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Emotional Maturity among Female Hockey Players: A Comparative Analysis

Sweetybala

BBK DAV College of Women, Amritsar, Punjab, India

Abstract

This study examined the Emotional Maturity level among female hockey players. To obtain data, the investigators had selected Forty four (N=44) female Hockey players from Guru Nanak Dev University, Amritsar of 19 to 25 years of age to act as subjects. They were divided into two groups: Group-A: Intercollegiate ($n_1=22$); Group-B: Interuniversity ($n_2=22$). The purposive sampling technique was used to select the subjects. For evaluating the levels of Emotional Maturity among subjects, Singh and Bhargava's (1988) Emotional Maturity Scale was used. To determine the significant differences between Intercollegiate and Interuniversity Hockey Players, unpaired t-test was employed for data analyses. To test the hypothesis, the level of significance was set at 0.05. The results revealed significant difference with regard to the sub-variables Emotional Regression of Emotional Maturity among Intercollegiate and Interuniversity female hockey players. However, No significant differences were found on the sub-variables: Emotional Unstability, Social Maladjustment, Personality Disintegration and Lack of Independence.

Keywords

Emotional Maturity, Hockey Players, Emotional Unstability, Emotional Regression, Social Maladjustment, Personality Disintegration and Lack of Independence

1. INTRODUCTION

Sport and physical activity programs can provide an effective vehicle for youth to develop at a personal, social and emotional level (Morris et al., 2004). Emotional intelligence (EI) may be broadly defined as a set of aptitudes, competencies, and skills for managing emotion and emotive encounters (Zeidner, Roberts, & Matthews, 2009). Mayer, *et al.* (2000) explained that EI has four skill hierarchical levels that range in complexity in terms of how individuals identify, manage and use emotions. Howard Gardner's (1983) influential theory of multiple intelligences discriminated two types of intelligence that pre-date EI. Another distinguished intelligence theorist, Robert Sternberg (1985), emphasized the importance of practical intelligence as a construct distinct from the general academic ability measured by IQ tests. One of the few reliable findings shows that athletes are more emotionally mature, extroverted and less neurotic and they have a better decision making capacity than non-athletes (Kirkcaldy, 1982; Morgan, 1980; Singer, 1975; Singh and Singh, 2011).

2. METHODS

2.1. Subjects

To obtain data, the investigators had selected Forty four (N=44) female Hockey players from Guru Nanak Dev University, Amritsar of 19 to 25 years of age to act as subjects. They were divided into two groups:

- Group-A: Intercollegiate ($n_1=22$)

- Group-B: Interuniversity ($n_2=22$)

The purposive sampling technique was used to select the subjects. All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study. Distribution and demographics of subjects are brought forth in Table 1.

Table 1: Distribution and Demographics of Subjects

Variables	Total (N=44)	Intercollegiate ($n_1=22$)	Interuniversity ($n_2=22$)
Age	22.136±1.533	22.181±1.680	22.090±1.411
Body Height	171.295±4.396	171.363±4.634	171.227±4.253
Body Mass	59.659±4.028	60.727±4.742	58.590±2.889

3. PROCEDURE

3.1. Emotional Maturity Scale (EMS)

For evaluating the levels of Emotional Maturity among subjects, Singh and Bhargava's (1988) Emotional Maturity Scale was used. This scale consists of five parameters namely:

1. Emotional Unstability
2. Emotional regression
3. Social maladjustment
4. Personality disintegration
5. Lack of independence.

3.2. Statistics

To determine the significant differences between Intercollegiate and Interuniversity Hockey Players, unpaired t-test was employed for data analyses. To test the hypothesis, the level of significance was set at 0.05.

4. RESULTS

Table 2: Descriptive Statistics of Emotional Unstability of Intercollegiate ($n_1=22$) and Interuniversity ($n_2=22$) Hockey Players of Guru Nanak Dev University, Amritsar

	Intercollegiate	Interuniversity	Total
n	22	22	44
$\sum x$	472	490	962
$\sum x^2$	10532	11942	22474
SS	405.4545	1028.3636	1441.1818
mean	21.4545	22.2727	21.8636

Results

Mean _a – Mean _b	t	df	P	one-tailed	0.3239445
-0.8182	0.4644	42		two-tailed	0.647889

The absolute value of the calculated t is smaller than critical value (0.4644 < 2.018), so the means are not significantly different.

Table 3: Descriptive Statistics of Emotional Regression of Intercollegiate (n₁=22) and Interuniversity (n₂=22) Hockey Players of Guru Nanak Dev University, Amritsar

	Intercollegiate	Interuniversity	Total
n	22	22	44
$\sum x$	416	487	903
$\sum x^2$	8122	11673	19795
SS	255.8182	892.5909	1262.9773
mean	18.9091	22.1364	20.5227

Results

Mean _a – Mean _b	t	df	P	one-tailed	0.0233205
-3.2273	2.0469	42		two-tailed	0.046641

The absolute value of the calculated t exceeds the critical value (2.0469>2.018), so the means are significantly different.

Table 4: Descriptive Statistics of Social Maladjustment of Intercollegiate (n₁=22) and Interuniversity (n₂=22) Hockey Players of Guru Nanak Dev University, Amritsar

	Intercollegiate	Interuniversity	Total
n	22	22	44
$\sum x$	450	473	923
$\sum x^2$	9806	10635	20441
SS	601.4545	465.5	1078.9773
mean	20.4545	21.5	20.9773

Results

Mean _a – Mean _b	t	df	P	one-tailed	0.2469945
-1.0455	0.6879	42		two-tailed	0.493989

The absolute value of the calculated t is smaller than critical value (0.6879<2.018), so the means are not significantly different.

Table 5: Descriptive Statistics of Personality Disintegration of Intercollegiate (n₁=22) and Interuniversity (n₂=22) Hockey Players of Guru Nanak Dev University, Amritsar

	Intercollegiate	Interuniversity	Total
n	22	22	44
$\sum x$	410	389	799
$\sum x^2$	8208	7587	15795
SS	567.0909	708.7727	1285.8864
mean	18.6364	17.6818	18.1591

Results

Mean _a – Mean _b	t	df	P	one-tailed	0.285857
0.9545	0.5744	42		two-tailed	0.571714

The calculated t value is smaller than critical value (0.5744<2.018), so the means are not significantly different.

Table 6: Descriptive Statistics of Lack of Independence of Intercollegiate ($n_1=22$) and Interuniversity ($n_2=22$) Hockey Players of Guru Nanak Dev University, Amritsar

	Intercollegiate	Interuniversity	Total
n	22	22	44
$\sum x$	379	372	751
$\sum x^2$	6881	6652	13533
SS	351.8636	361.8182	714.7955
mean	17.2273	16.9091	17.0682

Results

Mean _a – Mean _b	t	df	P	one-tailed	0.398067
0.3182	0.256	42		two-tailed	0.796134

The calculated t value is smaller than critical value ($0.256 < 2.018$), so the means are not significantly different.

Table 7: Descriptive Statistics of Emotional Maturity (i.e., Emotional Unstability, Emotional Regression, Social Maladjustment, Personality Disintegration, Lack of Independence and Emotional Maturity) of Intercollegiate ($n_1=22$) and Interuniversity ($n_2=22$) Hockey Players of Guru Nanak Dev University, Amritsar

Variables	Intercollegiate Mean \pm SD	Interuniversity Mean \pm SD	Mean Difference	t-value	p-value
Emotional Unstability	22.70 \pm 6.94	21.70 \pm 4.53	1.00	0.4644	.322
Emotional Regression	22.55 \pm 6.41	19.05 \pm 3.63	3.50	2.0469*	.023
Social Maladjustment	21.75 \pm 4.47	20.25 \pm 5.16	1.15	0.6879	.247
Personality Disintegration	17.95 \pm 5.81	18.85 \pm 5.39	0.90	0.5744	.284
Lack of Independence	17.00 \pm 3.89	17.20 \pm 4.14	0.20	0.256	.399
Emotional Maturity	96.68 \pm 17.987	100.09 \pm 25.466	4.45	0.513	.305

4.1. Emotional Unstability

The t-value is 0.4644. The p-value is .322. The means of Intercollegiate and Interuniversity is not significantly different at $p < 0.05$.

4.2. Emotional Regression

The t-value is 2.0469. The p-value is .023. The means of Intercollegiate and Interuniversity is significantly different at $p < 0.05$.

4.3. Social Maladjustment

The t-value is 0.6879. The p-value is .247. The means of Intercollegiate and Interuniversity is not significantly different at $p < 0.05$.

4.4. Personality Disintegration

The t-value is 0.5744. The p-value is .284. The means of Intercollegiate and Interuniversity is not significantly different at $p < 0.05$.

4.5. Lack of Independence

The t-value is 0.256. The p-value is .399. The means of Intercollegiate and Interuniversity is not significantly different at $p < 0.05$.

4.6. Emotional Maturity

The t-value is 0.513. The p-value is .305. The means of Intercollegiate and Interuniversity is not significantly different at $p < 0.05$.

5. CONCLUSION

The results revealed significant difference with regard to the sub-variables Emotional Regression of Emotional Maturity among Intercollegiate and Interuniversity female hockey players. However, No significant differences were found on the sub-variables: Emotional Unstability, Social Maladjustment, Personality Disintegration and Lack of Independence.

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Comparative Analysis of Strength and Power Abilities among University Level Weightlifters and Power Lifters

Dr. Manjit Singh

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Abstract

This study examined the strength and power abilities among university level weightlifters and power lifters. To obtain data, the investigator had selected Twenty Four (N=24) University level weightlifters and power lifters of Guru Nanak Dev University, Amritsar between the age group of 21-26 years. The subjects were purposively assigned into two groups: Group-A: Weightlifters ($n_1=12$) and Group-B: Power Lifters ($n_2=12$). All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study. The Muscular Strength was measured by Handgrip Strength Test, Muscular Power was measured by Vertical Jump Test and Muscular Endurance was measured by Pull-Up Test. Statistical analyses were performed using the statistical package for the social sciences for windows version 16.0 software (SPSS Inc., Chicago, IL). Data is expressed as the mean \pm SD. t-test for independent samples was utilized. The results pertain to the muscular strength, muscular power and muscular endurance t-test, which assumes that the two samples have equal variances.

Keywords

Muscular Strength, Muscular Power, Muscular Endurance, Weightlifters, Power Lifters

1. INTRODUCTION

Strength is an attribute often associated with superior performance in sport [1, 2]. Physical fitness is defined as the ability of an individual to competently and capably perform everyday tasks without excessive fatigue, and with enough energy remaining to enjoy spending free time, as well as to resolve unusual situations of sudden and unforeseen emergency [3]. Increasing levels of physical activity in children and adolescents improve physical fitness. A high level of fitness in childhood has a positive effect on health [4] and has a prolonged effect later in life [5, 6]. The promotion of physical fitness has been a key objective of physical education for more than a century [7]. However, on account of exceptional and ever increasing prominence of strength and power abilities in the past few years, there is a surprising lack of research in this specific area and as a result the present study was conducted to find out the difference of strength and power abilities among university level weightlifters and power lifters.

