

*Full Length Research paper*

# **Achievement motivation and locus of control of university level individual and team sport players- A prognostic study**

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The aim of this study is to find out the significant differences among the players of individual and team sports, on the variable achievement motivation and locus of control. A group of three hundred and fifty (N=350) male players of individual and team sports, aged between 20 to 25 years were purposively selected for this study. They were further divided into two groups: A (individual game) and B (team game). It was hypothesized that there may not be significant differences with regard to achievement motivation and locus of control among individual and team game players. The significance between-group differences were assessed using the student's t-test for dependent data. The level of  $p \leq .05$  was considered significant. Significance between group differences were found among the players of individual and team sports on the variable achievement motivation whereas no significance between group differences were found among the players of individual and team sports on the variable locus of control. Considering the various parameters as applied on different sets of subjects the results prove to be variant in nature and scope in relation to achievement motivation whereas results prove to be identical in respect to locus of control.

**Key words:** Achievement motivation, locus of control, individual sport, team sport.

## **INTRODUCTION**

Numerous studies have demonstrated the impact of psychological factors on sports performance (Crespo, 2002). Achievement motivation and locus of control have been two of those factors under consideration. For example, Taylor (1994) treated motivation as the base of a pyramid towards success in sports. Other important factors in this area include 'goal orientation', 'goal setting', 'motivational climate' (Boyce et al., 2001; Van Aken, 1994) and 'burnout' (Gould et al., 1997; 1996; 1996). Locus of control has been associated with many different personality and situational variables.

The locus of control construct, originally derived from social learning theory (Rotter, 1954), may be a useful concept in testing the above hypothesis. Social learning theory contains several assumptions. The assumption

upon which locus of control is based is that, the behavior of individuals in a specific situation is determined by the reinforcements they receive (Rotter, 1954). The purpose of this investigation is to provide important information with regards to achievement motivation and locus of control among the players of individual and team sports which will enable sport performers to cope successfully with negative affective states and to perform to their full capabilities.

## **MATERIALS AND METHODS**

### **Subjects**

In order to determine the significant differences among the variables, achievement motivation and locus of control, three hundred and fifty (N=350) male players of individual and team sports between 20 to 25 years old were selected for the study. They were further divided into two groups: A (individual sports) and B (team sports). The study was delimited to the psychological variables of achievement motivation and locus of control. The

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**Table 1.** Details of selected subject.

S/no.	Individual sport	Sample size	Team sport	Sample size
1	Athletics	35	Basketball	35
2	Weightlifting	35	Volleyball	35
3	Wrestling	35	Handball	35
4	Cycling	35	Football	35
5	Boxing	35	Baseball	35
	Total	(N1- 175)	(N2- 175)	(350)

**Table 2.** Mean standard deviation (SD), standard error of the mean and “t” value of achievement motivation of individual sport and team sport.

	Individual sport	Team sport
Sample size	175	175
Arithmetic mean	19.3486	28.7486
95% CI for the mean	18.5093to 20.1878	27.8588 to 29.6384
Variance	31.6422	35.5686
Standard deviation	5.6251	5.9639
Standard error of the mean	0.4252	0.4508
Mean difference		9.4000
Standard deviation		9.1212
95% CI		8.0392 to 10.7608
Test statistic t		13.633*
Degrees of Freedom (DF)		174
Two-tailed probability		P < 0.0001

study was confined to the male players of individual and team sports. The study was further delimited to individual and team sports including: (individual sports) athletics, weightlifting, wrestling, cycling and boxing; (team sports) basketball, volleyball, handball, football and baseball. The details of the subject are presented in Table 1.

## METHODOLOGY

The achievement motivation scale by Kamlesh and locus of control by Sanjay Vohra were used to assess the differences among the players of individual and team sports. The locus of control scale consists of twenty four total statements with eight statements for each subcategory which included: (P) powerful others, (C) chance control, and (I) individual control.

(P) Belief that outcomes are controlled by powerful others. High scores in this domain indicated that, study participants believed that other people controlled their outcomes.

(C) Belief that outcomes are controlled by chance. High scores in this domain indicated that study participants believed that unordered chance or random events controlled their outcomes.

(I) Belief that outcomes are controlled through your own individual effort. High scores in this domain indicated that, study participants believed that their outcomes were controlled by their own effort- that their current situations and current rewards are direct outcomes of things they control.

