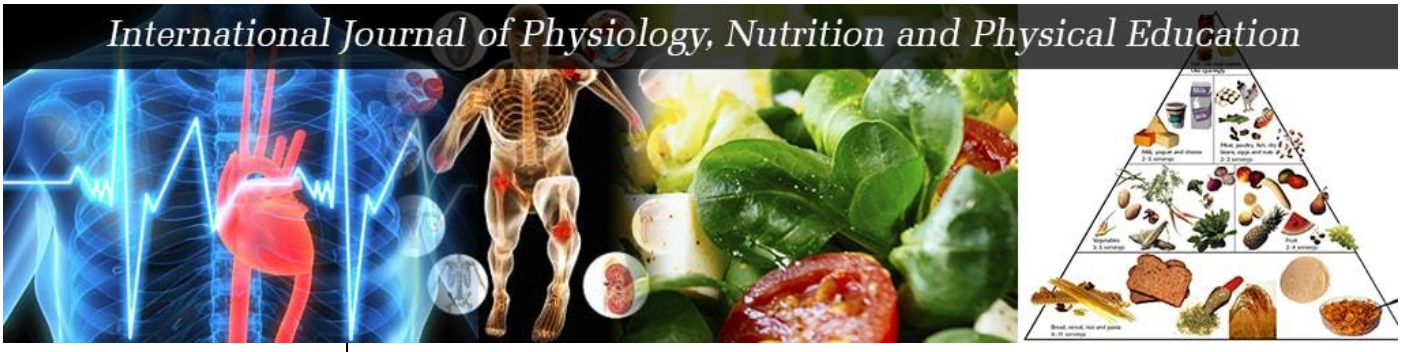

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An investigation on the of locus of control athletes and non-athletes of Bangalore university

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Abstract
The purpose of the study is to find out the difference in locus of control among athletes and non- athletes and to analyze the gender difference in locus of control among athletes and non- athletes. The athletes sample consisted of 140 UG students who were studying in one or the other UG courses and has participated in the Bangalore University inter-collegiate athletic meet events in the year 2018. The non-athletes sample consisted of those students who were studying in the same course as that of athletes, but who did not participate in any of the sports activities. To measure the locus of control of athletes and non- athletes the Sanjay Vohar's locus of control scale were administered to students of colleges affiliated to Bangalore University, Bangalore. It is concluded that there are significant difference between athletes and non- athletes on locus of control-P, C and I and also there are significant gender difference between athletes and non- athletes on locus of control-P, C and I.

Keywords: Locus of control, P- powerful others, C- chance control and I- individual control

Introduction
The participation in modern sports is influenced by various physical, physiological, sociological and psychological factors. During training, besides good physique and fitness of the athlete, main emphasis is laid on the development of various types of skills involved in the game as well as on teaching the strategies, techniques and tactics of the game. Until recently, the coaches have been paying inadequate attention to the social and psychological factors which although have been proved to contribute to performance in events in the higher competitive sports. It is only recently that sports administrators and coaches have realized the importance of the psychological preparation and training of players to enable them to bear the strain and stresses inherent in sports participation. So, now the sports trainer and coaches have started giving more importance to the psychological conditioning or the building the mental make-up of the players before their contests in the national and international competitions.

Significance of psychology in sports
Psychology of sports means applying psychological theories and concept, to aspects of sports such as coaching and teaching. The sports psychologist use psychological assessment techniques and achieves their optimal performance. While sports psychology is concerned with analyzing human behavior in various types of performance. Within the past few years interest has been increased in the field of competitive sport psychology, cognitive sport psychology focuses on the influence of mental factors on performance. Sport psychologists have acknowledged that an individual's thoughts and feelings can have a critical impact on his or her performance.
Psychology as a behavioral science has made contributions for improving sports performance. It has helped coaches to coach with proficiency. This psychological aspect on sport is gaining much attention among sports administrators. A rapidly growing area of interest in sports psychology concerns the use of stress management procedures much as bio-feedback and relaxation training to enhance athletic performance.

