A comparative study of selected psychological variables among junior national level long jump and high jump athletes

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Abstract

The aim of this study was a comparative study of selected psychological variables among junior national level long jump and high jump athletes. The data was collected through questionnaire method and the total subjects were selected simple random method and 200 boys junior national level athlete and the age group is 18 years to 20 years. They are equally divided in two groups. That is one is 100 athletes in long jump and 100 athletes in high jump. Selected from junior national level athletic championships during the academic year 2015-2016. The tools is Eysenck's Personality Questionnaire (EPQ), State Trait Anxiety Test Inventory (STAT), and Self-Concept Questionnaire (SCQ). These questionnaires are used for the measure psychological variable among junior national level long jump and high jump athletes. The data is interpreted through SPSS statistic software and then use the statistical tools for mean, Standard Deviation (SD) and T-Value and t-ration was employed at 05 level confidence.

Keywords: Psychotics, neuroticism, extroversion, introversion

Introduction

Psychology is the scientific study of mind and behavior. The word psychology comes from the Greek words psyche, meaning life, and logos, meaning explanation. Psychology is a popular major for students, a popular topic in the public media, and a part of our everyday lives. Personality is derived from the word “persona which means theatrical mask which the dramatic persons i.e. actors used in a play in the days of ancient Greek civilization later it was used by Romans. Eysenck defined personality as the more or less a reflection of a person’s character. His thinking, intelligence and his physical appearance which shows his adjustment to the surroundings he is moving. Personality can be the image got or created to show to the outer world. It can also be the changes in the human behavior as he matures and in the environment he is developed.

The Extraversion is a personality trait. The extrovert person’s orientation is towards the external world. He deals with the people intelligently and smartly. He is a relax guy, friendly and socially active. In Eysenck’s term Extraversion stands for central excitatory / inhibitory level and sociability.

If you have depression you can feel low, lack motivation and energy, have feelings of guilt and may experience a loss of appetite or sleep. If you have severe clinical depression, you may experience psychotic symptoms which are usually particularly pessimistic and self-blaming, such as believing that you are responsible for something when you are not.

Neuroticism is a long-term tendency to be in a negative emotional state. People with neuroticism tend to have more depressed moods - they suffer from feelings of guilt, envy, anger and anxiety, more frequently and more severely than other individuals. Neuroticism is the state of being neurotic. Those who score highly on neuroticism tend to be particularly sensitive to environmental stress and respond poorly to it. They may perceive every day, run-of-the-mill situation as menacing and major; trivial frustrations are problematic and may lead to despair.

Self-concept is the way people think about themselves. It is unique, dynamic, and always evolving. This mental image of oneself influences a person’s identity, self-esteem, body
image, and role in society. As a global understanding of oneself, self-concept shapes and defines who we are, the decisions we make, and the relationships we form. Self-concept is perhaps the basis for all motivated behavior [16]. The increased stress of games can harm players both physically and mentally, that can have negative impact on their performance. They may become tense, heart beats may change, heavy sweating, getting worried about the matches, they find it hard to concentrate on the game. Sports psychology deals with mental strength and how the pressure can be handled. But it can also happen that nothing is working and only few motivational words before the match can change the game positively.

Anxiety is a part of psychological factor is a complex emotional state associated by fear and tension. Anxiety plays an important role in human behavior, it is the main problem. Anxiety is an unpleasant state of inner turmoil and apprehension, often accompanied by nervous behavior, such as pacing back and forth, somatic complaints and rumination. It is the subjectively unpleasant feelings of dread over something unlikely to happen, such as the feeling of imminent death. Anxiety is feeling unrealistic fear, worry, and uneasefulness, usually generalized and unfocused. It is often accompanied by restlessness, fatigue, problems in concentration, and muscular tension.

Modern sport gives more importance to the psychology and fitness of the players as both the factors play important role in a game. Physical trainers and coaches think that psychological preparation can increase the chance of success in the competitions. Several studies revealed that the mind, environment, psychological variables and the level of performance is dependent upon the player psychological makeup.

Methodology

The Primary and Secondary data use for the present study. Use the Psychological Test that is the Eysenck’s Personality Questionnaire-R (EPQ-R) by H. J Eysenck, State-Trait Anxiety Test (STAT), and Self-Concept Questionnaire (SCQ). These questionnaires are used for the measure psychological variable among Junior National level Long jump and High jump Athletes. The Eysenck’s Personality Questionnaire (EPQ-R) for the validity for boy is P=5.66±4.02, E=10.67±5.22, N=13.39±6.06, L=9.62±5.12 and their reliability of boy is R=83, E=90, N=89 & L=86. The State-Trait Anxiety Test Inventory (STAT) validity is Gp=.85, M=.77, S=.80, S=.77, T=.73 and their reliability is Dimension wise Gp=.93, M=.87, S=.82, S=.86, T=.92 the total score=.33, and that same of self-concept questionnaire (SEQ) for the validity is .91 and their reliability is less than 80%.

