

STUDY ON VO₂ MAX IN DIFFERENT PLAYING POSITION OF SOCCER PLAYERS

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ABSTRACT

Aerobic capacity is the highest amount of oxygen consumed during maximal exercise in activities that use the large muscle groups. High aerobic efficiency players have good performance and quick recovery in normal condition and high tolerance of fatigue. Aerobic capacity is great importance in the game of soccer in order to tolerate the high physiological intensity of the game. The purpose of the study was to find out the significant difference of VO₂max among the different playing position of soccer players. For this study, total 45 players, 15 each defender, midfielder and forward players between 18 to 30 years of age who had been participating at least senior state league tournaments were selected randomly. Yo-Yo intermittent recovery test level-1 was administered to obtain the data. To find out the characteristics and means difference among the three groups, descriptive analysis and ANOVA were employed and tested at 0.05 level of confidence. The finding of the study revealed that there were insignificant differences in the means comparison among defender, midfielder and forward as the obtained value of $F=2.22$, is less than the table value $F=3.22$ at 0.05 level of confidence. VO₂max is considered to be the best indicator of aerobic capacity.

Keyword: VO₂max, Soccer, Yo-Yo intermittent, Defender, Midfielder and Forward.

Introduction

Soccer is an intermittent high intensity physical activity that requires a well- developed aerobic fitness and demanding long endurance duration of time. This is demanding highly physical and physiological fitness efficiency. During competitive soccer match play, elite players cover a distance of about 10 - 12 km (Withers RT., 1982; Bangsbo J, 1991). Aerobic base is interspersed by high intensity activity including accelerations, sprinting, changes in direction, jumping, side stepping, tackling, and game-specific technical skills (Ekblom B, 1986; Reilly T, 1976).

VO₂ max is most important factor in a Soccer match. So, players should be required maximum aerobic capacity for long duration exhibit better performance. Higher VO₂max allows the players to run longer and faster and to be more involved in various actions of the game (Stølen et al. 2005). High aerobic capacity also helps the players to recover better from high intensity actions and intermittent exercise, typically observed in a football match (Reilly, 1997). During the match, they need many activities and require continuous adaptation to maintained or changing situations by individual players and team players. The activities involved in soccer are intermittent nature, with changes every 3–5 sec. resulting in repeated high-intensity spells of play (Krustrup et al., 2006). Specific positional roles within

each playing position may demand unique physiological attributes (Reilly et al., 1990). These are reflected in the physical and physiological fitness of the soccer players (Reeves et al., 1999). Therefore, modern elite soccer players have high aerobic endurance fitness. Maximum aerobic endurance person can be maintenance his/her fitness level in long duration of time. VO₂max is considered to be the most essential component of endurance performance (Åstrand P Ø et al.1986, Hoff J., et al. 2004). The mean VO₂max of elite soccer players is normally reported to be between 55 and 68 ml kg⁻¹ min⁻¹ (Åstrand P Ø et al. 1986, Williams C. et al.1973).

Objective

The objective of the study was to find out the significant differences of VO₂max among the different playing positions of soccer players.

Methodology

For this study, forty five (N=45) players, between 18 to 30 years of age, fifteen (15) each for defender, midfielder and forward those were participated at least senior state league tournament were randomly selected. Yo-Yo intermittent recovery test level-1 (YYIRT-1) was administered to collect the pertaining data for VO₂max. Descriptive and analysis of variance (ANOVA) statistical techniques were employed to find out the characteristic of data

and significant differences of VO₂max among different playing position viz, defender, midfielder and forward. The level of significance was set at P<0.05.

Results

The pertaining data of VO₂max were treated by using the descriptive analysis to find out the range (R), means (M), standard deviations (SD), standard errors (SE), and variance (Var) shown in table 1.

Table 1: Descriptive Analysis Of Vo₂max In Different Playing Positions

Variable	N	R	Min	Max	Mean	S.E	S.D	Var
Defender	15	15.80	49.50	65.30	55.64	1.21	4.67	21.81
Midfielder	15	14.11	51.52	65.63	58.24	0.94	3.66	13.39
Forward	15	9.41	52.86	62.27	58.08	0.72	2.81	7.87

Table 1 show that the mean (M) and standard deviation (SD) of VO₂max for defender, midfielder and forward players were 55.64±4.67, 58.24±3.66 and 58.08±2.81 respectively; range were 15.80, 14.11 and 9.41 respectively; standard errors were 1.21, 0.94

and 0.72 respectively and the variance were 21.81, 13.39 and 7.87 respectively.

The analysis of variance (ANOVA) was employed to find out the significant mean differences of VO₂max among the three different playing positions soccer players and shown in table 2

Table 2: Significant Means Differences Among The Playing Positions

Group	Mean	SD	F	Sig.
Defender	55.64	4.67		
Midfielder	58.24	3.66	2.22	0.12
Forward	58.08	2.81		

Insignificant at 0.05 level of confidence, where, F_{(0.05)(2,42)}=3.22

Table 2 reveals that there were no significant differences among the three different playing positions viz defender, midfielder and forward players as the obtained calculated F=2.22 was

less than the tabulated F=3.22 at 0.05 level of confidence (p>0.05).

The graphical representation of means comparison among the three playing position is shown at figure 1.

Figure 1: Mean Comparison of Vo₂max Among The Different Playing Positions of Soccer Players



Discussion

In soccer match involves walking, sprinting, jogging, jumping, throwing etc. in varied directions with or without the ball. There are many accelerations and decelerations of movements during the match with vast number of changes in direction of play, which involve more loading on muscles. The intermittent high intensity pattern of activity during the match requires a high function of both the aerobic and anaerobic energy delivery pathways (Chittibabu, B. & Chandrasekar, S., 2014). The amount of distance covered during the game of football has a role to play in the significantly higher $VO_2\text{max}$ of football players. This shows that football is a more demanding sport in the area of intensity of workload, total miles covered and duration during training and the game itself, than most of the games (Ibikunle & Enumah, 2016). In the modern soccer, it is justified as the total football that all the playing members are actively involved in every offensive and defensive situations. All the defenders, midfielders and forwards have the same prime responsibility in every moments of game. Indeed, players of different playing positions get the same level of physical and physiological fitness.

In the present study, the finding of statistical analysis reveals that there are no significant differences of $VO_2\text{max}$ among the three different playing positions of soccer players, i.e. defender, midfielder and forward.

It can be stated that if the subjects were mainly selected from same level of regular soccer practice groups, there were less chances to find the significant differences of fitness among the positional groups. The nature of the game, energy demands, same routine work, same habitation and environmental condition, similar adaptation level to the training provided etc. might be the reason of insignificant differences in terms of aerobic capacity among different playing positions of soccer players. Therefore, there is similar $VO_2\text{max}$ performance among the soccer players of different playing positions as defender, midfielder and forward. It was proved that the meaning of total soccer means every players of different playing position of soccer has same aerobic capacity.

Conclusion

The finding of the study revealed that no significant differences were found in mean comparisons of $VO_2\text{max}$ among the soccer players of different playing positions. The result of the study had shown that the soccer players of different playing positions achieved similar level of $VO_2\text{max}$.

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COMPARISON OF AGGRESSION BETWEEN URBAN AND RURAL STUDENTS OF TEAM GAMES

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ABSTRACT

The purpose of this study was to compare aggression between urban and rural student of team game like Kabaddi, Kho-Kho, Volleyball and Handball etc. Who had participated in district and state level? The players were from rural and urban areas of Rajasthan state (especially Tonk, Sawai Madhopur, Karauli and Jaipur). A total of 600 subjects were taken, 150 from each district (75 urban and 75 rural). The students were 19 years old. The aggression scale questionnaire was administered to the subject during the district and state level tournament organised by education department government of Rajasthan. To check the significance difference between urban and rural players on aggression, the Z test was applied. The level of significance was set at 0.05. The finding of the study showed that there was a significant difference in aggression among student players from urban areas as compared to students from rural areas

Keywords: Aggression, Rural, Urban, Team game

Introduction

The word aggression is used in non-violence and arrogance, but in sports it is used for a different meaning. Here it means to enjoy the game with enthusiasm, filled with positive and winning spirit. In the present times, aggression has become very important in sports. A skilled trainer realizes the need for aggression in the sport and makes the trainees aware of it. It is also important to note that the need for aggression is hockey, football, volleyball, running, kabaddi. Just like in sports. On the contrary, in golf, chess and carom, patience and endurance are used instead of aggression. Aggression refers to the behaviour of a person who wants to suppress physical attacks on other people by quarrelling with other people by abusing them. In this way he wants to hurt, hurt, or destroy others. This tendency to aggression develops in the team as a result of congenital learning. Aggression is defined as hostile to total harmful and destructive behaviour. It is a feeling that a motive is an attitude or a diagnosis rather aggression is for an internal state. One reaction is emotional behaviour. It is strongly suspected that aggression is the cause of genetic factors and social factors. The result is aggression in its broadest sense, hostility is complete or a strong natural reaction like amla. It can be manifested either in retaliation or in arousal. Causes harm. When a child behaves this way in sports activities, it affects his playing skills.

He wins in the game due to aggression. In fact, aggression in the players leads to the development of seriousness and activeness. - Sometimes even in verbal form, it puts its communication on the opponent. It is a practical form which is suited to the circumstances.

Just as the child or man tries to relieve his physical and mental fatigue from various sports activities, similarly if it is necessary to perform well by taking regular part in sports activities, it is absolutely essential that the player's physical condition as well as mental form be healthier than it is important that the player is physically and mentally healthy, strong and happy if it is to perform at the highest level in the game or to execute a skill well. The aggression of the person's mood affects his aggression. Psychological conditions have both positive and negative effects on other activities.

Statement of the problem

The purpose of this study was to compare aggression between urban and rural players who had participated in team games.

Delimitations

The study was delimited to the urban and rural Team game players. The study was further delimited to assess aggression by aggression scale questionnaires.

Hypothesis

It was hypothesized that there would no difference in aggression between urban and rural Team games players.

Selection of subjects

For the purpose of the study 600 subjects were selected randomly for this study. The subjects were from different district of Rajasthan mainly Tonk, Sawai madhopur, Karauli and Jaipur. Student belongs to Central board of secondary Education (CBSE) and rural students belong to board of secondary Education Rajasthan (RSEB).

Selection of questionnaire

To measure the aggression of the students aggression scale by Dr. guru pyari Mathur and Dr. Rajkumari bhatnagar was selected for the study because it is a a good aggression scale . Scale is divided into five different groups (strongly agree, agree, uncertainty, disagree and strongly disagree) of different situations behaviour. The questionnaire was translated into Hindi . It includes 55 questions related to the different situations behaviour experience and working nature related to aggression.

Procedure for administration

The test was administered to the subjects in the tournament of district and state level organised by education department, government of

Rajasthan which was held in session 2010, 2011 and 2012. The subjects were assembled in a group, clear instructions were given so that all the items in the questionnaire must be attempted.