Objectives of the present study
- To find out the difference in locus of control among athletes and non- athletes.

- To analyze the gender difference in locus of control among athletes and non- athletes.

Materials and methods

Sample Design

For the purpose of present study a total number of 70 athletes and 70 non- athletes were selected from various educational institutions/colleges affiliated to Bangalore University, Bangalore. The samples were drawn on the principle of random sampling technique. Subjects were equally matched on their education and course of study. The athletes sample group consisted of those students who have actively participated in inter collegiate athletic events and also participated either inter-collegiate or university level in their respective game. The matching sample of non-athletes group was selected from those students who did not take part in any of the sports activities. The subjects were in the age range of 18 to 25 years with mean age of 22.5 years.

Test Administration

To measure the locus of control of athletes and non- athletes the Sanjay Vohar's locus of control scale were administered to students of colleges affiliated to Bangalore University, Bangalore. The athletes sample consisted of 140 UG students who were studying in one or the other UG courses and has participated in the inter-collegiate or university level athletic events. The non- athletes sample consisted of those students who were studying in the same course as that of athletes, but who did not participate in any of the sports activities.

Sanjay Vohara's Locus of Control Scale (LOC) questionnaires were issued to each student in the group and they were asked to go through the instructions given in the front page of the questionnaire and also all subjects were asked to fill in the front side of the questionnaire i.e., personal data. The subjects were informed to be fair in working their responses. The questionnaire was administered in a group of 35 students in a good and permissive atmosphere and it was maintained throughout the administration to all the groups of athletes and non- athletes samples. They were also informed that the test is neither a test of proficiency nor their intelligence. While they were answering the questions, supervision was done to know whether they were following instructions in answering or not, personal data was also checked to know whether they have filled in all the information that was given on the questionnaire.

Reliability

The present scale was made to find out the reliability of the scale. First, the split-half method of reliability was employed. Here the scale was divided into two parts of 12 statements each. Each part containing 4 statements each for P- powerful others, C- chance control, and I- individual control. The split-half reliability of the scale with N=380, was found to be 0.72 for P, 0.79 for C and 0.65 for, I, using Spearman-Brown. Further, with odd-even method, reliability coefficient was found to be 0.69 for P, 0.72 for C, and 0.66 for I.

The test-retest reliability was also calculated for the present scale, with N=200, retested after one week time. The test retest reliability coefficient was found to be 0.76, by calculating coefficient of correlation between two sets of scores of the same individuals on the same scale, after one week's time.

Validity

The first essential quality of any valid test is that it should be highly reliable. The present scale shows fairly high reliability coefficient. Apart from the high reliability and predictive validity, the present scale was also validated against the Rotter's Locus of Control Scale i.e. the concurrent validity was also established. A test's concurrent validity indicates the extent of its agreement with other present criteria measuring similar or same psychological operations or traits. The present scale was validated by correlating it with Rotter's Locus of Control scale (I-E scale). This was done by giving both the scales one after another with very little time interval in between. Scores of both the scales were than correlated with each other, and the correlation coefficient was found out be 0.54 (with N=220).

Tools

Following questionnaire was used in the present study to measure locus of control of athletes and non- athletes.

- ✓ Sanjay Vohara's Locus of Control Scale (LOC).

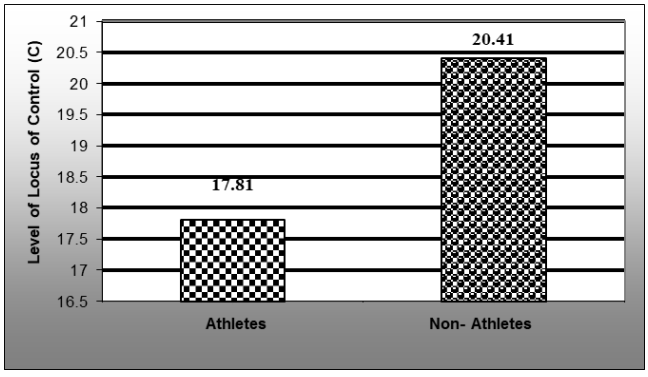
Statistical analysis

The obtained raw data was subjected appropriate statistical analysis to find out the answer to the problems posed under objectives. The statistical techniques used are, Mean, Standard deviation't' test, F test and Scheffe's post-hoc analysis.

