

ANALYSIS OF PRE-COMPETITIVE ANXIETY AND PERFORMANCE OF BADMINTON PLAYERS IN RALLY POINT SCORING SYSTEM

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ABSTRACT

The purpose of the study was to assess Pre-Competitive Anxiety and performance of Badminton Players in Rally Point Scoring System. Twenty- eight male badminton players, whose teams qualified to participate in the Semi Final League matches of the West Zone University Badminton Tournament held at Rani Durgavati University, Jabalpur from 29th December 2009 to 2nd January 2010 were selected to serve as subjects for this study. The criterion measure for testing the hypothesis in this study was the scores obtained in the Sports Competition Anxiety Test Questionnaire (SCAT) by Rainer Martens. Pre-competitive anxiety has significant difference between winners and losers men singles badminton players in Semi Final League matches. Significant difference was also found between total points scored in their matches by winners (after trailing by 4 or more points) and losers (after gaining 4 or more points lead) men Singles or Doubles badminton players in Semi Final League matches of the West Zone University Tournament.

Key Words: Rally Point Scoring System, Competition Anxiety, League matches

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INTRODUCTION

Badminton is a competitive game. Players compete against each other whenever they go on the court to play a game. If winning is a primary importance in competition then the performance the player gives in the game is the determining factor in winning. The purpose of the study was to assess Pre-Competitive Anxiety and performance of Badminton Players in Rally Point Scoring System. It was hypothesized that there will be no significant difference between winner and loser badminton players in pre-competitive anxiety and performance in rally point scoring system in badminton.

METHODOLOGY

Subjects:

Twenty- eight male badminton players, whose teams qualified to participate in the Semi Final League matches of the West Zone University Badminton Tournament held at Rani Durgavati University, Jabalpur from 29th December 2009 to 2nd January 2010 were selected to serve as subjects for this study.

Criterion measure:

The criterion measure for testing the hypothesis in this study was the scores obtained in the Sports Competition Anxiety Test Questionnaire (SCAT) by Rainer Martens. It has fifteen items out of which five were spurious questions, which have been added to the questionnaire to diminish response bias towards the actual test items. These five questions were not scored. The subjects were instructed to respond to each item according to how they generally felt before the competitive sports situation. Players were requested to respond the questionnaire 30 minutes before their matches. However no time limit was set for filling up the questionnaire but not more than five minutes were required for filling up the questionnaire. The subjects were asked to respond as quickly as possible without brooding over any question/statement once the instructions were clearly understood.

RESULTS AND DISCUSSION

To find out the significance of difference in pre-competitive anxiety of winner and loser badminton players, using t-test compared means and the data pertaining to this has been presented in Table 1.

TABLE 1
SIGNIFICANCE OF DIFFERENCE BETWEEN MEANS OF PRE-COMPETITIVE ANXIETY
OF WINNER AND LOSER BADMINTON PLAYERS IN MEN SINGLES

	Mean	Standard Deviation	Mean Diff.	σ_{DM}	t-ratio
Winner	20.50	2.176	1.44	0.437	3.30*
Loser	21.94	2.014			

*Significant 0.05 level tab $t_{0.05}(34) = 2.03$

Table - 1 revealed that there was significant difference in pre-competitive anxiety of winner and loser badminton players in men's singles of Semi Final League matches as the obtained t - value of 3.30 was higher than the required value to be significant at $t_{0.05}(34) =$

2.03.

To find out the significance of difference in total points scored in their matches by winners (after trailing by 4 or more points) and losers (after gaining 4 or more points lead) men badminton players in Singles or Doubles matches of Semi Final League, t-test was used and the data pertaining to this has been presented in Table - 2.

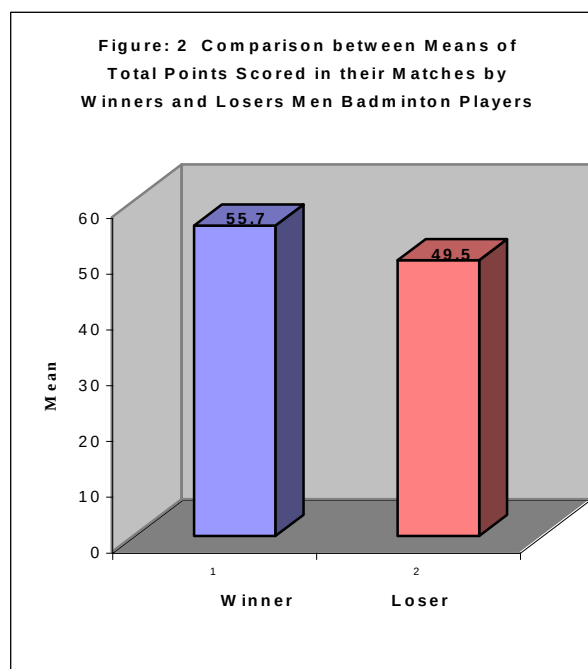
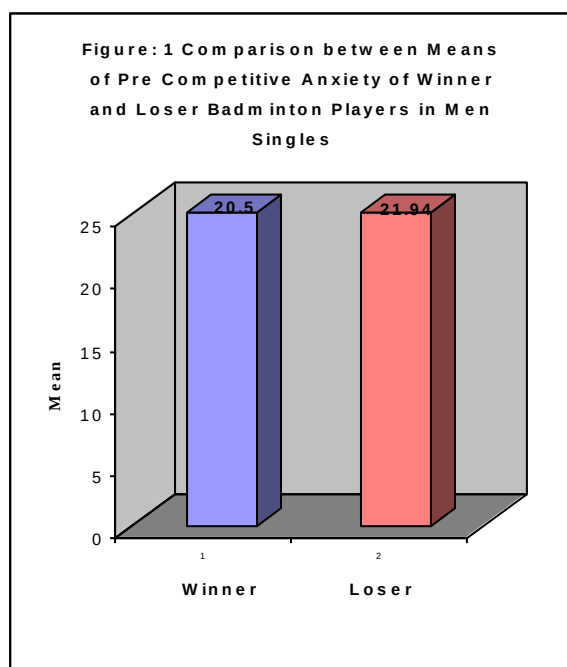
TABLE 2
SIGNIFICANCE OF DIFFERENCE BETWEEN MEANS OF TOTAL POINTS SCORED IN
THEIR MATCHES BY WINNERS (AFTER TRAILING BY 4 OR MORE POINTS)
AND LOSERS (AFTER GAINING 4 OR MORE POINTS LEAD)
MEN BADMINTON PLAYERS

	Mean	Standard Deviation	Mean Diff.	σ_{DM}	t-ratio
Winner	55.7	7.847	6.2	2.133	2.91*
Loser	49.5	10.554			

*Significant 0.05 level

tab t_{0.05} (18) = 2.10

Table-2 revealed significant difference between total points scored in their matches by winners (after trailing by 4 or more points) and losers (after gaining 4 or more points lead) men badminton players in Singles or Doubles of Semi Final League as the obtained 't' value of 2.91 was higher than the required value to be significant at t_{0.05} (18) = 2.10.



The analysis of matches and games won by men players after trailing by 4 or more points in singles or doubles of their Semi Final League matches in west zone university badminton tournament, has been presented in Table - 3.

TABLE 3
ANALYSIS OF MATCHES AND GAMES WON BY MEN PLAYERS AFTER TRAILING BY
4 OR MORE POINTS IN WEST ZONE UNIVERSITY BADMINTON TOURNAMENT

Teams	Ties		Total Matches	Matches Won after Trailing	%	Total Games	Games Won after Trailing	%
04	06	Singles	18	03	16.67	43	05	11.63
		Doubles	12	05	41.67	31	05	16.13
Total			30	08	26.67	74	10	13.51

DISCUSSION

Analysis of descriptive data on pre-competitive anxiety between winner (20.5) and loser (21.94) West Zone University badminton men players in Singles of Semi Final League matches was found to be significant as the obtained 't' value of 3.30 was higher than the required tabulated t - value of 2.03 with 34 degrees of freedom. This may be due to the fact that loser badminton players have tremendous pressure on them while performing.

There was significant difference in total points scored in their matches by the players who won (55.7) their games and the matches, after trailing by 4 or more points against their opponent's points who lost (49.5) in their Singles or Doubles matches of Semi Final League as the obtained 't' value of 2.91 was higher than the required tabulated t - value of 2.10 with 18 degrees of freedom at 0.05 level of significance. This may be attributed to the fact that in rally point scoring system it is very difficult to recover from a lead of 4 points or more by the opponent player as only 11.63 % games were won in singles after trailing by 4 or more points. On the contrary the players won 41.67 % matches in men's doubles after trailing by 4 or more points, as doubles is an attacking game, which provides both the opponents an opportunity to recover from behind.

CONCLUSIONS

Within the limitations of the present study the following conclusions were drawn: - 1. Significant difference was found in pre-competitive anxiety of winner and loser men's singles badminton players in their Semi Final League matches of the West Zone University Tournament. 2. Significant difference was also found between total points scored in their matches by winners (after trailing by 4 or more points) and losers (after gaining 4 or more points lead) men Singles or Doubles badminton players in Semi Final League matches of the West Zone University Tournament.

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A COMPARISON OF TEAM SPIRIT BETWEEN NATIONAL LEVEL MALE AND FEMALE VOLLEYBALL PLAYERS

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ABSTRACT

The purpose of the present investigation was to compare and analyse the team spirit of national level male and female volleyball players. A sample of Four hundred and sixty eight (Males=234, Females= 234)) national level volleyball players were selected to serve as subjects for this study. The subjects were in age group of 21 to 30 years. The subjects were selected from amongst the 58th Senior National Volleyball Competitions held at Laxmibai National University of Physical Education, Gwalior (M.P.) during 2009- 2010. Team spirit Questionnaire developed by Matt M. Starcevich (1999) was selected as a criterion tool to measure team spirit of volleyball players. To assess the national level male and female volleyball players on team spirit, mean, standard deviation, and t-ratio were computed. The results of the study revealed that Male and female volleyball players were found to have more high level team spirit followed by medium and low team spirit. significant difference also existed between male and female volleyball players on high and medium level of team spirit. The similarity was found between male and female volleyball players on low level team spirit and general team spirit.

Keywords: Team Spirit, Male, Female, Volleyball Players.

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INTRODUCTION

In order to improve the athletic performance in the field of physical education, many research projects have been conducted in India and abroad. In the United States they are basically just beginning to aid the coach in making valid and reliable decisions concerning athletic performance, yet much of the researches may be labeled as theoretical or simply a study for its own sake, as compared to practical or applied research applicable for utilization by the coaches. Undoubtedly a number of individuals, including many coaches look them as the theoretical research which is practically useless and not directly applicable to their purposes (Vanek and Cratty, 1980).

Research in sport psychology has concentrated on the coach as a leader. Researchers interested in team performance have largely ignored the leaders and leadership forces that may emerge or get appointed from within team membership itself (Fuoss and Tropmann, 1985).

Francis and Young (1979) has defined a team as an “energetic group of people who are committed to achieving common objectives, who work well together and enjoy doing so, and who produce high-quality results”. Johnson and Johnson (1991) described a team is a set of interpersonal relationships structured to achieve established goals. According to Hairis(1986) “A team as a work group or unit with a common purpose through which members develop mutual relationships for the achievement of goals/tasks. Teamwork, then, implies cooperative and coordinated effort by individuals working together in the interests of their common cause. It requires the sharing of talent and leadership, the playing of multiple roles.

The purpose of the present investigation was to analyse the team spirit of national level male and female volleyball players. It was hypothesized that there would be significant difference in their team Spirit among national level male and the female volleyball players.

METHODOLOGY

Selection of Sample:

A sample of Four hundred and sixty eight (Males=234, Females= 234)) national level volleyball players representing their respective state teams in 58th Senior National Volleyball Competitions and who volunteered to participate in this study, were selected to serve as subjects for this study. The subjects were in age group of 21 to 30 years. The subjects were selected from amongst the 58th Senior National Volleyball Competitions held at Laxmibai National University of Physical Education, Gwalior during 2009- 2010 in their respective volleyball courts.

Instrumentation:

Team spirit Questionnaire developed by Matt M. Starcevich at CEO, the Centre for coaching and mentoring in 1999 was selected as a criterion tool to measure team spirit of national level male and female volleyball players.

Collection of data:

The necessary permission from the organizing secretary of. 58th Senior National Volley ball Competitions at Gwalior was obtained by the research scholar to conduct this study on National level male and female volleyball players during competitions held in 2009. The coaches and subjects were contacted at the site championships personally and their sincere cooperation was solicited. Respondents were called to common place, when, they were not busy and had enough time to spare for testing. Necessary

instructions were given to the subjects before the administration of each test. The research scholar motivated the student respondents by promising to send a separate abstract of the conclusions of his study to each of subjects. Confidentiality of responses was guaranteed so that the subjects would not camouflage their real feelings. No time limit for filling the questionnaire was set but subjects were made to respond as quickly as possible. As soon as a group of players completed the questionnaires, they were collected from the players and verified that no questionnaire was left without being answered.

RESULTS AND DISCUSSION

To assess the national level male and female volleyball players on team spirit, mean, standard deviation, and t-ratio were computed and data pertaining to this have been presented in table 1 to 6 .

TABLE 1

DESCRIPTIVE STATISTICS OF TEAM SPIRIT OF NATIONAL LEVEL MALE AND FEMALE VOLLEYBALL PLAYERS

Levels of Team spirit	Sex	M	SD
High team spirit	Male (N=71)	83.85	3.647
	Female (N=61)	82.48	2.540
Medium team Spirit	Male (N=105)	68.85	5.222
	Female (N=127)	65.88	4.732
Low team spirit	Male (N=58)	51.59	5.208
	Female (N=46)	51.35	6.641

The mean scores of team spirit of three different levels as indicated by male and female volleyball players at national level of their participation have been depicted in figure 1 to 3.

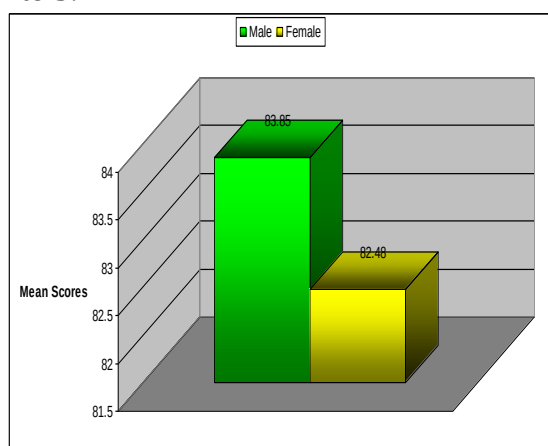


Fig.1: Mean Scores of High Team Spirit for National Level Male and Female Volleyball Players.