Scoring

The aggression scale consists of 55 items. Each item is keyed with strongly agree, agree, uncertainty, strongly disagree, disagree. In order to determine the significance difference between urban and rural Team game players on aggression, the z test was applied; the level of significance was set on 0.05.

Result of the study

The objective of the study was to compare the aggressive behaviour between urban and rural team game players. To find out the difference between means of urban and rural Team game players z test was conducted. The level of significance was 0.05 level.

The data pertaining to aggression behaviour were collected from 55 items of the questionnaire as per the standard procedure laid down in the aggression scale.

Findings

The mean difference between urban and rural players in relation to Aggression has been presented in table 1.

Table 1 Significance of Difference between Urban and Rural Team Games players on Aggression

	Urban	Rural
Mean	211.92	200.4933333
Know Variance	612.598	741.0973
Observations	150	150
Hypothesized Mean Difference		0
Z		-3.803686608*
P(Z<=z) one – tail		7.12793E-05
z Critical one – tail		1.644853627
P(Z<=z) two- tail		0.000142559
z Critical two – tail		1.959963985

$H_0 : \mu_1 = \mu_2$

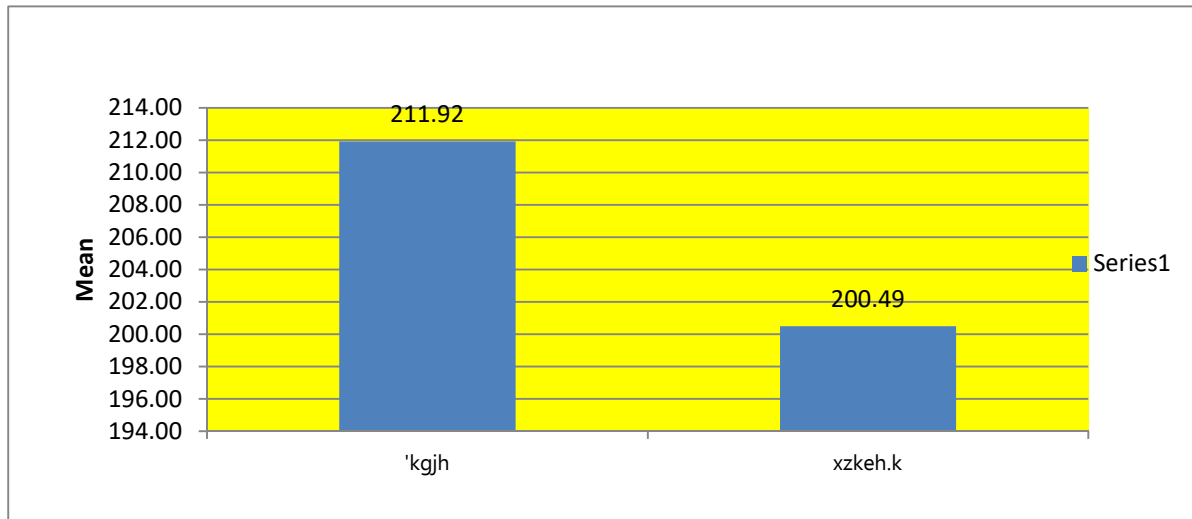
$|Z|_{cal} > Z_{tab}$

It is clear from the observation of the table that there is a meaningful difference in the aggression of urban and rural students participating in Team sports, hence research

hypothesis is accepted. There is no meaningful difference in the aggression of both level players that null hypothesis is accepted. Is because the statistic is absolute value of z is

meaningful at 3 point 80 certified level 005 is clear from the results Person than rural students

participating in team sports are more to come level of parents in urban students.



Discussion of finding

The finding of the study shows that urban and rural team game players had significant difference with respect to aggression. These finding me be attributed the fact that the players of team gamer take it as a question of prestige issue and that they are one who are only responsible for their winning and losing.

And winning at any coast becomes their ultimate aim.

Discussion of Hypothesis

In case of comparison of between urban and rural team game players, the result shows significant difference in aggression between urban and rural team game players, is rejected.

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THE PERCEIVED LEVEL OF BURNOUT AMONG COLLEGE PHYSICAL EDUCATION FACULTIES IN ODISHA

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ABSTRACT

The purpose of the study was to find out the level of burnout in college Physical Education faculties on the whole, and to find out the level of burnout in different age categories of physical education faculties. The participants of the study consists of 178 full-time physical education faculty belonging to Government and Private [aided] colleges the Odisha state, India. Total 146 male and 32 female physical education faculty were participated in this study. Maslach Burnout Inventory - Educator's Survey (MBI-ES) to evaluate three aspects of burnout: emotional exhaustion, depersonalization, and personal accomplishment, was used as the instrument for the study. Significant differences was seen between the physical education teachers belonging to the government and aided colleges only on burnout sub scale namely, personal accomplishment (PA) other variables it's were not significant. No significant difference was found among different age groups of dependent variables.

Keywords: Burnout, emotional exhaustion, depersonalization, personal accomplishment, physical education, university teachers

Introduction

Professional job burnout is one of the biggest occupational hazards of the twenty-first century and is reaching epidemic proportions among workers today. It has been most commonly defined as a psychological syndrome that involves a prolonged response to chronic emotional and interpersonal stressors in the work place. Burnout is currently classified as a mental illness in accordance with the ICD-10 medical classification system (Eriksson, Starrin & Janson, 2008). Burnout consists of emotional exhaustion, depersonalization and reduced personal achievement that may occur among individuals that work with other people in some capacity (Maslach, Jackson & Leiter, 1997).

Many believe that the university and college setting is set apart from the rest of society, free from job-related stress and strain. In fact, higher education has been largely ignored in the study of stress. The researchers noted changing conditions in higher learning institutions and reported numerous sources of stress such as lack of time, poorly prepared students, cumbersome bureaucratic rules, high self-expectation, unclear institutional expectations and inadequate salaries. Additionally, while teachers are facing uncertain professional futures with tremendous challenges and stress, they are not exempt from

their own family and relationship problems, thus increasing burnout (Fishkin, 1994).

Maslach and Jackson (1981) defined burnout as a condition described by emotional (having nothing left/having no strength left), depersonalisation and loss of a sense of personal (something that was completed). In almost the same way, there have been many different kinds of people or things event(s) or object(s) that prove something from educated people on the event of burnout. For example, Maslach and Leiter (1999) pointed that burnout happens when the workload is combined with a lack of personal control, not enough rewards, (not being there; not being present) of fairness, the breakdown of the working community or disagreeing values. Lee and Ashforth (1996) identified workload and time pressure as earlier events of burnout. Many work-related factors have been found to be connected with burnout among teachers including too much pressure, poor relationships with fellow workers, large classes, lack of useful things/valuable supplies, fear of violence, behavioural problems of pupils, role confusing double-meaning and role conflict, poor opportunities for promotion, lack of support and lack of participation in decision-making (for example, Abel & Sewell, 1999; Fimian & Blanton, 1987; Friedman, 1991; Wolpin et al., 1991).

According to Chang (2009), there are numerous factors that cause teacher burnout. These factors include political mandates, failed reform, a lack of autonomy and freedom for teachers, a lack of funding for programs, lack of resources for teachers, ineffective organization of roles and responsibilities for teachers, lack of systems and infrastructures being utilized, and ineffective leadership etc. Role ambiguity, formal evaluations, personal and professional relationship, as well as individual characteristics are also factors that increase teacher frustrations (Fisher, 2011).

University faculty members are not exempt from problems associated with burnout. Harrison's (1999) descriptions profile many issues and characteristics that university faculty deal with on a regular basis, including "pressures, conflicts, demands, and too few emotional rewards, accomplishments, and successes" (p. 26). He discusses unrealistic goals and expectations set for people without their input, and frustrations in achieving professional growth. Much of the discussion of Maslach and Leiter (1997, 1999) is appropriate for university faculty. Physical Education faculties in affiliated colleges located in rural and urban areas of different universities in Odisha state, India are no less susceptible to teacher burnout. Uncovering the factors contributing to burnout may supply information that is essential to developing action plans and interventions.

Burnout has most often been discussed and written about in relation to teaching and teachers at primary and secondary levels. Results on teachers' burnout about college Physical Education faculties working in government and government aided colleges, affiliated to different Universities in Odisha has not been available yet. Therefore, the purpose of the study was to achieve following objectives: 1. To find out the level of burnout in college Physical Education faculties on the whole, 2. To find out the level of burnout in different age categories of physical education faculties. This study possesses the potential to inform college administrators and the university /government departments about the degree of teacher burnout and its effects.

Methods and Materials

Participants

The participants of the study consists of 178 full-time physical education faculty belonging to Government and Private [aided] colleges affiliated to three Universities in the Odisha state viz. Sri Sri University, Utkal University and Sambalpur University. Total 146 male and 32 female physical education faculty were participated in this study. The respondents' demographic backgrounds are reflective and representative of the entire full-time faculty of the college physical education in the state. Regarding the age of the participants, approximately one-quarter of participants (25.85%) reported below the age of 35 years (n = 46), 26.96% reported they were between the age of 36 and 45 years (n = 48), and the rest (47.19%) comes under the age between 46 and 56 (n = 84).

Instrumentation

Maslach Burnout Inventory - Educator's Survey (MBI-ES): The MBI-ES is a version of the original MBI for use with educators, including teachers, administrators, other staff members, and volunteers working in any educational setting. The burnout was measured by Maslach Burnout Inventory - Educator's Survey (MI-ES) is a proprietary instrument that has been found to be reliable and valid (Maslach, Jackson, & Schwab, 1996). Maslach, Jackson, and Schwab created and designed the Maslach Burnout Inventory-Educator's Survey to evaluate three aspects of burnout: emotional exhaustion, depersonalization, and lack of personal accomplishment that can occur among individuals who work with people in some capacity. Each aspect of burnout requires a separate subscale. The MBI-ES addresses three scales: Emotional Exhaustion measures feelings of being emotionally overextended and exhausted by one's work, Depersonalization measures an unfeeling and impersonal response toward recipients of one's instruction and Personal Accomplishment measures feelings of competence and successful achievement in one's work. The MBI-ES is the most widely used and recognized instrument for measuring burnout. Responses were analysed in order to determine low, moderate, or high levels of emotional exhaustion, depersonalization, and personal accomplishment. Maslach and

Jackson (1996) provided criteria for categorisation of MBI-ES scores into low, moderate and high degrees of experienced burnout. For emotional exhaustion, scores ≤ 13 represent a low degree of burnout; scores 14–23 represent an moderate degree of burnout; and, scores ≥ 24 represent a high degree of burnout. Scores of ≤ 2 , 3–8 and ≥ 9 in depersonalisation

represent, respectively, low, moderate and high degrees of burnout. Scores of ≥ 43 , 36–42 and ≤ 32 in personal accomplishment represent high, moderate and low degrees of burnout, respectively, whereas a high score on Personal Accomplishment indicates a positive accomplishment, rather than a negative one, as revealed in Table 1

Table 1. Response Categories for Emotional Exhaustion, Depersonalisation and Personal Accomplishment on Maslach Burnout Inventory Educators Survey

Response Category	Emotional Exhaustion	Depersonalisation	Personal Accomplishment
High	24 or over	9 or over	43 or over
Moderate	14-23	3-8	33-42
Low	0-13	0-2	0-32

Demographic data pertaining to category of college, gender, and age were also collected using demographic questionnaire.