Table 1: Significance of Mean Difference between Locus of Control (P) of Athletes and Non- Athletes

Groups	Mean	Standard Deviation	t-value
Athletes	24.16	11.08	0.46
Non- Athletes	24.02	10.85	

******Significant at 0.001 level



Graph 2: Comparison of mean value of Locus of Control (C) of Athletes and Non- Athletes

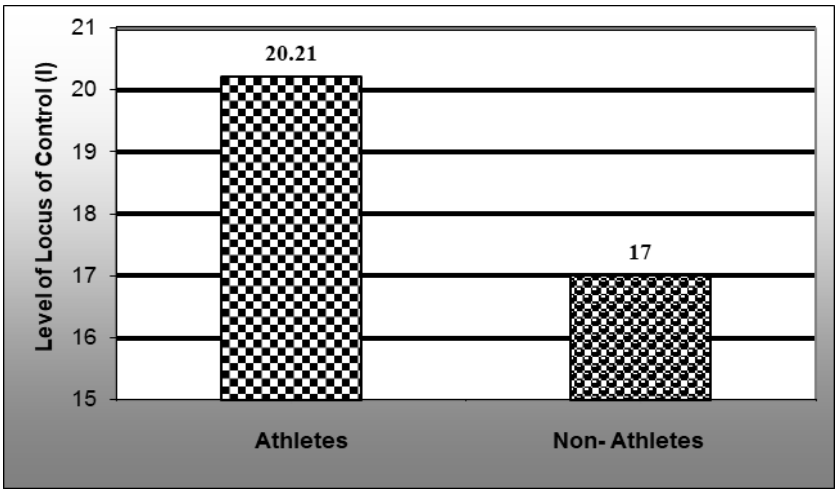
The table-1 and graph-1 presentation reveal that there is not significance difference in locus of control by powerful others between athletes and non- athletes. The obtained t-value is less than the table value 1.64. Hence there is no significant difference between athletes and non-athletes on locus of control (P).

The table-2 and graph-2 presentation reveal that there is a significant difference in chance control between athletes and non- athletes as the obtained t-value is greater than the table value 1.64. The non- athletes were found to be with higher scores than athletes in chance control.

Table 3: Significance of Mean Difference between Locus of Control (I) of Athletes and Non- Athletes

Groups	Mean	Standard Deviation	t-value
Athletes	20.21	7.27	4.91**
Non- Athletes	17	8.14	

**Significant at 0.001 level



Graph 3: Comparison of mean value of Locus of Control (I) of Athletes and Non-Athletes

The table-3 and graph-3 presentation reveal that there is significant difference in individual control between athletes and non-athletes, as obtained t-value is greater than the table value 1.64. The athletes were found to be with higher scores than non- athletes in individual control. Thus the athletes and non-athletes difference significantly on locus of control-P, C and I.

Gender Differences between Athletes and Non- Athletes on Locus of Control

To find out Gender differences between athletes and non-athletes on locus of control analysis of variance on locus of control dimensions, male athletes, female athletes, male non-athletes and female non-athletes has been done.

Table 4: Analysis of variance of Control by Powerful Others between Male athletes, Female athletes, Male Non-athletes and Female Non-athletes

