

## A Study of Health Locus of Control among Female High and Low Performers University Athletes

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**Abstract:** The objective of this study was to compare the psychological variable upon health beliefs (Health Locus of Control) among female University level athletes. A total numbers of 100 athletes (50 track athletes and 50 field athletes) were selected from all India University athletics championship completed the Multidimensional health locus of control questionnaire containing measures of study variables, validated inside the country. After distributing and collecting the questionnaires among the athletes, independent sample t-test was used to find out the significance of difference among the high and low performers female athletes on above mentioned psychological variables. The findings of the statistical analysis revealed that high and low performance female athletes show significance difference ( $P < 0.05$ ) on internal health locus of control. It has been observed that there was no difference between powerful health locus of control and chance health locus of control among high and low performers' female athletes.

**Key words:** Health Locus of Control % Female University level Athletes

### INTRODUCTION

Health locus of control is one of the most widely used parameters of health belief for the planning of health education programs [1]. Originally the construct of health locus of control was derived from the Social Learning Theory developed by Rotter [2] in the social learning theory states that an individual learns on the basis of their history of reinforcement. In fact, the Health locus of control is the degree to which individual believe that his or her behaviour is controlled by external or internal factors [3, 4]. The Multidimensional HLC scales have been used as one of the most efficient measures of health-related beliefs for more than a quarter of a century. The Multidimensional health locus of control scales consist of two equal and parallel forms, A and B that are the general health locus of control scales [5]. Wallston, Stein and Smith [6] developed Form C of the MHLC in which they split the Powerful Others dimension into two subscales: Doctors and Other People [6]. Finally, Wallston *et al.* [7] added a new subscale assessing beliefs about God as a locus of control of one's health status.

Participation in organized physical activities is included among the external Protective factors that challenge and help young people employ and develop their inner strengths and resources [8-11]. Involvement in such activities has been shown to foster positive connection to peer and adults, enhance adolescents' physical, mental and psycho-social skills and protect them from a host of health risk behaviours [12, 13].

Individuals' health locus of control influences their own health-related behaviours, including health risk behaviour and adherence to recommended health care regimens [4, 15]. For example, adolescents with high internal control are more likely to abstain from risky behaviours such as smoking and drinking [16] and children suffering for asthma who perceive their ability to control their health more positively adhere to their recommended regimen [17]. Perrin and Shapiro (1985) studied differences among children with and without a chronic physical illness and especially among their parents; they found that learning occurs from experiences related to illness, resulting in an increased external orientation in locus of control beliefs [18].

They concluded that health care professionals should be made aware of the tendency for young children and for children with a chronic illness and their families, to rely heavily on providers, perhaps to the detriment of learning effective skills for independent health-related decision making.

Parents have an important role in the promotion of their children's health especially when their children are very young. It is therefore of interest to assess parental locus of control relative to children's health [19]. Parents are typically the primary agents in promoting their children's health, giving direct care, providing access to health services, modelling attitudes and behaviours that influence their children's well-being and instilling a lifelong orientation in health behaviours and future morbidity [20-22] In consequence, we studied health control in parents of young children.

Many studies have demonstrated that cultural and societal factors often influence people's health control beliefs. It is suggested that in cultures that assume significant others like family members as responsible in making health care decisions and interventions, people's belief of significant others' control becomes the predominant locus of control, which then becomes the main determinant of health behaviours and outcomes [25-28].

Norman *et al.* [28] have studied of Multidimensional health locus of control, health value and likelihood to participate in health behaviours in 11,632 individuals from the UK. Individuals scoring high on the internality scale were more likely to participate in a higher number of health behaviours. Those who believed that chance and fate played a large role in their health status were less likely to engage in preventative health behaviours. A strong belief in powerful others was found to be related to performance of fewer health behaviours reflecting the belief in the ability of the medical professional to cure illness and protect health [29].

## MATERIALS AND METHODS

In this section, Selection of subject, Administration of the test and Statistical Analysis procedure has been described.