Administration of the Questionnaires

Data were collected through personal survey from the sample of physical education professors from the colleges representing both the government and private sectors. A set of research tools mentioned above was sent to 250 physical education faculties of government and private aided colleges across the state and only 178 packets were returned.

The data pertaining to the burnout was tested using descriptive statistics, Analysis of Variance (ANOVA) was computed to assess differences on mean scores on burnout dependent variables. Comparisons of mean burnout sub scale scores were evaluated between category basis and between the three

age groups. The data were analysed by using IBM-SPSS Version 25.0. LSD post hoc analysis was performed when statistical significance ($p < .05$) was obtained to identify significant pair wise differences.

Results of the Study and Discussion

Odisha state needs colleges with professional teachers with expertise, commitment and leadership. Raising professional standards and avoiding burnout in physical education teaching community needs practice of management strategies in order to maximize the output. Professionalism is the teacher’s most basic responsibility and should be both actively pursued and earnestly modelled (Murray & Mann, 1993). Increased job security is certainly an added benefit as well as a confidence builder that may set one apart from one’s peers.

Table 2 : Descriptive statistics on burnout sub scales of Government and Private Aided College Physical Education Faculties

Dependent Variable	Category	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Emotional Exhaustion	Government	12.662	1.116	10.458	14.866
	Aided	13.181	1.313	10.588	15.773
Depersonalization	Government	5.557	.543	4.485	6.629
	Aided	6.852	.639	5.591	8.113
Personal Accomplishment	Government	37.959	.998	35.988	39.929
	Aided	34.204	1.174	31.886	36.522

Table 2., it may be seen that the mean of burnout sub scale emotional exhaustion of

physical education college teachers from private aided college was moderate and higher

than the government sector, which is coming in low category.

At the same time, in the case of depersonalization and personal

accomplishment were moderate among two categories according to the criteria provided by Maslach and Jackson (1996) for categorization of the Maslach Burnout Inventory- Educators Survey (MBI-ES).

Table 3: ANOVA on Burnout of Dependent Variables between Category (Government Vs Aided)

Source	Dependent Variable	Sum of Squares	df	Mean Square	F	Sig.
Category	Emotional Exhaustion	5.869	1	5.869	.091	.764
	Depersonalization	36.555	1	36.555	2.386	.124
	Personal Accomplishment	307.462	1	307.462	5.938	.016*

*Significant at .05 level

In the ANOVA tests demonstrating that significant differences was seen between the physical education teachers belonging to the government and aided colleges only on burnout sub scale namely, Personal Accomplishment (F= 5.938, p<.016) other variables it's were not significant. The descriptive data also show that, government college teachers (M=37.959) having higher PA than private aided college

teachers (M=34.204), i.e., the mean difference was 3.755. But according to MBI-ES both scores will come under moderate category. Reason for higher mean on PA among the government college physical education teachers may be due to the comparatively higher status in the society for direct government employees, more job security and more freedom in the working environment.

Table 4: Percentage of Burnout among Physical Education faculty at college level

Scores	GOVT. COLLEGE		PRIVATE AIDED COLLEGE	
	Nos	%	Nos	%
EE-0 to 54	N=86	100	N=92	100
H : 24 &<	5	3.81	7	7.6
M : 14-23	13	15.11	16	17.39
L : 0 -13	68	79.06	69	75
DP-0 to 30	N=86	100	N=92	100
H : 9 &<	18	20.93	6	6.52
M : 03-08	32	37.2	16	17.39
L : 0- 02	36	41.86	70	76.09
PA-0 to 48	N=86	100	N=92	100
H: 0-32	7	8.14	22	23.91
M : 33-42	24	27.91	17	18.48
L : 43 &<	55	63.95	50	54.35

EE - Emotional Exhaustion, DP - Depersonalization, PA - Personal Accomplishment, H: High, M: Medium and L : Low

Table 4., shows the percentage analysis of burnout variable, emotional exhaustion (EE)

3.81% (n=5) government college teachers and 7.6% (n=7) private aided college scored high,

15.11% (n=13) government college and 17.39% (n=16) private aided college physical education teachers scores were moderate. At the same time 79.06 (n=68) government college teachers and 75% (n=69) private aided college physical education teachers scores were low. The EE sub-scale assesses the feelings of being emotionally overextended and exhausted by one's work, that means that majority of the college teachers were not emotionally overextended and exhausted by one's work.

Depersonalization (PA) percentages scores shows that, 20.93% (n=18) government college teachers and 6.52% (n=6) aided college teachers scored high, 37.2% (n=32) government college teachers and 17.39% (n=16) aided college teachers scored moderate. At the same time, 41.86 (n=36) government college teachers and 76.09% (n=69) aided college physical education teachers scored low. Depersonalization (DP) scale measures an unfeeling and impersonal response toward recipients of one's service, care, treatment, or instruction. Higher scores indicate higher degrees of experienced burnout. It had been expected that high scores on Depersonalization would be reflected in the behaviour of frequent complaints about clients. Co-workers' ratings of this behaviour were indeed correlated with Depersonalization scores, which means that, the teacher scoring high on Depersonalization was also more likely to be absent from family celebrations. Reports of fewer friends were correlated with frequent feelings of Depersonalization ($r = 0.20, p < 0.05$). The officer's wife was also more likely to say that he and she did not share the same friends (Depersonalization. $r=0.24, p < 0.01$) (Maslach and Susan, 1981).

Overall, these groups of teachers have a stronger feeling of being capable of reaching their goals and, therefore, do not become much depersonalized and emotionally exhausted. It can be decided that these teachers have lower burnout because of their ability to effectively deal with the many-sided problems of students and other types of problems. Due to these feelings, they do not feel bad about themselves and about others and about the job they have, these feelings of smart ability and self-worth are high, enabling them to oppose/to go against

act burnout.

Personal Accomplishment (PA), the maximum possible score on this variable was 48, which shows that, Physical education teachers belonging to government colleges obtained score was 8.14% at the same time teachers belonging to Aided colleges was 7.46%. In general, the obtained score of teachers in professionalism scale dependent variable personal accomplishment was 79.11%. A high score on Personal Accomplishment (PA) indicates a positive accomplishment, rather than a negative one

In summary, the mean scores of burnout sub scales indicates that, emotional exhaustion (EE) in government college physical education faculties was higher compare to the private college teachers. Between the male and female teachers of the government colleges, emotional exhaustion shows more in female than male. In the case of private college male and female faculties, female shows more emotional exhaustion compare to the male counterparts. The Emotional Exhaustion sub-scale assesses the feelings of being emotionally overextended and exhausted by one's work.

This is substantiated the findings of Baker (2004), Christensen (1997), and Nierman (2007), all of which found burnout levels to be low among athletic trainers. Lackritz (2004) found mean scores of 19.36 for emotional exhaustion, 6.14 for depersonalization and 36.90 for personal accomplishment among full-time university faculty members at a state university on the west coast in the United States. In addition, Brewer and McMahan (2004) reported mean scores of 19.28 for emotional exhaustion, 6.15 for depersonalization and 37.27 for personal accomplishment among industrial and technical educators in the United States. Both studies in 2004 (Lackritz; Brewer and McMahan) found similar mean scores in emotional exhaustion, depersonalization and personal accomplishment. Emotionally exhausted teachers compare the sensation to a tired feeling that intensifies over time, eventually draining the affected teacher of all emotional resources (Grayson & Alvarez, 2008). According to Maslach (1982), when burnout is left untreated, victims of the

syndrome have no methods or techniques to recuperate.

Table- 5 :ANOVA on Burnout of Dependent Variables between age groups

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Age	Emotional Exhaustion	155.871	2	77.936	1.203	.303
	Depersonalization	45.979	2	22.990	1.501	.226
	Personal Accomplishment	100.444	2	50.222	.970	.381

Table 5, shows that, in the case of burnout sub scales, there were no significant differences found between different age groups among physical education college teachers. The descriptive data analysis shows that, there was significantly negative relationship between the variables and depersonalization scores such that younger respondents belonging to the age group of up to 35 and 36-45 years tended to have a higher depersonalization scores than older respondents. For personal accomplishment, there was a positive relationship between the variables such that older respondents belonging to the age group of Upto-35 and 46-56 years had higher scores than middle aged respondents. There was no significant difference in emotional exhaustion scores and age among full-time college physical education faculty. The findings are similar to the study conducted by Tumkaya (2006) among full-time faculty in Turkey, found that the age was statistically significant in terms of emotional exhaustion and personal accomplishment scores, but not on depersonalization scores. Emotional exhaustion was experienced less in the higher age of the faculty member. Elder faculty define themselves more successful in terms of personal accomplishment, whereas the younger ones state that they personally don't find themselves to be successful. Age was a negative correlation of emotional exhaustion in a study by Lackritz (2004). Younger faculty are candidates more susceptible to burnout because they have additional pressures from the early stages of career-building and potential time conflicts with other aspects of their careers and lives, whereas older faculty tend to have more experience balancing time demands (Lackritz, 2004).

People experiencing burnout do not necessarily exhibit all three aspects; they can suffer from

emotional exhaustion, depersonalization, or diminished personal accomplishment independently of the other elements (Maslach, 1982). Maslach and Jackson (1996) indicate burnout can be viewed in the following ways: High Burnout-high scores on the emotional exhaustion and depersonalization dimensions and low scores in the personal accomplishment dimension. Average burnout- average scores in all three dimensions. Low burnout- low scores on the emotional exhaustion and depersonalization dimensions and high scores in the personal accomplishment dimension. The physical education faculty in Odisha exhibits a low degree of burnout in their profession.

Conclusions

It may be concluded that the problem of burnout needs urgent attention and intervention for physical education professors' wellbeing. Physical and emotional exhaustion is the extreme form of burnout which reflects in various debilitating symptoms. Physical education faculty, who reach this stage of burnout, suffer from sleep disturbance, depression, drained out feeling, and often indulge in excessive consumption of alcohol, tobacco or pills. The study contributes to creation of knowledge by empirically evolving the burnout. "Executive Burnout is marked by persistent feelings of inadequacy, ambiguity, dissatisfaction, and powerlessness accompanied by behavioural manifestations of apathy and indifference (depersonalization) and physical and emotional exhaustion." (Sharma, 2005).