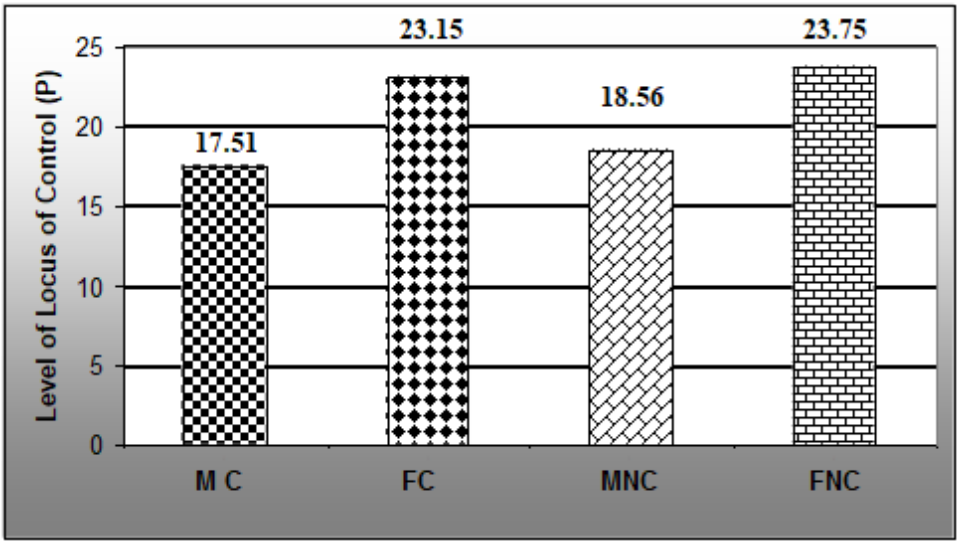
Variables	Groups	Sum of squares	DF	Mean Square	F-ratio
Control by Powerful Others	Between groups	3770.46	3	1256.82	11.73**
	Within Groups	53119.71	196	107.09	
	Total	56890.18	199	1363.91	

** Significant at 0.001 level

Table 5: Post Hoc Analysis of Locus of Control by Powerful Others among Male and Female Athletes and Non-Athletes

Group Means				Mean Difference
Male athletes	Female athletes	Male Non-athletes	Female Non-athletes	
17.51	23.15			5.64*
17.51		18.56		1.05
17.51			23.75	6.24*
	23.15	18.56		4.59*
	23.15		23.75	0.59
		18.56	23.75	5.19*

** Significant at 0.001 level



MC-Male Athletes**, FC**- Female Athletes**, MNC**- Male Non-Athletes**, FNC**- Female Non-Athletes

Graph 4: Comparison of mean value of Locus of Control by Powerful Others among Male and Female Athletes and Non-Athletes

The table-4, 5 and graph-4 presentation reveals that, there were significant differences in locus of control by powerful others between male and female athletes, male and female non-athletes, female athletes and male non-athletes, and male non-athletes and female non-athletes. No significant differences were found between male athletes and male non-athletes, female athletes and female non-athletes in locus of control by powerful others.

Table 6: Analysis of variance of Chance Control between Male athletes, Female athletes, Male Non-athletes and Female Non-athletes

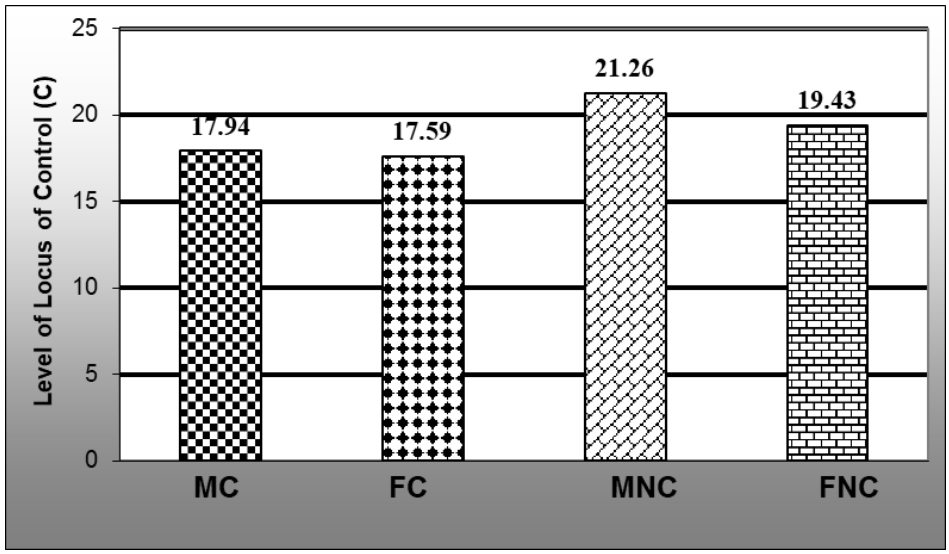
Variables	Groups	Sum of squares	DF	Mean Square	F-ratio
Chance Control	Between groups	1062.26	3	354.08	5.13**
	Within Groups	34221.00	196	68.99	
	Total	35283.27	199	423.07	

