STRENGTH FLEXIBILITY BALANCE AND SPORTS ACHIEVEMENT MOTIVATION OF FOOTBALL PLAYERS AND ATHLETES- AN ANALYTICAL STUDY

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Abstract:

For any kind of sports physical and psychological toughness is very important. Strength, flexibility and balance are the foremost components of physical fitness along with sports achievement motivation which urge any sportsman to do well in their respective game. The purpose of the study was to compare selected physical fitness components and sports achievement motivation between young football players and athletes aged 14-16 years. Mean,Standard deviation, Independent t – test and Coefficient Of Correlation was used. Significant level was set at 0.05 level. On the basis of the result back strength, leg strength and balance football players are better than the athletes and in hand grip strength, leg explosive strength, flexibility and sports achievement motivation there were no difference between the two groups. It was also found that strength is positively related with height and weight and balance is inversely related with height.

Introduction:

In the teen years, kids who formerly were bundles of nonstop energy might lose interest in physical activity. Between school, studying, friends and even part-time jobs, they have a lot of interests and responsibilities vying for their time and attention. But kids who started out enjoying sports and exercise tend to stay active throughout their lives. So they might just need a little encouragement to keep it going during adolescence. Immediate benefits including maintaining a healthy weight, feeling more energetic, and promoting a better outlook.Participating in team and individual sport can boost self confidence, provide opportunities for social interaction, and offer

a chance to have fun. And regular physical activity can help prevent heart disease, diabetes and other medical problems later in life.

Football and athletics are two most popular sports in this world. The craze of an Olympic or a FIFA World Cup shows justification to the point. However, the sportspersons need a strong body and mind to meet the demanding situations of the games and sports. Physical fitness components, psychological factors, skills, technique, tactics, body type are some basic criteria behind every successful individuals or teams. Considering this view the researcher has taken some basic fitness parameters and sports achievement motivation to compare between the 14-16 years football players and athletes.

Achievement motivation is a mindset that leads people to set for themselves realistic but challenging goals. Achievement contexts can be found anywhere – on the playing field, on the stage, in the office, in an art studio or in anytype of area of work or passion. Achievement motivation is seen as a personality factor and describes our persistence in striving for success.

In sports success usually means winning, although it could also be defined in terms of personal improvement. Success for sportspersons is significantly dependent upon sports achievement motivation. With determined motivation and true urge an athlete or a football player can deliver the very best of his or her potential on the pitch.

Purpose of the study:a) To compare strength, flexibility, balance between the football players and the athletes.b) To compare sports achievement motivation between footballers and athletes.c) To observe relationship of height and weight with selected physical fitness parameters.

Methodology

Subject:30 district level football players and athletes of Punjab, age14-16 years group were selected randomly by the standard procedure of simple random sampling.Among these 30 sportsperson 15 were football players and other 15 were athletes.

Criterionmeasure:a) Back strengthb) Leg explosive strength c) Hand grip strength(right and left) d)Flexibilitye)Static balancef) Sports achievement motivation.(M.L Kamlesh questionnaire).

The entire test was conducted for consecutive seven days at the morning (7a.m-8a.m) by using standard procedure. After collection of data parametric statistical calculation were made for result.

RESULT AND DISCUSSIONS:The analysis of data, interpretations of result were presented here.Table 2 represents the mean and S.D. value of age, height and weight of the football players and the athletes.

TABLE – 2

	Age		Height		Weight	
	Mean	S.D	Mean	S.D	Mean	S.D
Footballers	15	±1	133.4	5.83	40.8	±6.79
Athletes	14.5	±1.060	134.4	±8.04	39.2	±6.45

The meanage, height and weight of the football group was 15, 133.4 and 40.8 respectively and the S.D. was 1, 5.83 and 6.79 respectively. Similarly, the mean age, height and weight of the athlete group was 14.5, 134.4 and 39.4 respectively and the S.D. was 1.060, 8.04and 6.45 respectively. Comparing the mean of the parameters of football and athlete group it appears that the values were more or less same. So both the groups were homogeneous.

*Physical fitness components*In physical fitness components the researcher has taken back, leg, hand-grip and leg explosive strength with flexibility and balance as the criterion for measurement.

Table 3 represents the mean, S.D., SE_D and t value between football players and athletes on strength, flexibility, balance and sports achievement

Table 3

TEST ITEMS	GROUP	Mean± SD	t
Back strength.	Footballers	35.8±5.73	4.11*
	Athletes	26.2±6.98	
Leg Strength	Footballers	33.40±5.260	2.70*
	Athletes	27.06±7.97	
Right hand grip strength	Footballers	28.6±5.9	1.78
	Athletes	25.2±4.4	
Left hand strength	Footballers	31.2±7.324	1.13
	Athletes	28±7.181	
Flexibility	Footballers	24.4±3.48	1.31
	Athletes	22.7±3.60	
Balance	Footballers	23±10.93	3.03*
	Athletes	12.4±7.91	
Achievement motivation.	Footballers	1.6±0.30	0.133
	Athletes	1.7±0.138	

Significance value- At 0.05 level = 2.05 (Df =28)

Analysis of data

Backstrength: The mean and the S.D of the footballers and the athletes were found to be 35.8±5.73 and 26.2±6.98 respectively. To observe the significant difference between the mean values't' was calculated and found to be 4.116 which was significant at 28df. So in terms of back strength footballers are found better than the athletes.

Leg strength The mean and S.D of the footballers and the athletes were found to be 33.40±5.260 and 27.06±7.97 respectively. To observe the significant "t" was calculated and found to be 2.70 which was significant at 28df at 0.05 level. So, in terms of leg strength football players were found better than the athletes.