2. METHODS

2.1. Subjects

To obtain data, the investigator had selected Twenty Four (N=24) University level weightlifters and power lifters of Guru Nanak Dev University, Amritsar between the age group of 21-26 years. The subjects were purposively assigned into two groups:

- Group-A: Weightlifters ($n_1 = 12$)
- Group-B: Power Lifters ($n_2 = 12$).

All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study.

2.2. Procedure

The Muscular Strength was measured by Handgrip Strength Test, Muscular Power was measured by Vertical Jump Test and Muscular Endurance was measured by Pull-Up Test.

3. STATISTICAL ANALYSIS

Statistical analyses were performed using the Statistical Package for the Social Sciences for Windows version 16.0 software (SPSS Inc., Chicago, IL). Data is expressed as the mean \pm SD. t test for independent samples was utilized.

4. RESULTS

For each of the chosen variable, the result pertaining to Descriptive Statistics of Strength and Power Abilities (i.e., Muscular Strength, Muscular Power and Muscular Endurance) of Weightlifters ($n_1=12$) and Power lifters ($n_2=12$) of Guru Nanak Dev University, Amritsar are presented in the following tables:

Table 1: Descriptive Statistics of Muscular Strength of Weightlifters ($n_1=12$) and Power Lifters ($n_2=12$) of Guru Nanak Dev University, Amritsar

	Weightlifters	Power Lifters	Total
n	12	12	24
$\sum x$	584	583	1167
$\sum x^2$	28640	28427	57067
SS	218.6667	102.9167	321.625
mean	48.6667	48.5833	48.625

Results

Mean _a – Mean _b	t	df	p	one-tailed	0.480287
0.0833	+0.05	22		two-tailed	0.960574

For independent samples, these results pertain to the “Muscular Strength” t-test, which assumes that the two samples have equal variances.

Table 2: Descriptive Statistics of Muscular Power of Weightlifters ($n_1=12$) and Power Lifters ($n_2=12$) of Guru Nanak Dev University, Amritsar

	Weightlifters	Power Lifters	Total
n	12	12	24
$\sum x$	569	587	1156
$\sum x^2$	27043	28721	55764
SS	62.9167	6.9167	83.3333
mean	47.4167	48.9167	48.1667

Results

Mean _a – Mean _b	t	df	P	one-tailed	0.025711
-1.5	-2.06	22		two-tailed	0.051422

For independent samples, these results pertain to the “Muscular Power” t-test, which assumes that the two samples have equal variances.

Table 3: Descriptive Statistics of Muscular Endurance of Weightlifters (n₁=12) and Power Lifters (n₂=12) of Guru Nanak Dev University, Amritsar

	Weightlifters	Power Lifters	Total
n	12	12	24
Σx	67	61	128
Σx ²	389	325	714
SS	14.9167	14.9167	31.3333
mean	5.5833	5.0833	5.3333

Results

Mean _a – Mean _b	t	df	P	one-tailed	0.152558
0.5	+1.05	22		two-tailed	0.305116

For independent samples, these results pertain to the “Muscular Endurance” t-test, which assumes that the two samples have equal variances.

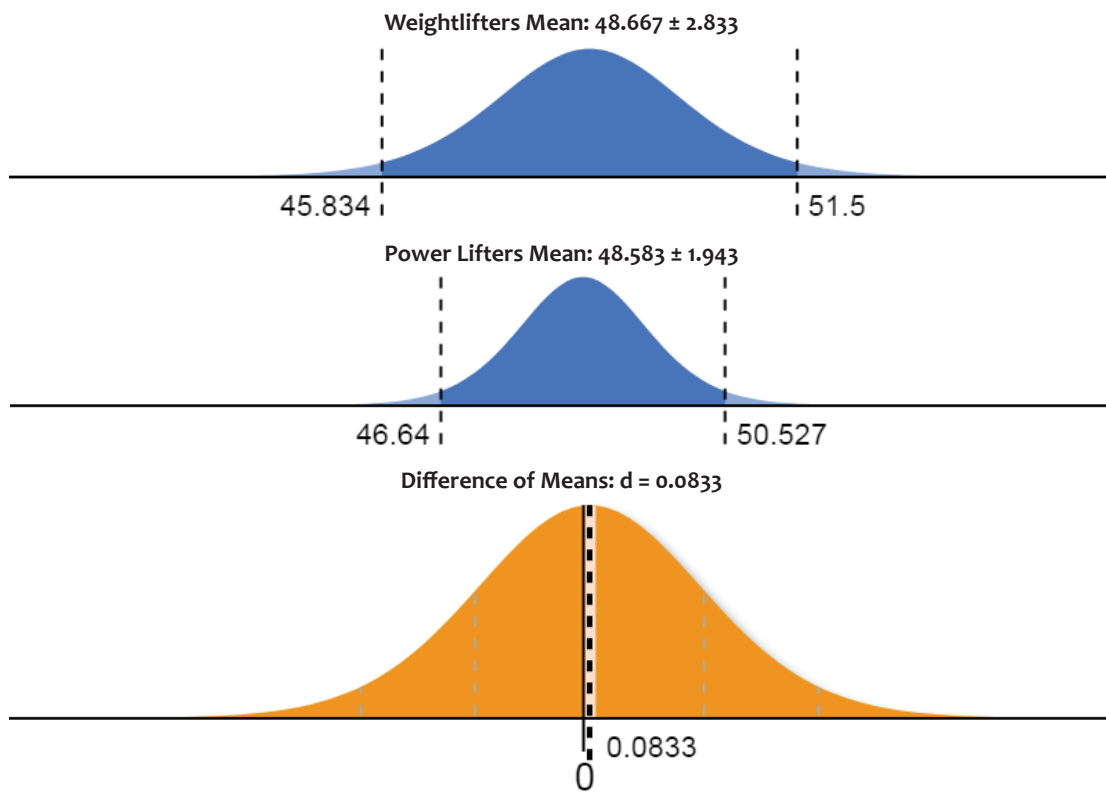


Fig. 1: Confidence Intervals and Estimated Difference of Weight Lifters 48.667±2.833 and Power Lifters 48.583±1.943 on the Variable Muscular Strength

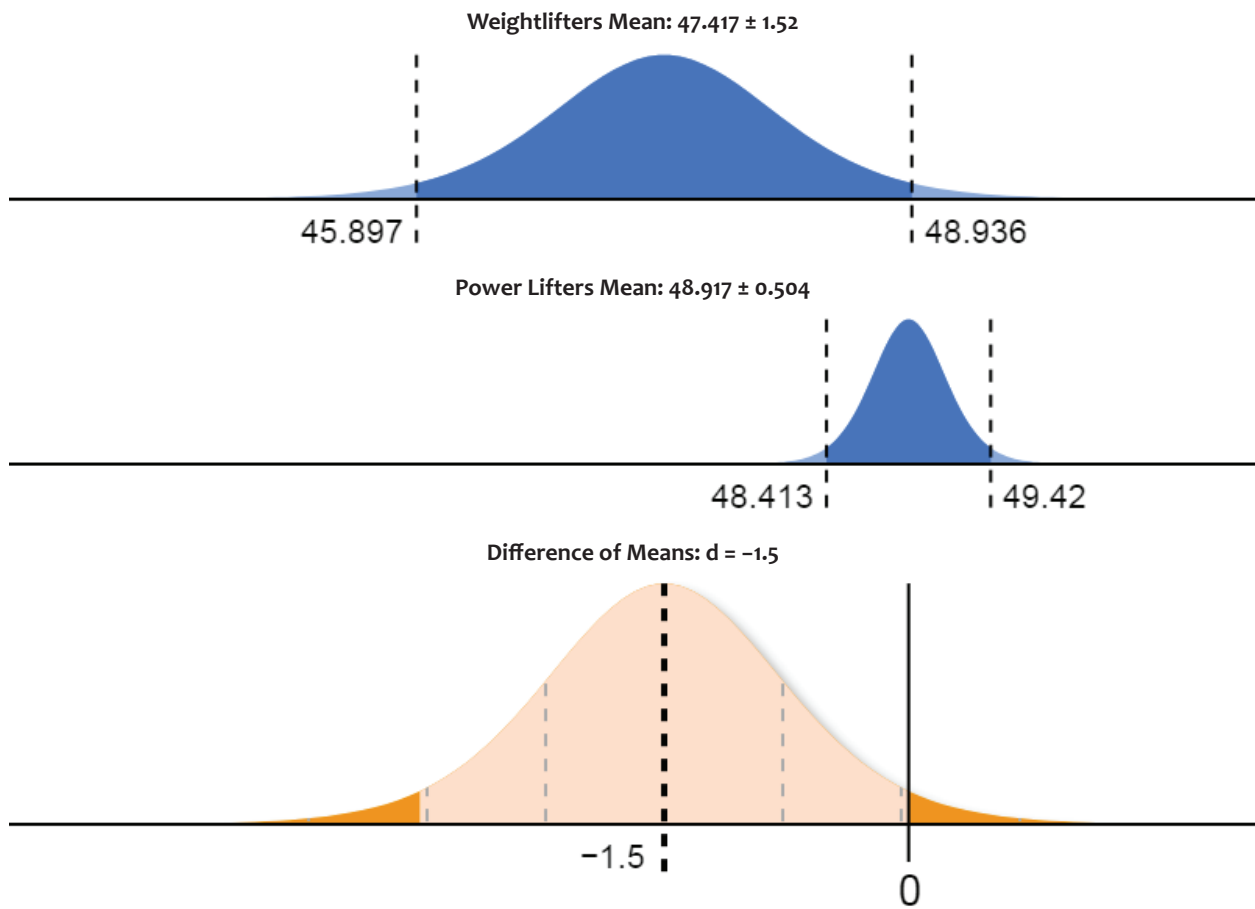
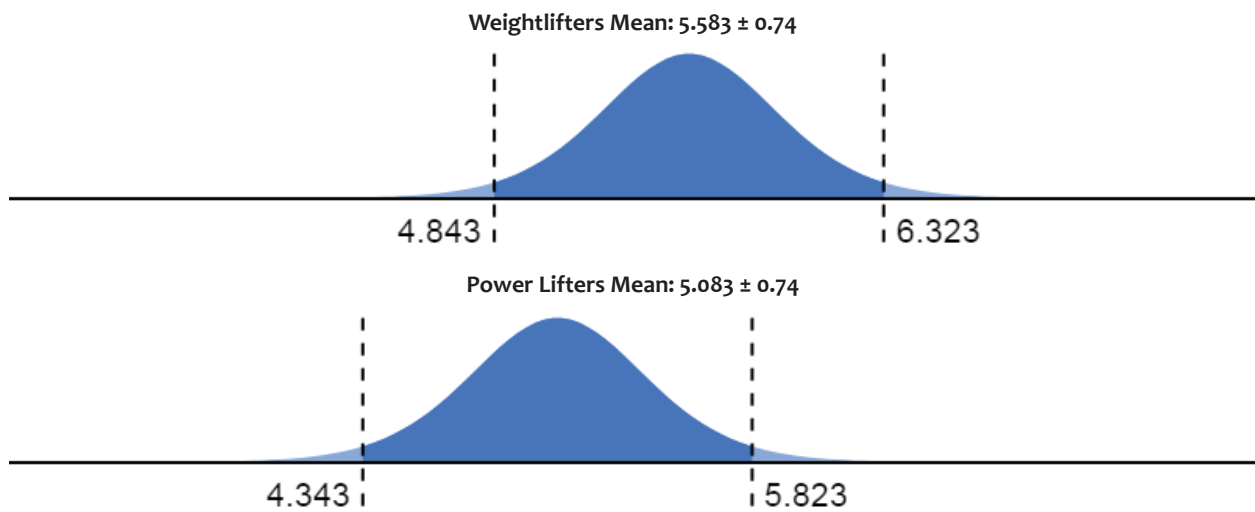


