105 (±3.81433) respectively. The level of significance was kept at 0.05 to test the hypothesis. The calculated't' of Personality factors of physical education teachers and other subject teachers is like, Extraversion = 0.255, Agreeableness=0.497, Conscientiousness =0.152, Neuroticism=0.099 and Openness=0. 569 respectively, all these't' values of personality factors are not significant at 0.05 level of significance. In the all five personality factors, there was no significant difference between physical education teachers & other Subject teachers, thus set hypothesis was accepted. Researcher also observed that in the personality factors, physical education teachers were more energetic, outgoing, sociable, careful, focused and methodical as compare to other subject teachers. On the other hand other subject teachers were more trusted, friendly, cooperative, emotional, less relaxed, tense, imaginative, cultured and less practical in nature as compare to physical education teachers. In the present study we found that there is no significant difference in the personality factors and self esteem of physical education teachers and other subject teachers, so we can conclude that their personality are similar and will not affect their teaching. Rather we can say that both groups of teachers are the two sides of a same coin and also are sailing in the same boat in the matter of personality factors.

Key Words: **Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness,**

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INTRODUCTION

Personality is covered with the ‘social stimulus value’ of the individual behavior, attributes and qualities or with conceptions of one’s self which differentiate one human being from other personalities the entire organization of the individual at each stage of his life. Traits like imagination, ambition or perseverance may be found in many people but it is in relation to other abilities and environment opportunities that they develop and influence life and behavior. Personality is the way to be affected by others. Personality is distinctive or unique. It is continually changing and growing people may acquire and develop in the course of his life and experience. Growth takes place by reorganization and integration of new experience and behavior in the total system. Disposition refers to habitual tendencies inherited or previous experience and term character is inter changeably with personality. Both Cattell’s and Eysenck’s theory have been the subject of considerable research, which has led some theorists to believe that Cattell focused on too many traits, while Eysenck focused on too few. As a result, a new trait theory often referred to as the "Big Five" theory emerged. This five-factor model of personality represents five core traits that interact to form human personality.

Today, many researchers believe that they are five core personality traits. Evidence of this theory has been growing over the past 50 years, beginning with the research of D. W. Fiske (1949) and later expanded upon by other researchers including Norman (1967), Smith (1967), Goldberg (1981), and McCrae & Costa (1987). The "big five" are broad categories of personality traits. While there is a significant body of literature supporting this five-factor model of personality, researchers don't always agree on the exact labels for each dimension. However, these five categories are usually described as follows:

Extraversion: This trait includes characteristics such as excitability, sociability, talkativeness, assertiveness and high amounts of emotional expressiveness.

Agreeableness: This personality dimension includes attributes such as trust, altruism, kindness, affection, and other pro-social behaviors.

Conscientiousness: Common features of this dimension include high levels of thoughtfulness, with good impulse control and goal-directed behaviors. Those high in conscientiousness tend to be organized and mindful of details.

Neuroticism: Individuals high in this trait tend to experience emotional instability, anxiety, moodiness, irritability, and sadness.

Openness: This trait features characteristics such as imagination and insight, and those high in this trait also tend to have a broad range of interests.

It is important to note that each of the five personality factors represents a range between two extremes. For example, extraversion represents a continuum between extreme extraversion and extreme introversion. In the real world, most people lie

somewhere in between the two polar ends of each dimension. These dimensions represent broad areas of personality. Research has demonstrated that these groupings of characteristics tend to occur together in many people. For example, individuals who are sociable tend to be talkative. However, these traits do not always occur together. Personality is a complex and varied and each person may display behaviors across several of these dimensions.

Few people understand the meaning of personality and its importance in the classroom. Some feel that personality is the kind of person one just happens to be, others have said that "It is being like others." Most important, many teachers do not realize the nature of their own short comings simply because they do not fully grasp the significance of the role of personality. Dr. W. H. Burnham said "everyone knows what personality is, but no one can define it." Even though the definition is complex. Most people will agree that personality "is the extent to which one is able to interest or influence other people. This means that your personality is the sum total of the qualities of character, mind and body that make you different from other people. It is a simple matter of human relations. It is the outward evidence of your inner qualities which determine your thoughts, feelings and actions in any given situation.- On this the Lord said, "For out of the abundance of the heart the mouth speaketh". The Apostle Paul said, "Finally, brethren, whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report; if there be any virtue, and if there be any praise, think on these things". At this point extreme caution must be exercised. In addition to influencing others to think with us on things wholesome and right, the teacher's personality must be such as to develop habits and skills which interest and serve others. It's doing things with people, for people and even involves self-sacrifice.