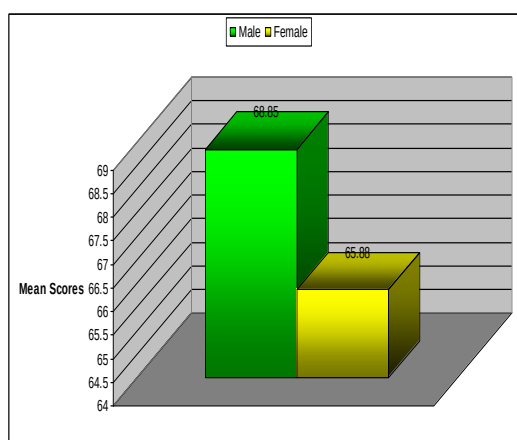


Fig.2: Mean Scores of Medium Team Spirit for National Level Male and Female Volleyball Players.

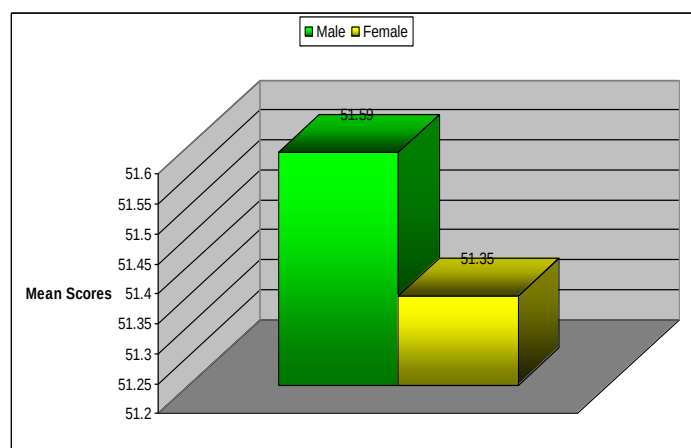


Fig.3: Mean Scores of Low Team Spirit for National Level Male and Female Volleyball Players.

In order to find out the significant differences between national level male and female volleyball players on high, medium and low team spirit, t-ratio was computed and data pertaining to this have been presented in Table 2 to 5.

TABLE 2

SIGNIFICANCE OF DIFFERENCES BETWEEN MEAN SCORES OF MALE AND FEMALE VOLLEYBALL PLAYERS ON HIGH TEAM SPIRIT

Sex	N	Mean	MD	σ_{DM}	t-ratio
Male	71	83.85	1.37	0.56	2.46*
Female	61	82.48			

*Significant at .05 level $t_{.05 (130)} = 1.98$

It is evident from table 2, that there was statistically significant difference existed between national level male and female volleyball players on high team spirit, as the obtained t-value of 2.46 was high than the requires $t_{.05 (130)} = 1.98$.

TABLE 3

SIGNIFICANCE OF DIFFERENCES BETWEEN MEAN SCORES OF MALE AND FEMALE VOLLEYBALL PLAYERS ON MEDIUM TEAM SPIRIT

Sex	N	Mean	MD	σ_{DM}	t-ratio
Male	105	68.85	2.97	0.65	4.53*
Female	127	65.88			

*Significant at .05 level $t_{.05 (230)} = 1.97$

It is evident from table 3, that there was statistically significant difference existed between national level male and female volleyball players on medium team spirit, as the obtained t-value of 4.53 was high than the requires $t_{.05 (230)} = 1.97$.

TABLE 4
SIGNIFICANCE OF DIFFERENCES BETWEEN MEAN SCORES OF MALE AND FEMALE VOLLEYBALL PLAYERS ON LOW TEAM SPIRIT

Sex	N	Mean	MD	σ_{DM}	t-ratio
Male	58	51.59	0.24	1.16	0.21
Female	46	51.35			

Insignificant at .05 level $t_{.05 (102)} = 1.98$

It is evident from table 4, that there was no statistically significant difference existed between national level male and female volleyball players on low team spirit, as the obtained t-value of 0.21 was less than the requires $t_{.05 (102)} = 1.98$.

TABLE 5
SIGNIFICANCE OF DIFFERENCES BETWEEN MEAN SCORES OF MALE AND FEMALE VOLLEYBALL PLAYERS ON GENERAL TEAM SPIRIT

Sex	N	Mean	MD	σ_{DM}	t-ratio
Male	234	69.12	1.77	1.13	1.58
Female	234	67.35			

Insignificant at .05 level $t_{.05 (466)} = 1.96$

It is evident from table 5, that there was no statistically significant difference existed between national level male and female volleyball players on general team spirit, as the obtained t-value of 1.58 was less than the requires $t_{.05 (466)} = 1.96$.

DISCUSSION

Findings of descriptive data of national level male and female volleyball players on different types of team spirit indicated that more than one fourth national level male volleyball players were found under high team spirit, less than fifty under medium team spirit and about one fourth under low team spirit. In case of female volleyball players, less than one third were under high team spirit, more than fifty under medium team spirit and less than one fourth under low team spirit.

When the national level male and female volleyball players were compared together on high, medium and low team spirit, significant differences were found between male and female volleyball players. National level male volleyball players were found to have more team spirit than their counter parts.

When the national level male and female volleyball players were compared together on general team spirit, significant difference was not found between male and female volleyball players. But the national level male volleyball players were found to have more general team spirit than their counter parts.

It was also hypothesized that there would be significant difference in their team spirit among national level male and the female volleyball players. This hypothesis has

been totally accepted, as the obtained f-values for team spirit were higher than the required value to be significant.

CONCLUSIONS

Within the limitations of the present study, the following conclusions are enumerated :

1. Male and female volleyball were found to have more high level team spirit followed by medium and low team spirit.
2. Significant difference existed between male and female volleyball players on high and medium level of team spirit.
3. Similarity was found between male and female volleyball players on low level team spirit and general team spirit.

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A STUDY OF SELF-EFFICACY OF UNIVERSITY STUDENT BY PHYSICAL ACTIVITY STAGES OF CHANGE

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ABSTRACT

The purpose of this study was to study and assess the self-efficacy of university students for physical activity. For this purpose, Two hundred and Ninety eight students from a Maharshi Mahesh Yogi Vedic Vishwavidalaya, Jabalpur (M. P.) were invited to participate in the study. Two hundred and eight students initiated the survey, but only 153 (100 male and 53 female) students completed the questionnaires, were selected as the subjects for the study. The Physical Exercise Self-efficacy scale prepared by Schwarzer & Renner, Brown (2005) and Physical Activity Stages of Change Questionnaire by Marcus & Simkin, (1993) were used for the purpose of data collection. To assess the self efficacy by physical activity stages of change of university students, means, standard deviations, and Analysis of Variance were computed. The results of the study indicated that the statistically significant difference existed among university students on self efficacy factor of self determination. The scheffe's Test of Post-hoc Comparison revealed the significant differences on stages of change of self-efficacy among university students between contemplation – preparation followed by action and maintenance; preparation – maintenance; and action- maintenance. The ratings of self-efficacy increased across the stages from pre-contemplation/contemplation to the maintenance stage.

Key words: self-efficacy, contemplation, preparation, action and maintenance.

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INTRODUCTION

Self-efficacy is the belief or perception an individual has of his or her own ability to complete a given task. In the constructs of the trans-theoretical model and exercise, self-efficacy is the belief or confidence that one can overcome obstacles to participate in exercise. He proposed that motivation to perform a certain behavior was based on two factors: expectations of outcome and cognitions about self-efficacy. Research has consistently shown self-efficacy to be the strongest predictor of exercise behavior Bandura (1982).

Recent research has shown that self-efficacy accounts for the majority of variance between the stages of change and exercise (Cardinal, et al., 2004; Marshal & Biddle, 2001; Wallace & Buckworth, 2001). Self-efficacy is predictive of exercise adherence in college students with a low self-efficacy resulting in a greater likelihood of relapse (Sullum et al., 2000).

Self-efficacy increases significantly from the pre-contemplation stage of change to the maintenance stage. Those individuals with low perceived confidence in their ability to exercise are more likely to be inactive compared to those with high levels of perceived confidence.

The first key is to develop an autonomous environment using the self-determination theory to increase young adults' stages of change and physical activity levels. An autonomy supportive environment provides a good reason for asking someone to participate, gives some choices to the person, acknowledges the person's feelings toward the activity. So, the purpose of this study was to study and assess the self-efficacy of university students for physical activity.

METHODOLOGY

Selection of Subjects:

Two hundred and Ninety eight students from a Maharshi Mahesh Yogi Vedic Vishwavidalaya, Jabalpur (M. P.) were invited to participate in the study. Two hundred and eight students initiated the survey, but only 153 (100 male and 53 female) students completed the questionnaires. This was a 73.50 % return rate of the total subjects studying in physical education and general education faculty. The mean age of the students was 19.47 years old.

Instrumentation:

The Physical Exercise Self-efficacy scale (PESES) prepared by Schwarzer & Renner, Brown (2005) has been used in recent research as a measure used to assess self-efficacy and exercise. The PESES is a five item scale that is measured on a four point Likert scale (1 = very uncertain, 4 = very certain). The item-total correlations were .74 to .76 and internal consistency was .88.

Physical Activity Stages of Change Questionnaire (PASCQ) by Marcus & Simkin, (1993) consists of four items representing the five stages of change in the transtheoretical model. The student was asked to answer four questions which reflected their current exercise behaviors. For example, physical activity was defined and then the student was asked to reply yes or no to "I am currently physically active" and "I intend to become more physically active in the next 6 months." Regular physical activity was then defined and the student was asked to answer yes or no to "I currently engage in regular physical activity" and "I have

been regularly physically active for the past 6 months.” The answers were assessed by a scoring algorithm. For example, a student would be in the pre-contemplation stage if they answered no to the first two questions. For a student to be in the maintenance stage, they had to answer yes to questions one, three, and four. The scoring algorithm determined the students’ particular stage at the time they completed the questionnaire, however, this questionnaire has been shown to be stable over a 2-week period (Marcus & Forsyth, 2003).

RESULTS AND DISCUSSION

To assess the self efficacy by physical activity stages of change of university students, means, standard deviations, and Analysis of Variance were computed.

Analysis of Variance for all the university students in relation to four stages of change were computed. To check the obtained F-ratio the level of significance was set at .01 level, and data pertaining to this have been presented in Table 1 to 21...

TABELE 1

MEANS AND STANDARD DEVIATIONS OF SELF EFFICACY IN RELATION TO STAGE OF CHANGE OF UNIVERSITY STUDENTS

S.NO.	Physical Activity Stages	Self-efficacy	
		M	SD
1.	Contemplation(N=28)	2.20	.63
2.	Preparation (N=19)	2.56	.76
3.	Action (N=22)	2.61	.45
4.	Maintenance (N=84)	2.99	.60

The mean scores of decisional balance and self-efficacy by stages of change of university students have been depicted in figures 1

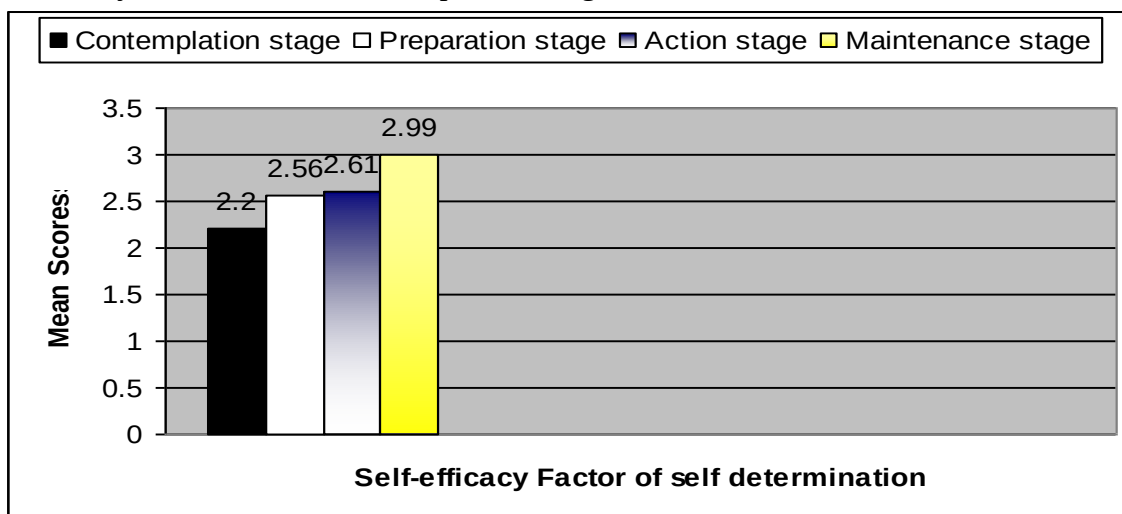


Figure 1: Mean Scores of Self-efficacy factor of Self Determination in Relation to Physical Activity Stages of Change of University Students.

TABELE 2
ANALYSIS OF VARIANCE OF SELF-EFFICACY BY STAGES OF CHANGE OF UNIVERSITY STUDENTS

Self-determination Factor	Source of Variance	df	Sum of Square	Mean Squares	F-ratio
Self-efficacy	Between Groups	3	14.69	4.89	13.13*
	Within Groups	149	55.59	0.37	

Significant at .01 level, $F_{01}(3,149)=3.91$

From Table 2, It is evident that the statistically significant difference existed among university students on self efficacy, as the obtained F-values of 18.49, and 13.13 were higher than the required $F_{01}(3, 149) = 3.91$.

As the F-ratio was found to be significant, Scheffe's Test of Post-hoc comparison was applied to study the significance of differences among university students on self-efficacy, the data pertaining to this have been presented in Table 3.

TABLE 3
SINGNIFICANCE OF DIFFERENCES AMONG UNIVERSITY STUDENTS BETWEEN ORDERED PAIRED MEANS ON STAGES OF CHANGE BY SELF-EFFICACY

Mean Scores					
Contemplation	Preparation	Action	Maintenance	Paired mean difference	Confidence Interval (C.I.)
2.20	2.56	-	-	0.36*	0.23
2.20	-	2.61	-	0.41*	
2.20	-	-	2.99	0.79*	
-	2.56	2.61	-	0.05	
-	2.56	-	2.99	0.43*	
-	-	2.61	2.99	0.38*	

*Significant at .01 level,

It is quite obvious from the table 3, that there were significant differences on stages of change of self-efficacy among university students between contemplation – preparation followed by action and maintenance; preparation – maintenance; and action-maintenance, as the paired mean differences of .36, .41, .79, .43 and .38 respectively were higher than the confidence interval (C.I.) of .23 But the mean differences of .05 was not significant at 0.01 level.