Fig. 2: Confidence Intervals and Estimated Difference of Weight Lifters 47.417 ± 1.52 and Power Lifters 48.917 ± 0.504 on the Variable Muscular Power



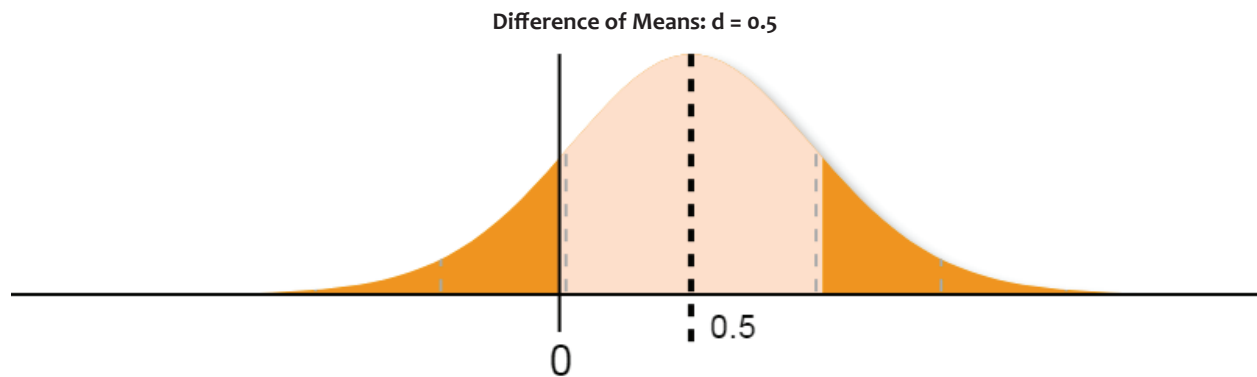


Fig. 3: Confidence Intervals and Estimated Difference of Weight Lifters 5.583 ± 0.74 and Power Lifters 5.083 ± 0.74 on the Variable Muscular Endurance

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Constructing Norms for Muscular Strength, Muscular Power and Muscular Endurance of Football Players

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Abstract

The present study was conducted to construct norms and present distribution of grades under normal distribution for muscular strength, muscular power and muscular endurance of football players. To obtain data, the investigators had selected Twelve (N=12) male football players from DAV College, Jalandhar of 19 to 25 years of age to act as subjects. They were divided into two groups (i.e., Goal Keepers, $n_1=4$ and Forwards, $N_2=8$). The purposive sampling technique was used to select the subjects. The Muscular Strength was measured by Handgrip Strength Test, Muscular Power was measured by Vertical Jump Test and Muscular Endurance was measured by Pull-Up Test. In order to construct the norms, Percentile Scale was used. Further, the scores were classified into five grades i.e., very good, good, average, poor and very poor.

Keywords

Football, Norms, Grade, Muscular Strength, Muscular Power, Muscular Endurance

1. INTRODUCTION

As with most team sports, there are many components of fitness that are important for success in football (soccer). Performance in football depends heavily on the aerobic endurance (or aerobic system) of players [1]. Individuals operate on average at about 70% of their maximum oxygen uptake, at about 80–90% of maximum heart rate [2], with blood lactate of 2–10 mmol/l [3] while they cover approximately 8–12 km distance during a professional football match [4, 5].

Over the last 20 years there has been an increase in match profiling studies, providing increasingly accurate data on the physical load imposed on players during a match [6,7,8,9]. The aim of the present study was to construct norms and present distribution of grades under normal distribution for muscular strength, muscular power and muscular endurance of football players.

2. METHODS

2.1. Subjects

To obtain data, the investigators had selected Twelve (N=12) male football players from DAV College, Jalandhar of 19 to 25 years of age to act as subjects. They were divided into two groups (i.e., Goal Keepers; $n_1=4$ and Forwards; $N_2=8$). The purposive sampling technique was used to select the subjects. All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study. Distribution and demographics of subjects are brought forth in Table 1.

Table 1: Distribution and Demographics of Subjects

Variables	Total (N=12)	Goal Keepers (n ₁ =4)	Forwards (n ₂ =8)
Age	21.833±1.946	21.75±1.707	21.865±2.167
Body Height	178.583±4.521	184.25±1.708	175.75±1.83
Body Mass	74.25±4.266	79.5±1.709	71.625±1.845

2.2. Procedure

The Muscular Strength was measured by Handgrip Strength Test, Muscular Power was measured by Vertical Jump Test and Muscular Endurance was measured by Pull-Up Test.

3. STATISTICAL TECHNIQUE

In order to construct the norms, Percentile Scale was used. Further, the scores were classified into five grades i.e., very good, good, average, poor and very poor.

4. RESEARCH FINDINGS

For each of the chosen variable, the result pertaining to Descriptive Statistics (Mean & Standard Deviation) and Percentile Plot (Hi & Low) of Muscular Strength, Muscular Power & Muscular Endurance of Goal Keepers (n₁=4) and Forwards (n₂=8) are presented in the following tables:

Table 2: Descriptive Statistics (Mean & Standard Deviation) and Percentile Plot (Hi & Low) of Muscular Strength, Muscular Power & Muscular Endurance of Goal Keepers (n₁=4)

Sr. No.	Test Items	Mean ± Standard Deviation		Hi	Low
1.	Muscular Strength	Mean	46.875	53	41
		SD	4.26		
2.	Muscular Power	Mean	45.625	49	42
		S.D	2.62		
3.	Muscular Endurance	Mean	5.8750	9	4
		SD	1.89		

Table 2 shows that in Muscular Strength, the mean score was 46.875 and standard deviation score was 4.26. In Muscular Power, the mean score was 45.625 and standard deviation score was 2.62 and in Muscular Endurance, the mean score was 5.8750 and standard deviation score was 1.89. The graphical representation of Descriptive Statistics (Mean & Standard Deviation) of Muscular Strength, Muscular Power & Muscular Endurance of Goal Keepers is exhibited in Fig. 1:

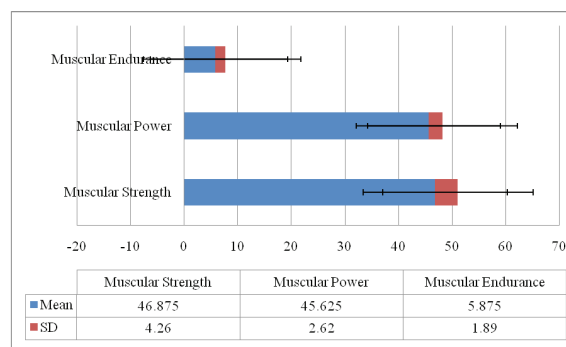


Fig. 1: Descriptive Statistics (Mean & Standard Deviation) and Percentile Plot (Hi & Low) of Muscular Strength, Muscular Power & Muscular Endurance of Goal Keepers (n₁=4)

Table 3: Descriptive Statistics (Mean & Standard Deviation) and Percentile Plot (Hi & Low) of Muscular Strength, Muscular Power & Muscular Endurance of Forwards ($n_2=8$)

Sr. No.	Test Items	Mean \pm Standard Deviation		Hi	Low
		Mean	SD		
1.	Muscular Strength	Mean	46.250	53	42
		SD	4.68		
2.	Muscular Power	Mean	45.750	50	43
		S.D	2.60		
3.	Muscular Endurance	Mean	6.000	8	4
		SD	1.69		

Table 3 shows that in Muscular Strength, the mean score was 46.250 and standard deviation score was 4.68. In Muscular Power, the mean score was 45.750 and standard deviation score was 2.60 and in Muscular Endurance, the mean score was 6.000 and standard deviation score was 1.69. The graphical representation of Descriptive Statistics (Mean & Standard Deviation) of Muscular Strength, Muscular Power & Muscular Endurance of Forwards is exhibited in Fig. 2:

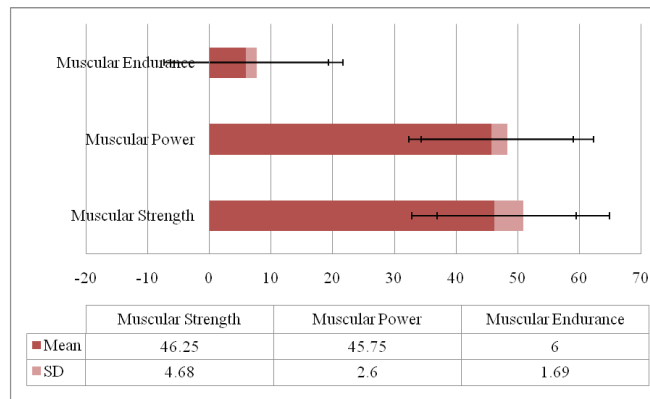


Fig. 2: Descriptive Statistics (Mean & Standard Deviation) and Percentile Plot (Hi & Low) of Muscular Strength, Muscular Power & Muscular Endurance of Forwards ($n_2=8$)

Distribution of grades under normal distribution for DAV College, Jalandhar Goal Keepers ($n_1=4$) on the variable Muscular Strength, Muscular Power & Muscular Endurance are presented in Tables 4.

