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Cross Country Analysis on Physical Fitness Practices of India and Bangladesh Football Players.

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ABSTRACT

The study focuses on a comparative analysis on the fitness practices of football players of both India and Bangladesh. It aims to look into various fitness parameters and the nature of training and exercises that have an impact on football players in general, analyse critically the extent to which the fitness factors have an impact on the player of both countries and examine the scope of upgradation in training patterns in the context of the football players of both countries concerned. For this purpose, data is collected on the football players of College level from both India and Bangladesh. 15 players each of India and Bangladesh have been chosen from the purpose of our study. The players' age ranges between 18-24 years. The statistical tool used in this research is Independent Sample t-test. The t-test is conducted using IBM SPSS software. The study has found that there is not much difference in speed of the players in both countries as their means are almost same. Indian players have average speed of 7.53, while Bangla players have an average speed of 7.38. Also, there is no significant difference between the speed of the players of two countries. The Mean Explosive Strength of Indian players come out to be 2.78, which is higher than that of Bangla Players. And there is significant difference between the explosive strength of the players of two countries as per the t-test. The average Agility of Bangladesh players is found to be slightly higher than the India players. They have their mean agilities of 10.13 for the former and 10.2 for the latter. T-test has found no significant difference between the agility of the players of both countries. The mean Muscular Strength of Indian players emerge at 32.86, which is somewhat higher than 30.21 of that of Bangla players. T-test reveals that there is a significant difference between the Muscle strength of the players of two countries. The study concluded that Indian football players are comparatively better off in terms of Speed, Explosive Strength and Muscle Strength, whereas Bangladesh football players only stand better in case of Agility. The statistical analysis renders that Indian players score significantly higher than their Bangla counterpart in terms of Explosive Strength and Muscle Power. Although the Muscle Strength is not so much important as a winning factor, Speed is considered to be one of those. In terms of Speed both countries' players stand good. However, trainers must focus on increasing the Agility of Indian players and the Explosive Strength of Bangla players.

Keywords:
Football players, agility, explosive strength, speed, muscle power, training, fitness factors, t-test, level of significance.

1. INTRODUCTION

Physical fitness is traditionally viewed as an important factor for a healthy life. It gives boost to the body and supplements the flow of vital energy to capacitate us execute the work in a seamless manner. Finess is a prerequisite for the sound health as well as sound mind. For a mind to be able to think and work properly, a fit body is essentially required. Fitness is defined as the state of physical condition that improves work efficiency and channelise the vitality towards an array of productive tasks. Physical fitness is especially contextual for the youth to utilise their potential to the fuller extent. That's why, sports and physical exercise are recommended as well as promoted for their upbringing and health improvement.

Sports involving both indoor and outdoor elements is an organized and systemic way of maintaining physical fitness. The importance of sports has been acknowledged from the historic time and its prominence has been growing since then. Apart from its primary objective of supporting health and fitness, Sports play a vital role in several other aspects like team building, leadership, cooperation, discipline, decision-making etc. It has a holistic impact on human development in both tangible and intangible ways.

Source: Internet

Among the outdoor sports, football is a popular one. It demands a decent physical condition and excellent energy level to play football. Various scientific exercises and workouts are envisaged for training and warmup of football players to acclimatise their body to the game. Such practices are adopted worldwide as a prerequisite for the players. Indian Subcontinent has a rich history of playing footballs and even nowadays it has been flourishing through school, college, club and national level events. Among the South Asian nations, India and Bangladesh have been a hotspot for football. The game standards need a well focus to the workouts and training of the players of both countries to contribute to their performances on the field.

2. REVIEW OF LITERATURE

Sumanta majhi & et al. found in their study that there is significant divergence between a soccer player and B.P.Ed Students in terms of various sports-specific skills like agility, speed and explosive strength. Students generally workouts for their associative development and do not focus on specific skills as per the soccer player.

Firdous Ahmad Bhat and Dr. Rakesh Pathak (2018) concluded from their study that the athlete students who have been undergoing rigorous workouts and exercises tend to have better fitness and physical standard as compared to non-athlete ordinary students. Also, the athlete students have a better endurance and tend to sustain longer on the ground.

Mr. Tufan Mete and Dr. Atanu Das (2018) found that there was a significant difference between sprinters and jumpers in terms of explosive leg strength. Players of both fields also differ in terms of body composition and physical measurements. Their findings led to the conclusion that players engaged in different Sports require different degrees of fitness.

