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## Comparative study of motor ability and achievement motivation of soccer players of urban senior secondary school and college boys of Kurukshetra

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### Abstract

**Background:** The purpose of the study was to determine the comparative study of motor ability and achievement motivation of soccer players of urban senior secondary school and college boys Kurukshetra.

**Material and Method:** 60 subjects (30 senior secondary school boys and 30 college boys) were selected randomly from the affiliated senior secondary school and college boys of Kurukshetra. The age of the subjects ranged from 15-25 years. Motor ability test (Barrow motor ability test 1957) and standardized Achievement Motivation Questionnaire (M.L. Kamlesh) was administered to the selected subjects for comparative study. Statistical technique ‘t’ test was used to compare the psychological variables and motor ability of urban senior secondary school and college boys of Kurukshetra. Level of significance was at 0.05 level.

**Results:** The results of the study revealed that significant difference found between mean scores for senior secondary school players and college players of Kurukshetra.

**Keywords:** Motor ability, achievement motivation, soccer

### Introduction

In our life both the academic and non-academic activities play an important role. Sports are the lifetime these days. That plays a major role in shaping our personality. Today media is playing a major role in popularizing sports. With the increasing emphasis on scientific support to the modern competitive sports many games techniques and tactics are being explored and adopted in the sports conscious to high-level performance in sports. Soccer in the game of constant action and require continuous adaptation to changing situation by the team as well as individuals. More and more people are playing soccer.

### Material and Methods

**Subjects:** 60 subjects (30 senior secondary school boys and 30 college boys) were selected randomly from the affiliated senior secondary school and college boys of Kurukshetra. The age of the subjects ranged from 15-25 years.

### Tool and Variables

Motor ability test (Barrow motor ability test 1957) and standardized Achievement Motivation Questionnaire (M.L. Kamlesh) was administered to the selected subjects for comparative study.

### Procedure

60 subjects of soccer players; in which 30 subject related to senior secondary school of Kurukshetra district and 30 subject related to college players of Kurukshetra district; who had participated at district level of school boys and also participated at Inter college level. Motor ability test (Barrow motor ability test 1957) and standardized Achievement Motivation Questionnaire (M.L. Kamlesh) was administered to the selected subjects for comparative study.

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### Statistical Analysis

To compare the psychological variables between senior secondary school boys and college boys of Kurukshetra with respect to comparative study t-test was applied between the mean scores of both groups. Further the level of significance was set at level of 0.05. The statistical analysis was performed with the help of SPSS (v-16) software.

### Results

The scores of the Motor ability test (Barrow motor ability test 1957) and standardized Achievement Motivation Questionnaire (M.L. Kamlesh) were analyzed to determine partial significant and partial non-significant and result is presented in the following tables:

**Table 1:** The mean standard deviation, standard error deviation and t-ratio of senior secondary school and college players of soccer in Standing Broad Jump.

Groups	No of Players	Mean(X)	Standard Deviation S.D	Standard Error of difference (SED)	T-test
Senior Secondary School boys	30	2.20	.152		
College boys	30	2.74	.158	0.29	3.95

't' at 0.05 significant level is 2.0 on 58 degree of freedom

It implied that there was a significant difference between the mean scores ( $x=2.20$ ) for senior secondary school players and ( $x=2.74$ ) for college players in soccer. The mean score of

college players was better than the senior secondary school players. So that the explosive leg power of college players have better then the senior secondary school players.

**Table 2:** The mean standard deviation, standard error deviation and t-ratio of senior secondary school and college players of soccer in Soft Ball Throw.

Groups	No of Players	Mean(X)	Standard Deviation S.D	Standard Error of difference (SED)	T-test
Senior Secondary School boys	30	10.56	2.22		
College boys	30	15.03	1.69	5.52	3.29

't' at 0.05 significant level is 2.0 on 58 degree of freedom

It implied that there was a significant difference between the mean scores ( $x=10.56$ ) for senior secondary school players and ( $x=15.03$ ) for college players in soccer. The mean score of college players was better than the senior secondary school

players. It shows that college players have covered more distance in softball throw as compare to senior secondary school of soccer players.

**Table 3:** The mean standard deviation, standard error deviation and t-ratio of senior secondary school and college players of soccer in Zig-Zag Run.