****** Significant at 0.001 level

Table 7: Post Hoc Analysis of Locus of Control (C) among Male and Female Athletes and Non-Athletes

Group Means				Mean Difference
Male athletes	**Female athletes**	**Male Non-athletes**	**Female non-athletes**	
17.94	17.59			0.35
17.94		21.26		3.31**
17.94			19.43	1.48
	17.59	21.26		3.67**
	17.59		19.43	1.83
		21.26	19.43	1.83

** Significant at 0.001 level



MC-Male Athletes**, FC**- Female Athletes**, MNC**- Male Non-Athletes**, FNC**- Female Non-Athletes

Graph 5: Comparison of mean value of Locus of Control (C) among Male and Female Athletes and Non-Athletes

The table-6, 7 and graph-5 presentation reveals that, there were significant differences in chance control between male athletes and male non-athletes, and female athletes and male non-athletes. No significant differences were found between male athletes and female athletes, male athletes and female non-athletes, female athletes and female non-athletes, and male non-athletes and female non-athletes in chance control.

Table 8: Analysis of variance of Individual control between Male athletes, Female athletes, Male Non-athletes and Female Non-athletes

Variables	Groups	Sum of squares	DF	Mean Square	F-ratio
Individual Control	Between groups	1416.59	3	472.19	**8.85***
	Within Groups	26440.99	496	53.30	
	Total	27857.59	499	525.49	

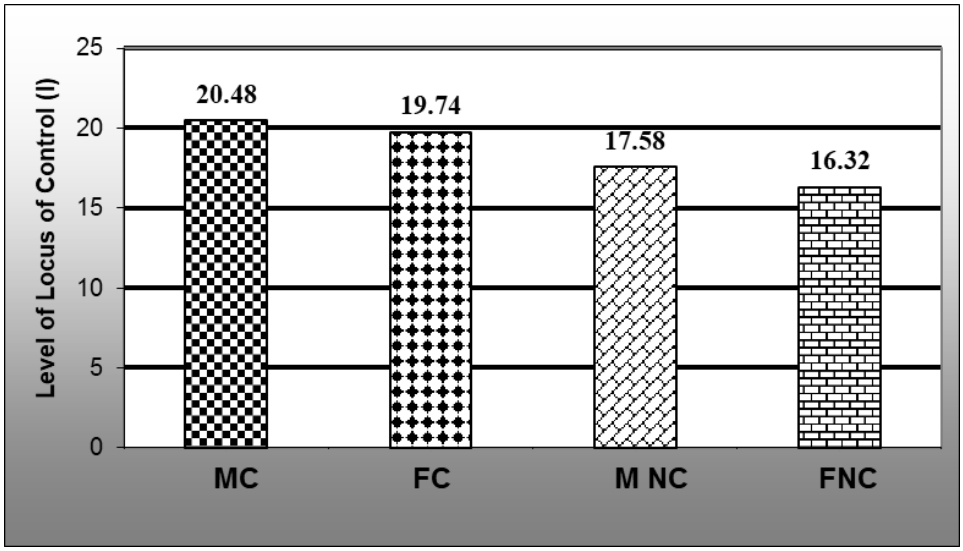
****** Significant at 0.001 level

Table-8 shows the analysis of variance of locus of control (I) among male athletes, female athletes, male non-athletes and female athletes, male non-athletes and female non-athletes. It is evident from the table that the obtained F value is significant. This clearly indicates that there are Gender differences in locus of control (I) of athletes and non-athletes. Since the Gender have significantly differential effects on locus of control (I).