Various forms of social support have distinct relationships with the three aspects of burnout. In general, social support tends to be more closely related to the Personal Accomplishment aspect of burnout, while personal conflict with

co-workers, supervisors, or service recipients is more closely related to increased exhaustion (Leiter, 1991). Social support from family members may serve as an important resource, building human service providers' capacity to manage the emotional demands of their work, while difficulties in engaging the boundary between work and family has been identified as a contributor to Exhaustion and depersonalization (Leiter & Dump, 1996). In short, this research indicates that both the demands and the benefits of social interaction at work are relevant to the professional development and alleviation of burnout among college physical education faculty too. The results of this study serve as a needs assessment for the faculty and present opportunities for physical educators to work with college and university administrators to develop and implement an effective programs to reduce the burnout and promote professionalism. As one respondent said, I'd like to see us less isolated from one another talking more, learning from each other and feeling encouraged by those relationships".

Teaching is a highly noble job/line of work and teachers are always an advantage to (community of people/all good people in the world). Through their intelligence, patience and wisdom they attempt to not only sharpen/improve the learner's thinking ability and ability but also create a well-rounded personality. Teaching has an influence in developing one's mind and character and also gives the happiness (from meeting a need or reaching a goal) of having sparked the light of knowledge and drove away the clouds of (the state of having no knowledge). If teachers are stressed or burned out, the previously-mentioned qualities will be affected and the students in particular and the (community of people/all good people in the world), in general, will be kept away from those (features/qualities/ traits) that are needed/demanded for a successful and bright future. The educational institutions must continuously monitor the factors which may have bad effects on the effectiveness of teachers and take (education that fixes something) actions to improve learning.

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ANALYSIS OF WHOLE-BODY REACTION TIME AMONG SOCCER PLAYERS OF DIFFERENT PLAYING POSITIONS

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ABSTRACT

The purpose of the study was to analyze the differences in the whole-body reaction time among the male soccer players of different playing positions (defender, mid-fielder & forward) participating at least in the state league. Forty-five (45) volunteered soccer players, 18 to 30 years of age, from different clubs of Manipur participated in the study. Whole-Body Reaction Type IV (Takei) was used for visual and auditory reactions measurement. Each participant was given five (5) trials on both visual and auditory. Descriptive and ANOVA statistical techniques were adopted and tested at a 0.05 level of significance. No significant differences were found among the soccer players of different playing positions in the whole-body reaction time of visual and auditory as the calculated values of F were 0.39 and 0.41 respectively were lesser than the tabulated value $F=3.22$.

Keywords: Whole-body reaction time, Playing positions, Soccer.

Introduction

Reaction time is the interval of time between the presentation of the stimulus and the initiation of the response. It is affected by the sensory organ, stimulus strength, preparatory setting, general muscle tension, motivation, practice, necessary response, tiredness, and overall health (Johnson & Nelson, 1982). Reaction time serves as a reliable measure of the rate at which the central nervous system processes sensory stimuli and performs them in the form of motor response (Thakur & Babu, 2016).

Reaction time is dependent on factors like perception, processing and response. Depending on the task, a stimulus in sports may be visual (seeing), auditory (hearing), or kinesthetic (touch). When the brain receives the signal from the sensory system, it immediately processes it and reacts by sending a message down the spinal cord to the right muscles, causing them to contract. As a consequence of all three elements working together, the reaction time is what it is. As a result of one of them being hampered, the response time would be slower (Kiikka, 2019). Reaction time is one of the important factors that allow players to stand out from their opponents by moving quickly under pressure, intercepting balls, and making fast decisions against imposters (Konter, as cited in Taskin et al., 2016). When an offensive player makes a move, the difference between a slow and a rapid response by the defensive players can decide their

success or failures. Slow reactions impede both offensive and defensive players because they are unable to show the quickness needed to outsmart their opponents. In the game of football, where signals, opponents' movements, or the motion of the ball affects a player's movements, reaction time is important. Reaction time in sports performance is significant in games and sports where a player's movement is triggered by signals, opponents' movements, or the motion of the ball (Gavkare et al., 2013).

Reaction time is also an important performance determinant in sports such as tennis, badminton, volleyball, football, basketball, hockey, kho-kho, handball, baseball, sprints, and so on (Kansal, 1996). The study aimed to compare the visual and auditory whole-body reaction times among soccer players of different playing positions.

Materials and Methods

A total of 45 male soccer players (15 players each from Defender, Mid-fielder, and Forward) between the age of 18 to 30 years who had participated at least in the state league was randomly selected as the subject. To determine the visual and auditory whole-body reaction time, Whole-Body Reaction Type IV (Takei) was used. It consists of three different lights (Blue, Yellow and Red) and sound (3000Hz, 1000Hz, and 500Hz) for visual and auditory reaction time respectively. The subject took a position and response to the given signal quickly by jumping up from the reaction mat.

The reaction time was recorded as soon as the subject returns to the mat from leaving it. The participants were made familiar with the instrument before the actual trials began. Five (5) trials each on visual and auditory whole-body reaction time were performed by the participants. The best (minimum) time out of the five (5) trials was the score of the test. To determine the significant differences of whole-body reaction time between defender, mid-

fielder, and forward, descriptive analysis and Analysis of Variance (ANOVA) was employed. The level of significance was set at 0.05.

Results

The descriptive analysis of visual and auditory whole-body reaction time among soccer players of different playing positions is presented in table 1.

Table-1: Descriptive Analysis of Visual and Auditory Whole-body Reaction Time of Different Playing Positions

VARIABLES	GROUPS	N	M	SD	SE
VISUAL	Defenders	15	0.24	0.04	0.01
	Mid-fielders	15	0.24	0.02	0.01
	Forwards	15	0.23	0.08	0.02
AUDITORY	Defenders	15	0.22	0.07	0.02
	Mid-fielders	15	0.23	0.03	0.01
	Forwards	15	0.24	0.03	0.01

Table 1 reveals that the means (M) and standard deviations (SD) on the visual whole-body reaction time for defenders, mid-fielders, and forwards were 0.24±0.04, 0.24±0.02, and 0.23±0.08 respectively. It also reveals that the means (M) and standard deviations (SD) on the auditory whole-body reaction time of

defenders, mid-fielders, and forwards were 0.22±0.07, 0.23±0.03, and 0.24±0.03 respectively.

The graphical representation of means of visual and auditory whole-body reaction time of defenders, mid-fielders, and forwards is shown in figure 1.

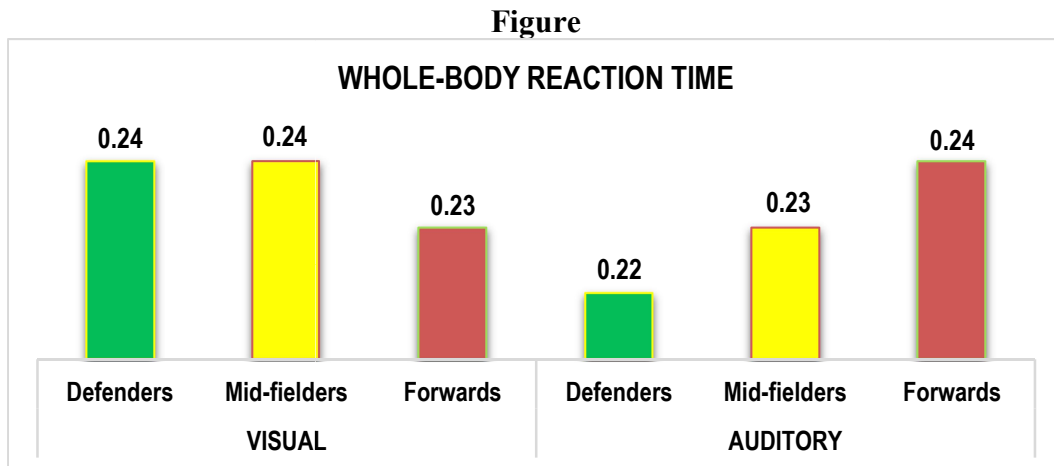


Fig. 1. Means Comparison of Visual and Auditory Whole-body Reaction Time of Different Playing Positions

The analysis of variance (ANOVA) among the soccer players of different playing positions in

visual and auditory whole-body reaction time is presented in table 2.

Table- 2 : Analysis of Variance (ANOVA) in Visual and Auditory Whole-body Reaction Time of Different Playing Positions

Variables	Groups	Sum of Squares	df	Mean Square	F	Sig.
VISUAL	Between	0.002	2	0.001	0.387 [@]	0.681
	Within	0.113	42	0.003		
AUDITORY	Between	0.002	2	0.001	0.405 [@]	0.669
	Within	0.091	42	0.002		

[@]Insignificant at 0.05 level of confidence, $F_{0.05}(2,42) = 3.220$

Table 2 reveals that there were insignificant differences among the respective means of visual and auditory whole-body reaction time among defenders, mid-fielders, and forwards as the obtained value of $F=0.387$ and 0.405 respectively were lesser than the critical value of $F=3.220$.

Discussions

The study was to compare visual and auditory whole-body reaction times among male soccer players of different playing positions. To determine the differences, the ANOVA test was employed and revealed that there were no significant mean differences of visual and auditory whole-body reaction time among the soccer players of different playing positions. Thakur and Babu (2016) also found that auditory reaction time has no significant variation, in which they examined the variation of reaction time concerning playing positions of football players.

The insignificant differences among the soccer players of different playing positions might be due to the strict implementation of the same

specific exercise components of the game during the training program. Every player was trained almost the same regardless of their playing positions. The defenders, mid-fielders, and forwards might possess a similar level of reflex actions of prime body muscles by the stimulations of visual and auditory perceptions. Also, the modern football playing styles have been interpreted as total football that all the playing members are responsible in defensive, offensive, and different strategic systems of play. Therefore, players of all positions indeed might be being achieving an equal level of football fitness and quality performance. Hence, there might not be significant differences among the soccer players of different playing positions.

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EXAMINING THE EFFECTS OF YOGIC EXERCISE ON FLEXIBILITY AMONG COLLEGIATE STUDENTS

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ABSTRACT

The primary objective of the study is to find out the Effects of yogic exercise on Flexibility among Collegiate Students. The 30 male collegiate students participated in the study and their age ranged between 18-25 years. Studied from S.B. Mahavidyalaya, Killari, Dist.- Latur (Maharashtra), Training was given to the experimental group only. Voluntary to participate in the specific yogi exercise Training Programmes. Exclusion criteria were the presence of chronic medical conditions such as asthma, injuries, heart disease or any other condition that would put the subjects at risk when performing the experimental test. The yogic Exercise training Scheduled was planned as 8 weeks 5 days week. Study was conducted at our college campus. The data was collected by age, height, weight, and flexibility of all subjects were measured in physical education department laboratory and Field. flexibility was assessed using Sit Reach test and Bent & Reach test. Mean score and standard deviation were taken and paired ANCOVA was applied. The result reveals that there was statistically significant effect of yogic exercise through Sit Reach test ($f=5.85, p<.0.05$). However, the result reveals a statistically significant effect of Flexibility through Bent & Reach test. ($f=3.65, p<.05$) It is found that yogic exercise improves the flexibility among collegiate students.

