

A comparative study of Mental Toughness of Physical Education Teacher Trainees and Assam Police Trainees

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Abstract: The prime aim of the investigation was to compare Mental Toughness of Physical Education Teacher Trainees and Assam Police Trainees (AP). To obtain the data researchers selected total sixty four (64) subjects, thirty two ($n_1=32$) male Physical education Teacher trainees from Centre for Studies in Physical Education and sports, Dibrugarh University and thirty two ($n_2=32$) male Assam Police trainees from 2nd Assam Police Battalion Camp, Makum, Tinsukia, Assam, India between the 19-22 years age. The study was delimited to assessment of Mental Toughness by using questionnaire mental toughness by Dr. Alan Goldberg (1998). The Independent t-test was applied to assess the differences between the groups. The level of significance was set at 0.05 of confidence. Results revealed statistically significant differences between the two groups of overall mental toughness ($t_{0.05} (62) = 7.55 > 1.67$) and also significant difference was found sub-variable i.e. Motivation ($6.26 > 1.67$), ability to handle the pressure ($33 > 1.67$), concentration ($8.44 > 1.67$), confidence ($8.05 > 1.67$) and Rebound ability ($3.28 > 1.67$).

Keywords: Mental Toughness, Physical education Teacher trainees, Assam Police Trainees.

INTRODUCTION

The term Mental toughness is often used to describe a collection of psychological characteristics thought to be central to high performance [1, 2]. Mental toughness is the capacity of an individual to deal effectively with stressors, pressures and challenges and perform the best of their ability, irrespective of the circumstances in which they find themselves [3]. Both athletes and coaches admitted that at least fifty percent of the success is influenced by psychological factors that are related to mental toughness [4]. When two teams who share the same strength, skills and tendency to win, 90% of the determining factor to be the champion depends on the mental aspect. Mental toughness is the most important psychological attribute in determining success.

Research has identified mental skills that distinguish between more and less successful performers across a number of sports such as, golf [5], rodeo and equestrian [6]. According to Loehr [4], mentally tough performers are disciplined thinkers who respond to pressure in ways which enable them to remain feeling relaxed, calm and energised because

they have the ability to increase their flow of positive energy in crisis and adversity.

Many coaches suggested mental toughness as a quality that must be considered in the recruitment of athletes as described by Weinberg, Butt, & Culp [1].

MATERIALS AND METHODS

Subjects

Total sixty four ($N=64$) were selected as subjects. The age of the subjects was ranging from 19-22 years. They were further divided into two groups of thirty two ($n_1=32$) male Physical Education Teacher Trainees from Centre for Studies in Physical Education and Sports, Dibrugarh University and thirty two ($n_2=32$) male Assam Police trainees from 2nd Assam Police Battalion Camp, Makum, Tinsukia. The study was delimited to assessment of mental toughness by using questionnaire mental toughness by Dr. Alan Goldberg [7]. The purposive sampling technique was used for the collection of the data. All the subjects, after having been informed about the objective and protocol of the study, gave their consent and volunteered to participate in this study.

Tools

To measure the level of mental toughness of the subjects, the mental toughness Questionnaire constructed by Goldberg [7] was administered.

Statistical technique

The independent 't' test was applied to find out the significant differences between the two groups. To test the hypotheses, the level of significance was set at 0.05

Table-1: Significant differences in the Mean scores of variables of Mental Toughness between Physical Education Teacher Trainees and Assam Police trainees

Variables	Physical Education Teachers Trainees		Assam Police Trainees		Mean Differences	Standard Error	t-ratio
	Mean	SD	Mean	SD			
Rebound ability	3.28	1.41	1.25	0.75	2.03	0.28	7.25*
Ability to Handle Pressure	3.46	1.41	1.15	0.71	2.31	0.07	33*
Concentration	4.21	1.89	1.34	0.46	2.87	0.34	8.44*
Confidence	4.25	0.95	2.88	0.17	1.37	0.17	8.05*
Motivation	3.87	1.13	5.31	0.72	1.44	0.23	6.26*
Overall Mental Toughness	19.15	4.90	12.12	1.08	7.03	.092	7.55*

*Significant at 0.05 level; Tabulated $t_{0.05}(62) = 1.67$

Rebound ability

Table-1 presents the results of Physical Education Teacher Trainees and Assam Police trainees of mental toughness. The study shows that the Mean and SD values of Physical education teachers trainees on the sub-variable rebound ability as 3.28 and 1.41 respectively. However, Assam Police trainees had Mean and SD values as 1.25 and 0.75 respectively.