DISCUSSION

Self-efficacy was hypothesized to vary as a function of stages of change, and this hypothesis was supported. The self-efficacy was found to differ across the stages of change. Specifically, those students in the maintenance stage of self-efficacy factor of self determination rated more important than the other stages. The ratings of self-efficacy increased across the stages from pre-contemplation/contemplation to the maintenance stage. The significant differences on stages of change of self-efficacy among university students between contemplation – preparation followed by action and maintenance; preparation – maintenance; and action- maintenance,

CONCLUSIONS

Within the limitation of present study, the following conclusions are enumerated :

1. Significant differences were on stages of change of physical activity among university students between contemplation – preparation followed by action and maintenance; preparation – maintenance; and action- maintenance.
2. Statistically significant difference existed among university students on all factors of self- determination by stages of change.
3. Significant differences were found among university students on self efficacy by stages of change.

RECOMMENDATIONS

It is recommended that A similar study may be conducted on more population of university students involved in sports activities in India. A study may be replicated on Indian athlete at their different level of their participation.

IMPLICATIONS

1. The first key is to develop an autonomous environment using the self-determination theory to increase young adults' stages of change and physical activity levels.
2. Identify determinants of physical activity in first-year college students to develop interventions to maintain or increase physical activity.

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DRUGS AND ATHLETE PERFORMANCE

Dr. Rajkumar Sharma*

ABSTRACT

Sports Medicine physicians should take care the orthopedic needs of whole athletes along with the medical problems, mental disorders, as well as an understanding of how medications affect training and exercise. To protect the athlete, physicians who take care of athletes need to be able to educate coaches, parents, and athletes about the benefits and risks of performance enhancing drugs from a scientific perspective. First, physicians must educate themselves regarding performance-enhancing drugs i.e. stimulants (Amphetamines and related drugs, Epinephrine and related drugs, Ephedrine & Cocaine). because this is not a subject taught in medical school or residency. Performance-enhancing drugs have been a part of sports since sporting competition began and likely always will be. Considered cheating by purists and necessary by some athletes, we must accept the fact that they are used, understand why they are used, and study how to prevent their use to institute change. This article summarizes current scientific information regarding the use of performance- enhancing drugs in young athletes so that physicians can take the information and knowledgably educate others.

Keywords: Drugs, Performance enhancing, Stimulants, and Athlete

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INTRODUCTION

Much of the earliest performance drug use in athletics involved stimulants. In the late nineteenth century European cyclists reportedly consumed a number of concoctions to reduce fatigue. Prior to competition athletes would take caffeine-based sugar cubes that had been dipped in nitroglycerin or a drink called Vin Mariani, that was a combination of wine and coca leaves.

In the modern era of sports, these crude preparations had been replaced with more powerful stimulants, most notably amphetamine. Stimulant use was suspected initially during the Summer and Winter Olympic Games in 1952. Amphetamine use was blamed for the deaths of two elite cyclists, one during the 1960 Summer Olympics in Rome and the other during the 1967 Tour de France. Shortly thereafter, the use of amphetamines, or "pep pills" by professional athletes was exposed.

Epidemiology

As with most performance drug use, few epidemiological studies have been conducted that define the magnitude of the problem. The most comprehensive work to date has been from a team of researchers at Michigan State University College of Human Medicine at National Collegiate Athletic Association institutions. The survey, which was conducted initially in 1985 and repeated in 1989, shows that during that time period amphetamine drug by athletes dropped from 8% to 2%. The use of weight loss products, many of which are stimulants, was not studied in 1985 but in 1989 five percent of respondents indicated that they used these substances. Caffeine use was virtually unchanged (68% in 1985 down to 64% in 1989) and cocaine/crack use fell dramatically from 17% to 4% over the same period. An important and potentially troubling result from the same study was that 22% of respondents indicated that the source of amphetamines was a representative of the athletic department (coach, trainer or team physician). In 1985 only 4% of respondents identified this group of individuals as their source for amphetamines. This finding was a notable exception to the trend of obtaining ergogenic drugs outside of the athletic department.

Mandell and colleagues studied the usage rates of amphetamines by National Football League teams. Purchase records from 1968 and 1969 revealed that approximately 65 amphetamine tablets per player per game were used by NFL teams. Subsequent interviews with 87 players from eleven different teams suggested that two-thirds of professional football players use these drugs occasionally and more than half were regular users. Dosages used varied by position and ranged from 5 to 150 mg per game.

Certain sports, such as gymnastics and wrestling as well as ballet dance require weight control. Participants in these activities may be at an increased risk for eating disorders and therefore amphetamine abuse.

Amphetamine

Amphetamine is a potent central nervous system stimulant. The main effects of the drug include alertness, decreased fatigue, mood elevation, increased self-confidence, increased motor activity and decreased appetite. The clinical use of amphetamine has decreased as concern over addiction and other adverse reactions has increased. Today, the drug is used sparingly for a small number of medical indications including: minimal brain dysfunction, attention-deficit disorder and narcolepsy.

Among the first reported uses of amphetamine to enhance performance came from the battle field rather than the athletic field. During World War II, studies in German soldiers demonstrated that amphetamine delayed fatigue. The first in-depth research involving athletes was not conducted until the late 1950s. The American Medical Association's Committee on Amphetamine Drugs and Athletics commissioned two studies.

Smith and Beecher performed a study of swimming, running and weight-throwing performance in the presence of amphetamine. The subjects, who included highly trained athletes, were given amphetamine doses of 14 mg/70 kg of body weight two to three hours before measuring athletic performance. Secobarbital was given at the same time in an attempt to mask the euphoric effects of amphetamine. Improvements were noted in a majority of athletes in each of the three athletic events. The magnitude of improvement was highest in the weight throwers who on average improved 3-4%. Runners showed an improvement of approximately 1.5%, and swimmers improved from 0.5 to 1.16%. The study did not address other factors that have an impact on athletic performance such as judgment, timing and eye-hand coordination.

Karpovich gave athletes amphetamine 10-20 mg or placebo before testing for performance in a variety of swimming and running events. In all but four subjects, amphetamine produced either neutral or negative results. One of the four subjects with improved performance was receiving placebo at the time.

Nearly twenty years after these first studies, Chandler and Blair looked at how amphetamine effected physiological components related to athletic performance. Study subjects were six male college students who were not varsity athletes. Each was given either amphetamine 15 mg·kg⁻¹ of body weight or placebo. The performance measurements taken were strength, muscular power, sprinting speed, acceleration, aerobic power and anaerobic capacity. Improvements were seen in all variables except sprinting speed following administration of amphetamine. Significant improvements were reported in strength, acceleration and aerobic power and increases in time to exhaustion and maximal heart rate. This suggests that amphetamine does not prevent exhaustion but instead may mask fatigue by interfering with the body's regulatory systems, effects that could result in serious medical consequences. Amphetamine is listed as a banned substance by both the International Olympic Committee.

Amphetamine can produce a variety of adverse effects, most of which are related to the CNS stimulation. Restlessness, insomnia, instability and agitation are commonly reported. Serious behavioral effects have also been reported including confusion, paranoia and vivid hallucinations. Excessive amphetamine doses may result in convulsions, coma and death.

Chronic amphetamine exposure can lead to dyskinesia, mainly of the muscles involving the face and jaw. Non-CNS side effects include hypertension, angina, cardiac dysrhythmias, nausea, vomiting, gastrointestinal discomfort, weight loss, necrotizing vasculitis and subarachnoid hemorrhage. Discontinuing amphetamine abruptly may result in chronic fatigue, lethargy and depression.

Tolerance to the mood altering effects of amphetamine occurs after prolonged exposure. This raises the question of whether tolerance can develop to the effects of amphetamine on

performance leading the athlete to escalate doses over time. The studies examining the ergogenic effects of amphetamine were all single dose or short term studies.

Caffeine

Caffeine is a methylxanthine derivative found in coffee, soft drinks and many non prescription drug products. Athletes have been reported to consume the drug in hopes of achieving ergogenic benefits.

However, caffeine does exhibit properties that are of potential benefit to endurance athletes. Most notably is the drug's lipolytic effect, which increases levels of circulating free fatty acids to be used as an alternate fuel during aerobic work. This in turn spares muscle glycogen leading to improved endurance. A number of studies have demonstrated this effect at doses of 250 mg taken one hour before exercise, with an additional 250 mg dose taken immediately before exercise and continuing every 15 minutes during exercise. Several similar studies have, however, failed to show that caffeine improves endurance. Perkins and Williams concluded that caffeine in doses as high as 10 mg·kg⁻¹ of body weight produced no significant improvements in time to exhaustion. Additional studies have challenged the theory that higher levels of free fatty acids result in glycogen sparing.

Increased alertness, improved ability for prolonged concentration and other anecdotal claims have led to the widespread use of caffeine. Studies have been equivocal in linking caffeine to these performance variables. Caffeine appears to have no affect or an adverse effect on standing steadiness, hand-arm steadiness and reaction time.

The status of caffeine as a banned ergogenic substance has changed over the years. Originally considered a banned substance by the IOC, caffeine was later dropped from the banned substance list. The drug returned to the IOC list of banned substances based on the aforementioned endurance studies involving higher caffeine doses. Evidence of doping with caffeine is defined as presence of the drug in the urine at or above a cutoff level of 12 mcg·ml⁻¹. A positive urine drug test for the National Collegiate Athletic Association is set at 15 mcg·ml⁻¹.

A legitimate concern of athletes is whether social consumption of caffeine containing beverages could result in a positive urine drug test. A recent study demonstrated that caffeine doses, given as coffee, tea or soft drink, would need to exceed 12 mg·kg⁻¹ of body weight to produce a urine caffeine concentration of 15 mcg·ml⁻¹. This would equate to nearly 1000 mg of caffeine in a 175 lb athlete. Approximately eight servings (5 oz.) of strongly brewed coffee or 16 cans (12 oz.) of a soft drink would have to be consumed to provide this amount of caffeine.

Cocaine

The 1986 deaths of two elite athletes, Len Bias and Don Rogers focused the attention of the public and athletic organizations on the use of cocaine by athletes. Large scale epidemiologic data is lacking. Most reports are anecdotal and suggest that the drug is used more for social reasons than to enhance performance, however, a survey of world class athletes indicated use of cocaine as a performance drug.

Cocaine does have legitimate medical uses, primarily as a topical anesthetic for nasal surgical procedures. Studies on the ergogenic properties are lacking. The most comprehensive study on the topic was conducted over 100 years ago, which showed

improvements in muscle strength and reaction time. These effects were noted minutes after the drug was administered nasally and lasted for over three hours. These ergogenic effects have not been confirmed by any subsequent studies. Most athletes who have used cocaine report that their performance worsened, despite at times having a sense of improved performance. Cocaine is banned by both the IOC.

The toxicity of cocaine is well known. Sudden death secondary to cocaine exposure has been reported, including among highly conditioned athletes. The drug produces significant effects on the heart resulting in heart attack, dysrhythmias and constriction of the coronary arteries. The central nervous system is also adversely effected by cocaine. Seizures, visual scotoma, blindness and optical neuropathy all have been reported. Serious behavioral changes are associated with cocaine use such as insomnia, euphoria, dysphoria, confusion, paranoia and hallucinations.

For the elite, highly trained athlete cocaine may hold an increased risk according to a recent hypothesis. Sprint-type athletes, because of their compact muscle composition, may be more prone to death following a cocaine-induced seizure. A lethal amount of heat and lactic acid could result in cardiac shut down.

Other stimulants

A number of drugs exist that have a chemical structure that is similar to amphetamine. Drugs, such as phenyl-propanolamine and ephedrine are widely used in non prescription products for treating the common cold. Phenyl-propanolamine is also found in many diet pills. Ephedrine is a common treatment of asthma, hay fever, sinusitis and other allergic conditions. These drugs, along with caffeine, are found in amphetamine "look-alike" products with names such as black beauties, white crosses, Christmas trees, greens and clears. Many who use these drugs are fooled into thinking that they are actually purchasing and using amphetamines. Phenyl-propanolamine has been estimated to be the fifth most abused drug in the United States. The extent to which these stimulants are used by athletes is not well known. In 1972 at the Summer Olympic Games in Munich, U.S. swimmer Rick De Mont, an asthmatic, was disqualified for taking a medication containing ephedrine.

The only performance studies involving these stimulants involved ephedrine. Twenty one male subjects were given either 24 mg of ephedrine or placebo. On three separate occasions over a three week period assessments were made of: strength, endurance and power, VO_2 max, reaction time, hand-eye coordination, anaerobic capacity and speed, cardio-respiratory endurance, response to maximal and sub-maximal effort, perceived exertion and speed of recovery following effort. Ephedrine had no effect on any of the performance variables measured, nor did any subject report any perception of improved performance.

Both phenyl-propanolamine and ephedrine are banned by the IOC. Many sports medicine experts feel that given the lack of conclusive ergogenic data, these drugs should be removed from the banned substance list. For athletes competing at events where drug testing is conducted, any treatment of common cough and cold ailments must avoid products containing either phenyl-propanolamine or ephedrine. This raises two points. First, athletes searching for relief of cold symptoms may not go to the team physician, but rather self-medicate using a non prescription product. Selecting a product containing a banned substance, the athlete could unwittingly risk disqualification. Secondly, for athletes who do access treatment through a team physician or trainer, drug therapy that does not include a

banned substance leaves little alternative but to use antihistamines. Non prescription antihistamines are sedating, a property that has a potential adverse effect on performance.

PROHIBITED STIMULANTS

Adrafinil, Adrenaline^{**}, Amfepramone, Amiphenazole, Amphetamine, Amphetaminil, Benzphetamine, Benzylpiperazine, Bromantan, Cathine^{***}, Clobenzorex, Cocaine, Cropropamide, Crotetamide, Cyclazodone, Dimethylamphetamine, Ephedrine^{****}, Etamivan, Etilamphetamine, Etilefrine, Famprofazone, Fenbutrazate, Fencamfamin, Fencamine, Fenetylline, Fenfluramine, Fenproporex, Furfenorex, Heptaminol, Isometheptene, Levamethamphetamine, Meclofenoxate, Mefenorex, Mephentermine, Mesocarb, Methamphetamine(d-), Methylenedioxymphetamine^{****}, Methylenedioxymethamphetamine, P-Methylamphetamine, Methylephedrine^{****}, Methylphenidate, Modafinil, Nikethamide, Norfenefrine, Norfenfluramine, Octopamine, Ortetamine, Oxilofrine, Parahydroxyamphetamine, Pemoline, Pentetrazol, Phendimetrazine, Phenmetrazine, Phenpromethamine, Phentermine, 4-Phenylpiracetam (carphedon), Prolintane, Propylhexedrine, Selegiline, Sibutramine, Strychnine, Tuaminoheptane and other substances with a similar chemical structure or similar biological effect(s).