Introduction

Yogic practice could have included stretching and rotation exercise. The most important benefit of yoga is physical and mental therapy. Indians have given great importance to yoga and physical exercises "not only to prevent or cure the physical ailments/diseases but to keep fit also. There are many disciplines of yoga that emphasize different aspects of the mind, body and spirit. However, in the West, mainstream Yoga focuses largely on the physical practice, primarily Hatha Yoga. Hatha is a widespread style that incorporates a series of poses (called Asanas) that emphasize stretching, breathing (called Pranayama), relaxation and meditation techniques to help build strength, increase flexibility, Concentration, balance and improve co-ordination. Yoga, with origins in ancient India has several subtypes, and incorporates physical postures (asanas), controlled breathing (pranayama), deep relaxation, and meditation. Flexibility, it references to the moving and stretching capacity of joints and muscles. Flexibility in joints can be increased by some exercises, in this research investigator focused on this factor, that which selected exercises or body movement can improve the flexibility of human joints. Every person's flexibility level can be different from another. Age, gender, genetics, daily routine, eating habits, and exercise level are responsible for it. For

example, at childhood our flexibility level is high but when we get older our joints get more rigid. But body temperature, activity level, joint structure, ligaments, tendons, also influences flexibility. For measuring flexibility investigator used Bend & Reach test and Sit & Reach test in this research.

Objectives of the Study

The objective study was to measure the effects of selected yogic exercises on Flexibility among collegiate students.

Research Hypotheses

There would be significant the effects of selected yogic exercises on flexibility among collegiate Students.

Methodology

Target population: Two groups were targeted experimental & control group; 30 collegiate students considered as experimental group & 30 other collegiate students considered as control group. Studied from S.B. Mahavidyalaya, Killari, Dist.- Latur (Maharashtra), The training programme was only given to experimental group. The age of the subjects was ranged between 18 to 25 years.

Demographic Information: The data was collected through respondents in the form of different experimental tests. The demographic information about Gender, age, daily smoking,

drug use, etc. was obtained before seeking responses.

Research Design

The research design refers to “the researcher’s overall plan for testing the research hypotheses” (Polit et al, 2001, p.167). This study involves a cross sectional, comparative pre and post-test of students in an experimental

research. Since only experimental group was taken by the investigator and there was no control group so this study was conducted in a quasi-square experimental design.

Test Administration: For the present study flexibility was assessed using Sit & Reach test and Bend & Reach test was utilized for data collection.

Yogic exercises the yogic training consists of the following selected yogic exercises

S.N.	ASANA	Position ASANA
1	Standing	Suriyanamaskar, Tadasana, Trikonasana, Utkatansana, Utthita Parsvakonasana, Cakrasana
2	Sitting	Yoga Mudra, Paschimottanasana, Ardha Matsyendrasana
3	Kneeling	Vajrasana, Padmasan
4	Prone	Bhujangasana, Shalabhasana, Dhanurasana
5	Supine	Naukasana, Sarvangasana, Halasana, savasana

Training Programme

The yogic exercises are also demonstrated correctly and asked them to do the same. Training Schedule Week ASANA Position Repetition Sets Rest between asanas Frequency per week 08 Week Standing 1 (15 Min.) 30 Sec. 5 Day/ Week Sitting 1 (15 Min.) 30 Sec. Kneeling 1 (15 Min.) 30 Sec. Prone 1 (15 Min.) 30 Sec. Supine 1 (15 Min.) 30 Sec.

Collection of data: Data was collected from Pre and Post Test was taken. 30 Male collegiate students as a experimental group and 30 Male collegiate students as a control.

Data Analysis

Statistical Analysis: For data analysis responses were expressed as Analysis of Covariance was performed for pre and post-test. The level of significant set up at 0.5 level

Results of Study

As the primary aim of the study was to statistically effects of yogic exercise find out the flexibility on collegiate Students. With the help of analysis of co-variance.

Table -1, Shows the statistical information of Analysis of Covariance effects of Yogic exercise on flexibility through Bent & Reach Test of pre and post-test of Control group & Experimental Group.

Bent & reach Test							
Analysis of Covariance							
Source of Variation	D.F	SSX	SSY	SSXY	SSYX	MSSYX	F-ratio
Treatment Group Means	2-1=1	669.90	241.51	402.23	186.02	186.0289	3.65*
Errors	30-2-1=27	2419.69	2084.8	2893.74	-1375.69	-50.9514	
f _{yx} = 3.65*							

Significant at 0.05 Level

As per Table, shows that statically significant effect of yogic exercise was found out on Flexibility through Bent & Reach Test in the form of Analysis of Covariance of pre and post-test of Control group & Experimental Group. With regards to Bend & Reach Test,

pre and post-test of Control group and Experimental Group they have obtain the F value 3.65 and which is significant at the level of 0.05, and table value is 4.1055. The Table reveals that, there was significant effects of selected yogic exercises on Flexibility effects of selected yogic exercises on Flexibility

through Bend & Reach test was found out in Experimental Group ($F=3.65^*$, $p>.05$).

Table -2 Shows the statistical information of Analysis of Covariance effects of Yogic exercise on flexibility through Sit & Reach Test of pre and post-test of Control group & Experimental Group

Sit & Reach Test							
Analysis of Covariance							
Source of Variation	D.F	SSX	SSY	SSXY	SSY X	MSSYX	F-ratio
Treatment Group Means	2-1=1	0.8	115.2	9.6	97.38	97.38	5.85*
Errors	30-2- 1=27	1397.0 88	1746.6.6	1346.55	448.7 5	16.62	
$f_{yx}= 5.85^*$							

Significant at 0.05 Level

As per Table, shows that statically significant effect yogic exercise was found out on Flexibility through Sit & Reach Test in the form of Analysis of Covariance of pre and post-test of Control group & Experimental Group.

With regards to Sit & Reach Test, pre and post-test of Control group and Experimental Group they have obtain the F value **5.85*** and which is significant at the level of 0.05, and table value is 4.1055. The Table reveals that, there was significant effects of selected yogic exercises on Flexibility through sit & Reach test was found out in Experimental Group ($F=5.85^*$, $p>.05$).

Conclusion

Results of this study are consistent with previous research that has significant effects of 8-week yogic exercise training on to improve flexibility among collegiate students. Thus, yoga may support to enhance performance of those athletes by increasing specific components of fitness. These results may assist the Educational policy makers, Universities and other State and Centre educational bodies to include must be a compulsory subject for college students of Maharashtra in their curriculum to improve flexibility and other health related physical fitness components. Hence, at this moment we can recommend that yoga professional could be included with the team to conduct yoga session on a regular basis to enhance performance of athletes. Coaches could also be trained on yoga poses so that they can conduct yoga session with their trainee athletes along with the other regular training.

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A STUDY ON SOCIO ECONOMIC STATUS OF FEMALE JUNIOR ATHLETES AND BADMINTON PLAYERS OF TELANGANA STATE

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ABSTRACT

The study was conducted to investigate the socio-economic status of junior athletes and badminton players of telangana state. For the present study 100 athletes and 100 badminton players were selected who participated at state level tournament. The socioeconomic status questionnaire prepared and validated by Kuppu swamy was used for the purpose of data collection to find out the significant effect. socio economic status of athletes and badminton players. Mean, standard deviation t-value and correlation were computed result of the study positive effect of the study indicated of socioeconomic status of the female athletes and badminton players of telangana state. Significance of difference. Was also observed in difference between parents occupation of Medallist and Non Medallist athletes. Between parents occupation of Medallist and Non-Medallist badminton players.

Keywords; Socio Economic Status, athletes badminton state level, Medallist and Non Medallist.

Introduction

Socio economic status

Socioeconomic status is the social standing or class of an individual or group. It is often measured as a combination of education, income, and occupation. A socioeconomic class is a group of people with similar characteristics. These characteristics can include social and economic standing, level of education, current profession, and ethnic background or heritage. Social economic theories may differ from conventional beliefs about economics. Traditional schools of thought often assume that actors are self-interested and make rational decisions. Social economic Social economics also referred to as socioeconomics, is concerned with the relationship between social and economic factors within society. These factors influence how a particular group or socioeconomic class behave within society, including their actions as consumers. Different socioeconomic classes may have different priorities regarding how they direct their funds.

Certain goods or services may be considered unavailable to specific classes based on their own perceived ability to afford them and their income. These goods or services can include access to more advanced or complete medical care, educational opportunities, and the ability to buy food that meets specific nutritional guidelines.

Athletics In the world of sports and games running, jumping and throwing events one called in one word as athletics or track and field events. Sprints, one relay race, long jump, high jump, and hop step and jump

Badminton

Badminton is a game which is played by men, women (Singles/Doubles) and both men and women (Mixed Doubles) together. It can be played by persons of all ages. The first set of rules was formulated in Pune, in India in 1901. These rules were gradually adopted by other nations. Due to this reason, it is believed that badminton originated in India. However, the game became an international sport after the first All England Championship. In 1934, the International Badminton Federation (IBF) was formed and the rules of the game were standardised. World Badminton Federation (WBF) regulates the game. Badminton Association of India came into existence in 1934 and various State Badminton Associations are affiliated to it.

Statement of the problem

The purpose of the present study was “A study on Socio Economic status of Female Junior Athletes and Badminton players of Telangana State”

Objectives of the study

1. To find out the Socio Economic Status of female junior athletes and badminton players of Telangana state

Hypotheses of the study

1. It was hypothesized that there would be no significant difference between parents' Occupation of Medalist and Non Medalist of athletes and badminton players .

Methodology

Selection of subjects

To achieve the purpose of the study 200 female players out of which 100 athletes and 100 badminton players from various districts of telangana state those who have participated at state level competition aged under 17 years were selected as subjects. Instrumentation

The socio-economic status questionnaire prepared and validated by Kuppaswamy's. Scale was used for the purpose of data collection during state level championship of athletics and Badminton.

The questionnaire is reliable and valid instrument to determine the socio-economic status for the present investigation. In this study the investigator has adopted kuppaswamy's scale for all the three variables.

Statistical procedure:

Socioeconomic status The test of significance or hypothesis testing always calls for some kind of statistical technique to be used there are different ways and techniques in which data can be treated and analysed statically. In present study Mean, standard deviation, t-test were used to compare the data.