Table 4: Grading for DAV College, Jalandhar Goal Keepers ($n_1=4$) for the Variable Muscular Strength, Muscular Power & Muscular Endurance

Test Items	Very Poor	Poor	Average	Good	Very Good
Muscular Strength	Less than (<) 38.355	38.355-42.615	42.615-51.135	51.135-55.395	Greater than (>)55.395
Muscular Power	Less than (<)40.385	40.385-43.005	43.005-48.245	48.245-50.865	Greater than (>)50.865
Muscular Endurance	Less than (<) 2.095	2.095-3.985	3.985-7.765	7.765-9.655	Greater than (>)9.655

The values listed in Table 4 gives a guide to expected scores of Goal Keepers. In Muscular Strength, the scores below 38.355 are considered very poor, from about 38.355-42.615 is considered poor, 42.614-51.135 is considered average, 51.135-55.395 is considered good and the scores above 55.395 are considered very good. In Muscular Power, the scores below 40.385 is considered very poor, from about 40.385-43.005 is considered poor, 43.005-48.245 is considered average, 48.245-50.865 is considered good and the scores above 50.865 are considered very good. In Muscular Endurance, the scores below 2.095 are considered very poor, from about 2.095-3.985 is considered poor, 3.985 -7.765 considered average, 7.765 -9.655 is considered good and the scores above 9.655 are considered very

good. The Normal distribution of a. Muscular Strength, b. Muscular Power and c. Muscular Endurance for Goal Keepers are exhibited in Fig. 3:

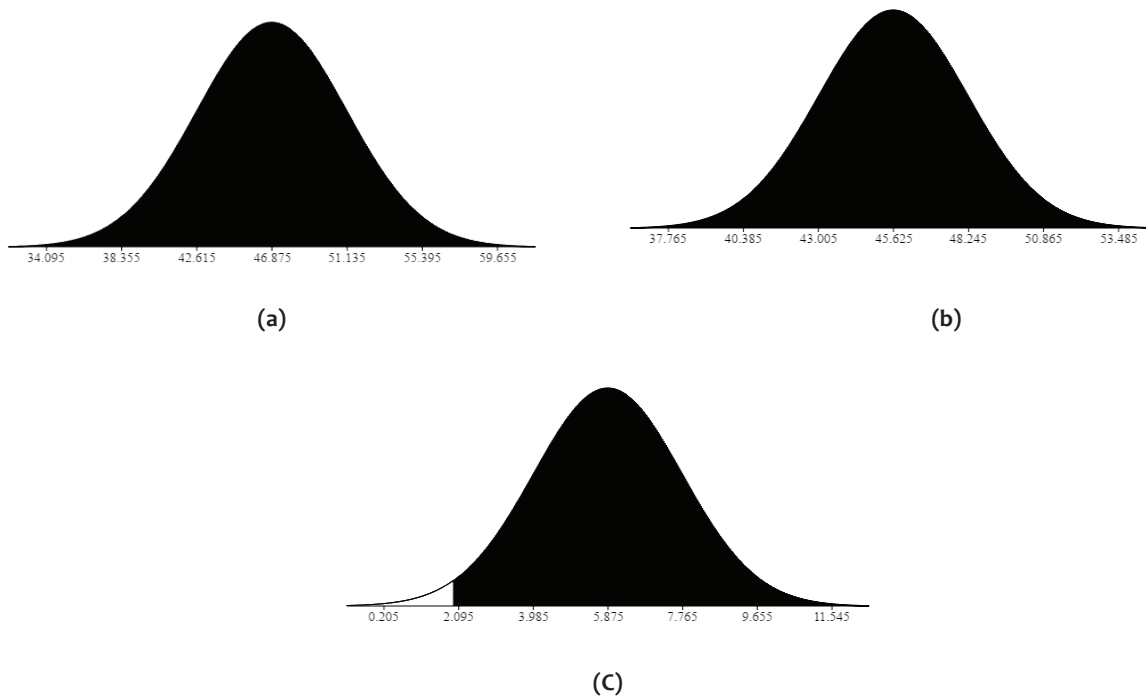


Fig. 3: Normal Distribution of a. Muscular Strength, b. Muscular Power & c. Muscular Endurance of Goal Keepers ($n_1=4$)

Distribution of grades under normal distribution for DAV College, Jalandhar Forwards ($n_2=8$) on the variable Muscular Strength, Muscular Power & Muscular Endurance are presented in Tables 5.

Table 5: Grading for DAV College, Jalandhar Forwards ($n_2=8$) for the Variable Muscular Strength, Muscular Power & Muscular Endurance

Test Items	Very Poor	Poor	Average	Good	Very Good
Muscular Strength	Less than (<) 36.89	36.89355-41.57	41.47-50.93	50.93-55.61	Greater than (>)55.61
Muscular Power	Less than (<)40.55	40.55-43.15	43.15-48.35	48.35-50.95	Greater than (>)50.95
Muscular Endurance	Less than (<) 2.62	2.62-4.32	4.31-7.69	7.69-9.38	Greater than (>)9.38

The values listed in Table 5 gives a guide to expected scores of Forwards. In Muscular Strength, the scores below 36.89 are considered very poor, from about 36.89355-41.57 is considered poor, 41.47-50.93 is considered average, 50.93-55.61 is considered good and the scores above 55.61 are considered very good. In Muscular Power, the scores below 40.55 is considered very poor, from about 40.55-43.15 is considered poor, 43.15-48.35 is considered average, 48.35-50.95 is considered good and the scores above 50.95 are considered very good. In Muscular Endurance, the scores below 2.62 are considered very poor, from about 2.62-4.32 is considered poor, 4.31-7.69 considered average, 7.69-9.38 is considered good and the scores above 9.38 are considered very good. The Normal distribution of a. Muscular Strength, b. Muscular Power and c. Muscular Endurance) for Forwards are exhibited in Fig. 4:

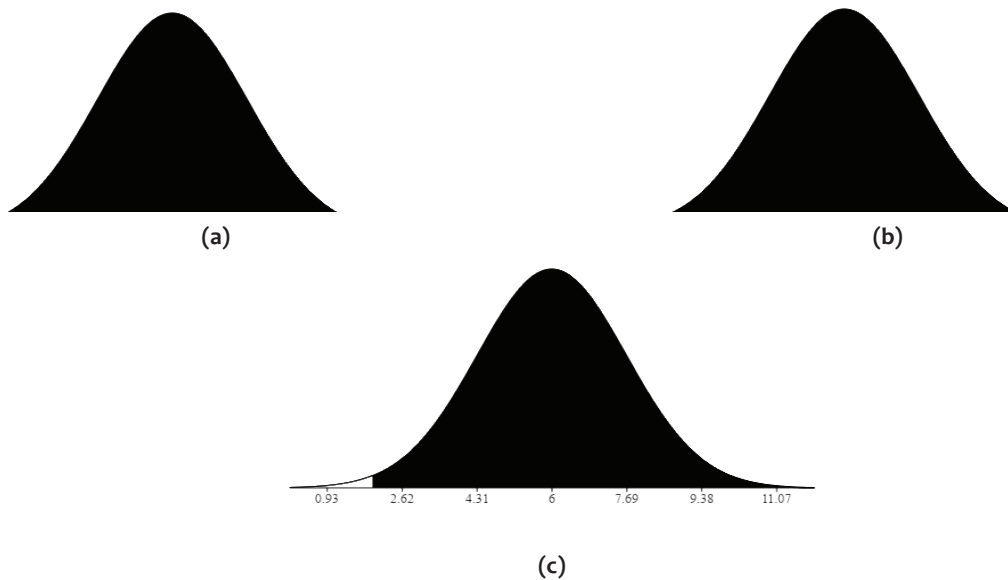


Fig. 4: Normal Distribution of a. Muscular Strength, b. Muscular Power & c. Muscular Endurance of Forwards ($n=8$)

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Comparative Effect of Kapabhati, Bhastrika and Agnisar on Positive Breath Holding Capacity of Over Fat Male Subjects of Gwalior District

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Abstract

Objective: To compare the effect of Kapabhati, Bhastrika and Agnisar on Positive Breath Holding Capacity of over Fat male subjects of Gwalior.

Methods: Eighty over fat male was randomly selected randomly as subjects and training programme was administered for 12 weeks.

Results: Significant difference was found between control group and Kapabhati, Bhastrika and Agnisar.

Conclusion: Kapabhati, Bhastrika and Agnisar are equally effective to improve Positive Breath Holding Capacity.

Keywords

Breathing Holding Capacity, Kapabhati, Bahstrika etc.

1. INTRODUCTION

Urban housing design and land use influence the physical activity of the residents of that area. Studies have shown that increasing access to physical activity in an organized, structured and supervised manner is effective for youth and adults.

Changes in environmental and societal factors are most likely the main explanation for doubling of severe childhood obesity over the last 30 years. Obesity encouraged by such "obesogenic environment" conditions that promote overeating and inactivity either are already present or emerging in most populations. In most developed countries the prevalence of obesity has increased in children specifically among minorities and low socioeconomic groups. Parental and family influences appear to have crucial impact on the current obesity epidemic. Family members eating patterns and activity behaviors for each other might provide social support for weight-control efforts. In this context, parent-child influences and interaction appear to be bi-directional.

World Health Organization (WHO) describes obesity as one of the most clearly visible, yet most neglected public-health problem that threatens to overwhelm both developing and less developed countries. The problem of obesity has increased globally during the past 20 years, in contrast to underweight, malnutrition and infectious diseases, which have always dominated thinking. WHO now accepts a body-mass index (BMI) of 25.0 Kg/m² or higher as abnormal; the overweight category is classified as obese when the BMI is 30.0 kg/m² or more. The risks of diabetes, hypertension and dyslipidaemia (abnormal lipid profile) increase from a BMI of about 21.0 kg/m², thereby reducing life expectancy and greatly increasing the health and societal economic burden. Excess bodyweight is now the sixth most important risk factor contributing to the overall burden of disease worldwide (Ezzati, 2002).

2. METHODS

Eighty over fat male was randomly selected randomly as subjects. The age group of the subjects range between 35-50 years. Pretest-Posttest Randomized-Group Design (Thomas and Nelson, 2001) was used for the present study. Breath holding was measured by manual method and the score was recorded in second.

Table 1: Classification of Subjects

Gender	Group	Training
Male	Experimental Group-I	Kapabhati
	Experimental Group-II	Bhastrika Pranayama
	Experimental Group-III	Agnisar
	Control Group-I	No Training

Table 2: Experimental Design

Male	R	Pre Test		Post Test
		O1	T1 (Kapalbhati)	O2
	R	O3	T2 (Bhastrika)	O4
	R	O5	T3 (Agnisar)	O6
	R	O7	Control Group	O8

Procedure to Measure Positive Breath Holding Capacity: To measure the Positive Breath Holding Capacity, the subjects were instructed to close the nostrils tightly with the nose clip. They were asked to inhale through the mouth to the maximum capacity. As soon as the subjects took a deep breath to the fullest capacity of their lungs and close the lips, the stopwatch was started. As soon as the subjects opened their lips to exhale, the stopwatch was stopped. **Score:** The time given by the watch was recorded as the score for the Positive Breath Holding Capacity. **Statistical Analysis:** To compare the effect of Kapalbhathi, Bhastrika and Agnisar on Postive Breath holding capacity Mean, Standard Deviation and Analysis of Co-variance was used at .05 level of significance.