MATERIALS AND METHOD

The participants were 38 physical education teachers (group 1) and 38 other subject teachers (group2). These teachers were selected from 38 secondary schools of Pune city in which 15 were English medium, 16 were Marathi medium, 3were English /Marathi medium,3 Hindi medium and 1 was Urdu medium school. Out of 38 subject teachers 10 were language teachers, 10 were mathematics teachers, 10 were social science and rest 8 were science teachers. Both male and female teachers were selected who had at least 5 years experience.

For the purpose of this study, personality of physical education teachers and other subject teachers were asked to complete Dr. Tom Buchan's big five inventory. The questionnaire consisted of 41 questions. The inventory is based on the Five Factor Model of personality. There is a broad consensus amongst personality theorists that this model, which describes five major factors, is the best current description of the structure of personality. This questionnaire measures the big five traits of personality viz Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness.

Basic description statistics were used in the data processing and the difference between the two groups of participants were calculated by means of the t test. Data processing was done in the SPSS 17 statistical program.

RESULTS

Comparison of mean and standard deviation of Physical education teachers and other Subject teachers on Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness scores.

	Physical education teachers				Other subject teachers			
Factors	N	Mean	Standard Deviation	St. Error Mean	N	Mean	Standard Deviation	St. Error Mean
Extra-Version	38	28.8158	4.82592	0.78287	38	28.5526	4.14401	0.67225
Agree-ableness	38	24.6842	3.09407	0.50192	38	25.0526	3.36875	0.54648
Conscien-tiousness	38	34.5263	4.89201	0.79359	38	34.3684	4.13568	0.67090
Neurotic-Ism	38	20.7895	2.95148	0.47879	38	20.8684	3.94675	0.64025
Openness	38	23.7105	3.84783	0.62420	38	24.2105	3.81433	0.61877

In the above table, there were 38 physical education teachers having mean of 28.8158, 24.6842, 34.5263, 20.7895, 23.7105, and with standard deviation of 4.82592, 3.09407, 4.89201, 2.95148, 3.84783, and standard error of mean 0.78287, 0.50192, 0.79359, 0.79359, 0.47879, 0.62420 on the Personality factors like Extraversion, Agreeableness Conscientiousness, Neuroticism and Openness. Similarly there were of 38 other Subject teachers having mean of 28.5526, 25.0526, 34.3684, 20.8684, 24.2105 with standard deviation of 4.14401, 3.36875, 4.13568, 3.94675, 3.81433 and standard error of mean 0.67225, 0.54648, 0.67090, 0.64025, 0.61877 on the Personality factors like Extraversion, Agreeableness Conscientiousness, Neuroticism and Openness respectively.

Independent sample‘t’ test of Extroversion

t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
0.255	74	0. 799	0.26316	1.03189

In the above table, mean differences for the Extraversion of physical education teachers and other subject teachers was 0.26316. This difference when tested by Independent ‘t’ test ,‘t’ value was found 0.255. Which was not significant at 0.05 (p=0.05) significance level for 74 degree of freedom. Therefore the set hypothesis, there is no significant difference between Extraversion of physical education teachers and other subject teachers is accepted.

Independent sample 't' test of Agreeableness

t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
0.497	74	0.621	0.368442	0.74201

In the above table, mean differences for the Agreeableness of physical education teachers and other subject teachers was 0.368442.

This deference when tested by Independent't' test, 't' value was found 0.497. Which was not significant at 0.05 (p=0.05) significance level for 74 degree of freedom. Therefore the set hypothesis, there is no significant difference between Agreeableness of physical education teachers and other subject teachers.

Independent sample 't' test of Conscientiousness

t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
0.152	74	0. 880	0. 15789	1.03917

In the above table, mean differences for the Conscientiousness of physical education teachers and other subject teachers was 0.15789. This deference when tested by Independent t' test ,'t' value was found 0.152. Which was not significant at 0.05 (p=0.05) significance level for 74 degree of freedom. Therefore the set hypothesis, there is no significant difference between Conscientiousness of physical education teachers and other subject teachers is ace

Independent sample 't' test of Neuroticism

t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
0.099	74	0. 922	0.07895	0.79947

In the above table, mean differences for the Neuroticism of physical education teachers and other subject teachers was 0.07895. This deference when tested by Independent 't' test, 't' value was found 0.099 . Which was not significant at 0.05 (p=0.05) significance level for 74 degree of freedom. Therefore the set hypothesis, there is no significant difference between Neuroticism of physical education teachers and other subject teachers.