Deepla K and Raj T. Rajender from their study conducted at a school in Hyderabad brought out that football players perform better in exercises like Pull up, Sit up, stretching etc, whereas the athletes are good at running. The pattern of divergence in terms of training and exercises of different sports' players are well acknowledged in their study.

Maurya D.C. et al. (2010) from a school-level study concluded that there is not a significant difference between Football players and athletes in terms of muscle strength. They viewed that muscle strength is not a prominent factor in determining the players' ability related to those sports. However, the importance of muscle strength in terms of other Sports has been left out of the scope of the study.

Subramanya NS and Pasodi MS (2011) found that the training and exercise pattern of various sports among students are interrelated and their benefits have wider scope in terms of fitness and capacity building of the students. School-level students with a sort of generalised training tend to perform better in more than one sport.

3. RESEARCH GAP

Studies referred to so far have been predominantly focused on the divergence of training patterns of Football players and athletes. They have made an attempt to bring out the significant factors that mark the specific benefits that accrue to either of the sports in the context of school or college-level students. There have not been many studies on inter-country comparisons of training patterns, especially in the field of football. This area needs to be addressed to have enlightenment over the similarities or disparities in training patterns between Nations.

4. RELEVANCE OF THE STUDY

Given the importance and popularity of football in the Indian subcontinent, especially in India and Bangladesh, it is interesting to look into the training pattern and nature of exercises that have

been imparted to the players of both countries. As the performance of the players on the field to a large extent impacted by the fitness and training factors, a fundamental study like this to investigate the exposure players of both countries are having might be a relevant study in the context of the linkage between fitness and the performance of football players concerned.

5. OBJECTIVES OF THE STUDY

1. To look into various fitness parameters and the nature of training and exercises that have an impact on football players in general.

2. To analyse critically the extent to which the fitness factors have an impact on the player of both countries.

3. To examine the scope of upgradation in training patterns in the context of the football players of both countries concerned.

6. RESEARCH METHODOLOGY

6.1 Sampling Framework

The study is based on data collected on the football players of College level from both India and Bangladesh. 15 players each of India and Bangladesh have been chosen from the purpose of our study. The players' age ranges between 18-24 years.
The players are undergone through several fitness tests, based on which data on the following four variables have been recorded.

Variables	Test	Units
Speed	50-yard dash test	Seconds
Explosive Strength	Standing broad jump test	Meter
Agility	Shuttle run test	Seconds
Muscular Strength	Sit-ups test	Numbers

6.2 Research Framework

The statistical tool used in this research is Independent Sample t-test. The t-test is conducted using IBM SPSS software. The t-test seeks to analyse whether the means of different groups significantly differ from each other. The level of significance is set at 0.05.
For the purpose of this study, we have considered two hypotheses:

1. Null Hypothesis (H0): There is no difference between group means
2. Alternative Hypothesis (H1): Group Means significantly differ from each other.

7. DATA ANALYSIS

7.1 Analysis of Speed

Group Statistics

	Players_Country	N	Mean	Std. Deviation	Std. Error Mean
Speed	Indian_Players	15	7.5333	.23503	.06068
	Bangladesh_Players	15	7.3800	.23664	.06110

There is not much difference in speed of the players in both countries as their means are almost same. Indian players have average speed of 7.53, while Bangla players have an average speed of 7.38. Both having A Standard Deviation of 0.23

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Speed	Equal variances assumed	.039	.845	1.781	28	.086
	Equal variances not assumed			1.781	27.999	.086

The t-value comes out to be 1.78 with 28 degrees of freedom. The corresponding p-value is 0.86, which is higher than 0.05. So, we fail to reject the null and conclude that there is no significant difference between the speed of the players of two countries.

7.2 Analysis of Explosive Strength

Group Statistics

	Players_Country	N	Mean	Std. Deviation	Std. Error Mean
Explosive_Strength	Indian_Players	15	2.7867	.36814	.09505
	Bangladesh_Players	15	2.3333	.21602	.05578

The Mean Explosive Strength of Indian players come out to be 2.78, which is higher than that of Bangla Players. Also, the Explosive Strength of Indian Players shows higher variability than the Bangla Players with an S.D. of 0.36 and 0.21 respectively.

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Explosive_Strength	Equal variances assumed	5.497	.026	4.113	28	.000
	Equal variances not assumed			4.113	22.620	.000

The t-value stands at 4.11, which is significant at both 5% and 1% level given the corresponding p-value<0.01. So, here we reject the null and conclude that there is significant difference between the explosive strength of the players of two countries.