^{*}The following substances included in the 2008 Monitoring Program (bupropion, caffeine, phenylephrine, phenylpropanolamine, pipradol, pseudoephedrine, synephrine) are not considered as Prohibited Substances.

^{**}**Adrenaline** associated with local anaesthetic agents or by local administration (e.g. nasal, ophthalmologic) is not prohibited.

^{***}**Cathine** is prohibited when its concentration in urine is greater than 5 micrograms per milliliter.

^{****}Each of **ephedrine** and **methylephedrine** is prohibited when its concentration in urine is greater than 10 micrograms per milliliter.

A stimulant not expressly mentioned as an example under this section should be considered as a Specified Substance only if the Athlete can establish that the substance is particularly susceptible to unintentional anti-doping rule violations because of its general availability in medicinal products or is less likely to be successfully abused as a doping agent.

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ASSESSMENT OF LEADERSHIP STYLE AND PARTICIPATION MOTIVATION OF SCHOOL GOING CHILDREN INVOLVED IN SPORTS ACTIVITIES

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ABSTRACT

The purpose of the study was to investigate the leadership style and reasons of participation in sports among school going children of Bilaspur region. Fifty male school going children of Bilaspur region involved in sports activities, attending summer coaching camp during the 2008-2009 session. In different games and sports were selected to serve as subjects for this study. Leadership Scale for Sports: Leadership Scale for Sports developed by P. Chelladurai (1994) to measure preferred behaviour preferences and Participation Motivation Questionnaire (PMQ) Prepared by Gill, Gross and Huddleston (1983) to assess the motives of male school going children of Bilaspur region involved in sports activities were used for the purpose of data collection. To analyse the preferences on five dimensions of leader behaviour and eight factors of participation motivation, means and standard deviations and One way analysis of variance were computed. The results of the study indicated that male children preferred more social support followed by democratic behaviour, training and instruction and autocratic behaviour positive feedback from their coaches. In case of participation motives, they preferred more skill development followed by team work, others, fitness, friendship, achievement status, energy release and fun from most important to least important rank order. The male school going children on five dimensions of preferred leadership behaviour expressed insignificant differences in their preferences for preferred leadership. In case of reason for participation in sports activity, male school going children had significant differences in their participation motivation.

Key words: Participation Motives, Leadership preferences, School Children

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INTRODUCTION

Leadership roles including teacher/instructor, organizer/planner, counselor, communicator, and motivator (Gould, 1987). College coaches often assume dual roles as both teachers and coaches. They must be able to provide instruction, guide skill development, and offer performance feedback, while directing a team toward a specific goal or outcome. It is not surprising then that coaches play an integral role in the success of their athletes and athletic teams, influencing factors such as their athletes' self-esteem (Barnett, Smoll, & Smith, 1992), skill learning, mental development (Gould, Dieffenbach, & Moffett, 2002), sport performance satisfaction (Horn, 2002), as well as performance outcomes (Horne & Carron, 1985, Schliesman, 1987).

Skubic (1956) investigated the attitudes that participants, parents and teachers held towards little league Baseball experiences. The result showed from the players point of view, reasons for sport participation included developing, friendships with others, having a good experience, having fun, developing sportsmanship qualities, improving skill level and keeping out of trouble. The result also revealed that both parents and players indicated that they were very upset by the fact that many players do not received a chance to play in the games.

The reasons why individuals decide to participate in an achievement activity certainly constitute an important component of the subjective meanings of that activity Maehr & Braskamp, 1986). A useful theory of sport achievement motivation should allow an insight into the variety of participation motives evidenced in athletics contents. Duda and White addressed this issue, in recent work. High school, intercollegiate, and recreational athletes completed the Participation Motivation Questionnaire in terms of their present sport involvement. Seven reasons for participation emerged competition, affiliation, being member of a team, energy release, skill development, improving one's fitness and gaining recognition status.

Understanding the major motives young athletes have for participating in sport has been a topic of interest for youth, sports administrators, and coaches and sports psychologists. This has prompted efforts from researchers to assess young athletes motives for sports participation (Anuradha & Roy, 1998).

The purpose of the study was to investigate the leadership style and reasons of participation in sports among school going children of Bilaspur region. It was hypothesized that: The male school going children of Bilaspur region involved in different game and sports will significantly differ in their leadership preferences and sports participation motives.

METHODOLOGY

Subjects:

Fifty male school going children of Bilaspur region involved in sports activities, attending summer coaching camp in different games and sports and who volunteered to participate in this study, were selected to serve as subjects for this study. The subjects were in age group of 14 to 18 years. The subjects were randomly selected from amongst the male school going children participated in Competition in different sports and games and were attending summer coaching camp during the 2008-2009 session.

Instrumentation

(1).Leadership Scale for Sports: Leadership Scale for Sports developed by P. Chelladurai(1994) was selected as a criterion tool to measure preferred behaviour preferences of male school going children of Bilaspur region involved in sports activities..

The scale consisted of 40 items for five dimensions in which training and instruction (13 items), democratic behaviour (9 items), autocratic behaviour (5 items), social support (8 items), and positive feedback (Rewarding behaviour) had 5 items on which there were no negative responses. The scoring of the leadership items were as follows :- Always - 5; Often - 4; Occasionally - 3; Seldom - 2; Never- 1. Each question had five responses namely 1. Always, 2 Often, 3 Occasionally, 4 Seldom, 5 Never. According to above stated responses, scoring was carried out for preferred leader behaviour of different games athletes. The score tabulated for all the items under dimensions of leadership behaviour were averaged out to get score for each dimension. The scale had test-retest reliability 0.72 for training behaviour, 0.82 for democratic behaviour, 0.76 for autocratic behaviour, 0.71 for social supports, and 0.79 for positive feedback

(2).Participation Motivation Questionnaire: Participation Motivation Questionnaire (PMQ) Prepared by Gill, Gross and Huddleston(1983), to assess motives of subjects to be involved in sports, was administered on all the subjects.

The questionnaire is made up of 30 items reflecting possible reasons for taking part in sports (e.g. I want to improve my skills) and will be adopted by making minor changes to the wording of some items to reflect the sport of the subjects. Subjects will be requested to indicate their responses on a Likert type scale (Not at all important, Some what important, very important) the relative value of each motive influencing their participation in respective games and sports. It will be emphasized in the instructions that the subject should respond in terms of their own reasons for participating. The score tabulated for all the items under factors of participation motivation were averaged out to get score for each dimension.

Administration of Questionnaire:

The necessary permission from the camp in charge was obtained by the research scholar to conduct this study on male school going children participated in Competition in different sports and games and were attending summer coaching camp during the 2008-2009 session.

The subjects were contacted at the site camp personally and their sincere cooperation was solicited. Respondents were called to common place, when, they were not busy and had enough time to spare for testing. Necessary instructions were given to the subjects before the administration of each test. Confidentiality of responses was guaranteed so that the subjects would not camouflage their real feelings. No time limit for filling the questionnaire was set but subjects were made to respond as quickly as possible. As soon as a group of children completed one questionnaire, another was given to them after a short interval. The completed questionnaires were collected from the children and it was verified that no questionnaire was left without being answered

RESULTS AND DISCUSSION

The findings of study have been presented with analysis of preferences on five dimensions of leader behaviour and eight factors of participation motivation of school going children involved in sports activity.

To assess the preferences on five dimensions of leader behaviour and eight factors of participation motivation of school going children involved in sports activity, means and standard deviations and One way analysis of variance with all the subjects were computed and data pertaining to this have been presented in Table 1 to 5.

TABELE 1
DESCRIPTIVE STATISTICS OF PREFERENCES ON FIVE DIMENSIONS OF LEADER
BEHAVIOUR OF SCHOOL GOING CHILDREN INVOLVED
IN SPORTS ACTIVITY

S.NO.	Leader Behaviour	M	SD
1.	Training & Instruction	3.930	.408
2.	Social Support	4.080	.411
3.	Positive Feedback	3.870	.685
4.	Autocratic Behaviour	3.917	.609
5.	Democratic Behaviour	4.070	.508

The mean scores of five dimensions of leader behaviour as preferred by male school going children involved in sports activity have been depicted in figures 1.

TABELE 2
DESCRIPTIVE STATISTICS AND RANK ORDER FOR EIGHT FACTORS OF
PARTICIPATION MOTIVATION OF SCHOOL GOING CHILDREN
INVOLVED IN SPORTS ACTIVITY

Participation Motivation Factors	Means	SD	Rank order
Skill (SKL)	2.613	.377	1 Most important
Team work (TW)	2.553	.459	2
Other(OTH)	2.549	.347	3
Fitness(Fit.)	2.486	.433	4
Friend (FRD)	2.480	.439	5
Achievement /status (AS)	2.416	.347	6
Energy release (ER)	2.358	.403	7
Fun (FN)	2.286	.398	8 Least important

The mean scores of eight factors of participation motivation of male school going children involved in sports activity have been depicted in figures 2.

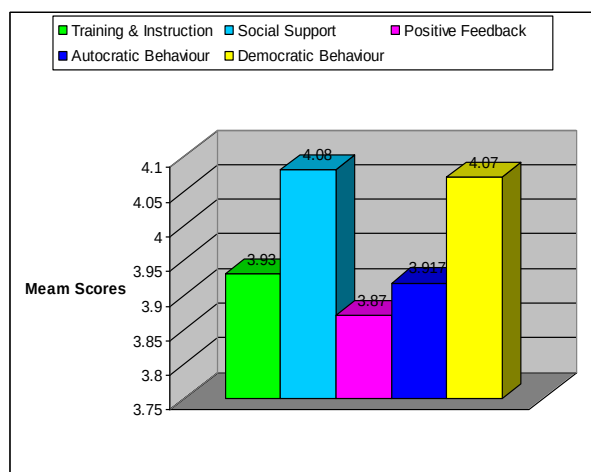


Fig.1: Mean Scores of Preferences on Five Dimensions of Preferred Leadership Behaviour for male school going children involved in sports activities.

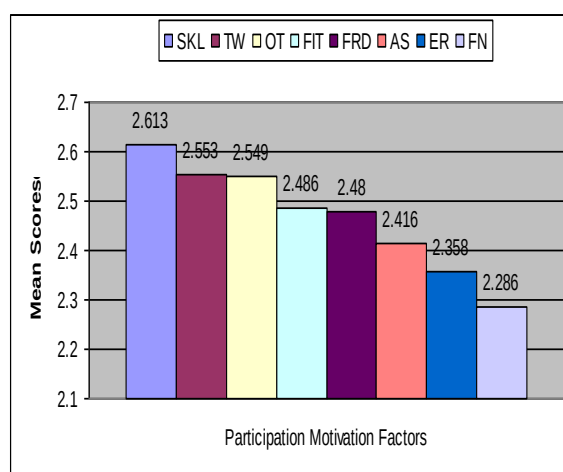


Fig.2: Mean Scores of Eight Factors of Sports Participation Motives Preferred by male school going children involved in sports activities.

TABELE 3

ANALYSIS OF VARIANCE FOR PREFERRED LEADERSHIP OF SCHOOL GOING CHILDREN INVOLVED IN SPORTS ACTIVITY

Source of Variance	df	Sum of Squares	Mean Square	F-ratio
Between Groups	4	1.818	.454	
Within Groups	245	70.291	.287	1.582
Total	249	72.208		

Insignificant at .05 level, $F_{.05}(4, 245) = 2.41$

From Table 3, It is evident that the statistically significant difference did not existed among school going children involved in sports activity on preferred leadership, as the obtained F-value of 1.582 was lesser than the required $F_{.05}(4, 245) = 2.41$.

TABELE 4

ANALYSIS OF VARIANCE FOR SPORTS PARTICIPATION MOTIVATION OF SCHOOL GOING CHILDREN INVOLVED IN SPORTS ACTIVITY

Source of Variance	df	Sum of Squares	Mean Square	F-ratio
Between Groups	7	4.156	.594	
Within Groups	392	63.512	.162	3.665*
Total	399	67.668		

*Significant at .05 level, $F_{.05}(7, 392) = 1.96$

From Table 4, It is evident that the statistically significant difference existed among school going children involved in sports activity on eight factors of participation motivation, as the obtained F-value of 3.665 was higher than the required $F_{.05}(7, 399) = 1.96$.

As the F-ratio was found to be significant, Scheffe's Test of Post-hoc comparison was applied to study the significance of differences among school going children involved in sports activity on eight factors of participation motivation and the data pertaining to this have been presented in Table 5.

TABLE 5
SIGNIFICANCE OF DIFFERENCES AMONG SCHOOL GOING CHILDREN BETWEEN
ORDERED PAIRED MEANS ON EIGHT FACTORS OF
PARTICIPATION MOTIVATION

AS	TW	FIT	ER	OTH	SKL	FRD	FN	Paired mean difference	Confidence Interval (C. I.)
2.416	2.553	-	-	-	-	-	-	.137	.298
2.416	-	2.486	-	-	-	-	-	.070	
2.416	-	-	2.358	-	-	-	-	.036	
2.416	-	-	-	2.549	-	-	-	.133	
2.416	-	-	-	-	2.613	-	-	.197	
2.416	-	-	-	-	-	2.480	-	.064	
2.416	-	-	-	-	-	-	2.286	.130	
-	2.553	2.486	-	-	-	-	-	.067	
-	2.553	-	2.358	-	-	-	-	.195	
-	2.553	-	-	2.549	-	-	-	.004	
-	2.553	-	-	-	2.613	-	-	.060	
-	2.553	-	-	-	-	2.480	-	.073	
-	2.553	-	-	-	-	-	2.286	.267	
-	-	2.486	2.358	-	-	-	-	.128	
-	-	2.486	-	2.549	-	-	-	.063	
-	-	2.486	-	-	2.613	-	-	.127	
-	-	2.486	-	-	-	2.480	-	.006	
-	-	2.486	-	-	-	-	2.286	.200	
-	-	-	2.358	2.549	-	-	-	.191	
-	-	-	2.358	-	2.613	-	-	.225	
-	-	-	2.358	-	-	2.480	-	.122	
-	-	-	2.358	-	-	-	2.286	.072	
-	-	-	-	2.549	2.613	-	-	.064	
-	-	-	-	2.549	-	2.480	-	.069	
-	-	-	-	2.549	-	-	2.286	.263	
-	-	-	-	-	2.613	2.480	-	.133	
-	-	-	-	-	2.613	-	2.286	.397*	
-	-	-	-	-	-	2.480	2.286	.194	

***Significant at .05 level,** Achievement status (AS), Team work (TW), Fitness(Fit), Energy release (ER), Other(OTH), Skill (SKL), Friend (FRD), Fun (FN).