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Independent sample't' test of Openness

t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
0. 569	74	0. 571	0. 50	0. 87892

In the above table, mean differences for the Openness of physical education teachers and other subject teachers was 0.50. This difference when tested by Independent t' test, 't' value was found 0. 569. Which was not significant at 0.05 (p=0.05) significance level for 74 degree of freedom. Therefore the set hypothesis, there is no significant difference between openness of physical education teachers and other subject teachers.

DISCUSSION

It was observed from the finding that the personality traits of physical education teachers and other subject teachers from above tables. That no significant differences were found between physical education teachers and other subject teachers in all personality factors i.e. Extraversion, Agreeableness Conscientiousness, Neuroticism and Openness. Therefore the set hypothesis, there is no significant difference between the personality factors of physical education teachers and other subject teachers is accepted.

The mean scores of personality factor Extroversion shows that physical education teachers have high degree of personality traits than other subject teachers. While the mean scores of personality Factor Agreeableness shows that other subject teachers have high degree of personality traits than physical education teachers. The mean scores of personality Factor Conscientiousness shows that physical education teachers have high degree of personality traits than other subject teachers. Mean scores of personality Factor Neuroticism shows that other subject teachers have high degree of personality traits than physical education teachers and mean scores of personality Factor Openness shows that other subject teachers have high degree of personality traits than physical education teachers.

In the present study we found that there is no significant difference between physical education teachers and other subject teachers in all personality factors. This finding was supported by the Dr. Mohan N. Khatal (2009) in his study of relationship between personality traits & effective communication of teachers from the professional courses, concluded that the personality traits of both effective and non-effective teacher communicator do not differ from profession to profession. Richard R. DeBlassie (1971) in his study, A Comparative Study of the Personality Structures of Persistent and Prospective Teachers, suggest that only slight personality difference exist between teachers with an undergraduate teacher training background and prospective teachers with an undergraduate liberal arts background. Sing,J and Sing,P (2005) In their study on personality make up of winners and non winners students sport person in relation to social economic status concluded that winners sports persons, as a whole, do not differ in their personality make up. While social-economic status is not significance different of personality make up of sportsperson. Erdwins, Carol J.; Mellinger, Jeanne C. 1984 studied the Mid-life women: Relation of age and role to personality. Found no difference among different age groups in personality dimensions like self-esteem, focus of control, achievement and affiliation needs, indicates of psychological adjustment.

In the present study, we observed that physical education teachers got good results in personality factors Extraversion and Conscientiousness as compared to other subject teachers, and other subject teachers got good results in personality factors Agreeableness, Neuroticism and Openness. Finally, Researcher concluded that physical education teachers were more energetic, outgoing, sociable, careful, focused and methodical as compared to other subject teachers. On the other hand other subject teachers were more trusted, friendly, cooperative, emotional, less relaxed, tense, imaginative, cultured and less practical in nature as compared to physical education teachers. These findings are supported by the researches like Beavers, Amy S (2011) investigated the similarities and differences of personality traits within teacher groups, as well as examine the effects of personality on job satisfaction for teachers, concluded that Mathematics, science, and physical education teachers were more resolute, analytical and investigative, where as elementary, secondary English and history, and special education teachers were more open-minded and sensitive. Among the traits distinctive of the teacher occupational type as a whole, teacher groups in this sample were generally extraverted, warm, energetic, dutiful, and patient. Main, Cecil; Hounshell, Paul B.(1971) in their study, A Comparative Study of Personality and Behavior of Selected Secondary Science and Non-Science Teachers. This study was concerned with personality and science teaching. They concluded science teachers were found to be generally more reserved, calm and mature, and appeared more serious and taciturn. In the group dependent versus self-sufficient factor, science teachers placed more toward the self-sufficient, resourceful polarity than the other teachers. Female science teachers appeared to be more outgoing and warm-hearted, while male science teachers were more tough-minded, self-reliant, and realistic. Ali Ozel (2007) in his study determined to what extent the geography teachers at high schools reflect their personality on their teaching experiences. The results showed that teachers reflected their personalities on their teaching experiences as their ages and seniority increased. The personal assets the teachers found in themselves were self-confidence, discipline, tidiness, justice and job-satisfaction.

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