**Participants:** This descriptive study was conducted based on the field research. All the samples of 100 Female athletes were randomly selected as subjects from

all India interuniversity athletic championship. (Track high and low performers = 50, field high and low performers = 50) 25 athletes were selected from each group. The subjects were oriented with the need and requirement of the study. The age of these participants ranged from 19 to 25 years

**Procedure:** The questionnaire was administered on the subjects, permission to collect data from organizing secretary all India inter-university athletic championship. The subjects were asked to complete a survey questionnaire. The purpose of the study was explained to athletes by the principal investigator during Data Acquisition. The High Performers were those who had succeeded in getting first eight positions in Track and Field events. Low Performers were those athletes who failed to qualify for the final rounds. The data from students were collected in groups. Help was offered when needed and responses were anonymous.

**Tool Used in the Study:** Multidimensional Health Locus of Control (MHLC).

This scale created by Wallston *et al.* [5] was administered to determine the study of casual beliefs relevant to health. The Multidimensional Health Locus of Control Scale (MHLC) scale is self-administered scale consists of two alternative forms (A and B) each of which contains 18 items. This three-factor scale was created with factors of internally (Internal health locus of control), powerful others (Powerful health locus of control) and chance (Chance health locus of control), all pertaining to the maintenance of health. Each dimension has six items that produce a possible range of scores of 6 to 36 per scale.

**Data Analysis:** The data thus collected were given to statistical treatment computing "t" ratio to find out the difference if any, between the experimental groups on health locus of control. The obtained results have been presented in the following table:

## RESULTS

As can be seen from table 1 there was strong significant difference has been observed between high and low performers female athletes on internal health locus of control.

Table 1: Indicating the mean difference on internal health locus of control among Female Track athletes

Experimental Groups	N	Mean	S.D.	't' Values	P
High Performers Track athletes	25	43.00	12.28	2.30	>0.05
Low Performers Track athletes	25	35.96	9.08		

[t] Cal, = 2.30

Table 2: Indicating the mean difference on Powerful health locus of control among Female Track athletes

Experimental Groups	N	Mean	SD	't'-values	P
High Performers Track athletes	25	43.88	11.13	.85	<0.05
Low Performers Track athletes	25	41.56	7.82		

[t] cal, = .85

Table 3: Indicating the mean difference on chance health locus of control among Female Track athletes

Experimental Groups	N	Mean	SD	't'-values	P
High Performers Track athletes	25	40.92	9.59	1.66	<0.05
Low Performers Track athletes	25	36.44	9.42		

[t] Cal, = 1.66

Table 4: Indicating the mean difference on internal health locus of control among Female Field athletes

Experimental Groups	N	Mean	SD	't'-values	P
High Performers field athletes	25	38.28	8.35	2.36	>0.05
Low Performers field athletes	25	33.24	6.58		

[t]cal, =2.36

Table 5: Indicating the mean difference on Powerful health locus of control Among Female Track athletes

Experimental Groups	N	Mean	SD	't'-values	P
High Performers field athletes	25	41.52	9.19	.96	<0.05
Low Performers field athletes	25	39.04	9.02		

[t]cal, =0.96 [t]tab, = 2.06

Table 6: Indicating the mean difference on chance health locus of control Among Female Track athletes

Experimental Groups	N	Mean	SD	't'-values	P
High Performers field athletes	25	37.92	12.40	.19	<0.05
Low Performers field athletes	25	37.36	7.39		

[t]cal, =.19

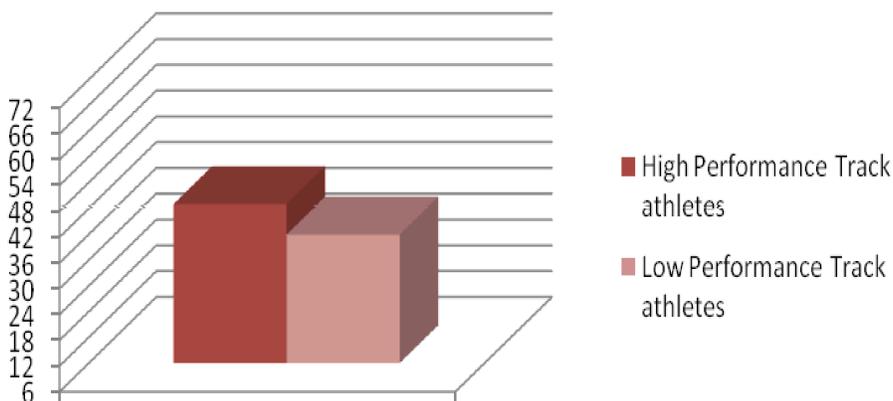


Fig. 1: Comparative status of high and low performer female track athletes on internal health locus of control