7.3 Analysis of Agility

Group Statistics

	Players_Country	N	Mean	Std. Deviation	Std. Error Mean
Agility	Indian_Players	15	10.0267	.19445	.05021
	Bangladesh_Players	15	10.1333	.20587	.05315

The average Agility of Bangladesh players is found to be slightly higher than the India players. They have their mean agilities of 10.13 for the former and 10.2 for the latter. There is not much variability of two countries as well in terms of agility with almost similar S.D. values.

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Agility	Equal variances assumed	.162	.691	-1.459	28	.156
	Equal variances not assumed			-1.459	27.909	.156

The t-value is found as 1.45, which corresponds to a p-value of 0.15. This is higher than 0.05. So, we fail to reject the null and conclude that there is no significant difference between the agility of the players of both countries.

7.4 Analysis of Muscular Strength

Group Statistics

	Players_Country	N	Mean	Std. Deviation	Std. Error Mean
Muscular_Strength	Indian_Players	15	32.8600	2.19734	.56735
	Bangladesh_Players	15	30.2133	2.01702	.52079

The mean Muscular Strength of Indian players emerge at 32.86, which is somewhat higher than 30.21 of that of Bangla players. Although there is not much disparity in variability between the two countries in terms of Muscular Strength.

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Muscular_Strength	Equal variances assumed	.091	.765	3.437	28	.002
	Equal variances not assumed			3.437	27.797	.002

The t-vale is 3.43 with 28 degrees of freedom. It corresponds to a p-value of 0.002, which is lesser than 0.05. So, we reject the null and accept that there is a significant difference between the Muscle strength of the players of two countries.

8. CONCLUSION

From our research on the fitness variables, we have found that Indian football players are comparatively better off in terms of Speed, Explosive Strength and Muscle Strength, whereas Bangladesh football players only stand better in case of Agility. The statistical analysis renders that Indian players score significantly higher than their Bangla counterpart in terms of Explosive Strength and Muscle Power. Although the Muscle Strength is not so much important as a winning factor, Speed is considered to be one of those. In terms of Speed both countries' players stand good. However, trainers must focus on increasing the Agility of Indian players and the Explosive Strength of Bangla players.

REFERENCES

Mete T, Dr. Atanu Das. A comparison on selected motor fitness components & physiological characteristics between sprinters & jumpers, International Journal of Yogic, Human Movement and Sports Sciences. 2018;3(2):148-151.
Subramanya NS, Pasodi MS. Training and physical fitness. 2011;2(2):43-47. ISSN: 0976–9862

Mr. Mahipal. A Comparative Study Of Selected Physical Fitness Variables Among State Level Athletes And Football Players Of District Panipat, TIJR, Jan 2016, 11-21
Busch Judgy G. A Normative study of the AAHPER Youth Fitness Test in grades seven through ten in the state of South Dakorta, completed Research in Health, Physical Education and Recreation, XII, 204, 1970.
Sumanta Majhi et al. A Comparative Study of Selected Motor Fitness Component Between Soccer Players And B.P.Ed Students, IOSR Journal of Sports and Physical Education (IOSR-JSPE). 2016;3(4):42-44.
Kunvar Singh, Ratnesh Singh. An association of anthropometric and physical fitness variables of cricket players with the performance of running between the wickets. 2017;4(1):141-145. ISSN: 2394-1685
Hart M and Shay CT. Relationship between physical fitness and academic success, Res. Quarts. 1964;25(2):443-445.
Kumari Sunita & Devi Santosh. Physical fitness status of female college athletes. Res. J physical edu. sci. 2014;2(6):5-7.
Maurya DC, et al. "A comparative study of Physical variable (Muscular strength) football players and athletes of school levels." 2015;3(8):1-4.
Singh Mandeep et al. "A study of the effect of resistance training on arm strength of state level adolescent male athletes" Asian Journal of multidimensional Research. 2012;1(1);84-89.
Trank Robert and Lewi's. Physical fitness quantitative expression of the physical condition of an individual. Journal of strength & conditioning. 1993 Jan;8:253-287.
V Gaurav et al. "Comparison of physical fitness variables between individual games and team games athletes." Indian j.sci. & technology. 2011;4(5):547-549.
Dr. Rajdhar Chaitram Bedse. A comparative study on physical fitness variables of football and cricket players, IJPNPE. 2017;2(1):40-43.