

EFFECT OF SIX WEEK TRAINING PROGRAMME ON PHYSICAL FITNESS OF FIFTEEN YEARS OLD BASKETBALL PLAYERS

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ABSTRACT

The purpose of the study was to assess the effect of six week training program on physical fitness of fifteen years old basketball players. For this purpose, fifteen basketball players of Bilaspur division (Chhattisgarh), were selected as the subjects of the study. The age of the subjects was fifteen years old. A training programme was carried for a period of 6 weeks. During the testing, all of the subjects were healthy. Measurement for various variables taken at the beginning (Pre-test) and after 6 weeks training programme (Post-test). The Mean, SD, and 't' test were computed through SPSS 16.0 program by the investigator for the collected data. The difference of pre-test and post test scores were taken into account and level of significance was set at .05 level of confidence. The results of the study indicated that the female basketball players had improved their results through the initial and final testing in the agility run, vertical jump and standing broad jump after the six week training programme. Significant improvement was not seen in single limb balance and sprints performance of female basketball players by means of six week training programme. The six-week training program have an effect also on the statistically relevant increase in the explosive type strength of the leg muscles and agility, which in turn leads to an increase in the vertical jump standing long jump. and agility run.

Keywords: Physical Fitness, Training Programme, Performance, strength

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INTRODUCTION

Basketball is a team sport in which two teams of five active players each try to score points against one another by placing a ball through a 10 feet (3.048 m) high hoop (the goal) under organized rules. Basketball is one of the most popular and widely viewed sports in the world (2008).

Points are scored by throwing (shooting) the ball through the basket above; the team with more points at the end of the game wins. The ball can be advanced on the court by bouncing it (dribbling) or passing it between teammates. Disruptive physical contact (foul) is not permitted and there are restrictions on how the ball can be handled (violations).

Women's basketball began in 1892 at Smith College when Senda Berenson, a physical education teacher, modified Naismith's rules for women. Shortly after she was hired at Smith, she went to Naismith to learn more about the game. Fascinated by the new sport and the values it could teach, she organized the first women's collegiate basketball game on March 21, 1893, when her Smith freshmen and sophomores played against one another. Her rules were first published in 1899 and two years later Berenson became the editor of A.G. Spalding's first Women's Basketball Guide, which further spread her version of basketball for women.

Komi and Bosco (1978) compared the vertical jump performance of men and women under 3 conditions: squat jump (SJ), countermovement jump (CMJ), and depth jump (DJ). All subjects attained the greatest jump heights in the DJ condition, followed by the CMJ and SJ conditions.

Blattner and Noble (1979) compared a DJ training group, an isokinetic training group, and a control group. They found both the DJ and isokinetic groups jumped significantly higher than the controls.

Clutch and colleagues (1983) compared CMJ training to DJ training when combined with weight training. They found no significant differences between the DJ and CMJ training groups, as both groups improved their vertical jump ability by 8.4 cm after 4 weeks of training.

Dursenev and Raevsky (1978) felt that depth jumps from 2 meters or higher were superior for improving muscle strength.

Brown et al. (1986) found significant improvement in vertical jump height following a 12-week DJ training program in male basketball players when compared to controls. Other researchers found that DJ training increased vertical jump ability in subjects who were participating in an activity that required jumping, and that any form of jump training increased vertical jump height in subjects whose activity did not require jumping. However, we are unaware of any research that has directly compared the effects of CMJ vs. DJ training for improving energy production as well as vertical jump

The purpose of the study was to assess the effect of six week training program on physical fitness of fifteen years old basketball players. It was hypothesized that significant difference may exist among fifteen years old female basketball players between the pre-test and post tests of specific physical fitness, who utilized training program of six weeks.

METHODOLOGY

Selection of Subjects:

The sample consisted of fifteen basketball players of Bilaspur division (Chhattisgarh), were selected as the subjects of the study. The age of the subjects was fifteen years old. A training programme was carried for a period of 6 weeks. During the testing, all of the subjects were healthy. Measurement for various variables taken at the beginning (Pre-test) and after 6 weeks training programme (Post-test).

Training Programme:

Prior to the realization of the training programme by the basketball players were trained for three weeks using a preliminary period training programme for a duration of 90 to 120 minutes. The basic aim during this period was to increase the basic abilities. The initial measuring took place following the completion of this phase of the preliminary period. The final measuring took place three days after the completion of the six week training programme.

Load dosing was done for every subject individually. As the starting values in load dosing for training, the values of the maximum attempts for all of the exercises contained in the explosive leg strength exercises were used. In creating the individual programs, we adhered to the principle that load during the first week should be 70% of the maximum, 80% during the second, 90% during the third, 80% during the fourth, 90% during the fifth and 100% during the sixth (See-Appendix-I)

Description of Tests:

The process of the initial and final measuring was carried out with the use of the following measuring instruments which cover the area of explosive strength, agility, speed and balance (See Appendix-II).

Administration of Test & Collection of Data:

All the tests were explained to the subjects prior to its administration. The chance to practice the prescribed tests to the subjects was also provided to become familiar with these.

Measurement for various variables were taken at the beginning (pre- test) and after six weeks (post-test). The data was collected before and after six weeks by using standard tests for 15 years old basketball players.

Scoring of Data:

All the subjects were pre-tested post-tested on balance time, speed, agility, vertical jump and standing broad jump and scoring of data for each test was done as follows:-

Single leg balance up to a total of 30 second, Time taken to cover the 50 meter sprint recorded in seconds, total time taken to complete the 6x10 meter shuttle run recorded to 1/10th of a second, Maximum horizontal distance jumped from ground level and reach at same ground level (standing broad jump), Maximum vertical distance jumped from ground level and reach vertically at highest level (standing vertical jump) and Maximum vertical distance jumped with one hand from ground level to attained maximum height by the basketball players were recorded in to nearest Meter-centimeter.

Statistical Analysis of Data:

The Mean, SD, and 't' test were computed through SPSS 16.0 program by the investigator for the collected data. The differences in the mean gain of each group for selected variables were tested for significance of difference by independent 't' test. The difference of pre-test and post test scores were taken into account and level of significance was set at .05 level of confidence.

RESULTS AND DISCUSSION

The Mean, S.D. and 't' test were computed through SPSS 16.0 program by the investigator for the collected data. The differences in the mean gain for selected variables were tested for significance of difference by paired 't' test. The difference of pre-test and post test scores were taken into account. The level of significance was set at .05 level of confidence and data pertaining to this have presented in table 1&2.

TABLE 1
DESCRIPTIVE STATISTICS ON PRETEST AND POST TEST OF SPECIFIC PHYSICAL
FITNESS OF FEMALE BASKETBALL PLAYERS

Specific motor abilities	Pre-test		Post-test	
	Mean	SD	Mean	SD
Single-limb balance time (seconds)	27.07	1.91	26.20	0.86
Agility run (seconds)	5.71	0.91	6.73	0.79
Sprint (seconds)	3.06	0.88	3.53	0.51
Vertical jump (cm)	42.33	3.92	60.07	3.42
Standing broad jump	231.87	9.79	240.33	8.71

The mean scores of various specific motor abilities i.e. single-limb balance, pro-agility run, sprints. Vertical jump and standing broad jump on pre-test and post-test of female basketball players have been depicted in figures 1 to 5.

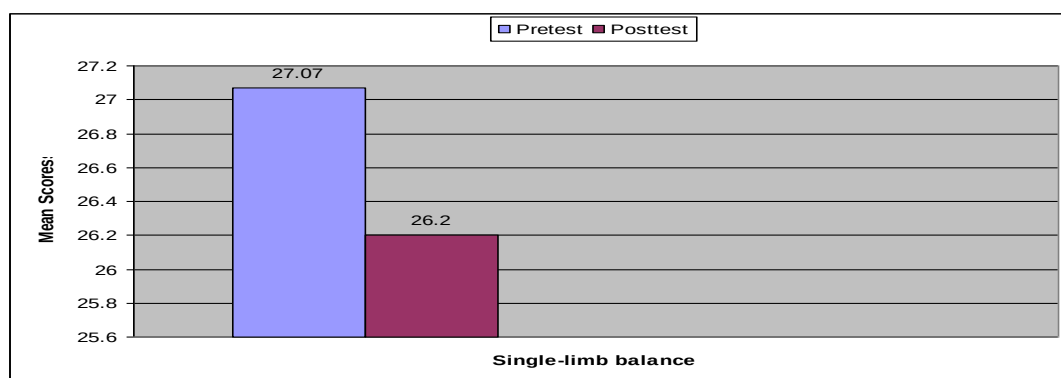


Fig.1: Mean Scores on Pretest and Posttest for Single Limb Balance of Female Basketball Players

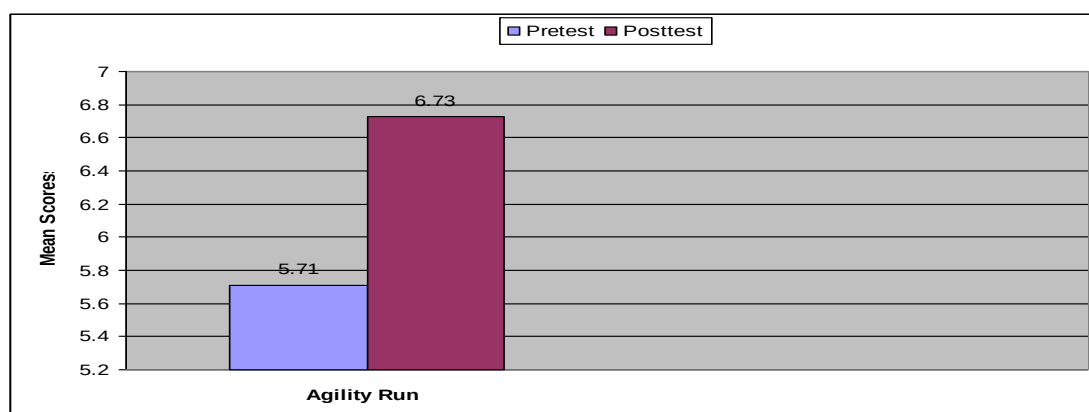


Fig.2: Mean Scores Pretest and Posttest for Agility Run of Female Basketball Players