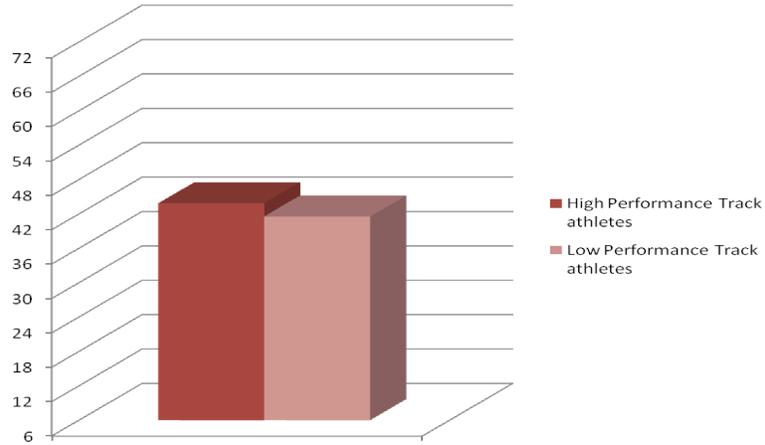


Fig. 2: Comparative status of high and low performer female track athletes on powerful health locus of control

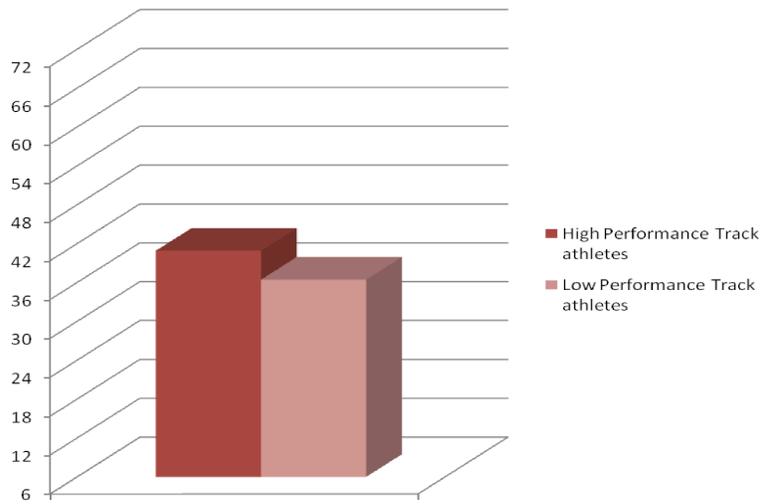


Fig. 3: Comparative status of high and low performer female track athletes on chance health locus of control

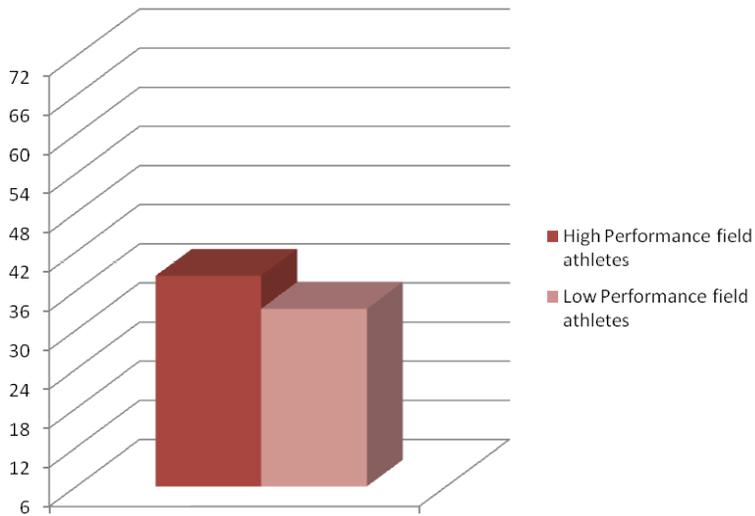


Fig. 4: Comparative status of high and low performer female field athletes on internal health locus of control