3. RESULTS

The result of the study was presented in below tables.

Table 3: Analysis of Co-variance of the Means of Three Experimental Groups and One Control Group in Positive Breath Holding Capacity

Tests	Mean				SOV	SOS	df	MSS	F-ratio	η^2
	Kabalbhathi	Bhastrika	Agnisar	Control						
Pre	51.35 (4.46)	51.50 (4.21)	52.05 (4.62)	51.40 (4.21)	A	6.25	3	2.08	0.11 (0.95)	0.43
					W	1457.30	76	19.18		
					Total	1463.55	79			
Post	100.20 (4.25)	98.10 (3.35)	97.50 (11.98)	56.40 (14.79)	A	26793.00	3	8931.00	91.20 (0.00)	78.26
					W	7442.80	76	97.93		
					Total	34235.80	79			
Adjusted Post test	100.30	98.13	97.29	56.48	A	26669.71	3	8889.90	92.99 (0.00)	4.08
					W	7169.67	75	95.60		
					Total	654460.00	80			

SoV- Source of variance, SoS – sum of square, df- degree of freedom, MSS - mean sum of square, η^2 effect size, * Significant at 0.05 level of significance, A = Among Means variance, W = Within Group variance, F = Ratio needed for significance at 0.05 level of significance = $df(3,76) = 2.72$, $df(3, 75) = 2.72$

In pre test a statistically insignificant difference was found among the four type of training on the Positive Breath Holding Capacity pre test $F(3, 76) = 0.11, p = 0.95$ with an effect size of 0.43. Table shows that the mean score in Positive Breath Holding Capacity was 51.35 for Kapalbhathi Group, 51.50 for Bhastrika Group, 52.05 for Agnisar Group and 51.40 in control groups. This shows that at initial level the groups were similar in nature. Like wise, in posttest there were significant mean differences on the mean score of Positive Breath Holding Capacity between the groups, $F(3, 76) = 91.20, p = 0.00$ with an effect size of 78.26%. Further, there was a significant difference of type of training on the adjusted mean score of Positive Breath Holding Capacity of the subjects after controlling the effect of pretest score, $F(3, 75) = 92.99, p = 0.00$ with an effect size of 4.08%.

Table 4: Pairwise Comparison of the Means of Three Experimental Groups and One Control Group in Positive Breath Holding Capacity

(I) Groups	(J) Groups	Mean Difference (I-J)	Sig. ^b
Kapalbhathi Group	Bhastrika Group	2.165	.486
	Agnisar Group	3.003	.335
	Control Group	43.822*	.000
Bhastrika Group	Agnisar Group	.838	.787
	Control Group	41.657*	.000
Agnisar Group	Control Group	40.819*	.000

*Significant at 0.05 level of significance.

The above table shows that there was a significant difference in the mean score of Kapalbhathi and control group, Bhastrika and control group & Agnisar and Control Group. Kapalbhathi, bhasrika and Agnisar were equally effective for Positive Breath Holding Capacity.

4. DISCUSSION OF FINDINGS

The present study reveals that the Kapalbhathi, Bhastrika and Agnisar were equally effective to improve the Breath Holding Capacity of the obese Male of Gwalior District. As defined by Moses breath holding time is the duration of time through which one can hold his breath without inhaling or exhaling. Breath holding could be positive or negative. It is referred to be positive when breath held after forcefully inhaling the air, similarly it is termed negative when the breath is held after exhaling the air forcefully. Sharma R, Gupta N, Bijlani RL. (2008) conducted a prospective controlled study to explore the short-term impact of a comprehensive but brief lifestyle intervention, based on yoga, on subjective well being levels in normal and diseased subjects. Sivasankaran S, and *et al.* (2007) hypothesized that Yoga and meditation will improve parameters of endothelial function. Coppola F. (2007) Natural Stress Relief meditation, a mental technique which is practiced for 15 minutes twice a day, aims to reduce stress and anxiety by eliciting a specific state of physiological rest along with mental alertness. Bijlani RL, and *et al.* (2005) studied the short-term impact of a brief lifestyle intervention based on yoga on some of the biochemical indicators of risk for cardiovascular disease and diabetes mellitus. Pilkington K, Kirkwood G, Rampes H, Richardson J. (2005): Yoga-based interventions may prove to be an attractive option for the treatment of depression. Brown RP, Gerbarg PL. (2005) Yogic breathing is a unique method for balancing the autonomic nervous system and influencing psychologic and stress-related disorders. Thus, the above findings shows that there is huge benefit of yoga and pranayama to overcome different diseases and disorders. In conclusion if Kapalbhathi, bhastrika and agnisar are equally effective to improve breathing holding capacity.

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Relationship of Social Stratification and Competitive Anxiety among Football Players of Punjab

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Abstract

The present study was aimed to investigate the relationship of social stratification (socio-economic) and competitive anxiety among male and female players of football of Punjab. To complete the research work of the researcher has selected fifty male and fifty female subjects from the different institutes of Punjab by using the purposive sampling technique. Findings pertaining to the study resolved with negative correlation in male and female football players between socioeconomic status and competitive anxiety. SPSS was used as a statistical tool to find out the correlation of the social stratification (socioeconomic) and competitive anxiety in male and female players of football of Punjab. Pearson correlation was used and level of significance level sets of 0.05 levels.

Keyword

Socioeconomic Status and Competitive Anxiety

1. INTRODUCTION

By the nature of the human being are competitive and ambitious for his to performance in sports. Not only every man, but every nation wants to show his best challenging opponent. Anxiety is a part of sports among all the athletes. In competitive sports, mental preparation of an athlete's or a team's is as much important. In modern competitive sports the athletes and team sports are prepared not only play the game, but also win the games and winning the game is not only depends upon the skills, tactics, physical fitness and knowledge of rules of game which bring victory but more important is the mental preparation. Anxiety is an unpleasant state of inner disorder, after accompanied by nervous behavior, such as pacing back and forth, somatic complaints and rumination. Anxiety is not the same as fear which a response to a real, which is a response to real or perceived immediate threat you would hard to find doesn't react in some way to immanent compete.

This is only possible through scientific, systematic and planned sports training as well. Anxiety is non-specific response of the body to the demand made upon it. When the problem present everyday life goes beyond our resources for coping with them.

The study of Anxiety in sport is of great interest to academics, researching, teaching sports sciences and to professionals who support and train sports performers. Situations of anxiety affect autonomic nervous system activity and hormonal responses. Anxiety is not a useful term for scientists because it is such a highly subjective phenomenon that it defies definition, but it plays a very important role in sports.

The main problem that research on the relationship between anxiety is encountered is that researchers have not adequately operationally has encountered. Instead, term such as stress, anxiety have been used interchangeably. Arousal can be considered to be a signal to the individual the response to the stressful state and characterized by psychological sings. Anxiety is a state when an individual doubt hi or her ability to cope with the situation that lead to the stress. Another important point to discuss is the difference between trait anxiety and state anxiety. Trait

Anxiety is a personality variable, which predisposes us to perceive certain situations as threatening. Trait anxiety refers to a general level of stress that is characteristic of an individual, that is, a trait related to personality. State anxiety is an emotional response, Often temporary which exists in relation to particular situations.

In today life anxiety is present in every individual. Instead of finding a permanent solution, one is running towards the temporal happiness. Coaches are not inferior if this thing.

Not only is uncontrolled anxiety is harming the bodies of an athlete it is also due to the overuse of alcohol, and drug abuse which place an individual at greater risk, health wise. Many people take -up sports, mainly for fun and enjoyment. However, little known that sports do experience its fair share of anxiety as well. Anxiety has reportedly been the cause of many poor performances among the athletes and sportsmen. Both physical and psychological anxiety affects performance of athletes. Physical and psychological anxiety on the athletes and students there are similarities among them. They are capable to perform the task at the various levels of Anxiety.

The feeling of anxiety. Aggression in sports also a serious issue aggression is a learned behavior and that spot may be teaching people to be more aggressive. Anxiety is a negative emotional state in which feeling of nervousness; worry and apprehension are associated with activation or arousal of the body. Anxiety is a vague form of fear of the failure of the competition. Athletes worries about the result of the competition. Jones (1995a) commented on measurement and design advances; Burton (1998) outlined the development of measures of the state response; Smith et al. (1998) discussed the re-conceptualization of trait anxiety in sport.

2. SIGNIFICANCE OF THE STUDY

After studying the review of related literature and considering the objective and hypotheses of the study, will help us to find the competitive anxiety level of the player's role of the economic condition of which whether its effects on the competitive anxiety of players. The study will also help to find the competitive anxiety level among male and female football players of Punjab with relation to socioeconomic conditions. How the socioeconomic status in male and female affects the anxiety level of the players.

3. MATERIAL AND METHODS

The study is Descriptive in nature. The present status of anxiety and socioeconomic variable (Social Stratification) has been studied between male and female Football players of the different institutes of Punjab. The researcher has described the methodology used for the selection of subjects, collection of data and the statistical tool used for the analysis of data.

4. TOOLS USED

1. To collect the data of the athlete of competitive Anxiety, Competitive anxiety test (CSAI-2) was used. This test was constructed by Rainer Martens, Damon Burton, Robin S. Vealey, Linda A. Bump, Daniel E. Smith.
2. To collect the data of social stratification Socioeconomic status scale was used by Rajbir Singh, Radhey Shyam and Satish Kumar constructed in 2006.

5. RESULT ANALYSIS

For the final result of the study SPSS was used for Mean, Standard deviation to saw co-relation between the socioeconomic status and competitive anxiety of male and female players of football of Punjab.

Table 1: Relationship of Socioeconomic Status and Competitive Anxiety of Female Players of Football of Punjab

Descriptive Statics					
	Mean	Std. Deviation	N	df	r
Economic level of players	119.34	10.80554	50	48	0.219
Anxiety Level	66.34	5.5018	50	48	

Tabulated value at df 48= 0.304 Significant at 0.05 level.

The Table 1 shows Relationship between socioeconomic status and competitive anxiety of female football player of Punjab the means score 119.34 and 66.34 of socioeconomic status and anxiety level, respectively, whereas standard deviation 10.80 and 5.50 the 'r' value 0.219 is less than the tabular value 0.304 shows an insignificant correlation between socioeconomic status and anxiety level of the female football player. Which means there is no correlation between socioeconomic status and anxiety level of the female football player.