Questionnaire were distributed to the Junior National Level Athletes Long jump and High jump, investigator gave the instruction and introduced to rules and norms for the related questionnaire before filling all questionnaire from the Athletes. Then statically analyses on collected data filling by the Athletes.

Statistical Analysis and Result

T-ratio will be computed to compare the significant differences between Long jump and High jump Athletes. To examine significant difference in Long jump and High jump Athletes t-ratio was employed at 0.05 level of confidence (or suitable test), t-Test for Difference of two Mean.

The significant Personality difference between Junior National Level Long jump and High jump Athletes with regards to Psychotics

Null Hypothesis: H0: There is no significant personality difference between Long jump and High jump Athletes with regards to Psychotics average score.

Alternative Hypothesis: H1: There is significant personality difference between Long jump and High jump athletes with regards to psychic’s average score.

<table>
<thead>
<tr>
<th>Players</th>
<th>Numbers</th>
<th>Mean</th>
<th>S.D</th>
<th>T-Test P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long jump</td>
<td>100</td>
<td>8.72</td>
<td>3.77</td>
<td>0.005</td>
</tr>
<tr>
<td>High jump</td>
<td>100</td>
<td>6.98</td>
<td>3.11</td>
<td></td>
</tr>
</tbody>
</table>

(Statistical analysis with SPSS Software)

Result

The 100 Long jump Athletes we observe that P-Value = 0.005 is less than the alpha (α) level (=5%).

H0: There is no significant personality difference between Long jump and High jump athletes with regards to psychic’s average score. This hypothesis is rejected. There is significant personality difference between Long jump and High jump Athletes with regards to psychic’s average score.

The significant Personality difference between Junior National Level Long jump and High jump Athletes with regards to Neuroticism

Null Hypothesis: H0: There is no significant personality difference between Long jump and High jump Athletes with regards to Neuroticism average score.

Alternative Hypothesis: H1: There is significant personality difference between Long jump and High jump athletes with regards to neuroticism average score.

<table>
<thead>
<tr>
<th>Players</th>
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<td>High jump</td>
<td>100</td>
<td>6.98</td>
<td>3.11</td>
<td></td>
</tr>
</tbody>
</table>

(Statistical analysis with SPSS Software)
Alternative Hypothesis: H1: There is significant personality difference between Long jump and High jump athletes with regards to Neuroticism average score.

<table>
<thead>
<tr>
<th>Players</th>
<th>Numbers</th>
<th>Mean</th>
<th>S.D</th>
<th>T-Test</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Jump</td>
<td>100</td>
<td>9.94</td>
<td>4.16</td>
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<tr>
<td>High Jump</td>
<td>100</td>
<td>9.85</td>
<td>3.2</td>
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<td></td>
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</table>

(Significant value 0.05*)
(Statistical analysis with SPSS Software)

Result
We observe that P-Value = 0.864 is greater than the alpha (α) level (=5%).
∴ We accept H0.

There is no significant personality difference between Long jump and High jump athletes with regards to Neuroticism average score.

Table 3: Athletes Extraversion Score Summary

<table>
<thead>
<tr>
<th>Players</th>
<th>Numbers</th>
<th>Mean</th>
<th>S.D</th>
<th>T-Test</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Jump</td>
<td>100</td>
<td>14.06</td>
<td>3.3</td>
<td>0.552</td>
<td></td>
</tr>
<tr>
<td>High Jump</td>
<td>100</td>
<td>14.33</td>
<td>3.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Significant value 0.05*)
(Statistical analysis with SPSS Software)

Result
We observe that P-Value = 0.552 is greater than the alpha (α) level (=5%).
∴ We accept H0.

There is no significant personality difference between Long jump and High jump athletes with regards to Extraversion average score.

Null Hypothesis: H0: There is no significant personality difference between Long jump and High jump athletes with regards to Extraversion average score.

Alternative Hypothesis: H1: There is significant personality difference between Long jump and High jump athletes with regards to Extraversion average score.

Table 4: Athletes Lie Score Summary

<table>
<thead>
<tr>
<th>Players</th>
<th>Numbers</th>
<th>Mean</th>
<th>S.D</th>
<th>T-Test</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Jump</td>
<td>100</td>
<td>11.98</td>
<td>2.47</td>
<td>0.141</td>
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</tr>
<tr>
<td>High Jump</td>
<td>100</td>
<td>11.38</td>
<td>2.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Significant value 0.05*)
(Statistical analysis with SPSS Software)

Result
We observe that P-Value = 0.141 is greater than the alpha (α) level (=5%).
∴ We accept H0.

There is no significant personality difference between Long jump and High jump athletes with regards to Lie score average score.

Conclusions
1. There is significant personality difference between Long jump and High jump athletes with regards to psychotic's average score.
2. There is no significant personality difference between Long jump and High jump Athletes with regards to neuroticism average score.
3. There is no significant personality difference between Long jump and High jump Athletes with regards to extraversion average score.
4. There is no significant personality difference in average lie score between Tennis and Badminton players.
5. There is no significant anxiety difference between Long jump and High jump Athletes.
6. There is no significant difference of self-concept between Long jump and High jump Athletes places.

Reference