It is quite obvious from the table 5, that there was significant difference on participation motivation among male school going children involved in sports activity. between SKL –FUN, as the paired mean differences of .327 was higher than the confidence interval (C.I.) of 0.298. But the mean differences of .137, .07, .036, .133, .197, .064, .13, .067, .195, .004, .06, .073, .267, .128, .063, .127, .006, .20, .191, .255, .122, .072, .064, .069, .263, .133 and .194 between AS –TW followed by FIT, ER, OTH, SKL, FRD, & FUN; TW –FIT followed by ER, OTH, SKL, FRD, & FUN; FIT –ER followed by OTH, SKL, FRD, & FUN; ER –OTH followed by SKL, FRD, & FUN; OTH –SKL followed by FRD, & FUN; SKL –FRD ; and FRD –FUN respectively were not significant at 0.05 level, as the confidence interval of 0.298 was higher than the mean differences.

DISCUSSION

Findings of descriptive data of male school going children involved in sports activity on five dimensions of preferred leadership behaviour indicated that male children preferred more social support followed by democratic behaviour, training and instruction and autocratic behaviour positive feedback from their coaches.

Findings of descriptive data of male school going children involved in sports activity on eight factors of reason of participation in sports indicated that male children preferred more skill development followed by team work, others, fitness, friendship, achievement status, energy release and fun from most important to least important rank order.

The results of One way analysis of variance (ANOVA) for male school going children involved in sports activity on five dimensions of preferred leadership behaviour expressed insignificant differences among male school going children in their preferences for preferred leadership.

In case of reason for participation in sports activity, male school going children had significant differences in their participation motivation. The Scheffe's Test of Post-hoc comparison showed that male school going children involved in sports activity had significant difference between skill development – fun factor of participation motivation only.

It was hypothesized that: the male school going children of Bilaspur region involved in different game and sports would significantly differ in their leadership preferences and sports participation motives is partially accepted, as male school going children had significant difference between preferences for skill development - fun only of sports participation motives. But the male school going children would not differ significantly in their leadership preferences on five dimension of preferred leadership behaviour.

CONCLUSIONS

Within the limitation of present study, the following conclusions are enumerated :

1. Male school going children of Bilaspur region exhibited similar preferences on five dimensions of leader behaviour.
2. Male school going children of Bilaspur region preferred more of social support followed by democratic behaviour, autocratic behaviour, training and instruction and positive feedback
3. Male school going children of Bilaspur region had different preferences for reason of participation in sports.
4. Male school going children of Bilaspur region preferred more of skill development followed by team work, other, fitness, friendship, achievement status, energy release and fun from their coaches .

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A COMPARISON OF PSYCHOLOGICAL STRESS OF MALE AND FEMALE HOCKEY PLAYERS

Dr. Kaushal Kumar Agrawal* & John Peter Toppo**

ABSTRACT

The purpose of the study was to investigate and compare the psychological stress among male and female Hockey players of Chhattisgarh. The subjects of the study were One Hundred Fifty Hockey players (Ninety males and Sixty females) of Chhattisgarh participated in State and National school games competitions during the year 2008-2010. Scale of Physical Stress (SPS) of Bisht Battery of Stress Scale, 1995 (BBSS) prepared and standardized by Bisht was used to measure the four components of stress e.g. anxiety, frustration, pressure, and conflict. To assess the stress of male and female Hockey players on four psychological dimensions of stress, means and standard deviations, t-ratio, and one way analysis of variance were computed. The analysis of data revealed that male and female hockey players had variation in their frequency and quantity on four dimensions of stress i. e. frustration, conflicts, pressure, and anxiety. Male hockey players were found more frustrated, anxious, conflicted, and under pressure than their female counter parts.

Key words: Stress, Hockey Players, Frequency & Quantity

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INTRODUCTION

Sports is a Psycho-physical activity full of tensions, anxiety, conflict, strain, and stress. In this modern era of competitive sports, teams and individual athletes play to win. And this spirit of winning the matches and individual events causes many psychological stress teams may win or lose under psychological stress so one has to prepare to train such a way that the members of the team or athletes are to bear all types of stress and strains effectively which may deteriorate the sports performance (Singh, 1982).

The Concept of Stress has physiological, psychological and social aspects. The term stress was first used and popularized by Endocrinologist Dr. Hans Selye to describe the results of same kind of traumatic impingement on the organism. In fact he used the term to designate the event or trauma affecting the organism or individual later on, the term began to replace such words like anxiety, emotional distress conflict ego-threat, frustration, tension, lack of security and arousal etc. Which denotes some psychological and physiological conditions. But the word Stress remained popular because it tended to unify mind body relationship (Cratney, 1981).

Stress has been defined as a stimulus intervening or response variable and a behavior a mediator as an intervening variable and a behavior at a response variable according to Frost (1971), the stress is a state in which the natural homeostasis (equilibrium) of the body is disrupted. "May be threat to the organism, disease, trauma, heat, Cold, Thirst, Fatigue may cause stress. Emotional arousal can also bring about stress" stress is the process that involves the perception of a substantial imbalance between environmental demand is perceived as having important consequences and is responded to with increased levels of anxiety. Hence Mac-Grath (1970) defines stress as occurring when there is an imbalance between the perceived demand and the perceived response capability of the organism. but the consequences must be perceived as important and it must be anticipated that failure to meet the demands will result in adverse consequence.

Anxiety, tension, stress, and other emotional disturbances are the symptoms of psychological stress, which are caused by frustration. The term frustration refers to the circumstances that result in the failure of a need to motivate to be satisfied when the satisfaction of the motive is thwarted, because we do not always reach the goal to which we aspire the thwarting or interference with goal directed behavior is often known as frustration. Whittaker (1970) says, interference with the satisfaction of motives is in the conflict of motives. If the individual wants two goals at the same time, he is likely to experience a great deal of discomfort and stress before making a choice.

Anxiety, stress, pressure, tension, and emotional excitement are all descriptive of the state of the organism of a sportsman, as it prepare him for some type of action. As it increases in quantity and intensity, the physiological mechanisms begins to operate and the organism is prepared to flee, to retreat, to fight or attack. It is a state of emotional excitement. In sports, it may be termed as "psyching-up" mental and physical preparation for a game or contest might involve all of these states i.e, anxiety, tension and emotional excitement.

Some times stress may also occur when the environment does not demand enough, when there is an under load rather than an overload of course stress like effects may occur from sensory deprivation social isolation or stimulus improvement. According to Spielberger

(1972), Stress is limited to the magnitude of objective danger that is associated with the stimulus properties of a given situation.

Stress in sport is both physical and psychological . It is easier, However, to Chart the physical injuries that cause young athletes to leave the arena than it is to chart psychological injuries which may also be disabling .Psychological stress often accompanies physical injury or precedes it. One example is provided in the lawsuit (New York Times December 6, 1981) of Vorhies versus the Virginia polytechnic Institute over the death of Bob Vorhies after he had completed punishment drills following a football practice (Butt, 1987).

The purpose of the study was to investigate and compare the psychological stress among male and female Hockey players of Chhattisgarh. It was hypothesized that there may be significant difference among male and female hockey players in all the dimensions of stress.

METHODOLOGY

Selection of Subjects:

The subjects of the study were One Hundred Fifty Hockey players (Ninty males and Sixty females) belong to different schools of Chhattisgarh and who participated in State and National school games competitions during the year 2008-2010 age raging from 14 to 19 yrs.

Instrumentation:

Scale of Physical Stress (SPS) of Bisht Battery of Stress Scale,1995 (BBSS) prepared and standardized by Bisht was used to measure the four components of stress e.g. anxiety, frustration, pressure, and conflict. The questionnaire consists of 60 items in which there are positive and negative statements which indicate the frequency of stress score provides the adding these frequency and quantity stress score provides the total stress scores. Physical frustration components have 22 items in which seven items show the negative response and fifteen items have positive response physical conflict pressure have sixteen items out of which two are negative response and in physical anxiety there Are seventeen items .Where two negative response were recorded. The test is highly reliable which is dependability efficient 0.91 Stability coefficient 0.83 and internal consistence 0.78.

The subjects were contacted at the site of practice field of hockey personally and necessary instructions were provided to the subject before the administration of test. Once the instructions are clearly understood by them, the SPS questionnaires were distributed to the respondents. As soon as a group of players completed the Questionnaire, the completed questionnaires were collected from the hockey players and it was verified that no questionnaire was left without being answered.

RESULTS AND DISCUSSION

To assess the stress of male and female Hockey players on four psychological dimensions of stress, means and standard deviations, t-ratio, and one way analysis of variance with all the subjects were computed and data pertaining to this have been presented in Table 1 to 6.

TABLE 1
DESCRIPTIVE STATISTICS OF FOUR DIMENSIONS OF PSYCHOLOGICAL STRESS
OF MALE AND FEMALE HOCKEY PLAYERS

S.NO.	Dimensions of Stress	Males (N=115)		Females (N=72)	
		M	SD	M	SD
1.	Frustration	60.57	23.96	41.07	14.33
2.	Conflict	13.02	06.45	09.07	04.06
3.	Pressure	37.00	18.41	23.33	09.33
4.	Anxiety	46.12	19.59	25.88	15.17

The mean scores of total sum of four dimensions of physical stress of as indicated male and female hockey players have been depicted in figures 1.

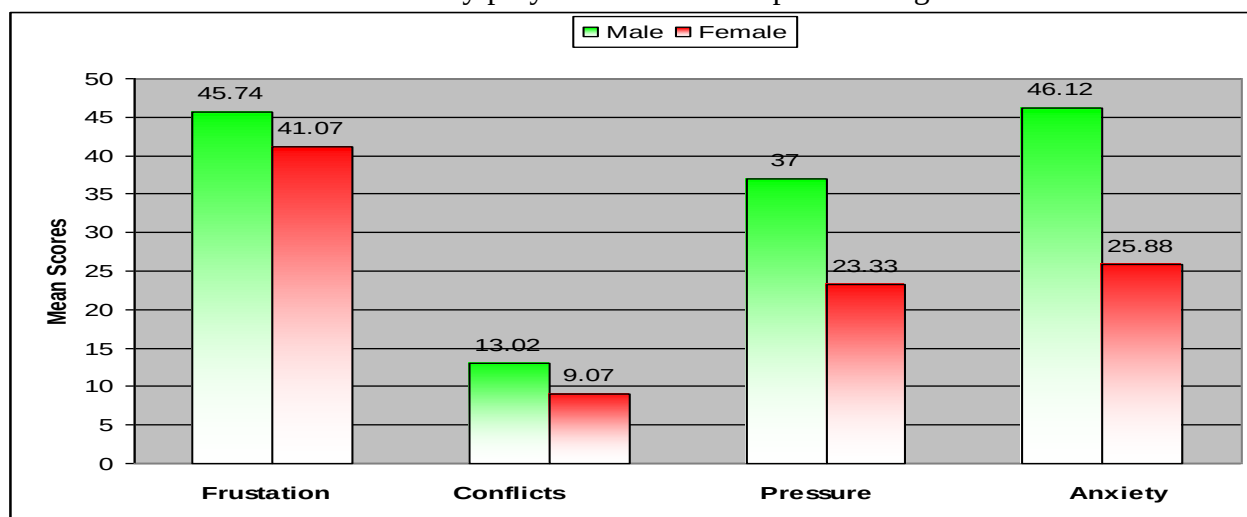


Fig. 1: Mean Scores of Total Sum of Frequency and Quantity on Four Dimensions of Physical Stress for Male and Female Hockey Players.

TABELE 2
ANALYSIS OF VARIANCE ON FOUR DIMENSIONS OF PSYCHOLOGICAL STRESS
AMONG MALE AND FEMALE HOCKEY PLAYERS

Dimensions	Source of Variance	df	Sum of Squares	Mean Square	F-ratio
Frustration	Between Groups	1	16844.46	16844.46	38.58*
	Within Groups	185	80826.78	436.90	
Conflict	Between Groups	1	690.13	690.13	21.37*
	Within Groups	185	5974.62	32.29	
Pressure	Between Groups	1	8270.16	8270.16	33.81*
	Within Groups	185	45248.00	214.58	
Anxiety	Between Groups	1	18150.93	18150.93	55.29*
	Within Groups	185	60736.17	328.30	

*Significant at .05 level, $F_{.05}(1, 185) = 3.89$

From Table 2, It is evident that the statistically significant differences existed among male and female hockey players on four dimensions of physical stress i. e. .

frustration, conflicts, pressure, and anxiety, as the obtained F-value of 38.58, 21.37, 33.81, and 55.29 was much higher than the required $F_{05}(1, 185) = 3.89$.

TABELE 3
ANALYSIS OF VARIANCE FOR PSYCHOLOGICAL STRESS OF MALE HOCKEY PLAYERS

Source of Variance	df	Sum of Squares	Mean Square	F-ratio
Between Groups	3	137439.00	137439.00	
Within Groups	456	153962.38	337.69	135.69*
Total	459	291401.38		

*Significant at .05 level, $F_{05}(3, 456) = 2.62$

From Table 3, It is evident that the statistically significant difference existed among male hockey players on physical stress was very high, as the obtained F-value of 135.69 was much higher than the required $F_{05}(3, 456) = 2.62$.

As the F-ratio was found to be significant, Scheffe's Test of Post-hoc comparison was applied to study the significance of differences among male hockey players on four dimensions physical stress and the data pertaining to this have been presented in Table 4

TABELE 4
SIGNIFICANCE OF DIFFERENCES AMONG MALE HOCKEY PLAYERS BETWEEN ORDERED PAIRED MEANS ON FOUR DIMENSIONS OF PSYCHOLOGICAL STRESS

Frustration	Conflicts	Pressure	Anxiety	Paired mean difference	Confidence Interval (C. I.)
60.57	13.02	-	-	47.55*	4.05
60.57	-	37.00	-	23.57*	
60.57	-	-	46.12	14.45*	
-	13.02	37.00	-	23.98*	
-	13.02	-	46.12	33.10*	
-	-	37.00	46.12	9.12*	

*Significant at .05 level

It is quite obvious from the table 4, that highly significant differences were found on physical stress male hockey players of between Frustration - Conflicts followed by Pressure and Anxiety; Conflicts - Pressure; followed by Anxiety, and Pressure- Anxiety as the paired mean differences of 47.55, 23.57, 14.45, 23.98, 33.10 and 9.12 respectively were higher than the confidence interval (C.I.) of 4.05.