Table 2: Relationship of Socioeconomic Status and Competitive Anxiety of Male Players of Football of Punjab

Descriptive Statistics					
	Mean	Std. Deviation	N	df	r
Economic level of players	115.92	11.68784	50	48	-0.127
Anxiety level	64.58	4.1605	50	48	

Tabulated vale of df 48=0.304 * Significant at 0.05 level

The Table 2 shows Relationship between socioeconomic status and competitive anxiety of male football player of Punjab the means score 115.92 and 64.58 of socioeconomic status and anxiety levels, respectively, whereas standard deviation 11.78 and 4.16 the 'r' value -0.127 is less than the tabular value 0.304 shows an insignificant correlation between socioeconomic status and anxiety level of the female football player. Which means there is no correlation between socioeconomic status and anxiety level of the female football player.

6. DISCUSSION AND CONCLUSION

On the basis of above mentioned analysis, it can be concluded that there is no relationship between socioeconomic status and anxiety of male and female sports person of Punjab. The result revealed that high and low socioeconomic status and anxiety are two separate variables and cannot have any positive and negative Co-relation but a level of anxiety is essential for its excellence in sport.

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Impact of Twelve Weeks Yogic Exercises on Stress Management Attitude and Aspiration Level Development among the Adolescents

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Abstract

An attempt has been made to investigate the Effect of Yogic Exercises on Stress Management Attitude and development of Aspiration Level among the adolescents. 200 male U.G. level students of Vivekananda Mission Mahavidyalaya were practiced different types of yogic exercises like Surya Namaskar, Asanas, Pranayam and Meditation for twelve weeks by maintaining a schedule. Stress was measured through Stress questionnaire designed by International Stress Management Association, Attitude was measured through Attitude questionnaire made by Ellen Brehmer and Aspiration Level was measured through Aspiration Scale, developed by Mahesh Bhargava and M.A. Shah. In results, it was found that there was significant difference between pre-test and post-test. So, it was evident that yogic exercises impact significantly on stress management attitude and aspiration level development among the adolescents.

Keywords

Yogic Exercises, Stress, Attitude, Aspiration, Adolescents, Surya Namaskar, Asanas, Pranayam, Meditation etc.

1. INTRODUCTION

Stress is a state of mental or emotional strain or tension resulting from adverse or demanding circumstances, subject to pressure or tension exerted on a material object. In psychology, stress is a feeling of strain and pressure. Gibbons (2012) stated that small amounts of stress may be desired, beneficial, may be healthy. Positive stress helps improve athletic performance. It also plays a factor in motivation, adaptation, and reaction to the environment. But excessive amounts of stress may lead to bodily harm. Stress can increase the risk of mental illnesses, depression etc.

Attitude refers to the predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation. It influences an individual's choice of action, and responses to challenges, incentives and rewards, stimuli etc.

In Clinical Psychology, level aspiration refers to the degree or quality of performance (exhibited in a testing situation) that a person desires to attain or feels he or she can achieve. Hurlock (1967) defined it as "a longing for what is above one's achieved level with advancement on it as it send. In other words, aspiration means the goal an individual sets for himself in a task, which has intense personal significance for him or in which he is ego-involved."

Yogic exercises are the important aspects in our life. Yoga is the art of living (Ajmeer Singh *et al.*, 2008). It includes Yama, Niyama, Asana, Pranayam, Dharana, Dhyana and Samadhi. It is also considered as a way of life. Practice of yoga is being emphasized in all institutional level.

The present study is an attempt on the part of the investigator to investigate the attitude of college level physical education teachers towards transgender so that effort can be made in the right direction to integrate them with other people of the society.

2. STATEMENT OF THE PROBLEM

The problem of the study was to investigate the effect of yogic exercises Stress Management, Attitude and Aspiration Level development among the adolescents.

3. HYPOTHESIS

It was hypothesized that yogic exercises have the positive effect on stress, development of attitude and aspiration level among the adolescents.

4. DELIMITATIONS

1. Only male students were selected.
2. No. of students was two hundred.
3. Age range was eighteen to twenty years.

5. LIMITATIONS

Subjects are not from the same cultural group, economical status, educational and family background, food habits, nutrition and mental growth. Thus any influence of those factors on personality, will be beyond the control of the investigator.

6. PROCEDURE

6.1. Selection of Subjects

200 male students of U.G. level of Vivekananda Mission Mahavidyalaya were practiced different types of yogic exercises like Surya Namaskar, Asanas, Pranayam and Meditation for twelve weeks by maintaining a schedule.

6.2. Criterion Measures

1. Stress was measured through Stress questionnaire designed by International Stress Management Association.
2. Attitude was measured through Attitude questionnaire made by Ellen Brehmer.
3. Aspiration Level was measured level of aspiration scale, developed by Mahesh Bhargava and M.A. Shah.

7. EXERCISE PROGRAMME

Name of Exercise		Monday	Wednesday	Friday
Surya Namaskar		15 min.	15 min.	15 min.
Asanas	Padmasana, Dhanurasana, Halasana, Shirasana, Ardhamatseyendrasana, Chakrasana, Sabbangasana, Mayurasana, Bakasana and Paschimatyasana.	30 min.	30 min.	25 min.
Pranayam	Anulom-Vilom and Kapalbhati	10 min.	10 min.	10 min.
Meditation		5 min.	5 min.	5 min.

8. PROGRAMME SCHEDULE

Frequency	03 days in a week
Duration	60 minutes
Time	3:00 pm-4:00 pm

8.1. Statistical Analysis

Pre-test and Post-test results were taken and compared by employing 't' test at 0.05 level of confidence.

9. PRESENTATION AND ANALYSIS OF DATA

Table 1: Mean and Standard Deviation of Pre-Test and Post-Test Results of Stress Attitude and Aspiration Level among Adolescents

Variables	Pre-test		Post-test	
	Mean	S.D.	Mean	S.D.
Stress	6.90	1.286	3.90	0.875
Attitude	11.80	1.229	14.30	1.337
Aspiration Level	3.80	1.032	6.40	1.173

From Table 1 it was observed that post-test result was less than pre-test result in case of Stress. It indicated that Stress became lesser due to yogic practices. In respect of Attitude, it was found that post-test result was higher than pre-test result which reflected that attitude became high due to yogic practices. It was also observed that post-test result was less than pre-test result in case of Aspiration Level. It indicated that aspiration level became lesser due to yogic practices.

Table 2: Mean Difference of Pre-Test and Post-Test Results of Stress Attitude and Aspiration Level among Adolescents

Variable	Tests	Mean	Standard Deviation	't' value
Stress	Pre-test	6.90	3.90	13.630*
	Post-test	1.286	0.875	
Attitude	Pre-test	11.80	14.30	9.731*
	Post-test	1.229	1.337	
Aspiration Level	Pre-test	3.80	6.40	11.758*
	Post-test	1.032	1.173	

* Significant at 0.05 level of Confidence

$$t_{.05} (199) = 1.960$$

From Table 2 it was observed that there was significant difference between pre-test and post-test result in relation to Stress. In respect of attitude, it was found that there was significant difference between pre-test and post-test result. It was also observed that there was significant difference between pre-test and post-test result in relation to level of aspiration.

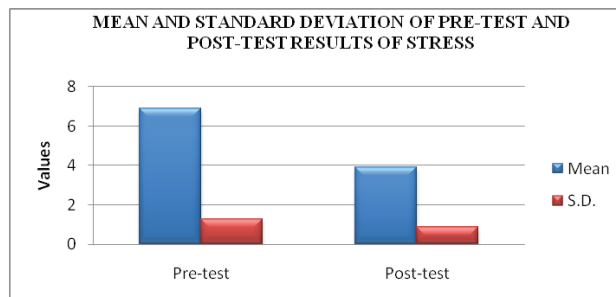


Fig. 1: Mean and Standard Deviation of Pre-test and Post-test Results of Stress among Adolescents

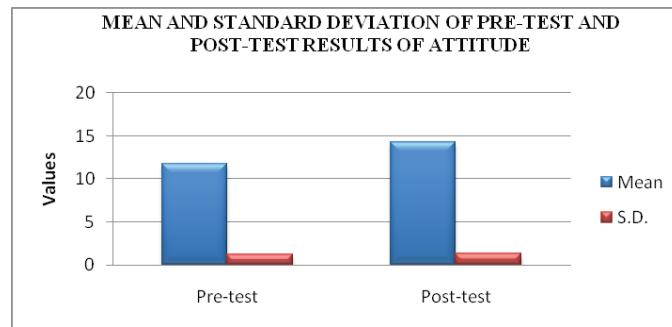


Fig. 2: Mean and Standard Deviation of Pre-test and Post-test Results of Attitude among Adolescents

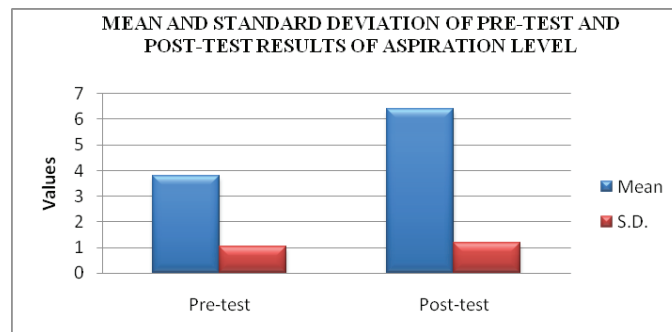


Fig. 4: Mean and Standard Deviation of Pre-test and Post-test Results of Aspiration Level among Adolescents

10. DISCUSSION OF THE FINDINGS

The obtained data on the subjects through application of statistical technique revealed that stress becomes less and attitude as well as aspiration level develop through practice of yogic exercises.

Hans Selye (1936) defined that stress is the non-specific response of the body to any demand for change. It is the way of responding to any kind of demand within our body. We perceive things as threatening, when they do not believe that their resources for coping with obstacles (stimuli, people, situations, etc.) are enough for what the circumstances demand. When we think that demands being placed on us which exceed our ability to cope up, then we perceive stress. Yogic practice helps the students to minimize the stress level among them.

Attitude is a psychological construct that represents an individual’s degree of like or dislike for something. Attitudes are generally positive or negative views of a person, place, thing, or event. Yogic exercises help the students to build up their attitude to a certain level.

Gardner (1940) defined as, “level of aspiration is a truly quantitative concept, which has two requirements that the subjects make some public indication of his aims and that, he makes this in quantitative terms.” Frank (1935) defined level of aspiration as, “level of future performance in a familiar task which an individual, knowing his level of past performance in that task, explicitly undertakes to reach.” Practice of yogic exercises helps the students to develop their level of aspiration.

Again, yogic exercises help the subjects to rely themselves about self like self-doing, self-control, self-confidence, self-realization, self-actualization etc. which may help them for developing better attitude and aspiration level in a successful manner.

11. CONCLUSION

Stress, Attitude, Aspiration Level etc. are the most important psycho-phenomena for the Adolescents. From the above findings, it can be concluded that yogic exercises helps to minimize the stress and develop attitude as well as aspiration level. During teaching as well as coaching, teacher and coaches should keep in mind about such psychological facts which help the students and athletes for better educational achievement as well as sports performances.