Right hand grip strength: The mean and S.D of the footballers and the athletes were found to be 28.6±5.9 and 25.2±4.4 respectively for right hand grip strength measurement. To observe the significant difference in their mean't' was calculated and found to be 1.784 which was not significant at 28df. So in terms of right hand grip strength there was no significant difference between the footballers and the athletes.

Left hand grip strength: The mean and SD of the footballer and the athletes were found to be 31.2   ±7.324 and 28 ±7.181 respectively..To observe significant difference between the groups't' was calculated and found to be 1.1363 which was not significant at 28df. So in terms of left-hand grip strength there was no significant difference between the footballers and the athletes.

Flexibility The mean & SD of the footballers and the athletes were found to be 24.4 ±3.24 and 22.7 ±3.607 respectively. To measure the significant difference between their mean the't' test was calculated & found to be 1.31 which is not significant at 28df. So, in terms of flexibility there was no significant difference between the footballers & the athletes.

Balance The mean & SD of the footballers & the athletes were 23 ±10.93 & 12.4 ±3.487.To observe the significant difference't' was calculated & found to be 3.03 which was significant at 28df. So in terms of balance football players are better than the athletes.

Leg explosive strength: The mean & SD of the footballers & the athletes are 1.6 ± 0.30 & 1.7 ±0.138. To observe the significant difference between their mean value't' test was calculated and found to be 0.133, which was not significant at 28df. So in terms of leg explosive strength there is no difference between the two groups.

Sports achievement motivation:The mean & SD of the footballers & athletes are 25.2 ± 3.227 & 26.5 ±2.67. To observe the significant difference between their means't' was calculated & found to be 1.192, which was not significant at 28df. So in terms of sports achievement motivation there was no significant difference between footballers & the athletes.

CORRELATION

Table 4 represents the coefficient of correlation between weight & back strength, weight & flexibility, weight & balance for football group and athlete group.

TABLE -4

Group	Wt. vs. Back strength	Wt. vs. Flexibility	Wt. vs. Balance
Footballers	0.54	.004	.0132
Athletes	0.52	-0.16	.027

Df = 13,   Significance value at .05 level= .514

From the table it is found that the coefficient of correlation between wt. vs. flexibility, wt. vs. back strength, wt. vs. balance for football group was 0.54, 0.004 and 0.132 respectively. Comparing the obtained value with the table value it was clear that the relationship between wt. vs. back strength is positively correlated for both the groups. At the same time it is also found the other relationship that is wt vs. flexibility and wt. vs. balance is not significant for both the groups.

So, on the basis of the result it may be conducted that back strength is related or dependent with weight. And flexibility and balance is not directly related with weight for both the football and the athlete group.

Table 5 represents the coefficient of correlation between height & back strength, height& flexibility, height & balance for football group and athlete group.

TABLE -5

Group	Ht. vs. Back strength	Ht vs. leg strength	Ht. vs. Flexibility	Ht. vs. Balance
Footballers	0.46	0.23	-0.063	-0.35
Athletes	0.75	.666	0.27	-0.27

Df = 13,   Significance value at .05 level= .514

From the table it is found that the coefficient of correlation between height vs. back strength, height vs. leg strength, height vs. flexibility and height vs. balance for football group was 0.46, 0.23,-0.063 and 0.693 respectively and for the athlete group 0.75, 0.666, 0.27 and -0.27 respectively. Comparing the obtained value with the table value it was found clear that the athletes' back strength and leg strength was significantly related with height in proportionate way. The table shows there was no significant relation between height and flexibility for both the group where in case of balance; height wasinversely correlated for both the group.

So it may be concluded that height was directly related with back strength and leg strength and inversely related with balance for both football players and athletes. And in case of flexibility no strong relation was found.

Discussion of the findings:

It was observed that in strength and balance football players were better than the athletes and in flexibility and sports achievement motivation there was no difference between the groups. Similar studies in the past made by D.C. Mauriya(2003), Chattopadhyaya Das, et al. (2007) compared the physical fitness components of junior footballers and sprinters. Results revealed that there exist significant difference in flexed arm hang (arm & shoulder strength), bent knee situps (muscular strength & endurance), Gilliam and colleagues (1979), concluded that each

sport has specific demands in each of the physical condition variables, and thus, provided a logical basis on why these variables differ from one sport to another. In the past studies concluded that the values of physical condition parameters are highly correlated with the type of sport, age, sex as well as with the division that athletes compete producing different measures for muscle strength and flexibility (Kellis et al., 1999, Zakas et al., 1995, Bisschop et al., 1998, Piastra et al., 1998,) It is also known that height plays a suppressive role in the improvement of flexibility in basketball. This phenomenon is more immense during adolescence, which was the focus of this study. Growth factors in the age of 15 present rapid changes, something that influences muscles' strength and flexibility. (O' Neil &Micheli, 1988). . Soccer players appeared to be stronger also in a study by Sidhu&Badhot(1991), except that in this case the sample consisted of professional athletes. Ahmadi, Namazizadeh, Abdoli, &Seyed (2009) studied achievement motivation and found no difference between footballers and athletes.

Conclusion:

1) In back strength, leg strength and balance football players were better than the athletes.
2) In hand strength (both left and right hand), flexibility and leg explosive strength there were no difference between the two groups.
3) Age, Weight and height were positively related with back strength for footballers and athletes.
4) In sports achievement motivation there was no difference between the two groups.
5) Height and balance were inversely related to each other for both the group.

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