## RESULTS

The results pertaining to significant difference, if any, between individual and team groups were assessed using the Student's t test and are presented in Tables 2 and 3. The between-group differences were assessed using the Student's t-test for dependent data. The level of  $p \leq .05$  was considered significant. Table 4 shows that the mean of achievement motivation of individual sport and team sport was 19.3486 and 28.7486, respectively, whereas the mean of locus of control of individual sport and team sport was 48.8857 and 48.2171, respectively. The *t* value in case of achievement motivation of individual sport and team sport was 13.633 whereas the *t* value in the case of locus of control of individual sport and team sport was 0.57. In case of achievement motivation, the  $H_0$  (null hypothesis) was rejected at 0.05 level of significance, since  $\text{cal. } t (=13.224^*) > \text{tab } t 0.05 (174) (=1.645)$  whereas, in case of locus of control, the  $H_0$  (null hypothesis) is accepted at 0.05 level of significance, since  $\text{cal. } t (=0.570) < \text{tab } t 0.05 (174) (=1.645)$  The graphical representation of mean, standard deviation (SD), standard error of the mean and “t” value of locus of

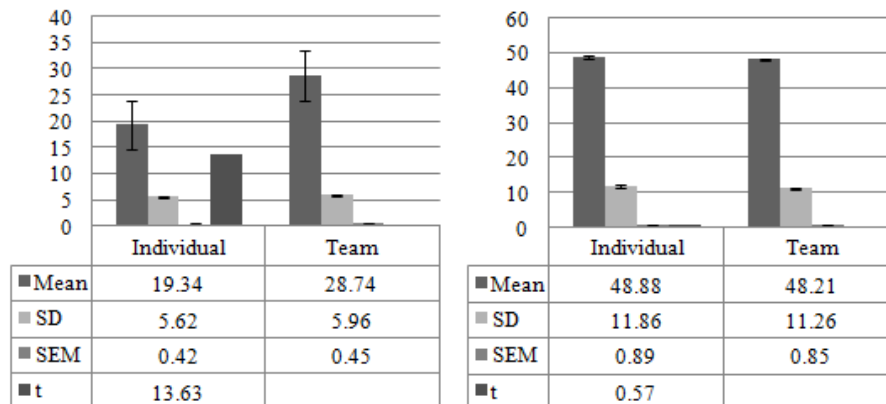
**Table 3.** Mean standard deviation (SD), standard error of the mean and “t” value of locus of control of individual sport and team sport.

	Individual sport	Team sport
Sample size	175	175
Arithmetic mean	48.8857	48.2171
95% CI for the mean	47.1150 to 50.6564	46.5362 to 49.8981
Variance	140.8489	126.9411
Standard deviation	11.8680	11.2668
Standard error of the mean	0.8971	0.8517
Mean difference	0.6686	
Standard deviation	15.5106	
95% CI	2.9827 to 1.6456	
Test statistic t	0.570	
Degrees of Freedom (DF)	174	
Two-tailed probability	P = 0.5693	

**Table 4.** Mean standard deviation (SD), standard error of the mean and “t” value of achievement motivation and locus of control of individual sport and team sport.

Variable	Group	Number	Mean	S.D.	SEM	‘t’ Value
Achievement motivation	Individual sport	175	19.34	5.62	0.42	13.63*
	Team sport	175	28.74	5.96	0.45	
Locus of control	Individual sport	175	48.88	11.86	0.89	0.57
	Team sport	175	48.21	11.26	0.85	

\* Significant at 0.05 level  $t_{0.05}(174) = 1.645$ .

**Figure 1.** Mean, standard deviation (SD), standard error of the mean and “t” value of locus of control of individual sport and team sport.

control of individual sport and team sport is exhibited in (Figure 1).

## SUMMARY, CONCLUSION AND PRACTICAL APPLICATIONS

To determine if significant differences existed for

achievement motivation and locus of control among the players of individual and team sports, a group of three hundred and fifty (N=350) male players of individual and team sports were selected for this study. They were further divided into two groups: A (individual sport) and B (team sport). It was hypothesized that there may not be significant differences with regard to achievement motivation and locus of control among individual and

team game players.

The between-group differences were assessed using the student's *t* test for dependent data. The level of  $p \leq 0.05$  was considered significant. In case of achievement motivation the  $H_0$  (null hypothesis) is rejected at 0.05 level of significance, since cal.  $t$  ( $=13.224^*$ )  $>$  tab  $t$  .05 (174) ( $=1.645$ ) whereas, in case of locus of control, the  $H_0$  (null hypothesis) is accepted at 0.05 level of significance, since cal.  $t$  ( $=-0.570$ )  $<$  tab  $t$  .05 (174) ( $=1.645$ ). Considering the various parameters as applied on different set of subjects the results prove to be variant in nature and scope, in relation to achievement motivation whereas results prove to be identical in respect to locus of control.

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