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Effect of Yogic Exercise on Selected Psychological Variables among College Level Students

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Abstract

This study is an attempt to investigate about the Effect of Yogic Exercise on Selected Psychological Variables among college level students. Psychological variables are Self-Esteem, Self-Concept, Trait and State Anxiety. For the study, one hundred girl students of Mahishadal Girls' College were selected within the age range of sixteen to twenty years. Self-esteem was measured by Rosenberg's Self-Esteem Scale. Self-concept was measured by Dr. R.K. Saraswat's Manual of Self-concept Questionnaire. The trait anxiety and state anxiety were measured by Spielberger's State Trait Anxiety Inventory (STAI). Pre-test and Post-test results were taken and compared by employing 't' test. In results, it was found that there were significant difference between pre-tests and post-tests. So, it was evident that Meditation impact significantly on Selected Psychological Variables namely Self-Esteem, Self-Concept, Trait Anxiety and State Anxiety among college level students.

Keywords

Yogic Exercise, Self-Esteem, Self-Concept, Trait Anxiety, State Anxiety etc.

1. INTRODUCTION

Yoga is a systematic process for all round development like physical, mental, intellectual and emotional as well spiritual also. People practice yoga to fit body and mind, to cure from different diseases etc.

In sociology and psychology, self-esteem reflects a person's overall subjective emotional evaluation of his or her own worth. It is a judgment of oneself as well as an attitude toward the self. Self-concept is the multidimensional construct to perceive physical competence throughout childhood and beyond.

Anxiety is an important bio-psychological parameter in our life. It is a multidimensional construct which reflects emotional impact or cognitive dimension of arousal. Martens (1977) suggested that anxiety reactions would result from an objective environmental demand interpreted as threatening by an individual.

There are two kinds of anxiety like state anxiety and trait anxiety. Spielberger (1983) described state anxiety as existing in a transitory emotional state that varies in intensity and fluctuates over time. On the other hand, trait anxiety refers to a stable susceptibility or a proneness to experience state anxiety frequently.

State anxiety may be denoted as an emotional state, characterized by subjective, consciously perceived feelings of apprehension and tension, accompanied by or associated by or associated with activation or arousal of the autonomic nervous system. On the other hand, trait anxiety may be denoted as a motive or acquired behavioral disposition to perceive a wide range of circumstances as threatening and respond to state anxiety.

1.1. Statement of the Problem

The problem of the study was to investigate about the Effect of Yogic Exercise on Selected Psychological Variables among college level students.

1.2. Hypothesis

It was hypothesized that there will be positive effect of Yogic Exercise on Psychological Variables likely Self-Esteem, Self-Concept, Trait and State Anxiety college level students.

1.3. Delimitations

1. The study was delimited to only girl college level students.
2. The subjects were selected from Mahishadal Girls' College in Purba Medinipur district.

1.4. Limitations

1. The subjects were from different socio-economic status, different mode of living etc. Hence uniform response might not be occurred which were another limitation of the study.
2. During test taken, same response was not obtained from all the subjects. It was also the limitation of this study.

1.5. Significance of the Study

1. This study will provide descriptive information about the Self-Esteem, Self-Concept, Trait and State Anxiety among college level students.
2. The result of this study will also have great significance in identifying the areas which can be easily developed.
3. This study will serve as a guideline to the teacher.
4. The findings of this study might give some clues to the concerned personnel in better understanding the aged people and which may results better social adjustability.

2. PROCEDURE

2.1. Selection of Subjects

1. For the study, one hundred girl students of were selected.
2. The age range was eighteen to twenty years.

2.2. Selection of Variables

In order to asses this study, the following variables were selected:

1. Self-esteem
2. Self-concept
3. Trait and State Anxiety.

2.3. Criterion Measures

1. Self-esteem was measured by Rosenberg’s Self-Esteem Scale.
2. Self-concept was measured by Dr. R. K. Saraswat’s Manual of Self-concept Questionnaire.
3. The trait anxiety and state anxiety were measured by Spielberger’s State-Trait Anxiety Inventory (STAI).

2.4. Statistical Analysis

Pre-test and Post-test results were taken and compared by employing ‘t’ test.

2.5. Level of Significance

For testing hypothesis the level of significance was set at 0.05 level.

3. EXERCISE PROGRAMME

Name of Exercise		Monday	Wednesday	Friday
Surya Namaskar		8 min.	8 min.	8 min.
Asanas	Padmasana, Dhanurasana, Halasana, Shirsana, Ardhamatseyendrasana, Chakrasana, Sabbangasana, Mayurasana, Bakasana and Paschimatyasana.	25 min.	25 min.	25 min.
Pranayam	Anulom-Vilom and Kapalbhati	7 min.	7 min.	7 min.
Meditation		5 min.	5 min.	5 min.

4. PROGRAMME SCHEDULE

Frequency	03 days in a week
Duration	45 minutes
Time	2:00 pm – 2:45 pm

5. PRESENTATION AND ANALYSIS OF DATA

Table 1: Mean and Standard Deviation of Pre-test and Post-test Results of Self-Esteem among College Level Students

Variables	Pre-test		Post-test	
	Mean	S.D.	Mean	S.D.
Self-esteem	14.45	5.76	19.36	6.34

From Table 1 it was observed that mean of post-test result was higher than pre-test result which means Self-esteem becomes better through Yogic Exercise.

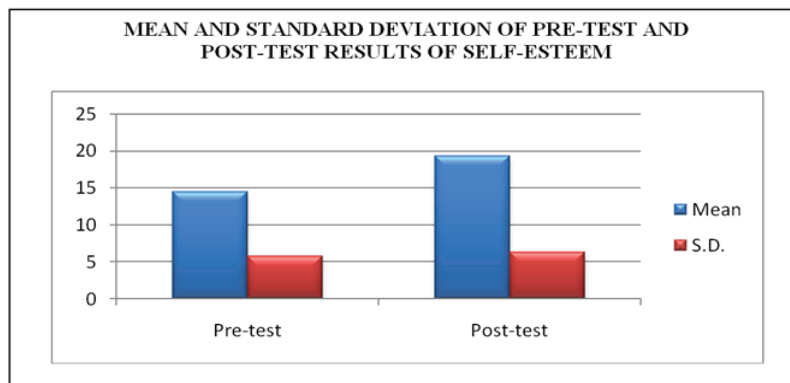


Fig. 1: Mean and Standard Deviation of Pre-test and Post-test Results of Self-esteem among College Level Students

Table 2: Mean Difference of Pre-test and Post-test Results of Self-Esteem among College Level Students

Variable	Tests	Mean	Standard Deviation	Standard Error	't' value
Self-esteem	Pre-test	14.450	5.760	1.211	4.0531 *
	Post-test	19.360	6.340		

* Significant at 0.05 level of Confidence

$t_{.05} (99) = 1.980$

From Table 2 it was observed that that there was significant difference between pre-test and post-test result on Self-Esteem (calculated value was greater than tabulated value).

Table 3: Mean and Standard Deviation of Pre-test and Post-test Results of Self-concept among College Level Students

Variables	Pre-test		Post-test	
	Mean	S.D.	Mean	S.D.
Self-concept	165.100	8.427	187.325	9.076

From Table 3 it was observed that mean of post-test result was higher than pre-test result which means Self-concept becomes better through Yogic Exercise.

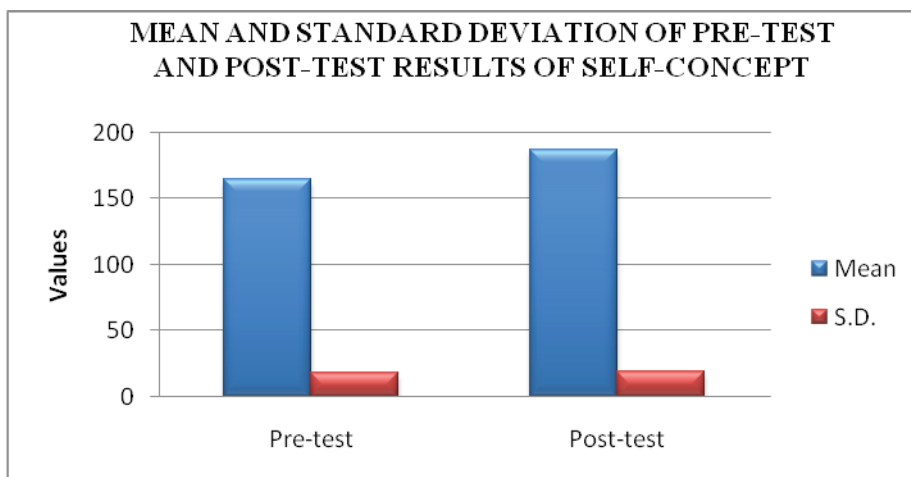


Fig. 2: Mean and Standard Deviation of Pre-test and Post-test Results of Self-concept among College Level Students

Table 4: Mean Difference of Pre-test and Post-test Results of Self-concept among College Level Students

Variable	Tests	Mean	Standard Deviation	Standard Error	't' value
Self-concept	Pre-test	165.100	8.427	1.751	12.689 *
	Post-test	187.325	9.076		

* Significant at 0.05 level of Confidence

$t_{.05} (99) = 1.980$

From Table 4 it was observed that that there was significant difference between pre-test and post-test result on Self-concept (calculated value was greater than tabulated value).

Table 5: Mean and Standard Deviation of Pre-test and Post-test Results of State Anxiety among College Level Students

Variables	Pre-test		Post-test	
	Mean	S.D.	Mean	S.D.
State Anxiety	49.375	3.356	43.625	3.439

From Table 5 it was observed that mean of post-test result was lower than pre-test result which means State Anxiety become less through Yogic Exercise.

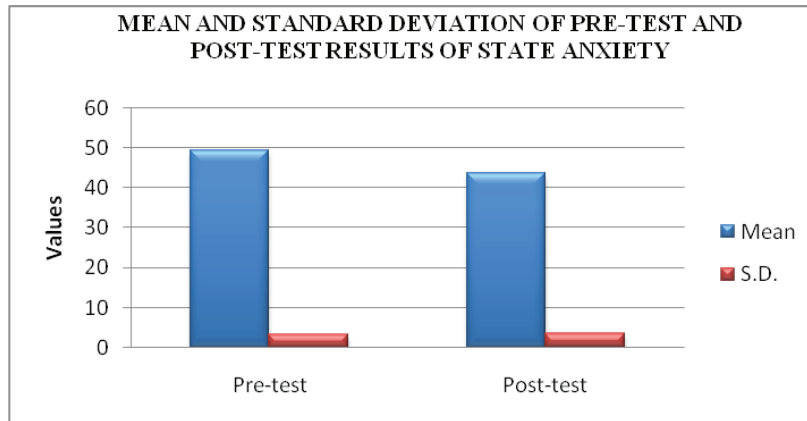


Fig. 3: Mean and Standard Deviation of Pre-test and Post-test Results of State Anxiety among College Level Students

Table 6: Mean Difference of Pre-test and Post-test Results of State Anxiety among College Level Students

Variable	Tests	Mean	Standard Deviation	Standard Error	't' value
State Anxiety	Pre-test	49.375	3.356	0.461	8.461*
	Post-test	43.625	3.439		

* Significant at 0.05 level of Confidence

$$t_{.05} (99) = 1.980$$

From Table 6 it was observed that that there was significant difference between pre-test and post-test result on State Anxiety (calculated value was greater than tabulated value).