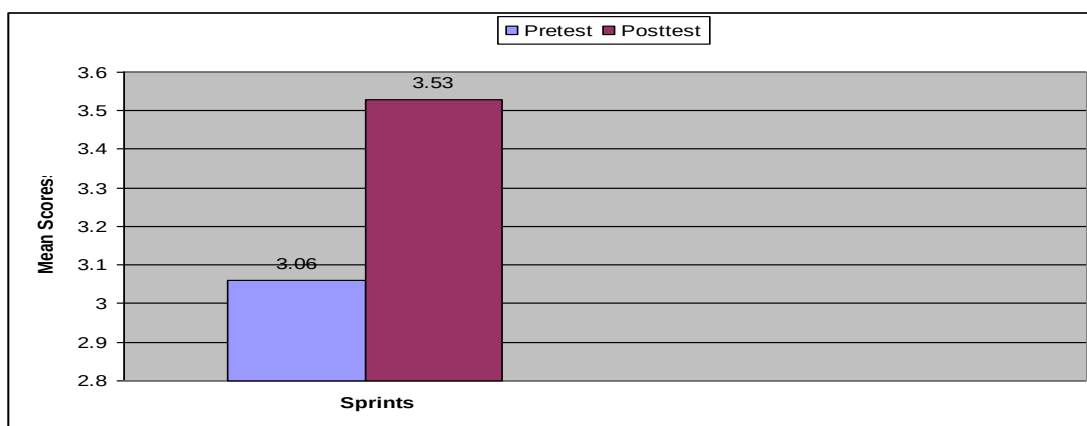


Fig.3: Mean Scores Pretest and Posttest for Sprints of Female Basketball Players

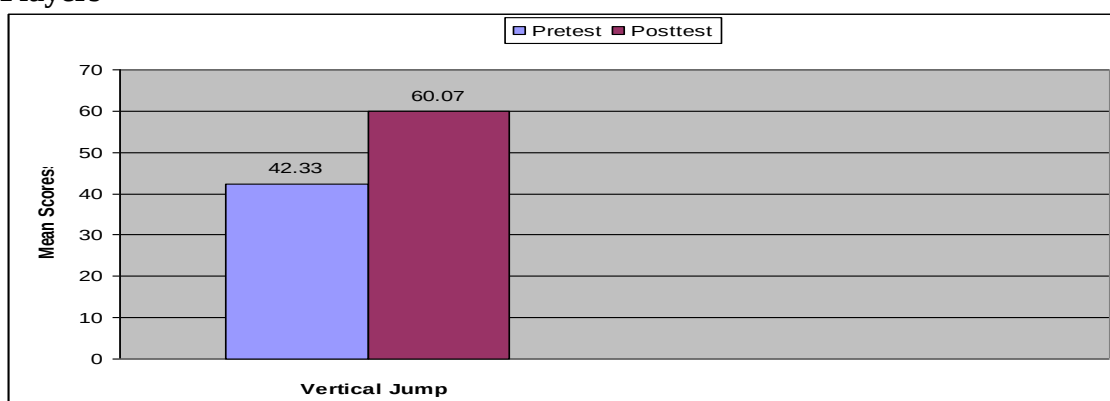


Fig.4: Mean Scores Pretest and Posttest for Vertical Jump of Female Basketball Players.

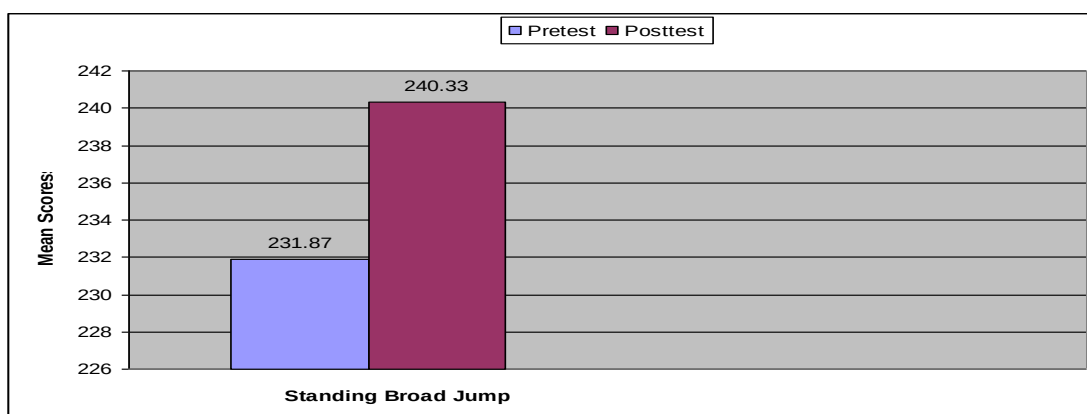


Fig.1: Mean Scores on Pretest and Posttest for Standing Broad Jump of Female Basketball Players

TABLE 2
SIGNIFICANCE OF DIFFERENCE BETWEEN MEAN SCORES ON SPECIFIC
PHYSICAL FITNESS OF FEMALE BASKETBALL PLAYERS

Variables	Sex	Mean	MD	σ DM	t-ratio
Single-limb balance time	Pretest Post-test	27.07 26.20	.87	0.54	1.60
Vertical jump	Pretest Post-test	42.26 60.01	17.75	1.35	13.11*
Agility run	Pretest Post-test	5.71 6.73	1.02	0.31	3.27*
Sprint	Pretest Post-test	3.06 3.53	0.47	0.25	1.90
Standing broad jump	Pretest Post-test	231.87 240.33	8.46	3.38	2.50*

Significant at .05 level, $t_{.05 (28)} = 2.05$

It is clearly evident from Table 2 that the statistically significant differences was found between pretest and post test mean score of female basketball players in their vertical jump, agility run and standing broad jump, as the obtained t-values of 13.11, 3.27 and 2.50 were higher than the required $t_{.05 (28)} = 2.05$ to be significant. No statistically significant difference between pretest and post test mean score of female basketball players in their single-limb balance time, and sprint run, as the obtained t-values of 1.60 and 1.90 respectively were lesser than the required $t_{.05 (28)} = 2.05$

DISCUSSION

The objective for this study was to determine the effect of six week training programme on specific physical fitness of female basketball players. The t- ratio was utilized to achieve this objective.

Results of the descriptive analysis of data indicated that the female basketball players had improved their results through the initial and final testing in the agility run, sprints. Vertical jump and standing broad jump except single-limb balance time of physical fitness after the six week training programme.

Results of the analysis of the differences between the initial and final measuring by t-test indicated that the statistically significant differences were found among female basketball players between the initial and final measuring of explosive strength of the legs through standing broad jump and vertical jump test and agility run. But they did not differ significantly between the initial and final testing of single limb balance time and speed. Results of analysis also indicated that they had improved their results at some extent after the availing six weeks training programme.

It was hypothesized that significant difference may exist among fifteen years old female basketball players between the pre-test and post tests of specific physical fitness, who utilized training program of six week. is partially accepted, as the mean scores of pre-test and post tests of standing broad jump, agility and vertical jump of female basketball players clearly indicates the statistically significant of differences in their vertical jump, agility and standing broad jump motor abilities. But the insignificant differences existed among junior female basketball players on pretest and post-test measuring of other specific physical fitness i.e. single limb balance time and speed.

CONCLUSIONS

Within the frame–work of the present investigation, the following conclusions may be drawn:

1 The six-week sand training program have an effect on the statistically relevant increase in the explosive type strength of the leg muscles and agility, which in turn leads to an increase in the vertical jump standing long jump. and agility run.

2. By means of the analysis it has been established that the difference in the resulting vertical jump and standing broad jump is beneficently relevant for the female basketball players of 15 years old after the six week training programme.

3. Significant improvement was not seen in single limb balance and sprints performance of female basketball players by means of six week training programme.

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Appendix-I

Week 1, training sessions 1 and 2, 70% load

The zig-zig running	-3sets of 30 meter
The box jump sideways	-2 sets, 30 sec., height of the box: 20 cm.
Tuck Jump	-2 sets, 9 Jumps.
Vertical jumps	-2 sets, 8 Jumps.

Week 2, training sessions 3 and 4, 80% load

The zig-zig running	-3sets of 30 meter
.The box jump sideways	-3 sets, 30 sec., height of the box: 20 cm.
Tuck Jump	-3 sets, 10 Jumps.
Vertical jumps	-3 sets, 9 Jumps.

Week 3 , training sessions 5, 6 and 7, 90% load

The zig-zig running	- 4sets of 30 meter
The box jump sideways	-3 sets, 60 sec., height of the box: 30cm.
Tuck Jump	-3 sets, 12 Jumps.
Vertical jumps	-3 sets, 11 Jumps.

Week 4, training sessions 8 and 9, 80% load

The zig-zig running	-3sets of 30 meter
The box jump sideways	-3 sets, 60 sec. height of the box: 30 cm.
Tuck Jump	-3 sets, 10 Jumps.
Vertical jumps	-3 sets, 9 Jumps.

Week 5 , training sessions 10, 11 and 12, 90% load

The zig-zig running	-3sets of 20 meter
The box jump sideways	-3 sets, 90sec height of the box: 30 cm.
Tuck Jump	-3 sets, 11 Jumps.
Vertical jumps	-3 sets, 11 Jumps.

Week 6, training sessions 13, 14 and 15, 100% load

The zig-zig running	- 4sets of 30 meter
The box jump sideways	-3 sets, 90sec.,height of the box: 30 cm.
Tuck Jump	-3 sets, 13 Jumps.
Vertical jumps	-3 sets, 12 Jumps.

Appendix-II

1. SHUTTLE RUN

Purpose: To measure speed and agility

Facilities and Equipment: Two lines parallel to each other and 10 yard apart were marked on the field. Stop watch, wooden blocks and whistle were the equipments.

Procedure: The subject stood in front of one of the lines with two wooden blocks beyond the other line. On the signal start the subject run to the blocks, take one, and returns to the second block, take one, and returns to the second block, which is carried across the starting line on the way back.

Scoring: The score was the total time taken to complete the course recorded to 1/10th of a second.

2. 50 YARD DASH

Purpose: To measure speed

Facilities and Equipment: Hockey ground with starting line a 50 yard course and a finish line. two stopwatches.

Procedure: After a short warm up period the subject takes a position behind the starting line. Best results are obtained one line was used as a starting line and the other as the finish line on the signal Ready? Go! The subjects start running at their best to reach the finish line at their earliest.

Scoring: The score was the time taken to complete the course to the nearest 1/10th of a second between the starting signal and the instant the subjects crossed the finishing line.

3. STANDING BROAD JUMP

Purpose: To measure strength & power of the legs muscles.

Facilities and Equipment: Tape measure and space on the floor or an outdoor jumping pit.

Procedure: The subject stands behind a takeoff line with his feet several inches apart. Before, jumping the student dips at the knees and swings the arms backward. She then jumps forward by simultaneously extending the knees and swinging the arms forward. Two trials are permitted. Measurement was from the closest heel mark to the takeoff line.

Marking: The score was the best of three distances recorded in centimeters and inches only the best trial was recorded.

4. VERTICAL JUMP

The vertical jump is measured using a wall test. Two trials for flat-footed vertical jump were performed. and we recorded the highest jump in centimeters/meters.

5. SINGLE LIMB BALANCE

. Hand-held timer was used by researcher to measure the duration of time (± 0.5 s) the subject balanced up to a total of 30 seconds. If athletes lost their balance, the time was recorded when they contacted the ground with the non-weight bearing leg.