Table 1: T- Test for Occupation of Parents of Medalists and non-medalists athletes
Descriptive Statistics

	Medal	N	Mean	Std. Deviation
A Occupation	Medal	24	5.58	1.349
	Non-Medal	76	5.04	1.518

It can be observed from the above table 1: that the parents' occupation of 24 medalist athletes mean value is 5.58 and standard deviation is

1.349 and similarly 76 Non Medalists athletes mean value is 5.04 and Standard deviation is 1.518

Table: 2 : Independent Samples Test

Athletes of Occupation	T-Test for Equality of Means	
	t	df
Equal variances assumed	1.569	98
Equal variances not assumed	1.670	42.982

Significant at 0.05 level

It can be observed from the above table: 2 the calculated Medalists and Non Medalists t-value as 1.569.

value as 1.569 which is less than the table value of 1.96 at 0.05 level of significance. Hence the formulated hypothesis is accepted.

Discussion on Hypothesis

It was hypothesized that there would be no significant difference between parents occupation of Medalist and Non Medalist athletes. It can be observed from the table: the calculated Medalists and Non Medalists t-

Hence it can be concluded, that there is no significant difference between parents occupation of Medalist and Non Medalist athletes.

Table :3: T- t-test for Occupation of Badminton players of Medalist and Non Medalist.

Descriptive Statistics

	Medal	N	Mean	Std. Deviation
B Occupation	Medal	20	6.65	1.424
	Non-Medal	80	6.13	1.938

It can be observed from the above table:3 that the parent's occupation of 20 Medalist of Badminton players means value is 6.65 and

standard deviation is 1.424 and similarly 80 Non Medalists badminton players mean is 6.13 and Standard deviation is 1.938.

Table :4: Independent Samples Test

Badminton of Occupation	T-test for Equality of Means	
	t	df
Equal variances assumed	1.135	98
Equal variances not assumed	1.363	38.666

Significant at 0.05 level

It can be observed from the table: 4th e calculated Medalist and Non Medalists t- value as 1.135.

Discussion on Hypothesis

It was hypothesized that there would be no significant difference between parents occupation of badminton players Medalists and Non Medalist

It can be observed from the table: the calculated Medalist and Non Medalists t- value as 1.135 which is less than the table value of 1.96 at 0.05 level of significance. Hence the

formulated hypothesis is accepted.

Hence it can be concluded, that there is no significant difference between parents occupation of Badminton. Players Medalist and Non Medalist.

Conclusions

1. We conclude that there is no significant difference between parents occupation of athletes medalist and Non medalist.

2. We conclude that there is no significant difference between parents occupation of Badminton Players medalist and Non medalist

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COMPARISONS OF SOCIO-ECONOMIC STATUS AND PERSONALITY TRAITS OF THE PLAYERS AND NON PLAYERS OF LAW EDUCATION

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ABSTRACT

The research was conducted on relationship of personality and socio-economic status of the law students. The sample consisted of 300 non sports person selected randomly from different law colleges. The main objective of the study was to find out the relationship of Personality and Socio-economic status of non sports person. Eysenck Personality Inventory test and Rajbirsingh, RadheyShyam and Satishkumar's Socio-economic status Scale Questionnaire was administered. On the basis of Karl Pearson's correlation coefficient analysis it was found that the non sports person's personality is not affected by the socio economic status of their family. The significant correlation was set at .05 level.

Keywords: Personality, Extroversion, Introversion, sports.

Introduction

Sports yield an enormous range of individual differences, which are so important to understand for purpose of selection and training and also sensitive to social control, group effort and competitive atmosphere. Such differences pertain to talent for varying kind of sporting activity as well as to variations within a particular sport.

It is being realized that besides physique and possession of skill relating to an activity, there are many other factors such as attitude, aptitude, interest, intelligence, adjustment, socio-economic status and personality characteristics which contribute to the success of participants. It is only during the last half century or so that physical educators have speculated upon the possible interrelationship between physical activity and various factors. Most of us at one point or another have played or participated in a sport, whether it is volleyball, tennis, karate or pole-vaulting. Have you ever sat back and wondered why you chose that particular sport to play besides the simple fact that you love participating in it? Recent studies have shown that the complex of multiple personality traits that composes each individual may be a significant factor in which sport you prefer to play. The broadest category of personality traits involves extraversion and introversion. People reflecting traits of extraversion tend to be excitable, outgoing, lively, sociable and impulsive. People reflecting traits of introversion tend to be

reserved, reclusive, thoughtful, calm, and rational. They are more interested in their own mental self, work better alone, and are controlled in social situations, preferring closer, more personal relationship. The strength and direction of the individual's interests, attitudes, motives, values and related variable represent an important aspect of his personality. These characteristics materially affect his vocational pursuits and other major phases of daily living.

In recent years, physical educators have become increasingly aware of the intimate relationship between the personality of the individual and the culture of the social class to which he belongs. The importance of the socio-economic stratification for the development of achievement motivation arises in the context of the similar early life experiences, same attitudes value, and training practices which help similar configuration of motives in the same sub group of society. Similar kind of later life experiences in particular kind of situations after childhood makes people in a specific group homogenous. The results of various studies in the past have indicated that middle class subjects are highly motivated than their working class counterparts (Douvan and Adelson, 1958; Himmtwait, Hasley and Oppenheim, 1952; Roser, 1956) concerning the relationship between social class and an achievements in India, Mehta (1967) has found that subjects coming from different social classes (social class based on fathers

education, occupation and income) do not differ significantly in their achievement levels.

Material and Method

300 non-sports persons were selected randomly from different Law colleges

Measures

Psychological Questionnaire of Personality by Eysenck Personality Inventory test and Rajbir Singh, Radheyshyam and Satishkumar's socio-

economic status scale Questionnaire was administered on non-sports person to get the data.

Statistical techniques

Detailed study of personality and socioeconomic status was done; Karl Pearson's correlation coefficient was applied.

Table 1: Frequency Distribution of Personality (Extroversion/Introversion) of Law Non Sports Person and Socio-Economic Status of their Family

Group			SES					Total		
			Low SES	Middle L SES	Middle A SES	Middle U SES	High SES			
Non Sports Person	Personality	Extrovert	Count	11	7	14	7	7	46	
			% within EXTCATE	23.9%	15.2%	30.4%	15.2%	15.2%	100.0%	
			% within SES	11.7%	14.6%	18.9%	14.6%	19.4%	15.3%	
		Average	Count	67	26	44	24	25	186	
			% within EXTCATE	36.0%	14.0%	23.7%	12.9%	13.4%	100.0%	
			% within SES	71.3%	54.2%	59.5%	50.0%	69.4%	62.0%	
		Introvert	Count	16	15	16	17	4	68	
			% within EXTCATE	23.5%	22.1%	23.5%	25.0%	5.9%	100.0%	
			% within SES	17.0%	31.3%	21.6%	35.4%	11.1%	22.7%	
	Total			Count	94	48	74	48	36	300
				% within EXTCATE	31.3%	16.0%	24.7%	16.0%	12.0%	100.0%
				% within SES	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 2: Relationship of Personality(Extroversion/Introversion) and Socio-Economic Status of Law Non Sports Person

Correlations(a)			
		Extrovert	SESS
per	Pearson Correlation	1	-.031
	Sig. (2-tailed)	.	.591
	N	300	300
SESS	Pearson Correlation	-.031	1
	Sig. (2-tailed)	.591	.
	N	300	300

Interpretation

The scores of the table 1 indicate that highly motivated non sportsperson students belong to middle socio-economic status group i.e. 170 students (56%) fall in middle socio-economic status. In other ways 46 students (15.3%) were

Extrovert, 68 students (22.7%) were Introvert and 186 students (62%) falls in average category.

Table 2 show the karl Pearson's correlation coefficient and their significant p-values between personality (Extroversion/

Introversion) and socio-economic status. Here we see that correlation coefficient between extroversion as well as socio-economic status is not significant in nature.

Discussion of Findings

The finding of Karl Pearson's correlation coefficient and their significant p-values between all pairs of socio-economic status and personality, we say from the table that correlation coefficient is insignificant for different pairs of these parameters in the case of law non-sports person.

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S. BALDEV SINGH DRONACHARYA AWARDEE AS A COACH**H. Kaur¹, A. Sharma² and K. Singh³**¹Department of Physical Education and Sports Technology, Sri Guru Granth Sahib World University, Fatehgarh Sahib, India²PGGCG -11, Chandigarh, India.³Sri Guru Granth Sahib World University, Fatehgarh Sahib, India¹sekhonharpreet197@gmail.com, ²anusharma1531@gmail.com,**ABSTRACT**

The current study purpose is to highlight the contribution and Achievements of S. Baldev Singh Dronacharya Awardees towards the promotion and coaching of sports in the country and his socio-economic conditions, cultural background. The data for investigation were derived from Personal Records, Official Records, Interview, Pictorial Records and Published Records. Survey Techniques were used to obtain responses and reactions about S. Baldev Singh Dronacharya awardee from selected eminent sports persons, trainees, coaches and physical educationists from all over the country through opinion rating Questionnaire to get desired information. S. Baldev Singh has been honored with Dronacharya Award in 2009.

Keywords: Contribution, pictorial records, opinion rating questionnaire

Introduction

Sports and games have been a vital part of Indian culture. The nation has consistently respected and viewed its extraordinary sportspersons as national heroes. These sportspersons have been good examples for more youthful age who kept on motivating them towards the fulfillment of more prominent statures. The history of the sport of hockey has its roots well laid within the world's early civilizations. Hockey is the National game of India. Hockey has been played in India from time immemorial. The Indian Hockey team is the national men's hockey team of India. It was the first non-European team to be a part of the international Hockey federation. In 1928, the team won its first Olympic Gold Medal. From 1928 to 1956, was the golden period for the Indian Hockey team. The power of Indian Hockey game made India famous in the world. Indian players have excellent skill and incomparable talent. The present study will highlight the sports, social and Psychological qualities of S. Baldev Singh Dronacharya Awardee which could be highly beneficial to the people who like to see the promotion of hockey locally, nationally and internationally. The exemplary performance of S. Baldev Singh in field hockey would inspire and motive sports persons and coaches, irrespective-of the sports. One must starve for. Such achievements in human life are appreciated and valued in every society.

Methodology

A case study was designed to investigate the contributions and achievements of S. Baldev Singh Dronacharya Awardee towards the promotion of Hockey in India and his philosophy towards sports as a profession in India, his quality as a coach, his professional qualities and his contribution to the game of Hockey at National and International level. Data or information for this investigation was derived from the primary sources i.e. personal records, pictorial records, interview, official records and secondary sources. Investigator personally contact with S. Baldev Singh Dronacharya Awardee for interview by taking prior appointments with him. The aim of interview was mainly to know his family background, environment influence, childhood, education, sports participation, sports career and achievements. Survey technique was used to obtain responses and reactions about from selected the eminent S. Baldev Singh Dronacharya Awardee sports person from all over the country. Especially opinion rating questionnaire regarding S. Baldev Singh Dronacharya Awardee was constructed with the help of experts. A questionnaire was formed and constructed by investigator in consultation with the experts. An extensive review of literature and research studies conducted on case studies was used for collection of the items of questionnaire. Also formal and informal discussion was done with the experts. Almost all care was taken to ensure maximum coverage of the data needed for the

study along with worthwhile and meaningful responses for Respondents.

