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A Comparative Study of Characteristics of Athletes of Differente Geographical Conditions and It's Role in Sports Performance

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Abstract

The purpose of this study is to discover that the geographical conditions have significant effect on psychological variables of athletes. The environment is an important element instrumental in the effort to promote sports has always been acknowledged. However, neither there is any literature nor major efforts to establish the inter-relationship between environment and sports. A person's health locus of control orientation MHLC is one of several factors that determine which health-related behaviors a person will perform. These health-related behaviors, in turn, partially determine a person's health status. Thus, mediated by behavior, health locus of control orientation is theoretically an indirect determinant of health status. Because health beliefs are learned over the course of a lifetime, they are themselves a function of prior health status and one's health-related experiences, both personal and vicarious.

This study examined the psychometric difference of the Multidimensional Health Locus of Control Scale in a sample of national level athletes (N = 450; coastal area= 150, Plain area-150, Hill area= 150 men athletes). The ANOVA one-way test clearly indicates that the F- Value calculated (4.009) is higher than the tabulated value (3.02). There is significant relationship among the means of costal, plain & hill area players level in relation to their multidimensional locus of control level.

Key words: Cricket, Anthropometric, Fast Bowling Performance.

1. Introduction:

The purpose of this study is to find out the effect of deferent geographical conditions on the physical and physiological conditions of sports person and its impact on sports performance. It is important to note similarities as well as differences between the Characteristic of Athlete from Costal, plain & hill area and it's effect on their Sports Performance. For instance, such as climatic conditions. The purpose of this section is to describe the physiological responses to a number of environmental conditions during the performance of sporting activities. Human being is a product of the earth's surface. This means not merely that he is a child of the earth; earth has mothered , set task, directed thoughts, confronted with difficulties, that have strengthened the body and sharpened wits, gave problems of navigation and irrigation, at the same time whispered hints for their solution which he/ she has entered into his bones and tissues, into his mind and soul. On the mountain nature has given him leg muscles of iron to climb the slope and rough and uneven terrain, along the coast nature has left these weak and flabby but given him instead vigorous development of chest and arm to handle his paddle.

1.1 Objective of the Study:

The objective of the study was to find out relationship between selected anthropometric variables (height, weight, arm length, upper leg girth and lower leg girth) with the fast bowling performance.

1.2 Hypothesis of the Study:

It was hypothesized that there will be no significant relationship between selected anthropometric variables (height, weight, arm length, upper leg girth and lower leg girth) with fast bowling performance.

2. Methodology:

2.1 Selection of Subjects:

Four hundred fifty (450) male athletes of deferent games and sports, who have participated in National games, All India University games, Zonal games. level players were selected as a subject for our study.

One Hundred Fifty (150) subjects from different sports discipline form the state of Goa, Maharashtra, Kerala, Tamil Nadu and Andhra Pradesh (Coastal area). One Hundred Fifty (150) subjects from Uttar Pradesh, Haryana, Punjab, Rajasthan and Madhya Pradesh (Plain area) and One Hundred Fifty (150) were selected from Uttrakhand, Himachal Pradesh, Jammu and Kashmir, Assam, Mizoram, and Manipur (hill area). The age level of subjects ranged from 18 to 25 years.

All the subjects were residing at different geographical environment.

Subjects were selected from different team and individual games as: participant of National games, All India University games, Zonal games and State level games. Wrestling (67x3), Athletics (37x3), Boxing(17x3), Basket Ball(10x3), Yoga(13x3), Squash(6x3), (N=450). Ssubjects from each event filed all three questionnaires entirely and carefully and before filling the questionnaires athletes / subjects were instruct properly regarding and filling the questionnaires

2.2 Collection of Data:

The following variables have been selected for purpose of this study.

a. Independent Variables:

The independent variables for this study are the athletes who belongs from different geographical condition in India i.e. Plain area, Hill area and Costal area.

b. Dependent Variables:

The dependent variables in this study are

- Multidimensional Health Locus Of Control

On the basis of this dependent variable we will measure and do our comparative study.

2.3 Criterion Measures:

To measure health locus of control among athletes of deferent geographical condition and it's role in sports performance, Multidimensional Health Locus of Control Scales by Wallston, Stein and Smith.

2.4 Statistical Analysis:

For the purpose of the present study to know the nature of the data descriptive statistics i.e. mean, standard deviation & Analysis of Variance were calculated.

3. Result and Findings of the Study:

To find out MHCL among costal, plain & hill area players, descriptive statistics was used and presented in table-1.