The 't'-value 7.25 as shown in the table above was found statistically significant at 0.05 level of confident.

Ability to Handle Pressure

The result statistically shows that the Mean and SD values of Physical education Teacher Trainees on the sub-variable Ability to Handle Pressure as 3.46 and 1.41 respectively. However, Assam Police Trainees had Mean and SD values as 1.15 and 0.71 respectively. The 't' value 33 as shown in the table above was found statistically significant at 0.05 level of confident.

Concentration

The result statistically shows that the Mean and SD values of Physical Education Teacher on the sub-variable concentration as 4.21 and 1.89 respectively and Assam Police trainees had Mean and SD values as 1.34 and 0.46 respectively. The 't'-value

8.44 as shown in the table above was found statistically insignificant at 0.05 level of confident.

Confidence

The result shows that the Mean and SD values of Physical Education Teacher Trainees on the sub-variable confidence as 4.25 and 0.95 respectively. However, Assam Police trainees had Mean and SD values as 0.17 and 1.37 respectively. The 't'-value as 8.05 shown in the table above was found statistically significant at 0.05 level of confident.

Motivation

Statistically it shows that the Mean and SD values of Physical Education Teacher Trainees on the sub-variable motivation as 3.87 and 1.13 respectively. However, Assam Police trainees had Mean and SD values as 5.31 and 0.72 respectively. The 't'-value 6.26 as shown in the table above was found statistically significant at 0.05 level of confident.

Overall Mental Toughness

The result statistically shows that the Mean and SD values of Physical Education Teacher Trainees on the overall mental toughness as 19.15 and 4.90 respectively. However, Assam Police trainees had Mean and SD values as 12.12 and 1.08 respectively. The 't'-value 7.55 as shown in the table above was found statistically significant at 0.05 level of confident.

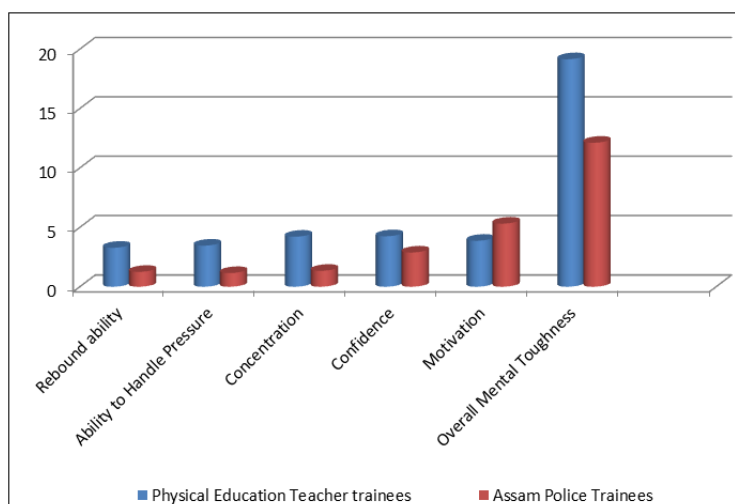


Fig-1: Graphical representations in Mean scores of Mental Toughness of Physical Education Teacher Trainees and Assam Police Trainees

DISCUSSION ON FINDINGS

It is cleared from the findings of table-1 that significant differences have been observed on the overall mental toughness between the two groups and also found significant differences among the sub-variables; rebound ability, ability to handle pressure, concentration, confidence and motivation. The finding of above results may due to the difference nature of Physical activities of Physical education Teacher trainees and Assam Police Trainees. All the subjects of Physical Education Teacher Trainees are from the background of players of different games and sports i.e. state level and National Level.

On the hand maximum subjects of the Assam Police Trainees are from the Non- sports participant. The finding of results fall in line with the study of Narimani and Ghaffari [8] compared mental toughness and aggression in martial arts and football players and non-athletes. The results of the study showed that there was a significant difference between athletes and non-athletes in mental skills in favor of athletes. Kuan *et al.*, [9], the athletes who were mental toughness were more likely to be selected into main teams to play in crucial competition. Gould *et al.*, [10] indicated that coaches felt the importance of being mentally tough in achieving success in sports.

CONCLUSIONS

On the basis of the finding it is concluded that there is significant difference between Physical Education Teacher Trainees and Assam Police Trainees on over all mental Toughness ($t_{0.05} (62) = 7.55 > 1.67$) and also sub-variable i.e. Motivation ($6.26 > 1.67$), ability to handle the pressure ($3.3 > 1.67$), concentration ($8.44 > 1.67$), confidence ($8.05 > 1.67$) and Rebound ability ($3.28 > 1.67$).

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