JOB SATISFACTION AMONG TEACHERS OF PROFESSIONAL AND NON PROFESSIONAL COURSES

Mr Gulbahar Khan* Dr Bharat Bhushan Singh** Dr Dravin***

ABSTRACT

The purpose of the study was to compare job satisfaction between teachers of professional and non professional courses. For the purpose of this study, total seventy teachers were randomly selected. Thirty five teachers were selected from non professional courses and thirty five from professional courses. To determine the Job Satisfaction of teachers the Job Satisfaction Scale for Teacher's (J.S.T.) developed by S. K. Saxena was used. To compare the job satisfaction of teachers t -test was used at 0.05 level of significance. there was no significant difference between teachers of professional and non professional courses in relation to job satisfaction because the calculated value of $t_{0.05(68)} = 1.021$ was lower than the tabulated value of $t_{0.05(68)} = 172$. The table also reveal that teachers of professional courses have more job satisfaction than the teachers of non professional courses but the difference was not significant.

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INTRODUCTION

Job satisfaction describes how content an individual is with his or her job. The happier people are within their job, the more satisfied they are said to be. Job satisfaction is not the same as motivation, although it is clearly linked. Job design aims to enhance job satisfaction and performance, methods include job rotation, job enlargement and job enrichment. Other influences on satisfaction include the management style and culture, employee involvement, empowerment and autonomous work groups.

Job satisfaction is a very important attribute which is frequently measured by organizations. The most common way of measurement is the use of rating scales where employees report their reactions to their jobs. Questions relate to rate of pay, work responsibilities, variety of tasks, promotional opportunities the work itself and co-workers.

Job satisfaction can also be seen within the broader context of the range of issues which affect an individual's experience of work, or their quality of working life. Job satisfaction can be understood in terms of its relationships with other key factors, such as general well-being, stress at work, control at work, home-work interface, and working conditions.

One of the most important aspects of an individual's work in a modern organization concerns the management of communication demands that he or she encounters on the job. Demands can be characterized as a communication load, which refers to "the rate and complexity of communication inputs an individual must process in a particular time frame (Faraca, Monge, & Russel, 1977)."

Individuals in an organization can experience communication over-load and communication under- load which can affect their level of job satisfaction. Communication overload can occur when "an individual receives too many messages in a short period of time which can result in unprocessed information or when an individual faces more complex messages that are more difficult to process (Farace, Monge, & Russel, 1997)." Due to this process, "given an individual's style of work and motivation to complete a task, when more inputs exist than outputs, the individual perceives a condition of overload which can be positively or negatively related to job satisfaction. In comparison, communication under load can occur when messages or inputs are sent below the individual's ability to process them (Farace, Monge, & Russel, 1997)." According to the ideas of communication over-load and under-load, if an individual does not receive enough input on the job or is unsuccessful in processing these inputs, the individual is more likely to become dissatisfied, aggravated, and unhappy with their work which leads to a low level of job satisfaction.

Job Satisfaction can be an important indicator of how employees feel about their jobs and a predictor of work behaviours such as organizational citizenship (Organ & Ryan,1995), absenteeism, (Wegge et. al., 2007). and turnover (Saari & Judge, 2004). Further, job satisfaction can partially mediate the relationship of personality variables and deviant work behaviors (Mount, Ilies, & Johnson, (2006).

There are three reasons to clarify the importance of job satisfaction. First, organizations can be directed by humanitarian values. Based on these values they will attempt to treat their employees honorably and with respect. Job satisfaction assessment can then serve as an indicator of the extent to which employees are dealt with effectively. High levels of job satisfaction could also be a sign of emotional wellness or mental fitness. Second, organizations can take on a utilitarian position in which employees' behavior would be expected to influence organizational operations according to the employees' degree of job satisfaction/dissatisfaction. Job satisfaction can be expressed through positive behaviors and job dissatisfaction through negative behaviors. Third, job satisfaction can be an indicator of organizational operations. Assessment of job satisfaction might identify various levels of satisfaction among organizational departments and, therefore, be helpful in pinning down

areas in need of improvement. He also believed that each one of the reasons is validation enough of the significance of job satisfaction and that the combination of the reasons provides an understanding of the focus on job satisfaction.

A teacher teaching properly in the class-room, completing the course of study, solving the difficulties of the students, helping them in appearing the various examinations is called as he is professional man. While a teacher will not paying attention in the working of the school but inviting the students for highly charged private classes may be called as a businessman. Hence the purpose, the motto, the ethics is important for the same work to be called as business or profession, though in both the case earning is a common factor. Satisfaction and non fulfillment of these needs decides the individual perceptions of how this needs are satisfied. Job satisfaction have defined by different people. Evidences to certify their through have been gleaned from various sources, even the definition becomes not possible in the real terms.

Job Satisfaction can be an important indicator of how employees feel about their jobs and a predictor of work behaviours such as organizational citizenship (Organ & Ryan,1995), absenteeism, (Wegge et. al., 2007). and turnover (Saari & Judge, 2004). Further, job satisfaction can partially mediate the relationship of personality variables and deviant work behaviors (Mount, Ilies, & Johnson, (2006).

One common research finding is that job satisfaction is correlated with life satisfaction (Rain, Lane & Steiner, 1991). This correlation is reciprocal, meaning people who are satisfied with life tend to be satisfied with their job and people who are satisfied with their job tend to be satisfied with life. However, some research has found that job satisfaction is not significantly related to life satisfaction when other variables such as non-work satisfaction and core self-evaluations are taken into account (Rode, 2004).

Purpose of the study was to compare job satisfaction between teachers of professional and non professional courses.

MATERIALS AND METHOD

For the purpose of this study, total seventy teachers were randomly selected. Thirty five teachers were selected from non professional courses and thirty five from professional courses. To determine the Job Satisfaction of teachers the Job Satisfaction Scale for Teacher's (J.S.T.) developed by S. K. Saxena was used. To compare the job satisfaction of teachers t test was used at 0.05 level of significance.

RESULTS AND DISCUSSION

To find out the significant difference between teachers of professional and non-professional courses in their job satisfaction, means, standard deviationa and t-ratio were computed and data pertaining to have been presented in Table and depicted in Figure 1

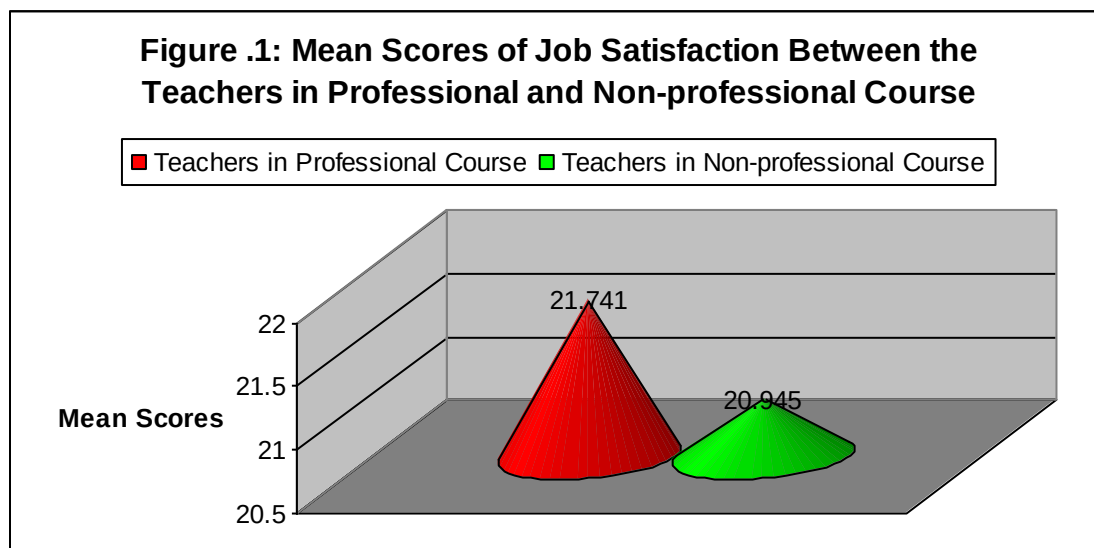
TABLE 1
COMPARISON OF JOB SATISFACTION BETWEEN TEACHERS OF PROFESSIONAL
AND NON PROFESSIONAL COURSES

Group	Mean	MD	DM	t-ratio
Professional	21.741	.791	.755	1.021
Non-Professional	20.945			

Insignificant at .05 level
t 0.05 (68) = 1.72.

Table 1 shows that there was no significant difference between teachers of professional and non-professional courses in their job satisfaction, as the calculated value of

1.021 was lower than the required value of $t_{0.05(68)} = 1.72$. This indicates that teachers of professional courses have more job satisfaction than their counterparts. But both groups were found to have similar job satisfaction in their professional course.



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A COMPARISON OF PHYSICAL FITNESS AND ACADEMIC PERFORMANCE OF MALE AND FEMALE CHILDREN OF ENGLISH MEDIUM SCHOOL

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ABSTRACT

The purpose of this study was to investigate the relationship between physical fitness and academic achievement of male and female children. The present study was based upon the male and female children of 7th class belong to Krishana Public School Koni Bilaspur. Fifty (Males=25, Females= 25) subjects were selected. The President's Challenge Physical Fitness test is designed to assess students based on five areas of physical fitness abdominal/core muscle strength and endurance (sit-ups), upper body strength and endurance (pull-ups), flexibility (sit and reach), agility (shuttle run), and cardiopulmonary endurance (mile run). The academic achievement was based upon the current academic year of each student in form of total mark obtain in the five subjects at 7th examinations. The mean age of male and female subjects were 13.40 ± 0.57 and 13.28 ± 0.64 respectively studying in 7th class. . To find out the relationship between academic achievement and five physical fitness components of adolescence male and female children means, and standard deviations were computed. The Pearson's Product Moment Correlation coefficients were calculated. The results were also compared with the adequate significant value at .05 level of confidence. Results of the study concluded that this study provided varying correlations between physical fitness and academic achievement among male and female students. Academic achievement of female children did not correlated with the five test items of President's Challenge Physical Fitness. Male children were found to have significant relationship between academic achievement and upper body strength followed by flexibility and other fitness components did not.

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INTRODUCTION

In the present days, every individual feels the importance of educational values in their life. In the process of education, many people follow the concept of education. They think that literacy and theoretical knowledge is the only channel of education, where as, education includes the mental, physical, social, spiritual, intellectual and economical etc., dimension to the process of learning the education.

The education means the modifications in behavior. This statement peruse to the various alteration and modification which may be conducted with the help of education, environment and teaching or training. The education may only be achieved, when the various body systems engaged and involved in a co-coordinative and systematic form. The educational concept of all-round development of a human being refers to various dimensions in which the physical dimension plays an important role to provide practical shape to the education process.

Teachers play an integral role to help foster the importance of lifelong physical activity in children. Unfortunately, the opportunities for children to engage in physical activity at school are dwindling. Physical education classes and recess are being eliminated from the school day. Schools and teachers have been under increased pressure to increase student achievement.

Children are becoming more and more immobile with health concerns which include being overweight, childhood obesity, high blood pressure, depression, and other diseases and trepidations. These health concerns can linger for long periods of time, if not for a lifetime.