Coaching career

A NIS diploma in 1979-80 paved his way to coaching but prior to that, he trained Arya College Ludhiana Hockey Team. Mr. Thal Singh was Principal of that college. He offered him 1200 rupees for training his college team. He accepted that offer and started training with new students and served there from 1975 to 1978. It is irony of his career that Punjab did not offer him job but Haryana appointed him hockey coach in 1981 in the Sports Department. He was posted in Shahabad Markanda, Kurukshetra till 1986. In Shahabad, S. Baldev Singh trained boys only as he had no interest in Women's Hockey. Therefore he chose to train boys rather than girls. In 1986 he did a tie-up with Namdhari Hockey Team and he got transferred to Sirsa by Haryana sports department. He revived Namdhari's Hockey Team which was stationed at village Jivan Nagar in District Sirsa (Haryana). There was a Hockey Nursery with young players. In 1992 he came back again to Shahabad Markanda town as a coach in the State's Sports Department. He reached for a good hockey field and a management of the school who could support him in his training. During this exercise he zeroed on ones Shri Guru Nanak

Pritam Girl's Senior Secondary School Shahabad. Here he started training girls along with some boys. S. Baldev Singh worked against all odds with only positive thinking of training the players to enter the Indian team to play for the nation. His dream come true with many of his training donning India colour and winning Padma Shri, Rajiv Gandhi Khel Ratna ,Arjuna and Bhim awards. At present, S. Baldev Singh is working as a Chief Hockey coach at Khalsa College Hockey Academy, Amritsar.

Honours and Awards Dronacharya Award 2009

S. Baldev Singh Dronacharya Awardee has been honored Dronacharya Award in August 29, 2009 for his contribution in Indian Hockey as excellent coach.

Results and discussion

To assess the different personality dimensions of S. Baldev Singh Dronacharya Awardee, opinion rating survey was conducted .Almost eighty eminent sports persons who has been associated with him as a player, admirers, colleagues and his contemporaries were chosen for the purpose. For the analysis of the data, statements were separately recorded and presented in percentages of the responses.

Table 1: Table Showing Opinion Rating Questionnaire on S. Baldev Singh Dronacharya Awardee as a Hockey Coach

S.No.	Statement	AS	A	NAND	D	DS
1	He is a very knowledgeable person.	100%	---	---	---	---
2	He honors all good suggestions.	100%	---	---	---	---
3	He is a committed.	100%	---	---	---	---
4	He has very natural ability of sporting talent.	100%	---	---	---	---
5	He has very vast knowledge about sports.	100%	---	---	---	---
6	His approaches to sports are most scientific.	46.15%	46.15 %	---	7.70%	---
7	His daily schedule for the players was always on scientific lines.	84.62%	15.38 %	---	---	---
8	He inspired players by given examples of outstanding sportsmen of the world.	84.62%	15.38 %	---	---	---
9	Even after retirement, he is playing important role as a promoter of sports.	100%	----	---	---	---
10	He was a great promoter/coach of sports.	84.62%	15.38%	---	---	---
11	He encouraged and promoted all games (mainly hockey) and sport	100%	---	---	---	---
12	He always emphasized on good diet and good Physical fitness.	100%	---	---	---	---
13	He always encouraged players to improve his Records.	84.62%	15.38%	---	---	---
14	He is fond of other games and sports.	69.23%	30.77%	---	---	---
15	He is keen to make hockey popular in the country.	100%	---	---	---	---

Conclusion

- S. Baldev Singh Dronacharya Awardee is a great promoter/coach of sports. S. Baldev Singh Dronacharya Awardee has very natural ability of sporting talent.
- S. Baldev Singh Dronacharya Awardee is very efficient, honest, a dedicated coach and strict disciplinarian.
- He always emphasized on good diet and good Physical fitness.
- S. Baldev Singh Dronacharya Awardee is very hardworking and regular in daily exercises.
- He always encouraged players to improve his Records.
- He is health conscious and always maintains his physical fitness.
- S. Baldev Singh Dronacharya Awardee believes in learning by doing.
- The Legendary S. Baldev Singh Dronacharya Awardee has always been a role model for others.

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EFFECTS OF RESISTANCE TRAINING AND ENDURANCE TRAINING ON SELECTED PHYSICAL FITNESS COMPONENTS

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ABSTRACT

The persistence of this study was to discover the effects of resistance training and endurance training on selected physical fitness components. Total thirty male of age between 23 to 32 years were nominated for this study. Further, they were separated into three equal groups, each group comprising of ten subjects. Group I and II were experimental group and performed their respective training program i.e. resistance and endurance training at alternate days up-to three months while group III remained as control group which did not perform any specific training program. The subjects were tested on selected criterion variables such as cardio-respiratory endurance, shoulder strength and strength endurance at prior to and after the completion training program. For testing the cardio-respiratory endurance, Cooper's 12 minutes run/walk test was administered, shoulder strength was measured by pull-ups, to test the strength endurance, bent knee sit-ups was administered. The analysis of covariance (ANCOVA) was used to see the substantial difference if any, between the control group and experimental groups on selected criterion variables discretely. Since, there were three groups in this study, the Bonferroni post-hoc test was applied. The selected criterion variables such as cardio-respiratory endurance, shoulder strength and strength endurance were improved significantly for the training groups when compared with the control group and the shoulder strength and strength endurance were improved significantly for strength training group comparing to the endurance training group while cardio-respiratory endurance was improved more efficiently in the endurance training group.

keywords: Strength Training, Endurance Training, Physical Fitness

Introduction

Training is education, or development in oneself or others, any skill and knowledge or fitness that relay to precise suitable proficiencies. Training has precise goal of refining one's ability, dimensions, efficiency and performance. Training also states to the progression of physical fitness associated to a definite capability, such as game and sports, military applications or any other professions. Physical training focuses on mechanical goals: training plans in this area advances precise motor skills, endurance, strength or overall physical fitness, often with an intent of summiting at a certain time.(1) Physical training must be provided to the individuals on the base of precise principles.

The strength training refers to the types of physical exercise, uses of resistance either as own body weight or dumbbells, barbells etc. which boost the muscular contraction which contributes in the strength, skeletal muscles hypertrophy and anaerobic endurance. It improves the complete fitness and well-being, including the volume of muscle, strengthening and improving the toughness of tendon, ligament and joint health, reduction in the injury(2), increased the bone density, overall

fitness, resting metabolic rate and cardiac functions.(3)(4)

Training of the aerobic system is termed as endurance training which is contrasting to the anaerobic system, which is separated into two types, general and specific endurance.(5) Endurance fitness which sustains the required activity level for a specific competitive sport, which comprises both cardiovascular and strength endurance essential for the sport.(6) In physiological aspect, it entails the respiratory and cardiovascular systems to stream energy to the engaged muscles to support constant physical action.(7)

Materials and methods:

Present study was designed to discover the consequence of strength training, and endurance training on cardio-respiratory endurance, shoulder strength and strength endurance. To accomplish this goal thirty male newly joined members from O two gym Kurukshetra Haryana of the age between 23-35 were selected purposively as subjects. Further they were separated into the three equivalent groups of i.e. one control group and two experimental, group I (n=10) performed the resistance training, group II (n = 10) performed endurance training on alternative days up-to

three months, and group III (n=10) remained as control group which did not performed any specific training program apart from their daily routine work.

After completion of any training program there would be a modification in various aspects and systems in human body. Hence, the researcher accessed with the experts and then designated the following aspects as criterion variables: 1. Cardio-respiratory endurance, 2. Shoulder strength and 3. Strength endurance measured by copper's 12 minutes run walk test(8), pull-

ups(9) and bent knee sit-ups(10) respectively prior to and after the treatment.

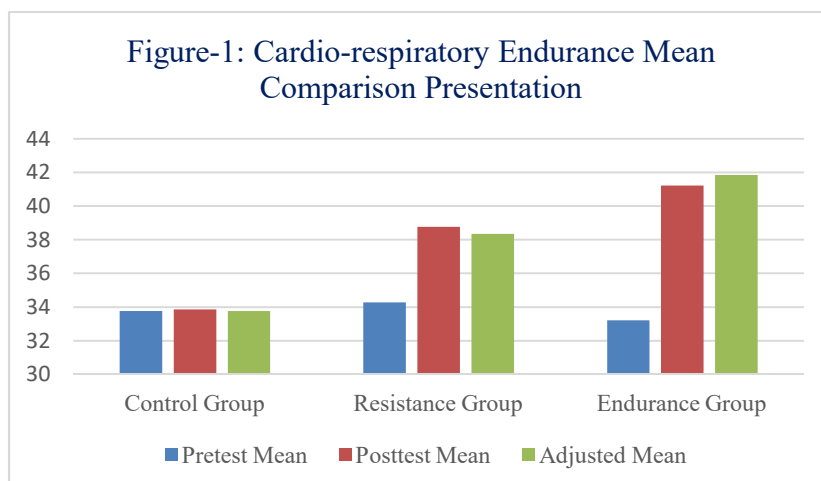
Analysis of the Data

Analysis of covariance was used to find the modifications in SPSS version-26, 2019 if any, amongst the adjusted post-test means of designated criterion variables discretely. Wherever the 'F' ratio of the adjusted post-test mean was found to be substantial, the Boneferroni post-hoc test was applied. .05 level of confidence was fixed to test the significance level of obtained 'F' ratio by analysis of covariance.

Table- I: Analysis of Covariance and 'F' ratio for Cardio-respiratory Endurance, Shoulder Strength and Strength Endurance of Control Group, Resistance Training Group, and Endurance Training Group

Variable	Data	Control	Resistance	Endurance	F-ratio
Cardio-respiratory Endurance	Pre-test Mean ± S.D.	33.76 ± 2.31	34.28 ± 2.86	33.22 ± 1.66	0.51
	Post-test Mean ± S.D.	33.86 ± 2.17	38.77 ± 2.07	41.42 ± 1.72	392.22*
	Adj. Post-test Mean	33.76±0.200	38.34±0.202	41.85±0.202	407.55*
Shoulder Strength	Pre-test Mean ± S.D.	3.50 ± 0.85	3.70 ± 0.95	3.60 ± 1.27	0.93
	Post-test Mean ± S.D.	3.50 ± 0.71	11.60 ± 1.78	3.80 ± 1.14	202.42*
	Adj. Post-test Mean	3.58 ± 0.30	11.52 ± 0.30	3.80 ± 0.30	221.81*
Strength Endurance	Pre-test Mean ± S.D.	4.10±1.37	4.50±1.58	4.10±1.37	0.26
	Post-test Mean ± S.D.	4.30±1.25	16.20±2.10	7.10±1.37	422.43*
	Adj. Post-test Mean	4.43±0.29	15.95±0.29	7.23±0.29	430.23*

* Significant at .05 level of confidence. (The table value required for significance at .05 level of confidence with df 2 and 27 and 2 and 26 were 3.35 and 3.37 respectively).