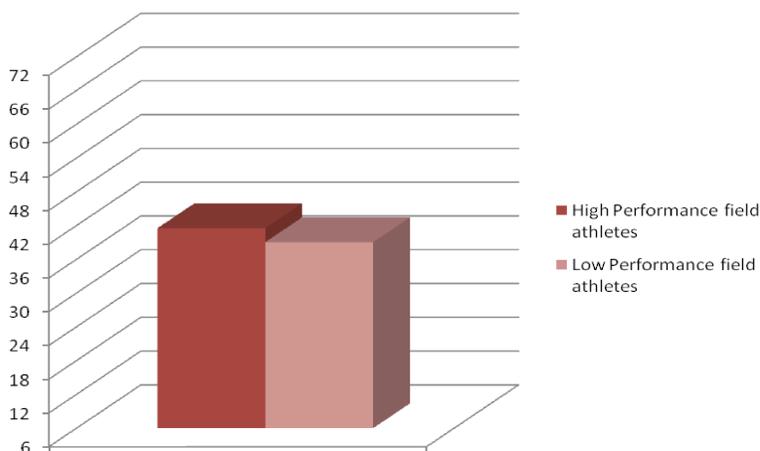


Fig. 5: Comparative status of high and low performer female field athletes on powerful health locus of control

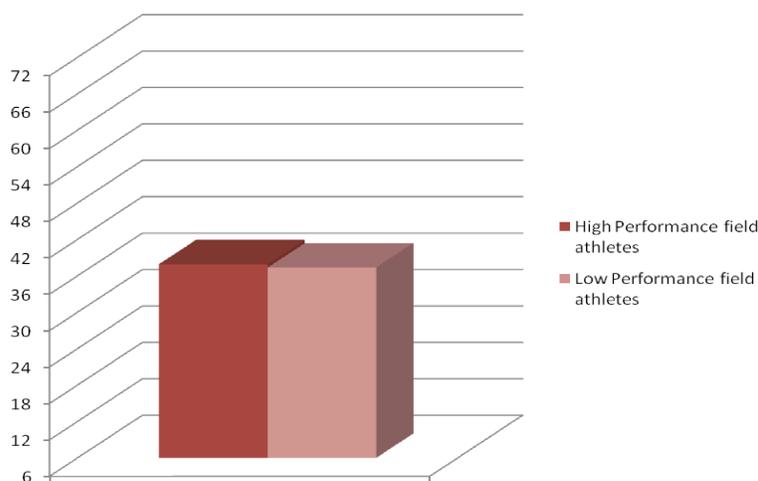


Fig. 6: Comparative status of high and low performer female field athletes on chance health locus of control

It may be seen from the above table 2 indicate, result revealed that  $t_{cal} = .85$  is less than  $t_{tab} = 2.06$ , we conclude that significant difference was not found between high and low performers female field athletes at 0.05 level of confidence.

Female track athlete's performance of both high and low performer groups are same.

Statistical Finding showed that there is a significant difference between high and low performers track athletes on level of internal health locus of control.

It is evident from table 5 there is no significant difference between high and low performer field athletes on the variable of powerful health locus of control.

There is no significant difference in the mean high and low performers' field athletes.

## DISCUSSION

Our purpose in the present study was to investigating various health conditions among high and low Performers female athletes. The obtained results have been presented in the following table:

As shown in table 1 that high performance female track athletes have high mean value ( $M= 43.00$ ) on internal health locus of control when compared to low performance female track athletes. The differences have emerged significant at 0.05 level of confidence.

It appears from the table 4 that high performance female field athletes have high mean value ( $M= 38.28$ ) on internal health locus of control when compared to low performance female field athletes ( $M= 33.24$ ). The difference has emerged be significantly at 0.05 level of confidence.

The multidimensional health locus of control scale has been used in number of studies investigating various health condition and behaviours with range of populations [23]. It is also found that high internals take an active responsibility for their own health and thus are like to engage in health promoting behavior. Those who score highly on the chance dimension tend to engage less in health protective and more in health damaging behaviours [23].

It has been depicted that no differences on powerful others and chance health locus of control, dimension of health locus of control. Wallston [23]. According to this theory, internal health locus of control refers to people's belief that their own behaviours exert influences on their health status, while external health locus of control refers to people's belief that health outcomes are dependent on other people's action or 'chance' variables such as luck and fate [24].

### CONCLUSION

The findings of the statistical analysis revealed that high and low performer's female athletes show significance difference ( $P < 0.05$ ) on internal health locus of control. It has been observed that there was no difference between powerful health locus of control and chance health locus of control among high and low performers' female athletes.

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- Follow this style in all references.

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