Health and educational professionals believe that physically active students perform better in the classroom. One study found a statistically significant relationship between fitness and academic achievement (Chomitz, Slining, McGowan, Mitchell, Dawson, & Hacker, 2009).

Promoting physical fitness and increasing opportunities for physical activity has implications to support academic achievement. Results from animal studies have shown that physical activity stimulates the neural development in the brain (Studenski, et.al., 2006).

Based on previous research with children, physical fitness can be globally related to academic achievement. Future research is deemed necessary to better determine the role physical fitness has on academic achievement.

The relationship between physical fitness and academic achievement has received much attention owing to the increasing prevalence of children who are overweight and unfit, as well as the inescapable pressure on schools to produce students who meet academic standards.

The benefits of physical fitness are widely acknowledged and extend across many domains of wellness. The association between fitness and academic achievement, however, remains to be clarified, especially in young children. Therefore, the purpose of this study was to examine the relationship between fitness and academic achievement in pre-adolescence male and female children

The purpose of this study was to investigate the relationship between physical fitness and academic achievement of male and female children.

Castelli, et. al. (2007) examined 259 public school students in third and fifth grades and found that field tests of physical fitness were positively related to academic achievement. Martin and Chalmers (2008) indicated the statistically significant relationships between fitness and academic achievement, though the direction of causation is not known. Eveland-Sayers, et. al. (2009) find out a link between specific components of physical fitness and academic achievement in elementary school children. Roberts (2009) found statistically significant relationships between physical fitness and two of the three measures used for academic achievement: STAR Math Percentiles and GPA's. Physical fitness and academic

achievement influence each other in ways that are still vague. Rodenroth. (2010) did not found a significant relationship between physical fitness scores based on the President's Challenge Physical Fitness Test and academic performance based on Grade Point Averages for fourth and fifth graders at the participating school. Du Toit, Pienaar & Truter (2011) found a positive relationship between physical fitness components and academic achievement was found with more significant correlations among girls than boys, as well as among older boys and girls.

METHODOLOGY

Selection of Subjects:

The present study was based upon the male and female children of 7th class belong to Krishana Public School Koni Bilaspur. Fifty (Males=25, Females= 25) subjects were selected to conduct the President's Challenge Physical Fitness Test and recording of academic achievement. The mean age of male and female subjects were 13.40 ± 0.57 and 13.28 ± 0.64 respectively studying in 7th class.

Selection of Instrument:

The student's physical fitness was assessed according to the President's Challenge Physical Fitness Test. This instrument was developed in 1953 to help promote a basic level of physical fitness for students. The President's Challenge Physical Fitness Test is a nationally recognized program and is a valid assessment tool that determines physical fitness levels.

The academic achievement was based upon the current academic year of each student in form of total mark obtain in the five subjects at 7th examinations. Average scores were calculated from current year achievement of student in English, Hindi, Mathematics, Science, and Social Studies.

Description and Administration of Test's Items:

The President's Challenge Physical Fitness test is designed to assess students based on five areas of physical fitness abdominal/core muscle strength and endurance (sit-ups), upper body strength and endurance (pull-ups), flexibility (sit and reach), agility (shuttle run), and cardiopulmonary endurance (mile run). A certified physical education teacher must administer and conduct the tests. The tests that the physical education teacher assessed, and the ones the researcher used for the study were sit-ups, shuttle run, one-mile run, pull-ups, and the sit and reach. The reason these fitness tests were used is because these are among the most common physical fitness tests for the identified areas of physical fitness

RESULTS AND DISCUSSION

To find out the relationship between academic achievement and five physical fitness components of adolescence male and female children means, and standard deviations were computed. The Pearson's Product Moment Correlation coefficients were calculated to reach at the final result of the study. The results were also compared with the adequate significant value at .05 level of confidence. and data pertaining to this have been presented in Table 1 to 2.

TABLE 1

DESCRIPTIVE STATISTICS OF VARIOUS COMPONENTS OF PHYSICAL FITNESS, AGE, HEIGHT, WEIGHT AND BMI OF MALE AND FEMALE CHILDREN

S.NO.	Test variables	Male(N=50)		Female (N=50)	
		Mean	SD	Mean	SD
1	Sit-ups	14.07	6.59	14.08	5.31
2	Pull-ups	2.14	1.18	01.16	0.80
3	Sit and Reach	25.89	4.43	25.60	4.00
4	Shuttle run	31.64	6.15	32.40	4.55
5	1Mile Run	11.99	1.79	13.18	1.68

The mean scores of various components of physical fitness of male and female children belong to Krishana Public School, Koni, Bilaspur (CG) have been depicted in figures 1 to 9.

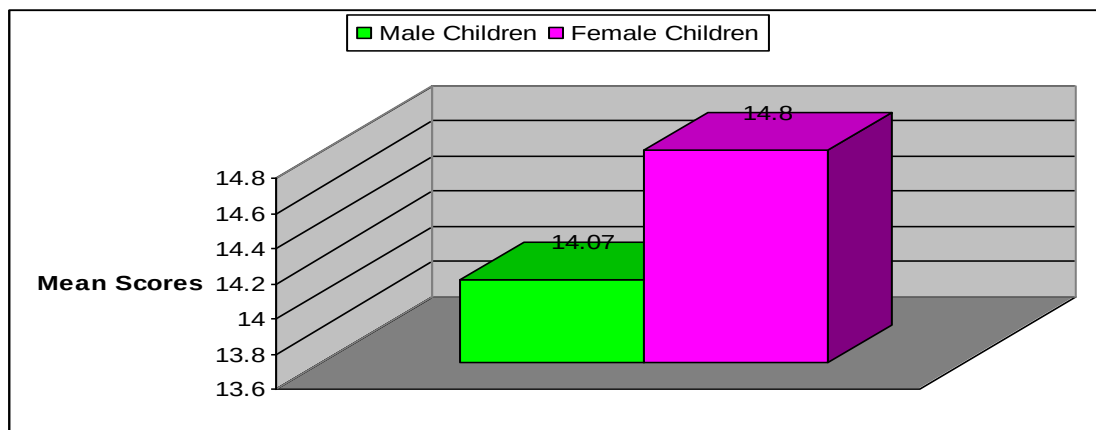


Figure 1: Mean Scores of Sit-ups (abdominal strength) of Male and Female students.

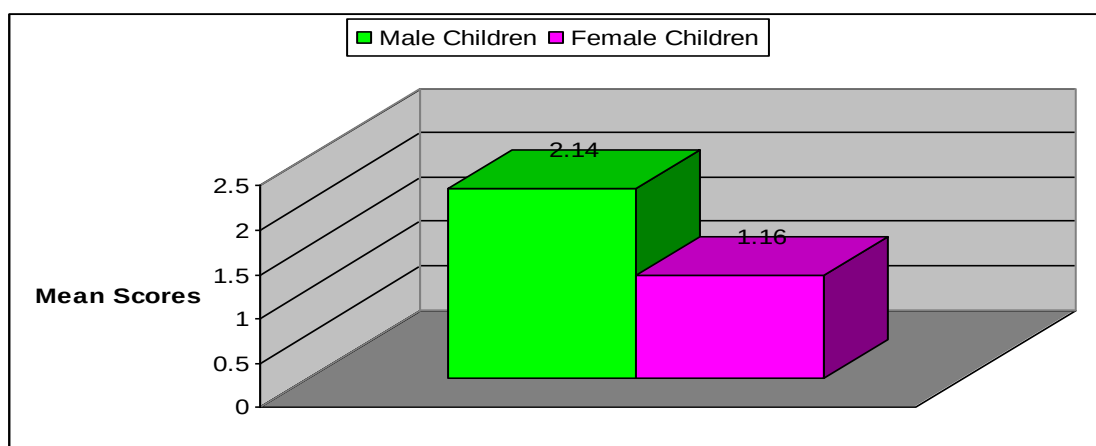


Figure 2: Mean Scores of Pull-ups (Shoulder strength) of Male and Female students.

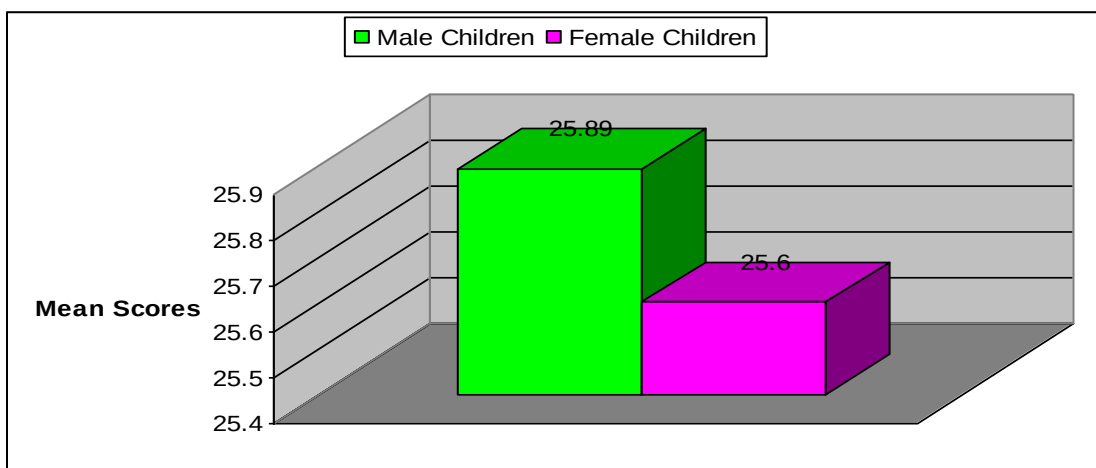


Figure 3: Mean Scores of Sit and Reach (Flexibility) of Male and Female students.

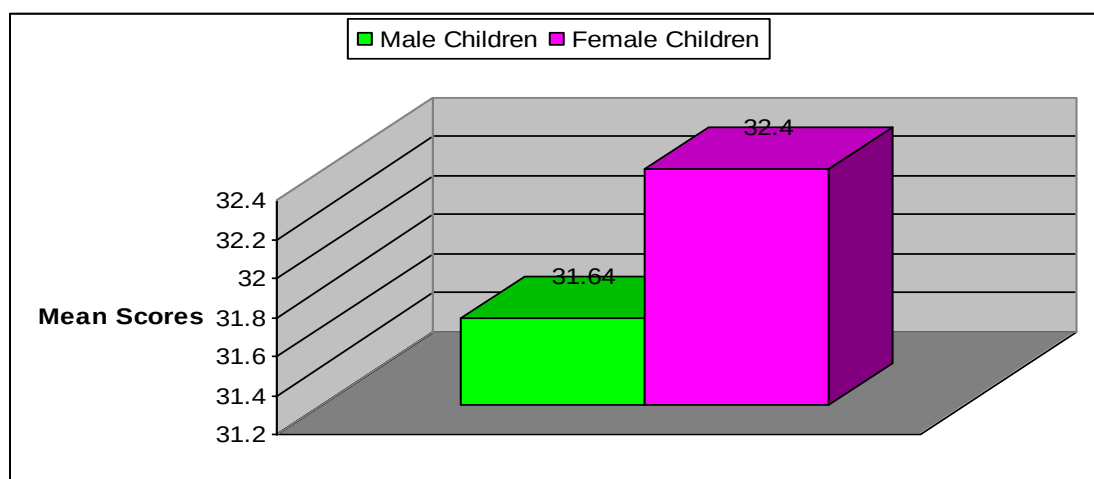


Figure 4: Mean Scores of Shuttle Run (Agility) of Male and Female students.