Table 7: Mean and Standard Deviation of Pre-test and Post-test Results of Trait Anxiety among College Level Students

Variables	Pre-test		Post-test	
	Mean	S.D.	Mean	S.D.
Trait Anxiety	48.825	5.344	41.950	2.650

From Table 7 it was observed that mean of post-test result was lower than pre-test result which means Trait Anxiety become less through Yogic Exercise.

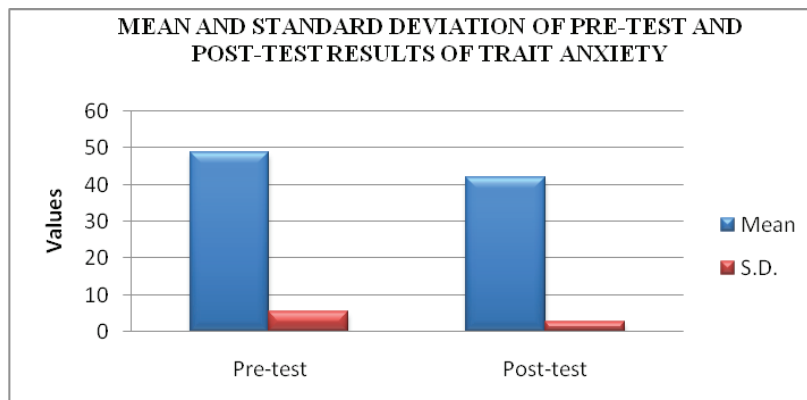


Fig. 4: Mean and Standard Deviation of Pre-test and Post-test Results of Trait Anxiety among College Level Students

Table 8: Mean Difference of Pre-test and Post-test Results of Trait Anxiety among College Level Students

Variable	Tests	Mean	Standard Deviation	Standard Error	't' Value
Trait Anxiety	Pre-test	48.825	5.344	0.711	8.149 *
	Post-test	41.950	2.650		

* Significant at 0.05 level of Confidence

$t_{.05(99)} = 1.980$

From Table 8 it was observed that that there was significant difference between pre-test and post-test result on Trait Anxiety (calculated value was greater than tabulated value).

6. DISCUSSION OF THE FINDINGS

Self-esteem and Self-concept are the important bio-psychological parameter in our life. Self-esteem reflects a person's overall subjective emotional evaluation of his or her own worth. It is a judgment of oneself as well as an attitude toward the self. Self-concept is the multidimensional construct to perceive physical competence throughout life. Through the practice Yogic Exercise, emotion, confidence, self-realization etc. become higher that results improvement of self-esteem and self-concept.

Anxiety reflects emotional impact of an arousal which results from an objective environmental demand interpreted as threatening by an individual. There are two kinds of anxiety like trait anxiety and state anxiety.

Spielberger (1983) described that state anxiety as existing in a transitory emotional state that varies in intensity and fluctuates over time. It is an emotional state, characterized by subjective, consciously perceived feelings of apprehension and tension, accompanied by or associated with activation or arousal of the autonomic nervous system. On the other hand, trait anxiety refers to a stable susceptibility or a proneness to experience state anxiety frequently. It is a motive or acquired behavioral disposition to perceive a wide range of circumstances as threatening and respond to state anxiety.

Practice of Yogic Exercise helps the individuals to minimize the anxiety level - both trait anxiety and state anxiety.

7. CONCLUSION

In conclusion, it was found that there were significant difference between pre-tests and post-tests. So, it was evident that Yogic Exercise impact significantly on psychological variables namely Self-Esteem, Self-Concept, Trait Anxiety and State Anxiety among college level students.

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Relationship Between Selected Motor Fitness Variables and Basketball Shooting Ability

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Abstract

Purpose of study was to find out the correlation between selected motor fitness variables and basketball shooting ability. Sample of forty male subjects was selected from North Zone Inter University tournament. Purposive Random sampling method was used to select the samples. The basketball shooting ability was measured by using Field Goal Speed Test (Johnson 1934) and Selected motor fitness test items such as Vertical Jump Test (Indiana Motor Fitness test 1943), 50 meter Dash (Johnson and Nelson 1979), Stork balance stand test (Johnson and Nelson 1979) and Alternate Hand wall toss test for coordinative ability were used for data collection. For analysis and interpretation of data, the investigator was completely relied on MS-Excel. Mean, Standard Deviation, Pearson Product Moment Relation statistical techniques were used by the investigator. Motor fitness variables Vertical jump, Alternate hand wall test have a significant relationship with basketball shooting ability and it was concluded that there exists insignificant relationship between Stork stand balance test, 50 m dash and shooting ability of basketball player.

1. INTRODUCTION

Motor fitness is the ability to perform activities that require muscular coordination such as walking, running, playing and manipulating instrument and machinery. General motor fitness is the immediate capacity of an individual, to perform in many varied stunts or athletic event Mathews (1973). Motor Fitness refers to the efficiency of basic movements in addition to the physical fitness. Basketball is the one of the most popular sports in the World. Along with its popularity, Basketball has improved at a fast pace, over the years. There is marked change in player's physical features and games techniques and tactics, as well as multivariate pressure over the players. The performance in various sports including Basketball depends directly on physical fitness, technical skills, tactical efficiency and psychological state of players. The motor fitness and technical skills are interrelated and interdependent (Harre, 1979). Skills of game play a vital role in performance. Shooting is one of the most important skills because it is the way to accumulate scores for the team, also motor fitness variables and physical characteristics plays a vital role in Basketball shooting, which can be proved by the study which is mainly aimed at determining and analyzing motor abilities of European top-quality young female basketball players. The result of the study confirms that the differences between individual player types can also be confirmed in a sample of European top-quality young female basketball players. They were distinctly differentiated in body height and mass, whereas it was also confirmed that there exists differences in motor abilities of the players as well. Motor ability of individual player varies considerably, according to their height and mass. There exists difference in the performance of motor abilities, when tested in general, but when specific skills were performed, results were contrary when compared to previous results. The differences are not only a consequence of the differences in body height but also of the

different playing roles of individual types of players as well as the technical and tactical knowledge of the game. (2009, Frane Erculj et al.)

2. METHODOLOGY

Forty Inter University male Basketball players were selected from the teams which participated in North Zone Inter University tournament held in Punjab, October 2009. Purposive Random sampling method was used to select the samples. Prior to the administration of pre-test, a meeting with all subjects was held. The purposes of study along with the various testing procedures were explained to them. Motor fitness test items which were used for data collection are : Vertical Jump Test (mtr.) (Bookwalter, K.W. (1943), Fifty meter Dash (sec.) (Johnson and Nelson. 1979), Stork balance stand test (sec.) (Johnson and Nelson. 1979) and Alternate Hand wall toss test for coordinative ability (Bookwalter, K.W. and C.W. Bookwalter. (1962). For analysis and interpretation of data, the investigator was completely relied on MS-Excel and statistical techniques which was used are Mean, Standard Deviation and Pearson’s Product Moment Relation. Objective of the study is to find out the relationship between selected motor fitness variables with basketball shooting ability. It is hypothesized that there will be significant relation between selected motor fitness variables with basketball shooting ability.

3. RESULTS

The analysis and interpretation of the present study have been presented below:

Table 1: Relationship Between Motor Fitness Variables and Shooting Ability of Basketball Players

S. No.	Variables	Mean	Coefficient of Correlation
1.	Vertical Jump	20.79	0.839*
2.	Alternate Hand Wall Test	27.40	0.337*
3.	Stork Stand Balance Test	9.07	-0.026
4.	50 m Dash	7.22	-0.390

* Significant at 0.05 level

Table value of ‘r’ for 38 degree of freedom was .30

Table 1 shows the obtained value of relation ($r = 0.304$) for 38 degree of freedom. The value of coefficient of relation for motor fitness variables namely vertical jump (0.839), Alternate hand wall test (0.337) of the subject was greater than the table value of 0.304 (38) at 0.05 level of significance and thus have positive and significant relation. Whereas the obtained value of coefficient of relation in other motor fitness variables i.e. Stork stand balance test (-0.026) and 50 m dash (-0.390) showed negative relation with basketball shooting ability.

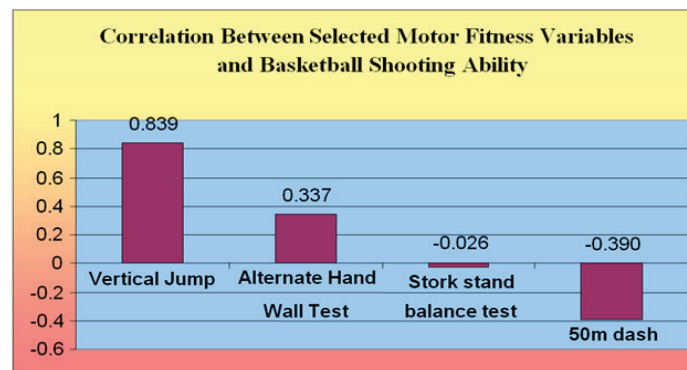


Fig. 1: Correlation Between Selected Motor Fitness Variables and Basketball Shooting Ability

Study aimed to find out the relation between basketballs' shooting ability with selected Motor Fitness variables. Based on the analysis and within the limitations of the present study, following conclusion can be drawn:

Since 'r' for Vertical jump (0.839), Alternate hand wall test (0.337) of the subjects was greater than the table value of 0.304 (38) which is significance at 0.05 level. Thus the hypothesis of the study is accepted. Thus it may be concluded that Vertical jump, Alternate hand wall test have positive relation with basketball shooting ability. Whereas the 'r' in other motor fitness variables i.e. Stork stand balance test(-0.026) and 50M (-0.390) showed negative relation with basketball shooting ability and the hypothesis is rejected Thus it may be concluded that Stork stand balance test and 50 m dash have no any effect on the shooting ability of basketball player.

Motor fitness variables Vertical jump, Alternate hand wall tests have significant relationship with basketball shooting ability and non significant relationship exists between Stork stand balance test and 50m dash and shooting ability of basketball player.

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