TABLE-1

Descriptive statistics of Multi-Dimensional Health Locus of Control factor among costal, plain & hill area players

	Coastal Area	Plain Area	Hill Area
Mean	196.66	206.74	205.05
Variance	818.23	1460.44	991.67
Standard Deviation	28.60	38.21	31.49
Minimum	134	120	129
Maximum	272	300	271

- The above table shows the Mean value, Variance and Standard Deviation of Coastal Area is 196.66, 818.23 and 28.60 respectively.
- The Mean value, Variance and Standard Deviation of Plain Area is 206.74, 1460.44 and 31.49 respectively.
- The Mean value, Variance and Standard Deviation of Hill Area is 205.05, 991.67 and 31.49 respectively.
- Table also reads that the minimum value for multidimensional locus of control variable among costal area players were 134, whereas minimum values for plain area players were 120 and minimum values for hill players area 129. This table shows the maximum value for costal area players were 272, whereas maximum value for plain area players were 300 and maximum value for hill area players are 271.
- The reason behind high mean of plain area athletes have a better medical facility in comparison of coastal and hill areas. They tend to get better medical advice and equipment to sustain and recover in sports. Plain areas are much more developed and well connected which keep them updated in better ways to prevent and take proper care of health rules to follow with better nutrition advice, could be a reason for high average score in plain area.

To find out multidimensional locus of control among costal, plain & hill area players, analysis of variance statistics was used and presented in table-2.

TABLE-2

Analysis of variance in multidimensional locus of control among costal, plain & hill area players

Source of Variance	Degree of freedom	Sum of squares	Mean Squares	F-ratio	F-critical
Between Group	2	8740.49	4370.249	4.009	3.02
Within Group	447	487283.28	1090.12		

Tabulated value of F to be significant at .05 level for the degree of freedom (2,447) = 3.02

The value shown in table-2 clearly indicates that the F-Value calculated is higher than the tabulated value. There is significant relationship among the means of costal, plain & hill area players level in relation to their multidimensional locus of control level. Costal, plain and hill area through test was computed which are presented in the following tables.

TABLE-3

Comparison of multidimensional locus of control among costal, plain & hill area players

Coastal Area	Plain Area	Hill Area	Mean Difference
196.67	206.67		-10
196.67		205.05	-8.38
	206.67	205.05	1.62

This test to compare the multidimensional health locus of control among costal, plain & hill area players has clearly revealed the negative difference between the players of coastal area and plain area where the calculated mean difference found (-10), costal area and hill area where the calculated mean difference found (-8.38) plain area and hill area where the calculated mean difference found (1.62). Whereas the score did not reveal any significant difference between the players of non-costal and hill area. The calculated value reveal significant difference between the players of plain area to that of hill area as the required value was much higher than the calculated value at .05 level of significant. The scores are also illustrated in the figure-1

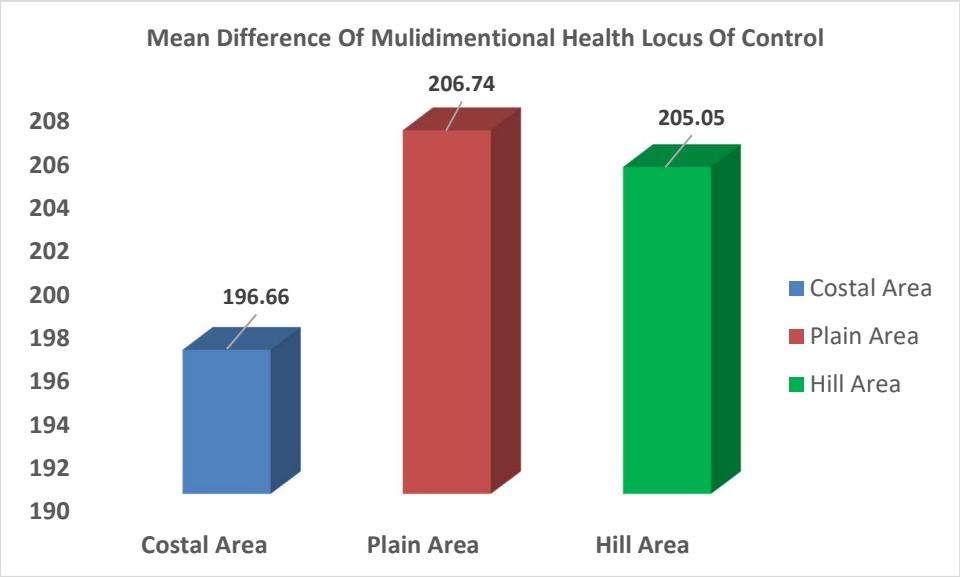

Figure-1

Mean difference mulidimentional health locus of control among coastal area, plain area and hill area athletes

4. Summary and Conclusion:

The study which I have undertaken with the purpose to collect the information regarding the study discovered that the geographical conditions have significant effect on psychological variables of athletes. The environment is an important element instrumental in the effort to promote sports has always been acknowledged. However, neither there is any literature nor major efforts to establish the inter-relationship between environment and sports.

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