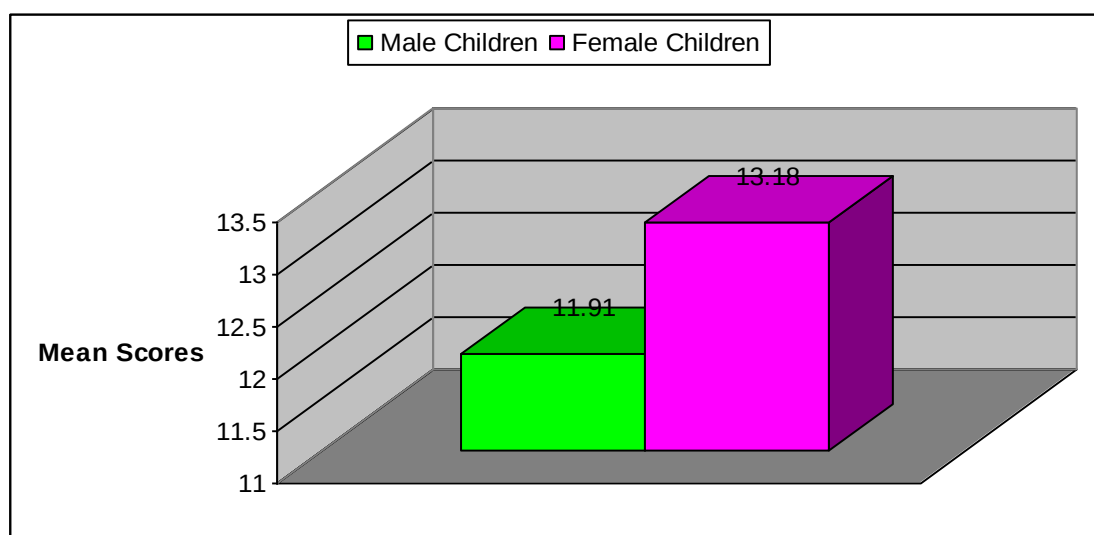


Figure 5: Mean Scores of 1 Mile Run (Endurance) of Male and Female students

TABLE 2

RELATIONSHIP BETWEEN ACADEMIC ACHIEVEMENT AND PHYSICAL FITNESS COMPONENTS OF AMONG MALE AND FEMALE CHILDREN

S.NO.	Variables Correlated	Males	Females
1.	Academic Achievement V/S Sit-up	-.127	-.187
2.	Academic Achievement V/S Pull-ups	-.409*	.177
3.	Academic Achievement V/S Sit & Reach	-.494*	-.134
4.	Academic Achievement V/S Shuttle run	.010	-.198
5.	Academic Achievement V/S 1 Mile run	-.181	.130

*Significant at .05 level, $r_{.05(48)} = .279$

Table 2 shows that there is statistically significant correlation existed between academic achievement - Pull-ups followed by Sit and reach components of physical fitness among male children, as the Pearson's Product Moment Correlations ('r') of -.409, and -.494, respectively were higher than the required value to be significant. But significant correlation did not existed between academic achievement- Sit-ups followed by shuttle run and 1 Mile

run components of physical fitness among female children, as the Pearson's Product Moment Correlations (r) of $-.127$, $.010$ and $-.181$ respectively were found lesser than the required value of $r_{.05(48)} = .279$.

In case of Female, significant correlations were not found between academic achievement - Sit-ups followed by Pull-ups, Sit and reach (abdominal strength) shuttle run and 1 mile run components of physical fitness among female children, as the Pearson's Product Moment Correlations (r) of $-.187$, $.177$, $-.134$, $-.198$ and $.130$ respectively were less than the required value of $r_{.05(48)} = .279$.

DISCUSSION

Findings of the descriptive data of pre-adolescence male and female students on various physical fitness components indicated that male students were found to have more upper-body strength and flexibility than their counterparts. In case of female students, they were found to have more amount of strength and endurance of abdominal muscles, speed and agility and cardio-pulmonary endurance in comparison of male respondents.

When the relationship established between five components of physical fitness and academic achievement among pre-adolescence male and female children, significant correlations were found between academic achievement- pull-ups (Upper body strength and endurance) followed by flexibility among male respondents. But, they did not have significant correlation between academic achievement -sit-ups followed by shuttle run and 1 mile run physical fitness scores based on the President's Challenge Physical Fitness Test. But the results of this study provided varying correlations between physical fitness and academic achievement among male students,

In case of female children, there was no significant correlation between academic achievement based on Grade Point Averages and physical fitness scores based on the President's Challenge Physical Fitness Test.

The results of this study differ from other studies that involved physical fitness and academic achievement, in that numerous studies have found a significant correlation between physical fitness and academic achievement, and this research study did not in case of female children.

CONCLUSIONS

1. Female students, they were found to have more amount of strength and endurance of abdominal muscles, speed and agility, and cardio-pulmonary endurance in comparison of male respondents.
2. Male students were found to have more amount of upper body strength endurance and flexibility in comparison of female respondents.
3. Female children did not have any significant correlation between academic achievement and all components of Physical fitness.
4. Male children were found to have significant correlation between academic achievement and two components of physical fitness i.e. pull-ups and sit and reach test.
5. Results of this study provided varying correlations between physical fitness and academic achievement among male and students.

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EFFECT OF EXTRINSIC MOTIVATION ON PERFORMANCE OF PHYSICAL FITNESS COMPONENTS OF KASHMIR REGION STUDENTS

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ABSTRACT

The purpose of the study was to determine the effect of extrinsic motivation on performance of physical fitness components of Kashmir region students. Sixty male students of adolescent age group with age ranging between 13 to 19 years and studying in boys secondary school, Peth Makhama, were randomly selected as subjects. All subjects were randomly assigned to two experimental group (A. & B.) and one control group (C), each were consisting of 20 subjects. The experimental treatment was also assigned to the group at random. The group A and B were treated as experimental group and were given motivation i.e. Reward and punishment respectively. The group C served as a control group and was not given any motivation. "AAPHER" youth physical fitness test consisted of six test items i.e. 600 Meter Run/walk, Sit-ups, Pull-ups, 50 m dash, 4x10 M. shuttle run, and Standing broad jump was chosen for the purpose of data collection. Reward can be in varied ways such as recognition, prizes, certificates, honors etc. Punishment on the other hand is an unpleasant stimulus: a stimulus that hurts threatens, annoys bothers etc. It is a negative motive and is based on fear of failure, fear of losing prestige, fear of insult etc., Mean SD, t-test F-test was applied to get the final results for the present investigation. Significant difference was found between initial test mean and final test mean of reward group, whereas the results of initial test and final test of punishment group and control group did not differ significantly. There was no significant difference between the performance of reward group - punishment group and between the punishment and control groups.

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INTRODUCTION

Motivation is a reality but the most difficult problem at hand is how to deal with it, how to instill it, how it is necessary to do so in the interest of life itself.

Motivation is a tool in the hands of the Physical Education teachers and the coaches to bring about effective and desirable changes in the behaviour of the learner at any stage. How should the Horse/be made to drink, how should the adult made to drink from the cup of life, how should a child be made to enter the school and how should the athlete be made to put in his best in a competitive situation are some of the problems which parents, Teachers and coaches have to encounter. Motivation then is challenging task for the Teacher and the coaches.

Motivation is concerned with the intensity and the direction of behaviour. Athletes may be intrinsically motivated to be competent or extrinsically motivated. Coaches can motivate Athletes through such direct method as compliance, identification and inter analysis and through indirect method. Athletes differ in the responsibility they perceive for the reward and the punishment they receive (Martin, 1980).

Internal motivation is rooted in the biological and psychological processes of man, external motivation also known as secondary reinforcement has social orientation; in other words, it has its genesis in the interplay of social forces. In psychological literature, it is termed as external pull the incentives and attractions the environment offers to the individual to induce him to engage in certain kind of behaviour. For example, we do great things to draw people's attention towards us, to get recognition from the society for what we do, and receive (or expect to receive) some material benefit such as awards, rewards, money etc. The higher and stronger these incentives are, the greater is the effort an individual puts in to perform better and climb on to the higher rungs of success in his/her specialized field of activity arts, crafts, sports, literature, science, architecture etc. The expectation to get higher grade in academic work makes the school boy study hard. The promise of a higher status in society makes a philanthropist engage in activities considered beneficial to the society at large. The idea of earning more profit and building up a big business empire motivates a trader to adopt ingenious techniques of running his establishments (Kamlesh, 2006).

Extrinsic motivation is more of a reinforce than a natural stimulus to activity. However recent activities have conformed that extrinsic motivation, when used deftly in a limited way, proves very helpful in skill learning during childhood because children would not realize the worth of the activity and its real goals, we may motivate the child to play by giving him some sort of rewards but we lean not teach him on the worth of play. In case, play is made so interesting that it attracts everyone's attention, the child would not hesitate taking to it without any coaxing and cajoling by either mother or the teacher.

Award and reward may help in eliciting natural response from students but emphasis on these devices proves unrewarding in the long run. Extrinsic motivation has ambivalent implications in physical education and sports.

Reward and punishment is a part of motivation. These two are the two ends of motivation which could be used effectively. The reward as a positive motive seeks to influence conduct favorably by associating a pleasant feeling with desire act. It serves as a powerful motivation for them to continue and to try to live up to the expectations. Reward can be in varied ways such as recognition, prizes, certificates, honors etc. Punishment on the other hand is an unpleasant stimulus: a stimulus that hurts threatens, annoys bothers etc. It is a negative motive and is based on fear of failure, fear of losing prestige, fear of insult etc.

Psychologist has found that a reward such as smile or a small gift for good behaviour is more effective as a motivator of self control than punishment. Whether punishment is administered by Parent, a Teacher or any adult, his attitude should be objective and calm (Grow and Crow, 1953).

So both reward and punishment' should be used by the Coach or teacher to motivate the Children for improvement of performance. He must judicially and appropriately analyze the environmental condition to see which method is appropriate for the child because of the individual difference the effect may be in a positive or in a negative way for enhancement of performance. So while rewarding for an effort or punishing, a balance is needed otherwise the extreme approach may become ineffective.

Motivation is a process by which an individual is inspired guided as coaxed to do something. It is one of the important conditions rather than the central core of life. In other words it is that psychophysical condition of the organism which causes an individual to work as strive to fulfill his needs. In to work as strive fulfill his needs. In absence of proper motivation not only learning process but also life style itself becomes an uninteresting uphill task. Motivation than is considered as that process by which a child may be prepared to respond to situation which are directed towards the achievement of certain predetermined goals or objectives. In this field of physical education and sports, no athlete can win or even show better performance without motivation (Kamlesh, 1988).