TABELE 5
ANALYSIS OF VARIANCE FOR PSYCHOLOGICAL STRESS OF FEMALE HOCKEY PLAYERS

Source of Variance	df	Sum of Squares	Mean Square	F-ratio
Between Groups	3	37112.15	12370.72	
Within Groups	284	38823.18	136.70	90.49*
Total	287	65935.33		

*Significant at .05 level, $F_{05}(3, 284) = 2.64$

From Table 5, It is evident that the statistically significant difference existed among female hockey players on physical stress was very high, as the obtained F-

value of 90.49 was much higher than the required $F_{.05}(3, 284) = 2.64$.

As the F-ratio was found to be significant, Scheffe's Test of Post-hoc comparison was applied to study the significance of differences among female hockey players on four dimensions physical stress and the data pertaining to this have been presented in Table 6.

TABELE 6
SINGNIFICANCE OF DIFFERENCES AMONG FEMALE HOCKEY PLAYERS
BETWEEN ORDERED PAIRED MEANS ON FOUR DIMENSIONS OF
PSYCHOLOGICAL STRESS

Frustration	Conflicts	Pressure	Anxiety	Paired mean difference	Confidence Interval (C. I.)
40.07	9.07	-	-	31.00*	5.48
40.07	-	23.33	-	16.74*	
40.07	-	-	25.88	14.19*	
-	9.07	23.33	-	14.26*	
-	9.07	-	25.88	16.81*	
-	-	23.33	25.88	2.55	

*Significant at .05 level

It is quite obvious from the table 6, that there were significant differences on physical stress among female hockey players of between Frustration - Conflicts followed by Pressure and Anxiety; Conflicts - Pressure; followed by Anxiety, as the paired mean differences of 31.00, 16.74, 14.19, 14.26 and 16.81 respectively were higher than the confidence interval (CI) of 5.48. But the mean differences between Pressure - Anxiety was not significant at 0.05 level, as the confidence interval of 5.48 was higher than the mean difference of 2.55.

DISCUSSION

The male and female hockey players had significant differences in their frequency and quantity for the set of four dimensions of physical stress. Males hockey players were found more frustrated, anxious, conflicted, and under pressure than their female counter parts.

The analysis of variance with male and female hockey players as a whole and four dimensions of physical stress indicated that significant differences existed among male and female hockey players in their frequency and quantity for the set of four dimensions of physical stress.

Significant differences were found among male and female hockey players in four dimensions of physical stress. It was also found that both sex gymnasts were more under frustration followed by anxiety, pressure and conflicts.

It was hypothesized that there may be significant difference among male and female hockey players on four dimensions of physical stress is partially accepted. But, it was also found that both sex hockey players were more under frustration followed by anxiety, pressure and conflicts. pressure than their female counter parts.

CONCLUSIONS

Within the limitations of the present study, the following conclusions are enumerated :

1. The male and female hockey players had variation in their frequency and quantity on four dimensions of stress i. e. frustration, conflicts, pressure, and anxiety.
2. Male hockey players were found more frustrated, anxious, conflicted, and under pressure than their female counter parts.
3. Male and female hockey players as a whole had variation on the set of four dimensions of stress.
4. Male and female hockey players were found more under frustration followed by anxiety, pressure and conflicts. dimensions of stress.

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A STUDY OF DECISION BALANCE IN RELATION TO PHYSICAL ACTIVITY STAGES OF CHANGE OF UNIVERSITY STUDENTS

Ashish Pandey* & Aradhana Saxena**

ABSTRACT

The purpose of this study was to study and assess the decision balance of university students for physical activity. For this purpose, Two hundred and Ninety eight students from a Maharshi Mahesh Yogi Vedic Vishwavidalaya, Jabalpur (M. P.) were invited to participate in the study. Two hundred and eight students initiated the survey, but only 153 (100 male and 53 female) students completed the questionnaires, were selected as the subjects for the study. Decisional Balance Scale prepared by Marcus, Rakowski, & Rossi (1992) and Physical Activity Stages of Change Questionnaire by Marcus & Simkin, (1993) were used for the purpose of data collection. To assess the decision balance by physical activity stages of change of university students, means, standard deviations, and Analysis of Variance were computed. The results of this investigation revealed that the statistically significant difference existed among university students on decision balance factor of self determination. The Scheffe's Test of Post-hoc Comparison revealed the significant differences on stages of change of decisional balance among university students between contemplation – preparation followed by action and maintenance. The ratings of decision balance increased across the stages from preparation to the maintenance stage. But the low rating was found in Contemplation with across the stages.

Keywords: Decision, Balance, Self determination, Stages of change

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INTRODUCTION

More research is needed to investigate how required health and physical education courses can increase students' physical activity levels as compared to those students who have not taken the course. The purpose of this study was to examine motivational constructs in a college population where students are required to take a physical fitness course for graduation. The findings will guide efforts to identify and develop effective strategies that can be used to facilitate adoption of active lifestyles for the college aged population that will carry over into adulthood. Students' levels of physical activity and exercise motivation were explored using Self-determination theory (Deci & Ryan, 1985) as an organizing framework. The Trans-theoretical Model (Prochaska & Velicer, 1997) was integrated with Self Determination Theory to examine how motivation changes as individuals become physically active.

The stages of change approach has frequently been applied in the health field because it uses stages to track changes in behavior over time. This approach recognizes that behavior change requires both time and motivation because individuals vary in their readiness to make a change. The stages of change model is used as an effective tool in developing interventions that are specific to individual needs (Velicer et al., 1998).

Decisional Balance reflects an individual's struggle to weigh the pros and cons of an activity or changing of an activity. Specifically to exercise, it can be thought of as a balance between the benefits and costs of exercising. This balance changes as an individual makes his or her way through the stages of change. It has been hypothesized that decisional balance (pros minus the cons) increases from pre-contemplation to maintenance, with a shift occurring between the preparation and action stages where the pros eventually outweigh the cons (Prochaska & Velicer, 1997).

Decisional Balance reflects an individual's struggle to weigh the pros and cons of an activity or changing of an activity. Specifically to exercise, it can be thought of as a balance between the benefits and costs of exercising. This balance changes as an individual makes his or her way through the stages of change (Velicer, et. al., 1985).

The purpose of this study was to assess and examine the decision balance in relation to physical activity stages of change of university students.

METHODOLOGY

Selection of Subjects

Two hundred and Ninety eight students from a Maharshi Mahesh Yogi Vedic Vishwavidalaya, Jabalpur (M. P.) were invited to participate in the study. Two hundred and eight students initiated the survey, but only 153 (100 male and 53 female) students completed the questionnaires. This was a 73.50 % return rate of the total subjects studying in physical education and general education faculty. The mean age of the students was 19.47 years old.

Insrtrumentation

Decisional Balance Scale (DBS) prepared by Marcus, Rakowski, & Rossi (1992) to assesses one's attitudes (pros and cons) towards exercise. The pros represent the advantages of exercise while the cons represent the disadvantages. Participants are asked to indicate how important each question is in their decision to exercise by using a five point Likert scale (1 = not at all important, 5 = extremely important). The scale is scored by adding the responses to

the pro questions, the responses to the con questions, and then by subtracting the con total from the pro total to create a decisional balance difference score.

Physical Activity Stages of Change Questionnaire (PASCQ) by Marcus & Simkin, (1993) consists of four items representing the five stages of change in the transtheoretical model. The student was asked to answer four questions which reflected their current exercise behaviors. For example, physical activity was defined and then the student was asked to reply yes or no to "I am currently physically active" and "I intend to become more physically active in the next 6 months." Regular physical activity was then defined and the student was asked to answer yes or no to "I currently engage in regular physical activity" and "I have been regularly physically active for the past 6 months." The answers were assessed by a scoring algorithm. For example, a student would be in the pre-contemplation stage if they answered no to the first two questions. For a student to be in the maintenance stage, they had to answer yes to questions one, three, and four.

ADMINISTRATION OF QUESTIONNAIRES

The university, where data were collected is located in a small city in the Madhya Pradesh. It is a liberal university that has a religious affiliation also. The enrollment is typically around 10,000 students. A majority of students live outside the campus. The largest majors on campus are Computer Science, Management, Education, yoga, Vedic science and physical education. The fitness/health facility is owned and contains a 400 meters Track, two volleyball court, one handball court, badminton hall, one basketball court, weight training room, and health centre etc. Data was collected during the months of August and September, 2009 in the university campus through a personal contact with the respondents in university campus.

RESULTS AND DISCUSSION

Means and standard deviations, Analysis of Variance (ANOVA) for decisional balance with the independent variable being stages of change were computed with the help of SPSS 16 Version.. Wherever, the F-ratio was found significant, Scheffe's Test of post-hoc analysis was applied to find out significance of difference between ordered paired means. and data pertaining to this have presented in Table 1 to3.

TABELE 1

MEANS AND STANDARD DEVIATIONS OF DECISION BALANCE IN RELATION TO STAGE OF CHANGE OF UNIVERSITY STUDENTS

S.NO.	Physical Activity Stages	Decision Balance	
		M	SD
1.	Contemplation(N=28)	4.39	6.37
2.	Preparation (N=19)	11.42	3.77
3.	Action (N=22)	10.45	4.29
4.	Maintenance (N=84)	11.92	4.30

The mean scores of decisional balance and self-efficacy by stages of change of university students have been depicted in figures 1

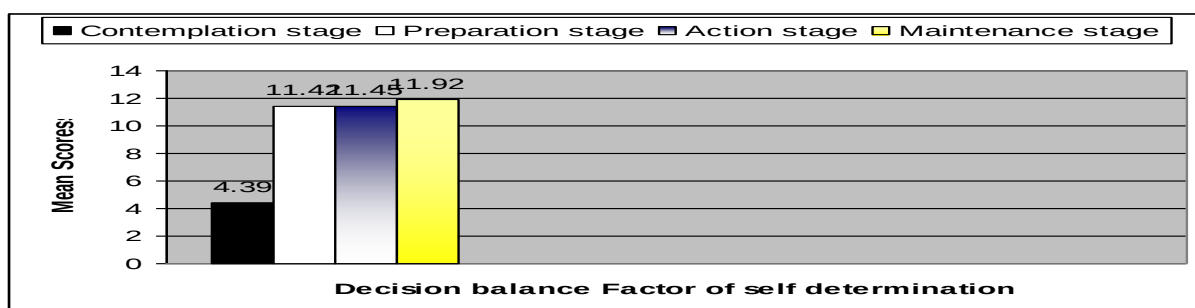


Figure 1: Mean Scores of Decision Balance factor of Self Determination by Physical Activity Stages of Change of University Students.

TABLE 2
ANALYSIS OF VARIANCE OF DECISIONAL BALANCE BY STAGES OF CHANGE OF UNIVERSITY STUDENTS

Self-determination Factors	Source of Variance	df	Sum of Square	Mean Squares	F-ratio
Decision Balance	Between Groups	3	1220.83	406.94	18.49*
	Within Groups	149	3279.18	22.01	

Significant at .01 level, $F_{01}(3,149)=3.91$

From Table 2, It is evident that the statistically significant difference existed among university students on decisional balance, as the obtained F-values of 18.49, and 13.13 were higher than the required $F_{01}(3, 149) = 3.91$.

As the F-ratio was found to be significant, Scheffe's Test of Post-hoc comparison was applied to study the significance of differences among university students on decisional balance, the data pertaining to this have been presented in Table 3.

TABLE 3
SIGNIFICANCE OF DIFFERENCES AMONG UNIVERSITY STUDENTS BETWEEN ORDERED PAIRED MEANS ON STAGES OF CHANGE BY DECISIONAL BALANCE

Mean Scores					
Contemplation	Preparation	Action	Maintenance	Paired mean difference	(C.I.)
4.39	11.42	-	-	7.03*	1.76
4.39	-	10.45	-	6.06*	
4.39	-	-	11.92	7.53*	
-	11.42	10.45	-	0.97	
-	11.42	-	11.92	0.50	
-	-	10.45	11.92	1.47	

*Significant at .01 level,

It is quite obvious from the table 3, that there were significant differences on stages of change of decisional balance among university students between contemplation – preparation followed by action and maintenance; as the paired mean differences of 7.03, 6.06, and 7.53 respectively were higher than the confidence interval (C.I.) of 1.76. But the mean differences of .97, .50, and 1.47 were not significant at 0.01 level.

DISCUSSION

Decisional balance was hypothesized to vary as a function of stages of change, and those hypothesis was supported. Statistically significant difference exhibited by university students on decisional balance. The university students in the maintenance, action, and preparation stages had higher scores on decisional balance than those in pre-contemplation/contemplation. The ratings of decision balance increased across the stages from preparation to the maintenance stage. But the low rating was found in Contemplation with across the stages.

CONCLUSIONS

From the present study, the following conclusions are drawn:

1. Significant differences were on stages of change of physical activity among university students between contemplation – preparation followed by action and maintenance; preparation – maintenance; and action- maintenance.
2. Statistically significant difference existed among university students on decision balance factor of self-determination by stages of change.

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ANALYSIS OF PERSONALITY CHARACTERISTICS OF MALE AND FEMALE VOLLEYBALL PLAYERS

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ABSTRACT

The purpose of the present investigation was to compare and analyse the personality Characteristics of male and female Volleyball players. The sample consisted 100 State level volleyball players (Sixty males and forty females) belong to chhattisgarh participated in state competitions during the year 2009-2010. Eysenck's Personality Questionnaire-R (E.P.Q.-R) prepared by Eysenck and .Eysenck was selected to measure the four dimensions of personality of state level volleyball players. To assess the four personality characteristics of male and female volleyball players of state level, means and standard deviations, t-ratio and analysis of variance were computed. The results of the study revealed that state levels volleyball players as whole had similarity in psychoticism, neuroticism and social desirability and dissimilarity in extraversion personality factors. Male volleyball players were found more extroverted than their counter parts. Male and female volleyball players together expressed differences in extraversion only. Male volleyball players were more neurotic in nature followed extraversion, social desirability and psychoticism personality factors than their counter parts.

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INTRODUCTION

Personality is made up of many components some of which are objective, observable and measurable; others are subjective and therefore less easily studied and measured. Among the objective components of personality are physical characteristics, such as body size, physique and factors which influence the speed and strength of movements, aptitudes and talents- both physical and intellectual, habits, behavior patterns and mode of action. The subjective components include motives, feeling, ideas, attitudes, commitments that give direction to the individual way of thinking feeling and action. Thus personality pattern are made of traits, specific qualities of behavior organized and integrated into a whole. The two major components of personality are the 'core' or concept of self and 'spokes of the wheel' the traits.