Groups	No of Players	Mean(X)	Standard Deviation S.D	Standard Error of difference (SED)	T-test
Senior Secondary School boys	30	21.07	1.23		
College boys	30	20.59	0.997	0.236	3.06

't' at 0.05 significant level is 2.0 on 58 degree of freedom

It implied that there was a significant difference between the mean scores ( $x=21.07$  sec.) for senior secondary school players and ( $x=20.59$  sec.) for college players in soccer. The

mean score of senior secondary school players was higher than the college players. So that the time taken in zig-zag run test is directly related to agility of the players.

**Table 4:** The mean standard deviation, standard error deviation and t-ratio of senior secondary school and college players of soccer in Wall Pass.

Groups	No of Players	Mean(X)	Standard Deviation S.D	Standard Error of difference (SED)	T-test
Senior Secondary School boys	30	12.03	1.189		
College boys	30	16.10	1.373	.227	4.11

't' at 0.05 significant level is 2.0 on 58 degree of freedom

It implied that there was a significant difference between the mean scores ( $x=12.03$ ) for senior secondary school players and ( $x=16.10$ ) for college players in soccer. The mean score

of college players was better than the senior secondary school players. The table clearly show that handling and controlling ability of college players have better the school players.

**Table 5:** The mean standard deviation, standard error deviation and t-ratio of senior secondary school and college players of soccer in Medicine Ball Put.

Groups	No of Players	Mean(X)	Standard Deviation S.D	Standard Error of difference (SED)	T-test
Senior Secondary School boys	30	12.60	.59		
College boys	30	13.20	.41	0.76	2.78

't' at 0.05 significant level is 2.0 on 58 degree of freedom

It implied that there was a significant difference between the mean scores ( $x=12.60$ ) for senior secondary school players and ( $x=13.20$ ) for college players in soccer. The medicine ball of college players higher shows the strength of players. It can

note that longer the distance covered, higher the strength possessed by the players. It further implied that the college players have better strength component possessed by them as compared to school boys of soccer.

**Table 6:** The mean standard deviation, standard error deviation and t-ratio of senior secondary school and college players of soccer in 60 yard Dash.

Groups	No of Players	Mean(X)	Standard Deviation S.D	Standard Error of difference (SED)	T-test
Senior Secondary School boys	30	7.64	.38		
College boys	30	6.72	.29	.33	1.56

't' at 0.05 significant level is 2.0 on 58 degree of freedom

It implied that there was a significant difference between the mean scores ( $x=7.64$ ) for senior secondary school players and ( $x=6.72$ ) for college players in soccer. The mean score of

senior secondary school players was higher than the college players.

**Table 7:** The mean standard deviation, standard error deviation and t-ratio of senior secondary school and college players of soccer in Achievement Motivation.

Groups	No of Players	Mean(X)	Standard Deviation S.D	Standard Error of difference (SED)	T-test
Senior Secondary School boys	30	9.73	2.44		
College boys	30	11.59	2.12	.72	3.91

't' at 0.05 significant level is 2.0 on 58 degree of freedom

It implied that there was a significant difference between the mean scores ( $x=9.73$ ) for senior secondary school players and ( $x=11.59$ ) for college players in soccer. The mean score of college players was better than the senior secondary school players. College players have better achievement motivation as compare to senior secondary school players.

Statistical Procedure: T-test was used to analysis the data for comparative study of motor ability and achievement motivation of urban senior secondary school and college players of Kurukshetra. The level of significance was set at 0.05 level.

### Discussion and Conclusions

- It was found that no significant difference in speed of senior secondary school and college players in soccer as measured through 60 yard dash test.
- It was discovered that there was a significant difference in agility of soccer players. The senior secondary school players had better agility as compare to college players.
- It was discovered that there was significant difference in shoulder girdle strength of soccer players. The college players had better shoulder girdle strength as compare to senior secondary school players.
- It was existed a significant difference in upper body strength of soccer players. It was found that senior secondary school had better upper body strength than the college players.
- It was discovered that there was significant difference in handling and controlling ability of senior secondary school and college players. The college players have handling and controlling ability possessed by them as compared to senior secondary school.
- There existed significant difference in lower leg strength of soccer players. The college players had better lower leg strength as compared to senior secondary school.

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