Thus the present investigation enquires into the phenomenon of establishing the effect of extrinsic motivation on performance of physical fitness components of Kashmir region students. This knowledge will be of profound use in training, guiding and coaching the athletes for various sports and games.

Chamblee studied the influence of reward in the form if verbal argument feed back condition on the acquisition of closed irons physical skill by beginners. Rushall and Fatteringer studied the effect of various reinforcers used as motivators in swimming . Perrystudied sixty-nine females to determine the effect of individualized extrinsic motivational techniques on the performance of vertical jump and handgrip. School ward Ryan experimented to determine the effects of four types of motive incentive conditions on grip strength. Lee examined the performance and attitudinal effect of two levels of absolute feed back with and without payment and followed by one of two levels of normative feed back (success or failure). Ghenn stated the differences between the basketball wall volley test and the chining test in the basketball wall volley test the best of three are resulted in the greatest statistical difference and the use of scale scores with encouragement for the chining test yielded the greatest significant difference. Noble concluded that the incentive motive condition did not effect performance. Kamlesh concluded that excellence, affiliation success and sensation are the major reasons for the athletes to participate in competitive sports, and male and female athletes to do not differ on the level of their incentive motivation. He also found that Indian athletes are average in their motivational profile.

The purpose of the study was to determine the effect of extrinsic motivation on performance of physical fitness components of Kashmir region students. It was also hypothesized that the reward method would be better in comparison to punishment method in improving the physical fitness performance.

METHODOLOGY

Selection of Subjects

60 male students of adolescent age group with age ranging between 13 to 19 years and studying in boys secondary school, Peth Makhama, were randomly selected as subjects. All subjects were randomly assigned to two experimental group (A. & B.) and one control group (C), each were consisting of 20 subjects. The experimental treatment was also assigned to the group at random. The group A and B were treated as experimental group and were given motivation i.e. Reward and punishment respectively. The group C served as a control group and was not given any motivation. All subjects were participating in the normal programme of the school. Random group design was adopted for this study

Criterion Measures

"AAPHER" youth physical fitness test was selected and their scores from following test were considered as criterion measures for this study.

1. 600 m run/walk
2. Sit-up s
3. Pull-ups
4. 50 m dash
5. 4x10 m shuttle run
6. Standing broad jump

Instrumentation

Physical fitness: All the Physical Fitness test were explained to the subject prior to its administration .the subject were given chance to practice the prescribed tests, whenever necessary to become familiar with the test and know exactly what was done. See Appendix-1

Rewards : To prepare the students psychological for test, scholar explained in detail about reward techniques. The reward was consisted of different prizes for the first to six positions. For all motor components out of 20 students the best six positions were selected on the basis of their performance. Research scholar distributed the prizes to the position holders accordingly.

Punishment: This technique was introduced in the form of threat and punishment to the student before talking the test. The entire students were assembled and introduced that they must improve their performance otherwise they would be made to run around the track. The technique was applied on all physical fitness components. Conversion of Raw scores into standard scores.

The obtained raw scores were converted into standard scores by using the formula - $Z = \frac{X-m}{\alpha}$. The negative values obtained were converted into positive values by using Table No. 'A' of normal probability curve(Garrett, 1969).

RESULTS AND DISCUSSION

To find out the significance of differences between pretest and post-test means of three groups i.e. Reward & Punishment (experimental groups) and one control group on composite scores of "AAPHER" youth physical fitness test performance, t-test was applied and data pertaining to this have been presented in Table 1 and depicted in Figure 1-3.

TABLE -1

SIGNIFICANCE OF DIFFERENCE BETWEEN T PRE-TEST AND POST-TEST MEANS OF THE EXPERIMENTAL AND ONE CONTROL GROUP ON COMPOSITE SCORES OF "AAPHER" YOUTH PHYSICAL FITNESS TEST PERFORMANCE.

Groups	Pre- Test	Post-Test	MD	σ DM.	t-ratio
Reward	299.48	332.22	32.74	9.58	3.40*
Punishment	325.08	329.80	04.72	9.05	0.52
Control	293.72	278.68	15.04	12.08	1.24

*Significant at .05 level, $t_{.05(38)} = 2.02$

It is evident from Table-1 that the significant difference was found between the pre-test and post-test of reward group, as the obtained t-value of 3.40 was higher than the required value to be significant. Insignificant differences were found among the punishment and control groups, obtained t- values of 0.52 and 1.24 respectively were lesser than the required value $t_{.05(38)} = 2.02$

Fig. 1: Paired Means of Reward Group in composite Score of "AAHPER" Physical Youth Fitness test performance

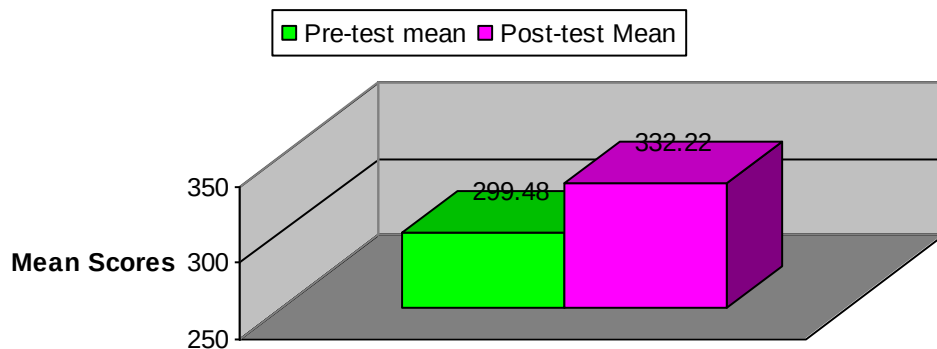


Fig. 2: Paired Means of Punishment Group in composite Score of "AAHPER" Physical Youth Fitness test performance

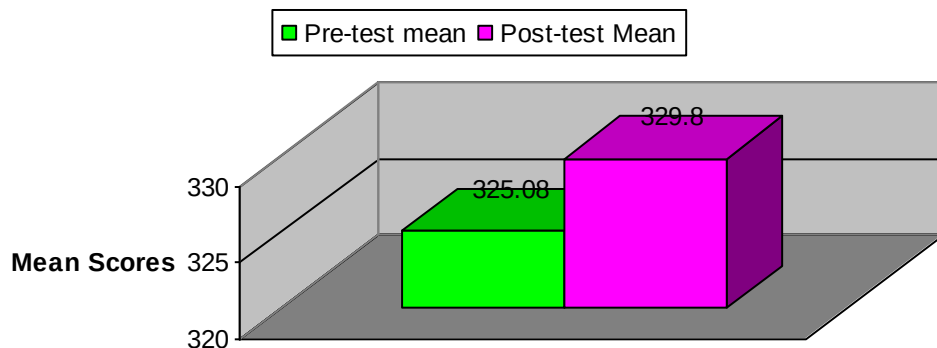
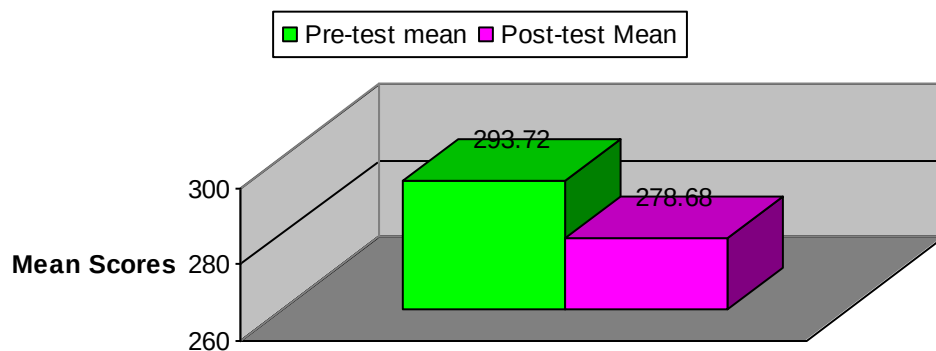


Fig. 3: Paired Means of Control Group in composite Score of "AAHPER" Physical Youth Fitness test performance



To find out the significance of difference among the three groups on composite scores of "AAPHER" youth fitness test performance, F-ratio was computed and data pertaining to this have been presented in Table 2.

TABLE 2
ANALYSIS OF COVARIANCE OF THE MEANS OF TWO EXPERIMENTAL AND ONE CONTROL GROUP ON COMPOSITE SCORES OF "AAPHER" YOUTH FITNESS TEST PERFORMANCE

Test	Source of Variance	df	Sum of Square	Mean Squares	F-ratio
Pre-test mean	Between Groups	2, 57	10076.98	5038.49 12741.75	0 .39
Post-test mean	Between Groups	2, 57	36477.00	238.00 11052.98	1 .65
Adjusted mean	Between Groups	2, 57	22804.64	402.32 1760.81	6.47*

* Significant at .05 level

F .05 (2, 57) = 3.15

It is evident from table-2 that the statistically significance difference was not found between pre-test and post-test mean, as the obtained F-values of 0.39 and 1.65 were lesser than the required value to be significant. where as significant difference was found between the adjusted post means, as the obtained F-values of 6.47 was higher than the required value F .05 (2, 57) = 3.15

As the difference between the adjusted post-test means was found significant Scheffe's Test of Post-hoc Comparison was applied and data pertaining to this have been presented in Table 3.

TABLE 3
PAIRED ADJUSTED FINAL MEANS AND DIFFERENCE BETWEEN MEANS FOR TWO EXPERIMENTAL AND ONE CONTROL GROUP ON COMPOSITE OF "AAPHER" YOUTH FITNESS TEST PERFORMANCE

Reward Group	Punishment Group	Control Group	Mean Difference	C.I.
335.27	313.28	-	21.99	27.72
335.27	-	288.18	47.09*	27.72
-	313.28	288.18	25.10	27.72

*Significant at .05 level

It is evident from the Table 3 that the significant difference was found between the reward group- control group, as the obtained mean difference of 47.09. was higher than the confidence interval (CI) of 27.72. Insignificant differences were found between reward group-punishment group and between punishment group- control group. as the obtained mean differences of 21.99 and 25.10 respectively were lesser than the confidence interval (CI) of 27.72.

DISCUSSION

It is evident from the findings that motivational techniques namely reward proved to be significantly effective techniques to improve the performance on composite scores of "AAPHER" youth fitness test in comparison to punishment and

control group performance. Punishment group and control group could not prove to be significantly effective in improving the performance of the subjects.

This may be attributed to the fact that every person has a strong desire that he should be recognized and wishes that others should praise him for his work or performance and people should accept him as a superior person. Every child wants that every one should praise that entire he does. There are many honours hi society and all wish to get them and want to be mentioned in the honour list of the school, selecting for various competition etc. give great pleasure and increase the expected quality hi the performance.