Relationship between personality and performance in athletic or Sport skill are often discussed in the pages of professional Journals and by individuals on the playing fields. People placed in situation which call for action usually several more of themselves than is exposed in less dynamic situations. Some have speculated that movement characteristics /who may be or the traits of the total personality complex (Roul & Singh,1995).

Success in athletics seems to be dependent in part on psychological status and traits. The use of an athlete's personality profile, in concern with knowledge of their past experience, coach's rating, anatomic and physiological characteristics and so one can enhance the accuracy of prediction in a number of sports (Cratty, 1973).

The purpose of the present investigation was to compare and analyse the personality Characteristics of male and female Volleyball players. It was hypothesized that there would be no significant difference between male and female Volleyball players in their personality characteristics as a whole and separately.

REVIEW OF RELATED LITERARUE

Solomon found that the coaches' expectations for the athletes were the only significant predictor of athletic performance, of the issues addressed and evaluated within the survey completed by the participants. **Reiss, Sherman, and Wiltz** found that the strongest correlation between sports and motivation was present in the motivational factor "enjoyment of physical exercise." Moreover, they found that an "athlete" may effectively be defined simply as "someone who enjoys physical activity". **Erdheim and Wang's** found that personality can predict athletic performance. Moreover, we can say that the individuals high in dimensions of personality that include setting high goals, such as their coaches' high expectations, are more likely to achieve such high set athletic goals. **Yanada and Hirat** found to be less neurotic and depressive and more hypomania than those students who discontinued. They assumed that it may be that low trait anxiety and neuroticism are pre-requisites for success in athletics, and anxious on demotic individuals simply avoid or drop out of athletics. **Booth** concluded that no significant differences were found between the means of the scores in any of the MMPI variables among those who participated in individual sport.

METHODOLOGY

Selection of Subjects

The sample consisted 100 State level volleyball players (Sixty males and forty females) belong to different districts of chhattisgarh who participated in state competitions during the year 2009-2010.

Description of Questionnaire

Eysenck's Personality Questionnaire-R (E.P.Q.-R) prepared by Eysenck and .Eysenck (1975) was selected to measure the four dimensions of personality of state level volleyball players. The Questionnaire consists of 90 items to measure the personality traits of the players and 90 items representing three dimensions of personality i.e. Extraversion, Psychoticism, Neuroticism and Social Desirability. The over all test-retest reliability with age and sex were .78 for Psychoticism, .89 for .Extraversion, .86 for Neuroticism and .84 Social Desirability.

RESULTS AND DISCUSSION

To assess the four personality characteristics of male and female volleyball players of state level, means and standard deviations, t-ratio and analysis of variance (ANOVA) on dependent variable for all the subjects taken together and separately for both the gender were computed and data pertaining to this have been presented in table 1 to 5.

TABLE 1

DESCRIPTIVE STATISTICS OF FOUR PERSONALITY FACTORS OF STATE LEVEL MALE AND FEMALE VOLLEYBALL PLAYERS OF CHHATTISGARH

S.NO.	Dimensions of Stress	Males (N=60)		Females (N=40)	
		M	SD	M	SD
1.	Psychoticism	7.59	3.04	7.16	2.21
2.	Extraversion	10.50	2.18	8.72	3.01
3.	Neuroticism	10.53	3.40	10.80	3.58
4.	Social Desirability	7.86	2.51	7.55	2.49

The mean scores of four personality factors as indicated male and female Volleyball players have been depicted in figures 1.

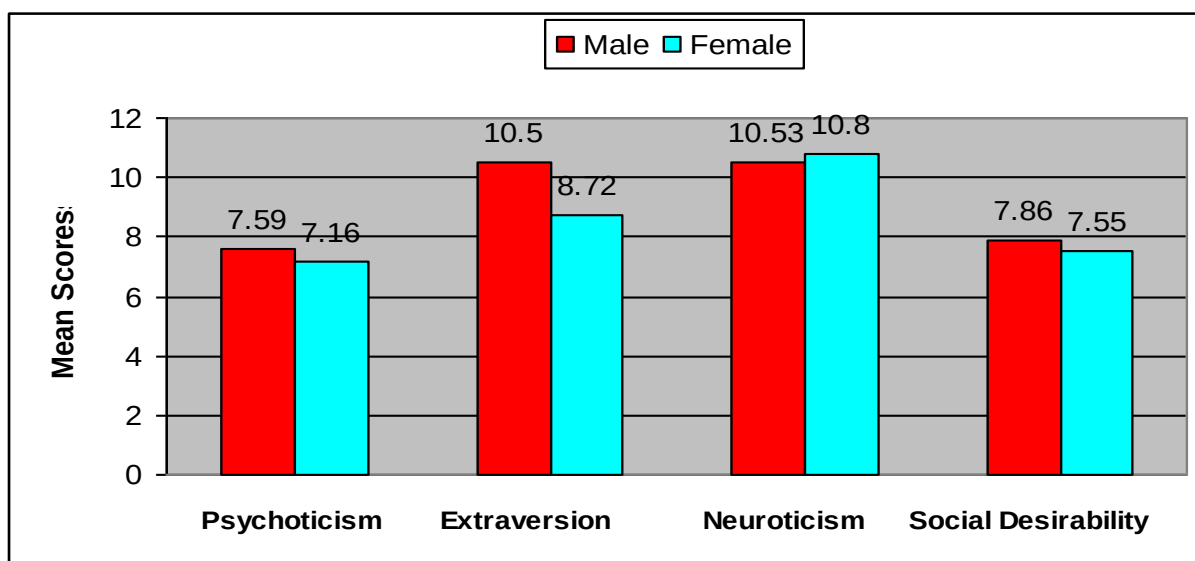


Figure :1- Mean Scores of Four dimensions of Personality of State level Male and Female Volleyball Players

TABLE 2
ANALYSIS OF VARIANCE OF PERSONALITY FACTORS OF STATE LEVEL MALE AND FEMALE VOLLEYBALL PLAYERS OF CHHATTISGARH

Variables	Source of Variance	df	Sum of Squares	Mean Square	F-ratio
Psychoticism	Between Groups	1	4.81	4.81	0.66
	Within Groups	98	741.50	7.56	
Extraversion	Between Groups	1	58.54	58.54	0.11
	Within Groups	98	922.18	9.41	
Neuroticism	Between Groups	1	1.31	1.31	5.99*
	Within Groups	98	1229.05	12.54	
Social Desirability	Between Groups	1	2.53	2.53	0.37
	Within Groups	98	612.65	6.25	

*Significant at .05 level, $F_{.05}(1, 98) = 3.94$.

From table 2, It is evident that significant differences existed among male and female volleyball players of state level in their neuroticism factor of personality, as the obtained F-values of 5.99 was higher than the required $F_{.05}(1, 98) = 3.94$. They did not differ in their three personality factors i. e. Psychoticism, extraversion and social desirability, as the obtained t-values of 0.66, 0.11 and 0.37 respectively were less than the required $F_{.05}(1, 98) = 3.94$.

TABLE 3
ANALYSIS OF VARIANCE OF PERSONALITY FACTORS OF STATE LEVEL MALE VOLLEYBALL PLAYERS OF CHHATTISGARH

Source of Variance	df	Sum of Squares	Mean Square	F-ratio
Between Groups	3	449.18	149.73	16.84*
Within Groups	236	2099.77	8.89	
Total	239	2548.95		

*Significant at .05 level, $F_{.05}(3, 236) = 2.65$.

From table 3, It is evident that significant differences existed among state level male volleyball players in their all personality factors, as the obtained F-values of 16.84 was too much higher than the required $F_{.05}(3, 236) = 2.65$.

TABLE 4
ANALYSIS OF VARIANCE OF PERSONALITY FACTORS OF STATE LEVEL FEMALE VOLLEYBALL PLAYERS OF CHHATTISGARH

Source of Variance	df	Sum of Squares	Mean Square	F-ratio
Between Groups	3	371.22	105.74	11.79*
Within Groups	156	1699.13	8.97	
Total	159	1729.22		

*Significant at .05 level, $F_{.05}(3, 156) = 2.66$.

From table 4, It is evident that significant differences existed among state level female volleyball players in their all personality factors, as the obtained F-values of 11.79 was too much higher than the required $F_{.05}(3, 156) = 2.66$.

TABLE 5
SIGNIFICANCE OF DIFFERENCES BETWEEN MEAN SCORES OF STATE LEVEL
MALE AND FEMALE VOLLEYBALL PLAYERS ON FOUR
PERSONALITY FACTORS

Variables	Sex	Mean	MD	σ_{DM}	t-ratio
Psychoticism	Male	7.59	0.43	0.37	0.66
	Female	7.16		0.31	
Extraversion	Male	10.50	1.58	0.43	2.12*
	Female	8.72		0.48	
Neuroticism	Male	10.53	0.27	0.33	0.21
	Female	10.80		0.50	
Social Desirability	Male	7.86	0.31	0.29	0.49
	Female	7.55		0.31	

Significant at .05 level $t_{.05(98)} = 1.98$

From table 5, It is clear that the significant difference was found between State level male and female volleyball players on extraversion personality factor only, as the obtained t-value of 2.12 was higher than the required $t_{.05(98)} = 1.98$. They did not differ in their three personality factors i. e. Psychoticism, neuroticism and social desirability, as the obtained t-values of 0.66, 0.21 and 0.49 respectively were less than the required $t_{.05(98)} = 1.98$.

DISCUSSION

When state level volleyball players as a whole were compared on four dimensions of personality characteristics, they had no significant differences in all dimensions except extraversion only. This may also be due to similarity in setting the specific goal, plan and nature of game play.

To see whether state level male volleyball players on four dimensions of personality traits produced significant analysis of variance. This similarity in personality structure of same level competition may be attributed to the possible similarity of game style, attitude and competition orientation of male players participated at state level. In case of state level female volleyball players, they were also found significantly differ in all dimensions of personality dimensions.

When male and female volleyball players of state level were compared together on the four dimensions of personality, they had no significant differences in all dimensions except extraversion only. The females were less extroverted than their counter parts. This may also be due to variations in intellectual level for specific goal setting.

It was hypothesized that there would be no significant difference between male and female volleyball players in their four personality factors has been partially accepted, as they had significantly differ in extraversion dimension only, but they did not differ significantly in other dimensions of personality characteristics. It was also hypothesized that there would be no significant difference among male and female volleyball players as a whole and separately in their four personality factors has been accepted, as the both gender volleyball players separately had significantly differ in all personality factors which may be due to variations in training age and performance level.

CONCLUSIONS

Within the limitations of the present study, the following conclusions are enumerated :

1. State levels volleyball players as whole had similarity in psychoticism, neuroticism and social desirability and dissimilarity in extraversion personality factors
2. Male volleyball players were found more extroverted than their counter parts.
3. Male and female volleyball players together expressed differences in extraversion only.
4. Male volleyball players were more neurotic in nature followed extraversion, social desirability and psychoticism personality factors than their counter parts.

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A COMPARATIVE STUDY OF ANTHROPOMETRIC PARAMETERS OF INDIAN ELITE MALEATHLETES OF DIFFERENT THROWING EVENTS

*** Dr. Dau Dayal Yadav, & Arvind Bahadur Singh ****

ABSTRACT

The purpose of the study was to compare the anthropometric parameter of Indian elite male athletes of different throwing events. For this purpose, 25 elite male throwers for each event i.e. Javelin, Shot put, Discus and Hammer throws were selected from various States taken admission for regular diploma course, SAI hostel of Patiala and India camp held at SAI, NSNIS, Patiala. Purposive sampling was used to extract the sample. data in the from of criterion measure of study described above were collected through the anthropometrical tools during 2004-2005. The level of significance of study 0.05. Results of the study indicated that there was no significant difference in the means of sitting height of hammer, shot put, discus and javelin throwers.

Key words: Anthropometric parameter, Sitting height, Arm length, and Leg length.

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INTRODUCTION

The throws (shot put, discus, javelin, and hammer) are field events in athletics. They are measure for explosive strength (power) in a human being from ancient time to modern time. The throwers of shot put, Discus, Javelin and hammer differed greatly in physique from the other athletes. As a group, they are taller and heavier, with longer arms in relation to their legs. They had broader shoulders and broader hips even for their trunk size, and are somewhat fatter than the track athletes. Their proportions of leg to the trunk is similar to those of middle distance In ancient time throws were used in hunting and warfare. In modern time throws are used for achieving awards or medals in National and International level competitions.

The greater size of the throwers in all dimensions contributes to increase the proportionally body weight of these athletes. The stresses of weight bearing in the case of throwers may be responsible for broadening their knee. The better development of the lean body mass will help them to provide the great strength required in the throwing events runners.

The purpose of the study was to assess and compare the arm length , leg length and sitting stature of the Indian elite male athletes of different throwing events.

METHODOLOGY

Selection of Subjects

For the purpose of this study, Twenty Five (25) elite male athletes of Javelin, Shot put, Discus and Hammer events were selected from NIS trainees during 2004-05, SAI hostel of Patiala and Indian athletic camp held at SAI NSNIS Patiala (PB.) from 27.1.2005 to 26-2-2005.

Selection of Variable

Three anthropometric parameters were selected to measure the sitting height, total arm length and total leg length.

Criterion Measure

All the subjects were tested on sitting stature, total arm length and total leg length. and scoring of data for Sitting height is recorded in centimeters; Total arm length is measured in to nearest centimeters and total leg length is also recorded in to nearest centimeters.

Administration of Tests

The subject of four throwing events were explained about the purpose of study in the presence of their coaches to elicit active cooperation from them..

1. Sitting Stature

Purpose: To measure the sitting height of the athletes of different events.
Equipments: Anthropometric rode, Sitting table, Measuring scale Procedure: The subject

was made to sit on the stool with his legs hanging down freely. The subject was asked to stretch his back as far as possible and to hold his head upright so that Frankfort planes becomes horizontal. Gentle upward pressure was applied to the mastoid processes. The muscles of the thigh and buttock were contracted in order to stretch him full. The horizontal bar of the anthropometric rod was brought down so that it touched the highest point on the head. The distance between anthropometric rod and the highest point of the stool was measured. Scoring: Sitting height in Cm.

2. Total Arm Length

Purpose: To measure the sitting height of the athletes of different events. Equipments: Anthropometric rod, Sitting table, Measuring scale, Procedure: The subject was made to stand with arms hanging down normally. Acromion and Dactylion were marked on the right hand. The distance between two points was measured with the help of measuring tape. Scoring: Sitting height in Cm.