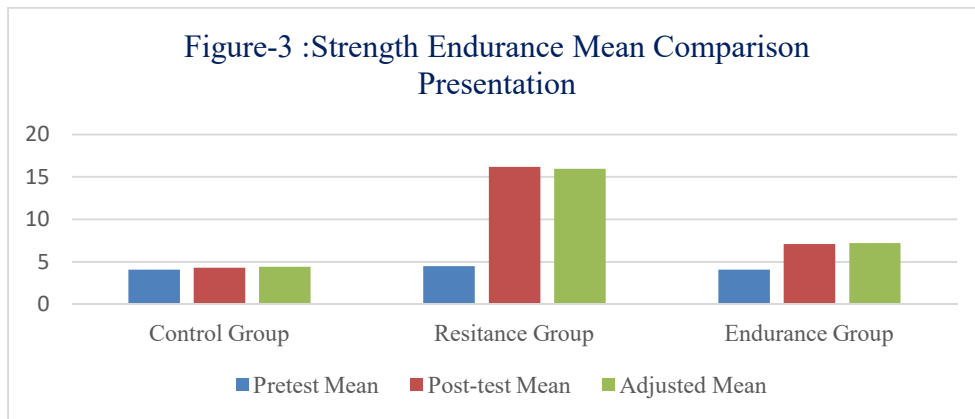
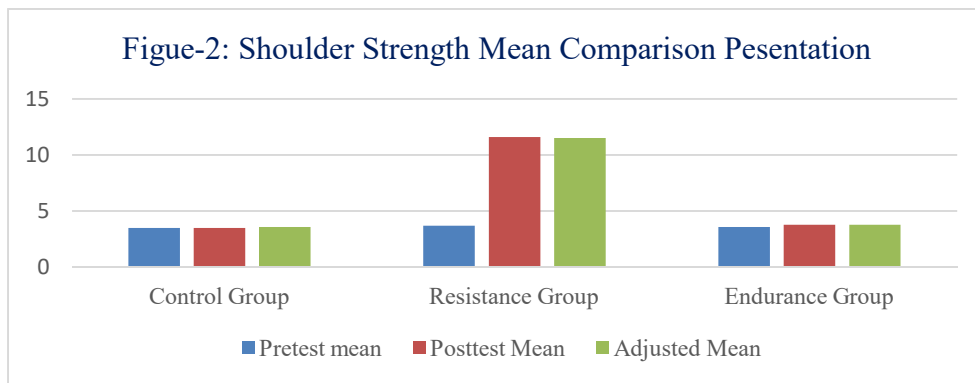


Table – I illustrate that pre test means 'f' ratio of control group, resistance training group and endurance training group on cardio-respiratory endurance was 0.51, which is insignificant at 0.05 level of confidence. The post and adjusted post test mean 'f' ratio value of experimental groups and control group were 392.22 and 407.55 which are significant at 0.05 level of confidence. The pre test means 'f' ratio of control group, resistance training group and endurance training group on shoulder strength was 0.93, which is insignificant at 0.05 level of confidence. The post and adjusted post test mean 'f' ratio value of experimental groups and control group were 202.42 and 221.81, which are significant

at 0.05 level of confidence. The pre test means 'f' ratio of control group, resistance training group and endurance training group on strength endurance was 0.26 which is insignificant at 0.05 level of confidence. The post test and adjusted post test mean 'f' ratio value of experimental groups and control group were 422.43 and 430.23, which are significant at 0.05 level of confidence. The overall study shows that there was a significant increase in cardio-respiratory endurance, shoulder strength and strength endurance. Further, to find out which of the paired mean significantly differ, the Bonferroni post-hoc test was applied and presented below.

Table- II: Paired Mean Comparisons of Cardio-respiratory Endurance

(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig. ^b
control	resistance	-4.646*	.264	.000
	endurance	-8.168*	.269	.000
resistance	control	4.646*	.264	.000
	endurance	-3.522*	.272	.000
endurance	control	8.168*	.269	.000
	resistance	3.522*	.272	.000

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Table – II illustrates that the Bonferroni Test for the difference between adjusted post test means of control group and resistance training group was 4.646, between control group and

endurance training group was 8.168 and between resistance training group and endurance training group was 3.522 which were significant at 0.05 level of confidence.

Table – III : Paired Mean Comparison of Shoulder Strength

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig. ^b
control	resistance	-7.931*	.429	.000
	endurance	-.216	.428	1.000
resistance	control	7.931*	.429	.000
	endurance	7.716*	.428	.000
endurance	control	.216	.428	1.000
	resistance	-7.716*	.428	.000

Based on estimated marginal means

The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Illustrates that the Bonferroni Test for the difference between adjusted post test means of control group and resistance training group was 7.931, and between resistance training group and endurance training group was 7.716 which

were significant at 0.05 level of confidence but between control group and endurance training group was 0.216 which was insignificant at 0.05 level of confidence.

Table – IV : Paired Mean Comparison of Strength Endurance

(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig. ^b
control	resistance	-11.526*	.409	.000
	endurance	-2.800*	.406	.000
resistance	control	11.526*	.409	.000
	endurance	8.726*	.409	.000
endurance	control	2.800*	.406	.000
	resistance	-8.726*	.409	.000

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

Table – IV illustrates that the Bonferroni Test for the difference between adjusted post test means of control group and resistance training group was 11.526, between control group and endurance training group was 2.800 and between resistance training group and endurance training group was 8.726 which were significant at 0.05 level of confidence.

Conclusion

The outcome of the present study depicts that the cardio-respiratory endurance has improved by both training methods but endurance training has improved the cardio-respiratory endurance more efficiently than the resistance training. Shoulder strength improved by resistance training method only. Strength endurance increased by both training method but resistance training has improved the strength endurance more efficiently than the endurance training.

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TRAINING IMPACT OF YOGIC PRACTICE AND MENTAL HEALTH OF WOMEN STUDENTS

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ABSTRACT

Mental health is characterised as a state of personal mental welfare in which people are essentially happy, their life roles and their relationship with others. Mental wellbeing is a measure of the capacity of a person to adapt his or her environment to life and to do so with sufficient satisfaction, achievement, productivity and happiness. The goal of the study is to find out women's mental health through yogic practice. The selection of subject of the shanti girl hostel [N=45] kottayam. Subject age between 18 to 25. The scale consist of 20 items using ANCOVA test.

Keywords : Yoga, Mental Health

Yoga

Literally, yoga is the same as the absorption in Samadhi, from the root yuj which means joining. Yoga is a self-disciplinary life focused on the principles of easy living and high thought. The basic and natural programme that involves five key principles of yoga, according to Swami Sivanandha. Swami Vishnu-Devananda says yogi life is like a triangle, birth, development, change, decay, and death are the physical body. At about the age of 1820, the growth period hits a peak. The cell rejuvenation rate (anabolic) during the beginning of life, the "young age" exceeds the rate of cell decay (catabolic). In the average individual, the body maintains a balance between the ages of 20 and around 30

Mental Health

Mental health is defined as a state of personal mental wellbeing in which individuals feel basically satisfied with themselves, their roles in life, and their relationship with others. Mental health is the measure of a person's ability to shape his environment to adjust to life as he has to face it and to do so with a reasonable amount of satisfaction, success,

efficiency, and happiness Swami Vishnu-Devananda says yogi life is like a triangle, birth, development, change, decay, and death are the physical body. At about the age of 1820, the growth period hits a peak. During the beginning of life, the 'youthful period', the rate of cell rejuvenation

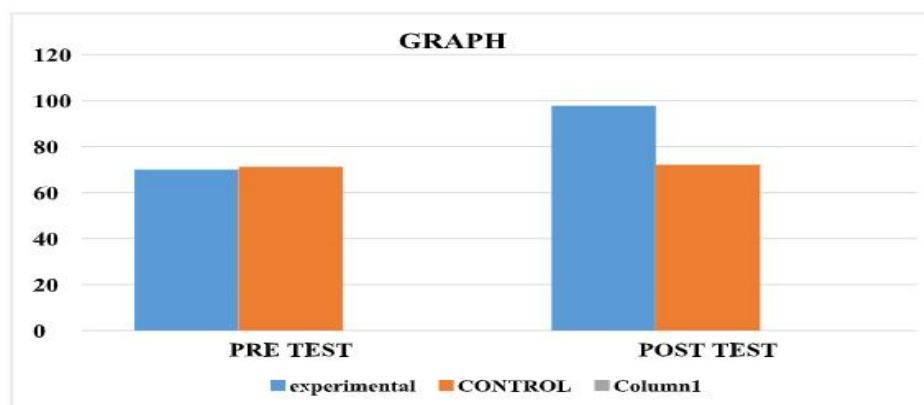
Methodology

The purpose of this study was to determine the effect of four week yogic training program and its effect in mental health of women students. The yogic practice can play an important role on improving the performance. Forty subjects (40 female) age between 20 to 25 years was selected as the subjects of the study and their pre-test was conducted through the mental health ability questionnaire. Then among the forty samples 20 subjects was taken as experimental group on which four weeks of yogic practice was given whereas remaining 20 subjects act as control group. After completion of four weeks yogic practice program post-test was conducted through the same questionnaire and the results were calculated. The four weeks training was included meditation and asanas

Table 1: Mean, standard deviation, mean difference and 't ratio on yogic training among women students

	Mean	N	Std deviation	Std.error mean	Sig[2 tailed]
Exp pre test	70	20	3.069	.686	
Pair 1					
Exp post test	97.75	20	1.949	.436	000
Con pre test	71.20	20	.912	.204	
Pair 2					
Con post test	72.10	20	.933	.209	235

Significant at 0.05 level of confidence



Discussion and Findings

This study was conducted to determine the effect of four weeks yogic practice training program and its effect on mental health of women students. To achieve the purpose of the study, forty Wrestlers aged between 20 to 25 years were selected as the subjects of the study. The selected variable for the study was mental health. The tests administered to assess the data were collected through peter becker Trier Personality Inventory (TPI) questionnaire. Further the researcher arranged one month

Conclusion

The result of the study revealed that by comparing pre-test and post-test scores experimental group showed significant

(trice a week) yogic training programme. Only the experiment group were undergone the training programme. A Pre -test and Post-test score of the experimental group and control group were treated statistically using 't -test' and the level of significance was kept at 0.05 level. The results revealed that, by comparing pre-test and post-test scores experimental group showed significant improvement in mental health than control group due to yogic training programme.

improvement in mental health than control group due to yogic training programme and hypothesis is accepted

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