It is evident from the findings that there is significant difference between the rewards group and control group. Where as there is no significant difference between the reward group and punishment group also no significant difference between the punishment and control group.

This may be attributed to the fact that the performance of an individual in any field need some amount of motivation in order to quality one self in terms of excellence. This is not only applicable I the routine social interaction but also in that field of sports where lot of competition is involved.

CONCLUSION

On the basis of the results of the study the following conclusion are drawn: It is evident that the 't' values obtained for the two experimental groups (Reward and Punishment) and one control group, significant difference was found between the initial test mean and final test mean of reward group. No significant difference was found between the initial test and final test of punishment group. No significant difference was found between the initial test and final test mean of control group. It is evident that the mean difference between the reward group and control group is found to be significant at .05 level. There was no significant between the reward group and punishment group. There was no significant difference between the punishment group and control group performance.

RECOMMENDATION

On the basis of results of this study it is very strongly recommended that physical Education teachers, coaches and administrators of teaching dealing with adolescent age group must apply the reward method as the positive motivation technique to improve the performance of the students of this age group.

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A STUDY OF COMPETITIVE BEHAVIOUR OF NATIONAL LEVEL PLAYERS OF BALL BADMINTON

Mohd Shafi Bhat* & Jai Shankar Yadav**

ABSTRACT

The present study was undertaken to study the competitive behaviour and their relationship with performance of National level male and female Ball badminton players. One hundred male and female athletes, who represented their respective States of India and voluntarily participated in the study, were selected as the subjects of the study. Competitive Behavior scale by Harris and Harris were administrated on all subjects during the competitions. For testing the hypothesis and significance of difference among the probable occurrence of obtained responses, the level of significance chosen was .05. Means and standard deviations were computed for all the variables. Percentage was calculated to analyze the sub areas of subjects on competitive Behavior scale. Person's Product moment method of correlation coefficient was used to find out the relationship competitive Behaviors and National of National level male and female player's ability which revealed that no significance relationship existed between selected variables and National level student ability.

Key words: Competitive behaviour, National level, Playing ability, Performance

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INTRODUCTION

Nowadays the level of competition has reached the nerve breaking stage. Only separately fit players or team can think of achieving a success at high level. Success in games seems to be dependent in part on Psychology status and trait the case of athletics personality profile in concert with knowledge of their past experience, coach's rating anatomic and physiological characteristics and so on can enhance the of prediction in a number of sports.

Competition is one of the outgrowths of modern life. It is a nature human activity which is inevitable in life and the education process should assist in the preparation of individuals for the battle of life. Competition provides the means by which one can show one's worth through success.

All sports lead to competition. Competition is a conscious struggle or rivalry in which an individual seeks to gain in terms of performance. Competition is a special phenomenon (Individual attempt to get success in their performance "excelling" "doing better" "surpassing" are source of the expressions which are generally used to denote competition)

Competitive sports are a place where the young and super challenging players fight for supremacy and records. The players are sophisticatedly prepared by experts, sports scientists and coaches to tussle among themselves, hence to win and then to enjoy their dreams and fruits of the efforts put in for years together. The fact is that today players are simply stronger, faster and more efficient than yesterdays and tomorrows may be still better.

Athletes are highly charged with "Psychological Electricity", energy which rarely permits either spectator of athlete to stand ideally by and not become emotionally involved with the highly visible nature of sports, together with those who participate. The physical power to gather the emotional strength needed to perform well inevitably changes the hearts and the minds of coaches and players alike.

Success in competitive sports places high psychophysical demands on the participants. They have to be physically fit, technically sound and tactically prepared to have am grip over the competitive situation. However, their psychological aliveness to the situation has been described by -any to be of paramount importance. At the time of competition, the psyche of the players which moves them to use their physical fitness, tactical and technical preparedness at its maximum. Sports of all competitive level, i.e. in sports arena, beecome more of a psychological phenomenon than physical.

METHODOLOGY

Selection of Subjects

One, hundred and twenty male and female national level players were randomly selected among the player representing their respective states in national level Ball badminton competition held at Banglore (Karnataka) during the session 2012-13. Their age ranged from 21 years and above. Keeping in view the importance of the competitive Behaviour in this study, the following variable had been selected.

Description of Questionnaire and collection of Data

The competitive Behavior questionnaire designed by Harris and Harris was used to assess the Behavior of player during competition which consists of fifty statements the subject is required to respond to the statement according to the frequency of occurrence of Behavior i.e. "always" "some time" and "never" in competitive situation. The best desired response has been given one point, sometime 2 points, least desired Behavior 3 points.

In order to ensure full co-operation from the subjects The researcher had a meeting with players in presence of their respective coaches. The purpose of study was made clear by explanation in order to ascertain that there was no ambiguity among the subjects regarding the effects which they had to put in for the successful completion. The entire subject voluntarily extended their full cooperation and the player of respective team ensured that the subjects were made available for the collection of data as and when required.

RESULTS AND DISCUSSION

To assess that National level male and female Athletes selected 100 players competitive behaviors. Analysis of mean and standard deviation were computed. The level of significance was set at .05 levels. The data collected on competitive Behavior of National level players was analyzed using percentages and chi-square test and data pertaining to this have been presented in Table 1

TABLE 1

CHI-SQUARE ANALYSIS AND PERCENTAGE OF RESPONSES ON COMPETITIVE BEHAVIOR OF NATIONAL LEVEL MALE AND FEMALE PLAYERS

S. N0.	Competitive Behavior	Response			Chi Square
		Always	Sometimes	Never	
1.	I perform much better in practice than in completion.	53 (42.50)	51 (42.50)	16 (13.33)	21.65*
2.	Having important people watch me perform bothers me.	12 (10.00)	28 (23.33)	80 (66.66)	63.2*
3.	Before completion I have difficulty in sleeping.	22 (18.33)	48 (40.00)	50 (41.66)	12.2*
4.	I worry about what others think of my performance.	22 (18.33)	24 (20.00)	74 (61.66)	43.2*
5.	What make a mistake during competition I have difficulty	29 (24.16)	53 (44.16)	38 (31.36)	7.35*
6.	I find that my mind wanders during competition.	10 (8.33)	19 (15.83)	91 (75.83)	98.55*
7.	I follow a specific routine when preparing for competition.	96 (80.00)	13 (10.83)	11 (9.16)	117.6*
8.	I make more mistakes when the pressure is on and the score is	11 (9.16)	41 (34.16)	68 (56.66)	40.65*
9.	I feel like I panic in close competition situations.	11 (9.16)	41 (34.16)	68 (56.66)	40.65*
10.	I berate myself during the competition when I made dumb	61 (50.83)	45 (37.5)	14 (11.66)	28.55*
11.	When the coach or a teammate yells at me] I have difficulty concentrating during the rest of the game.	49 (20.00)	34 (28.33)	62 (51.66)	19.4*

Table (Continued)

12.	It takes me a little while to work out the butterflies in my stomach & settle into the game.	49 (40.83)	23 (19.16)	48 (40.00)	10.85*
13.	In important competitions, I am afraid that I will not play as well as I can.	19 (15.83)	37 (30.83)	64 (53.33)	25.65*
14.	Playing to my Potential is very important to me.	100 (83.33)	9 (7.50)	11 (9.16)	25.65*
15.	I am a "cloth Player" in Pressure situations.	91 (75.83)	18 (15.00)	11 (9.16)	135*
16.	I am able to concentrate in a positive manner on the upcoming completion while warming up and	96 (82.5)	20 (16.56)	04 (3.33)	120.8*
17.	I have my own game worked out in my head in detail.	99 (82.5)	09 (7.5)	21 (10.00)	130.6*
18.	I get nervous and worry before Important competitions.	19 (15.83)	41 (34.16)	60 (50.0)	21.05*
19.	My thoughts wander out of control before competition.	20 (16.66)	29 (24.16)	71 (59.16)	37.05*
20.	I am easily distracted and irritated prior to performance.	33 (27.5)	34 (28.33)	53 (44.16)	6.35*
21.	I need some time to myself prior to a completion in order to mentally	45 (37.5)	27 (22.)	48 (40.00)	6.45*
22.	I perform best when I know the specifics about what I am to do, when, and with whom	87 (72.5)	26 (21.66)	07 (5.83)	87.35*
23.	The more difficult the challenge, the better I perform.	85 (70.83)	26 (21.66)	09 (7.50)	79.55*
24.	I perform best when I am nervous and worried.	39 (32.5)	37 (30.83)	44 (36.66)	0.65*
25.	I perform best when I am relaxed, calm and confident.	103 (85.83)	12 (10.00)	05 (4.16)	194.4
26.	I mentally go over everything I can in preparation for the competition.	86 (71.66)	20 (17.50)	14 (11.66)	79.8*
27.	When I am really concentrating on the coach's instructions called from the sidelines	26 (21.66)	42 (35.00)	52 (43.33)	8.6*
28.	When I am really concentrating on the game, I miss the coach's instructions called from the sidelines.	29 (24.16)	35 (29.16)	56 (46.66)	10.05*
29.	I enjoy competition more than practicing for it.	88 (73.33)	15 (12.50)	17 (14.19)	86.45*
30.	I perform best when my coach and teammates me. compliment	64 (53.33)	34 (28.33)	22 (18.33)	23.4*
31.	I can recall everything that happened during the competition after it is over.	88 (73.33)	21 (17.50)	11 (9.16)	87.65

Table (Continued)

32.	I replay the competition in my head and see/feel myself playing as I would like to have Played.	77 (64.16)	37 (30.83)	06 (5.00)	63.65*
33.	I set my own performance goals for each practice.	78 (65.00)	30 (25.0)	12 (10.00)	58.2*
34.	I set my own performance goals for each competition.	83 (69.16)	21 (17.50)	16 (13.33)	69.66*
35.	After the each competition is over I feel that I could have performed better than I did.	83 (69.16)	32 (26.66)	05 (4.16)	78.45*
36.	If I could "psych out" my opponents, I would.	59 (49.16)	35 (29.16)	26 (21.66)	14.55*
37.	I worry about getting injured when I perform	20 (16.66)	20 (16.66)	80 (66.66)	60.00*
38.	After a competition I think about how I played and what I can do to improve my next performance.	91 (75.83)	22 (18.33)	07 (5.83)	100.3*
39.	When the official makes a bad call, I let it pass and come back to focus on what is happening.	74 (64.66)	28 (23.33)	18 (15.00)	44.6*
40.	I make many trips to the toilet before a competition.	24 (20.00)	29 (24.16)	67 (55.83)	27.65*
41.	I feel weak and practically sick just before the game.	12 (10.00)	25 (20.8)	83 (69.16)	71.45*
42.	I try not to think about the upcoming competition because it makes me too nervous.	17 (14.16)	22 (18.33)	81 (67.50)	63.35*
43.	Just before the competition, I feel that I cannot remember anything.	36 (30.00)	26 (21.66)	58 (48.33)	13.4*
44.	My performance is consistently at or near my potential.	73 (60.83)	37 (30.80)	10 (8.33)	49.95*
45.	I enjoy practices more than competition because there is less	57 (47.5)	32 (26.66)	31 (25.83)	10.85*
46.	If my mind wanders during competition, I can refocus immediately back to what is happening.	92 (76.66)	18 (15.00)	10 (8.33)	102.2*
47.	The larger the crowd, the more nervous I get.	13 (10.83)	13 (10.83)	94 (78.33)	109.3*
48.	It someone important to me comes to watch me play, I am more nervous than usual.	12 (10.00)	13 (10.83)	95 (79.66)	113.4*
49.	I think a lot about how I play and how I want to Play when I am away from practice and completion.	74 (61.66)	27 (22.50)	19 (15.83)	44.15*
50.	I can see and feel myself clearly performing just as I wish when I mentally rehearse my skills and strategies in my "mind's eye".	56 (49.166)	46 (38.33)	15 (12.5)	25.55*

significant at .05 level, $\chi^2_{.05}(2) = 5.99$

It is evident from Tables 1 that National level Ball badminton male & female players significantly differ in responses to different competitive situations, as the χ^2 values was more than the required value of $\chi^2_{.05}(20) = 5.99$, except in the case of statement No. 24 i.e. "I

perform best when I am nervous and worried" for which the responses yield a χ^2 values of 0.65 which is much less than the required value of 5.99.