3. Total Leg Length

Purpose: To measure the sitting height of the athletes of different events. Equipments: Anthropometric rod, Sitting table, Measuring scale Procedure: The subject was made to stand erect with body weight equally distributed on the legs. The distance between trochanterion to pternion or ground was measured with the help of measuring tape. Scoring: Sitting height in Cm.

RESULTS AND DISCUSSION

In order to find out the significance of differences among male elite athletes of different throwing events, means, standard deviations, and F-ratio were computed for obtained data. As the F-ratio was found to be significant, L.S.D. test of post-hoc comparison was applied to study the significance of differences among elite male athletes of different throwing events. The level of significance was set at .05 level and data pertaining to this have been presented in Table 1 to 5 .

TABLE I
ANALYSIS OF VARIANCE OF SITTING HEIGHT OF ELITE MALE INDIAN
ATHLETES OF DIFFERENT THROWING EVENTS

Anthropometric Variable	Source of variance	df	Sum of Square	Mean Squares	F-value
Sitting height	Between Groups	3	65.63	21.88	1.96
	Within Groups	96	1072.00	11.17	

Significant at .05 level, $F_{.05}(3,96) = 2.70$

It is clear evident from Table 1 that the statistically insignificant difference existed among elite male athletes of different throwing events, as the obtained F- value of 1.96 was lesser than the required value $F_{.05}(3,96) = 2.70$

TABLE 2
ANALYSIS OF VARIANCE OF TOTAL ARM LENGTH OF ELITE MALE INDIAN
ATHLETES OF DIFFERENT THROWING EVENTS

Anthropometric Variable	Source of variance	df	Sum of Square	Mean Squares	F-value
Total Arm Length	Between Groups	3	125.55	41.85	4.18*
	Within Groups	96	961.84	10.02	

Significant at .05 level, $F_{.05}(3,96) = 2.70$

It is clear evident from Table 2 that the statistically significant difference existed in total arm length among elite male athletes of different throwing events, as the obtained F-value of 4.18 was higher than the required value $F_{.05}(3,96) = 2.70$

As the F-ratio was found to be significant, L.S.D. test of post-hoc comparison was applied to study the significance of differences in total arm length of elite male athletes of different throwing events i. e. Shot put, Discus, Javelin and Hammer throws and the data pertaining to this have been presented in Table 3.

TABLE 3
SIGNIFICANCE OF DIFFERENCES AMONG ELITE MALE ATHLETES OF
DIFFERENT THROWING EVENTS BETWEEN ORDERED PAIRED
MEANS ON TOTAL ARM LENGTH

Mean Scores of Throwing Groups					
Javelin	Discus	Shot put	Hammer	Paired Mean difference	C.I
80.36	80.12	-	-	0.24	0.354
80.36	-	78.68	-	1.68*	
80.36	-	-	77.6	2.76*	
-	80.12	78.68	-	1.44*	
-	80.12	-	77.6	2.52*	
-	-	78.68	77.6	1.08*	

*Significant at .05 level

It is quite obvious from the table 3, that the significant differences in total arm length were found between elite male athletes of Javelin throw-Shot put followed by Hammer throw; between Discus throw- Shot put followed by Hammer throw and between Shot put – Hammer throw, as the obtained paired mean differences of 1.68, 2.76, 1.44, 2.52 and 1.08 respectively were higher than the confidence interval of 0.354.

TABLE 4
ANALYSIS OF VARIANCE OF TOTAL LEG LENGTH OF ELITE MALE INDIAN
OF DIFFERENT THROWING EVENTS

Anthropometric Variable	Source of variance	df	Sum of Square	Mean Squares	F-value
Total Arm Length	Between Groups	3	790.27	263.42	7.91*
	Within Groups	96	3196.48	33.29	

Significant at .05 level, $F_{.05}(3,96) = 2.70$

It is clear evident from Table 4 that the statistically significant difference existed in total leg length among elite male athletes of different throwing events, as the obtained F-value of 7.91 was higher than the required value $F_{.05}(3,96) = 2.70$

As the F-ratio was found to be significant, L.S.D. test of post-hoc comparison was applied to study the significance of differences in total leg length of elite male athletes of different throwing events i. e. Shot put, Discus, Javelin and Hammer throws and the data pertaining to this have been presented in Table 5.

TABLE 5
SIGNIFICANCE OF DIFFERENCES AMONG ELITE MALE ATHLETES OF
DIFFERENT THROWING EVENTS BETWEEN ORDERED PAIRED
MEANS ON TOTAL LEG LENGTH

Mean Scores of Throwing Groups					
Javelin	Discus	Shot put	Hammer	Paired Mean difference	C.I.
104.08	110.6	-	-	6.52*	0.646
104.08	-	103.4	-	0.68*	
104.08	-	-	106.12	2.04*	
-	110.6	103.4	-	7.2*	
-	110.6	-	106.12	4.48*	
-	-	103.4	106.12	2.72*	

Significant at .05 level

It is quite obvious from the table 5, that the significant differences in total arm length were found between elite male athletes of Javelin throw- Discus throw followed by Shot put, and Hammer throw; between Discus throw- Shot put followed by Hammer throw and between Shot put – Hammer throw, as the obtained paired mean differences of 6.52, 0.68, 2.04, 7.20, 4.48 and 2.72 respectively were higher than the confidence interval of 0.646.

DISCUSSION

Sitting height

Results of the study indicated that there was no significant difference in the means of sitting height of hammer, shot put, discus and javelin throwers.

Total arm length

By comparing the paired mean difference, It was concluded that mean of total arm length of javelin throwers was significantly greater than mean of total arm length of discus, shot put and Hammer throwers. Further mean of total arm length of discus thrower was also significantly greater than mean of total arm length of shot putter and hammer throwers and mean of total arm length of hammer thrower was significantly the least from all the three groups.

The Javelin throwers needs greater long arm length for throwing the javelin to maximum distance. The greater arm length provides greater bone lever and arm jerk during the throwing of the Javelin.

Discus throwers needs longer arm length for taking greater radius during rotation in the circle. Javelin throwers are using linear application of force to throwing the javelin where as Discus throwers are using centrifugal force. Therefore the requirement of greater arm length for javelin throwers is greater than discus throwers.

Shot putters requires maximum strength during the putting of shot. Therefore the requirement of arm length for shot putter was lesser than javelin throwers and discus thrower.

Total leg length

By comparing the paired mean difference, It was concluded that mean of total leg length of discus throwers was significantly greater than mean of total leg length of, hammer, javelin throwers and shot putter. Further mean of total leg length of Hammer thrower was also significantly greater than the mean of total leg length of Javelin throwers and Shot putter, mean of total leg length of shot putter was significantly the least from all the three groups.

Lesser Total leg length means greater upper segmental length. Lesser leg length of shot putter helps in stability during stance and foot placement with easiness in diameter coverage of the circle. Greater leg length also helps in the development of greater distance course of force application.

Lesser leg length of Javelin thrower helps in taking effective strides. Lesser leg length of Hammer throwers also helps in effective step turning and foot placement, which also increases the course of force application for hammer throwers. Discus thrower had least upper segmental length, which gives them more stability during turning movement and foot placement. This increase the speed of their turning, thus centrifugal force is enhanced which takes the Discus to maximum distance.

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A TRANSFORMATIVE AND MOBILIZATION POWER OF SPORTS IN CURBING TERRORISM

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ABSTRACT

Sports and games is a sociological phenomenon in field of endeavor which has aims to develop social traits humanity and break the barrier of inequality, caste and creed. the fundamental elements of sports make it a viable potential and practical tool which channelize the energy through social mobilization . Sports can cut across all barriers that divide the society, making it a powerful to supports conflict prevention and peace building effort both symbolically on the global power. In contrast, Terrorism is epidemic disease which is dangerous for human existence on earth. The causes of terrorism are poverty, injustice, racism and also lacking of tools and safety valve which fulfill the demands of children and adults. A mass movement required eradicating the terrorism. Sports and Games and its potential are very valuable to eradicate the root causes of terrorism. Children and adults are prime focus of terrorist organizations to carry out this social evil and maintaining the existence of terrorist's organization. The children and adult are designated with hyperactivity and transition period of life which demands a programme, opportunity and venue to channelizing their surplus energy in constructive way. The children and adult demand a transformation power to manage and sublimate their innate urges and a way to recognize himself in society.

The children and adult are two important pillar of terrorism; therefore it is important to focus on young generation with suitable mechanism. The terrorist organization are recruited adult and child for carrying social evils viz terrorism.

Therefore, it is concluded that now it is a need of hours to encourage, aware and ensure the participation of children and adult in sports activities. Sports can stop the raw material to terrorist organization and channelize the energy of children in nation building. The well design sports base in initiatives are practical and cost effective tools for curbing terrorism through children and adult. Sports can produce antidote to antisocial activities.

Keywords: Sports, Terrorism, children, Nation, Mobilization

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INTRODUCTION

Sport is power house of vision, explored in credible horizons for itself and produced a solution to mental and social problem of human beings. Sports is a sociological phenomenon in field of endeavour which has aims to break the barrier that divide the societies. It is also a powerful social tool to remove the social evil. Sports inculcate the various social and emotional traits which help to make a good citizen of nation and a man of humanity. The programme of sports provide a platform to young and children to worthy use of leisure time and channelizing their energy to achieve self image, recognition in society, fostering his physical and emotional health, and destroy inequality, poverty; the leisure time; surplus energy, immaturity, and lack of constructive and socially acceptable means are important factors which influence the children and adult of a nations. The children and adult are soul and future of the nation and enrich with a special characteristics. These characteristics of children and adult require a powerful tool and platform to sublimate and channelize his energies immediately toward a man of humanity. Failure to manage the requirement of children may have serious consequences. Failure of N.G.O. and Gov. fulfill the demand of children and youth by family, community, and Nation given birth to terrorism, Naxelism, Racism. Terrorism is an epidemic disease spreaded into whole world. There is no consensus on definition of terrorism among law maker, politician, and educationist.

“Terrorism (U.N.O) any act intended to cause death or serious bodily harm to civilians or non-combatants with the purpose of in-dimidiating a population or compelling a government or international organization to do or abstain from doing any act.”

Terrorism is primary attributed by religion, inequality and poverty. Maharashtra has been the most preferred target for the most terrorist organization. Intelligence agencies are revealed that the youth are involve in this task. Now a days politician, educationists are finding a ways, tool, to eradicate the terrorism. Children and adult are future of the nation and need of hours control the involvement of them. These are the important target of terrorist organization, terrorist organization recruited the children and adult for training as means for indoctrinating and terrorist ideology. It means youth and children are part and parcel for growing up terrorism. The scientific investigation has revealed that childhood and adult period well suited to train them for any purpose. The terrorist organization are recruited to children for following reason:

1. Easy to channelizing nature & characteristic to words evils traits
2. Easy to modify the belief, attitude
3. Easy to develop goal of mission
4. Easy to channelizing hyperactivity toward any direction
5. Children likes physical activity
6. Easily distracted, annoyed
7. Low self esteem
8. Hypersensitivity
9. Over power emotion
10. Changing attitude towards society
11. Easily convince to deal challenging task
12. Immature to understand right and wrong
13. unrealistic dreams

Keeping in view above mention salient characteristic of children which make them vulnerable to terrorism and anti-social activities because they could not find any opportunity and channel to express their innate urge and surplus energy. Sports and games is an inevitable reality of life as well medium sublimates above mentioned in constructive way. Sports and games has biological purpose and psychological, sociological implication to mould the children and adult to become socially acceptable and recognized citizen. We can realize the transformative potential of sports in following ways:

A PRACTICAL APPROACH OF MOBILIZATION AND TRANSFORMATION OF SPORTS

Sports as a tool of socialization: Sports provides plenty of opportunities for socialization and individual recognition. The children and adult execute, demonstrate and channelize the urge which comes from within group through sports activities. Sports brings individuals together and its strength the group behavior and also binds them.

Sports as a channel of physical energy: The children and adult have more energy than they actually need, sports play a role as a channel to release the surplus energy to develop his body and mind. This surplus is the cause of various unwanted activities.

Sports as an outlet of emotion: Children and adult are oversensitive and full of emotion. Sports is best outlet to vent up of emotion. The children and adult keep themselves emotionally balanced through sports activities.

Sports as a management of anxiety, aggression: Every one inherits from certain psychological instinct unless these instincts can find expression in action, these will be repressed and will exert a distorting influence on personality. Sports gives outlet for anxiety and aggression. In the absence of such legitimate outlet, uncontrolled aggression appeared in form of delinquency.

Sports as a catalyst for equality: Sports play a role to root up the large and small biases conscious and unconscious and discrimination on the basis of caste and creeds, religion and gender. Sports have been systematically help to equalize our society.

Sports as investment to eradicate poverty: Sports play a significant role as economical development in different geographical, cultural and political context. The sports programme develop a lot opportunities to fight against poverty. The sports industry as well organization of large sporting event create opportunity for employment and life skills essential for productive life in society.

Sports as a promoter and sponsor of patriotism: Sports teams or squad comprises players professing different religion, belonging to different caste and creed, but while representing the nation they do or die together for nation. This promotes a feeling of patriotism and strengthens the process of national integration.

Sports as means for promoting religious tolerance: Sports person try to understand and appreciate the values, ideals and qualities of other religions, caste, customs and way of living, they develop religious tolerance and respect of other which is necessary for curbing terrorism.

CONCLUSION

It is concluded that sports is a language every one can speak. Sports have above mentioned potentialities to channelize the surplus energy, molding the characteristic and prepare an individual a man of humanity and good citizen of a nation building

It have a transformative power to learn the essential unity in diversities. Sports can inculcate essential qualities of communal harmony. In fact, sports play ground are the lavatories of the society, where socially useful action can be molded, refined and human approach can be practiced. Sports have a strong appeal for children and youth to build characters and prevent delinquency. Sports activities provide a out let for the normal desire for recognition, success and achievement. Children and adult have no need to seek such satisfaction in unsocial ways. The police officials have testified that less delinquency, crime, and other unsocial task where children and adult are engaged in sports activity.

Sport offer a sense of normality, especially children and adult. Sport programme provide structure in an unstructured and destabilizing environment and serve as a means to channel energies away from aggression or self distraction, and terrorism and causes of social evils.

Sports programme can stop the raw material, resource to carry out terrorist organization because the children and adults are busy in his natural activities.

RECOMMENDATIONS

1. "Sports for all" especially children and adults
2. Encourage to parents for sporting excellence of his/her words.
3. Encourage the indigenous games in rural areas, poverty region and terrorist origin region.
4. Sports must be part of economical agenda of terrorist region and nations.
5. Sports must be part of compulsory in teaching of religion institutes
6. Promote women participation in sports.
7. Sport must be incorporated into development agenda of Govt. and N.G.O.

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