Table 9: Post Hoc Analysis of Locus of Control (I) among Male and Female Athletes and Non-Athletes

Group Means				Mean Difference
Male athletes	Female athletes	Male Non-athletes	Female non-athletes	
20.48	19.74			0.74
20.48		17.58		2.90**
20.48			16.32	4.15**
	19.74	17.58		2.16
	19.74		16.32	3.41**
		17.58	16.32	1.25

****** Significant at 0.001 level



MC-Male Athletes**, FC**- Female Athletes**, MNC**- Male Non-Athletes**, FNC**- Female Non-Athletes

Graph 6: Comparison of mean value of Locus of Control (I) among Male and Female Athletes and Non-Athletes

The table 8, 9 and graph 6 presentations reveals that, there were significant differences in individual control between male athletes and male non-athletes, male athletes and female non-athletes, and female athletes and female non-athletes. No significant differences were found between male and female athletes, female athletes and male non-athletes, and male non-athletes and female non-athletes in individual control.

Conclusions

- Significant differences between athletes and non-athletes on locus of control- i.e. Powerful others, Chance control and Individual control.
- Significant Gender differences between athletes and non-athletes on locus of control i.e., Powerful others, Chance control and Individual control.

Suggestions for further research

- The study may be repeated with large sample drawn from variety of sports and non-sports population including many other biogenic and psychogenic variables.
- The study may be extended to find out the locus of control relationship with other variables like personality, aggression, and other psycho-motor variables.
- In order to find out the effects of regional variations and cultural differences the study may be repeated on different regional and cultural area population.

Reference

1. Alderman R. Psychological behavior in sport Philadelphia Saunders, 1974.
2. Berger RA, Littlefield OH. Comparison between football, athlete and non-athlete on Personality. Res. Quart, 1969,

40, 663.
3. Bryant J, Cratty. Psychology in Contemporary Sports, 1989.
4. Garrett HE. Statistics in Psychology and Education, New York, Longmans, Green and Co. Inc, 1956.
5. Gore PM, Rotter JB. A personality correlates of social action. Journal of Personality, 1963, 31, 58-64.
6. Krishna KP. Anxiety and Locus of Control. Indian Journal of Clinical Psychology. 1981; 8(1):55-56.
7. Kumar A, Vaidya AK. Locus of Control in Short and long sleepers British Journal of Psychiatry (In Press), 1986.
8. Kumar A, Pathak N, Thakur GP. Locus of control and death anxiety in Individual, team and non athletes, Proceedings of VI World Congress in Sports Psychology, Copenhagen, Denmark, 1985.
9. Kumar A, Pathak N. Locus of Control of female athletes and non-athletes, Proceedings of First National Conference on Sports Psychology, Gwalior, India, 1986.
10. Kumar A, Pathak N. Locus of Control in female athletes and non-athletes. Proceedings of First National Conference on Sports Psychology. Gwalior, India, 1986.
11. Kumar A, Tripathi AK. Locus of Control in advantaged and disadvantaged adolescents. Psychological Sports (In Press), 1986.
12. Kumar A, Vaidya AK. Locus of Control of gamma and delta alcoholics. Psychological Reports (In Press), 1986.
13. Kumar A, Pathak N, Thakur GP. Death Anxiety and Locus of Control in Individual, Team and Non-Athletes. International Journal of Sports Psychology, 1985.
14. Kumar, Anand, Srivastava SN. Rotter's Locus of Control Scale, Kumar Publication C-4/148, Kalimahal, Varanasi, 1985.
15. McKelvie SJ, Husband DE. A Locus of Control and Anxiety in College Athletes and Non-athletes. Perceptual and Motors Skills. 1980; 50:810-822.
16. Morgan WP. Affective beneficence of vigorous physical activities. Medicine and Science in sports and exercise. 1984; 17:1-94.