DISCUSSION

Descriptive analysis of data on various National level male and female players indicates that National level players Significantly differ in response to different competitive situations.. When the responses of players on competitive Behavior scale were tested on probability of equal occurrence it was found that the National level male and female players differed significantly in their responses on all the questions, except question No. 24 as the χ^2 value of 0.65 was much less than the required value of $\chi^2_{.05(2)}=5.99$.

CONCLUSIONS

Within the limitations of the present study the following conclusions may be drawn :

1. 44.16% of National level male & female players feel that they always perform better in practice than competition. 42.50% players some time performed better in competition and 13.33% players performed better competition than practice.
2. 10.00% of players always feel bothered when the important people are watching the competition, 23.33% of players sometime bothered the presence of important people and 66.66% of players never bothered the presence of important people watching the performer.
3. 18.33% of players have always difficulty in sleeping before competition where as 40.00% of players have sometime difficulty in sleeping and 41.66% of them never had any difficulty in sleeping before competition.
4. 18.33% of players always worry about what others think on their performance; 20.22% of players sometimes worry about what others think and 61.66% players never worried what others think of their performance.
5. 24.16% of players have always a difficulty in regaining the concentration after committing a mistake, where as 44.16% of players have sometime in difficulty in regaining the concentration.
6. 31.66% of players never had any difficulty in regaining concentration, after committing a mistake. 75.83% of players were found that their mind never wanders during competition.
7. 80.00% of players always prepared a specific routine for competition, where as 10.83% sometime prepared a specific routine, and 9.16% of players never prepared any routine for competition.
8. 9.16% of players make more mistake when the pressure is on and the score is close, but 34.16% of players sometime make mistakes when pressure is on and 56.66% of players never had any problem under pressure or when the score is close.
9. 9.16% of players always felt panic during close competitive situations where as 34.17% of players felt sometime panic; and 56.66% never had any panic during close competitive situations.
10. 50.83% of players always berate when they make some mistakes during competition, where as 37.58% of players sometime berate when they make some mistakes and 11.66% of players never berate when they make mistakes during competition.
11. 20.00% of players always have difficulty in concentration when the coach or team mate shouts at them; where as 28.33% players sometime had difficulty in concentration and 51.66% of players never had any difficulty in concentration when the coach or team mate shout at me.
12. 40.83% of players always little to settle into the game or warm up the game, 19.16% of players sometime take little time to settle and 40.00% of players never settled (ate the game).

13. 15.83% of players are always afraid that they may not be able to perform in an important competition; whereas 30.83% of players Sometime afraid of their performance and 53.33% of players are never afraid of their performance in an important competition.
14. 83.33% of players feel that playing to their potential is very important, where as 7.50% of players feel sometime and 9.16% of players never felt that playing to their potential is very important.
15. 75.83% of players feel that they are cloth athlete or they are under control in pressure situations where as 15% of players sometime feel that they are cloth athlete and 9.17% players never felt they are cloth athlete in pressure situations.
16. 81.00% players are always able to concentrate positively even while warming up for the for the upcoming contest, 16.56% of players sometimes could concentrate positively; and 3.43% of players never able to concentrate positively even during warming up for the upcoming contest.
17. 15.83% of players always had own game plan in their mind while only 7.5% players had sometimes these game plan in their mind and 10% of players never had any game plan.
18. 15.83% of players always get worried and nervous before the competitions; where as 34.16% players sometimes get worried and 50.00% of players never get worried or nervous before the competitions.
19. 16.66% of players were found always that their thought wanders out of control before competition where as 24.16% of players felt sometime; and 59.16% never had any problem in their thoughts before competitions.
20. 27.50% of athlete always easily distracted and irritated prior to the performance, while only 25.33% of players sometimes distracted and 44.16% of players never distracted and irritated priors to the performance, while only 25.33% of players sometimes distracted and 44.16% of players never distracted and irritated prior to the performance.
21. 37.50% of players always need some time for the mental preparation prior to the competition; 22.50% of players sometimes need mental preparation before the competition, and 40% of players never need any mental preparation.
22. 72.50% National s players always feel that they perform best when they know about the specifics of the game (such as what to do, when to do, how to do, with whom, etc.) 27.66% players feel sometime; and 5.83% of players never felt any difference.
23. 70.83% of players always feel that they perform better when the challenge is more difficult, 21.66% of players feel sometimes they perform better if the challenge is more difficult where as 7.5% of players never performs better is more challenging situation.
24. 32.5% of players always perform better when they are nervous and worried, where as 30.83% players sometimes give their best and 36.66% of players never give their best when they are nervous and worried.
25. 85.83% of players always feel they perform best when they are relaxed, calm and confident 10.00% of players sometimes feel that they perform best when they are relaxed and 4.16% of players never feel they perform best when they are relaxed, calm and confident.
26. 26. 71.66% of players always prepare mentally in all the aspects of game; where as 17.50% of players sometimes prepare themselves mentally and 11.66% of players never do any mental preparation for the competition.
27. 21.66% of National level players the coach's instruction when they are really concentrating on the game; 35.00% of players sometimes miss the coach's instruction

- and 43.33% players never miss the coach's instruction from side line when the players are really concentrating on the game.
28. 24.16%) of players always have difficulty concentrating on what is happening when the things do not go as planned during the contest, where as 29.16% feel sometimes and 46.66% never had any difficulty concentrating on what is happening when the things do not go as planned.
 29. 73.33% players always enjoy competition rather than practicing for it, where as 12.50% players sometime enjoy competition and 14.16% players never enjoyed competition.
 30. 53.33% players always perform better when their coach or team complaints about him where as 28.33% players sometimes play their best and 18.33% of players never performed better even after the complained by the coach or team mates.
 31. 73.33% players could always recall the things happened during the competition after it is over, where as 17.50% of players sometimes recalled the happenings of the competition, and 9.16% of players never recalled the things happening in the competition.
 32. 64.16% of players replay the competition in their head and imagine how he would like to have played, where as 30.83% of players sometimes imagine the 5.00% of players never reply or imagines the way that he would like to have played.
 33. 65.00% of players always set their own performance goals for each practice session, 25.00% of players sometimes set their performance goals and 10.00% of players never set any performance goal in the practice.
 34. 69.16% of players always set their own performance goals in competition, 17.50% of players sometimes set own performance goals where as 13.33% of players never set any performance goals in competition.
 35. 69.16% of players always feel that they could have performed better than they had done, where as 26.67% of players sometimes feel and 4.16% of players never feel that they could have performed better than they had done.
 36. 49.16% of players always could 'Psyche out' their opponents, 29.16% of players sometime psyche out their opponents and 21.16% of players never psyche out their opponents.
 37. 16.66% of players always worried about being injured when they perform, 16.66% of players sometime worried about being injured and 66.66% of players never worried about being injured when they perform,
 38. 75.83% of players always after the competition, how they played and what can be done to improve their performance, 18.33% of players sometimes analyze their performance and 5.83 of players never analyze their performance after the game.
 39. 61.66% of players always let it pass and focus on what is happening when the official makes a bad call, where as 23.33% of players sometime let it go; and 15.00% of players never let it pass the officials bad call and could not focus on the game.
 40. 20.00% of players always go many trips to the toilet before a competition, 24.16% of players go sometimes and 55.83% of players never go many trips to the toilet before competition.
 41. 10.00% National players always feel weak and practically sick just before the game; where as 20.83% of players feel sometimes and 69.16% of players never feel weak and sick before the game.
 42. 14.16% of players always try, not to think about the upcoming competition because it make them too nervous and 18.33% of players sometimes try not to think and 67.50% of players never try not to think about the upcoming contest.

43. 30.00% of players always feel that they can't remember anything just before the competition; where as 21.66% of players sometimes feel that they can't remember anything and 48.33% of players never feel that they can't remember anything.
44. 60.83% of players always feel that their performance is consistently at or near their potential where as 30.83% of players sometimes feel that their performance is at or near to their potential and 8.33% of players feel that their performance is at or near to their potential.
45. 47.50% of players always enjoy practice more than competition because of less pressure to perform whereas 26.66% of players sometimes enjoy practice more than competition and 25.83% of players never enjoy practice more than competition.
46. 76.66% of players always could refocus immediately back to see what is happening if the mind is wandering during competition, whereas 15.00% of players sometimes could refocus immediately if the mind was wandering during competition and 8.33% of players never could refocus their mind immediately.
47. 10.83% of players always get more nervous if the crowd is larger where as 10.83% of players sometimes feel more nervous and 78.33% of players never get nervous even if the crowd is larger.
48. 10% of players always feel nervous more than usual if someone important to them comes to watch them, 10.83% of players sometimes feel and 79.66% of players never feel nervous more than usual if someone important to them come to watch them.
49. 61.66% of players always think a lot away think a lot about how they play and how they want to play when they are away from practice and competition where as 22.50% of players sometimes think about how they play and how they want to play and 15.83% of players never think about how they play.
50. 49.16% of players always perform just as they mentally rehearse their skills and strategies where as 38.33% of players sometimes perform just as they wish and 12.50% of players never feel clearly perform just as they wish when they mentally rehearse their skills and strategies.
51. National level male and female players indicated the significant difference in the majority of responses in different competitive situations except question 24.

RECOMMENDATIONS

Psychological skill training should be implemented for the Players with poor psychological skills. The coaches must eliminate the recognition scheme to keep the recognition in proper perspective. The Players seeking the approval of coach or/and teammates must be made to understand that they are valued as people, not just as players who perform well. The players should be taught to shift attention. This study was mainly confined to players who represented states in one particular year. It will be worthwhile to make a similar study on a larger population of players on both sexes and at various levels.

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