Personality correlates of health related physical fitness awarness of elite track & field athletes

SK Hilaluddin and Sajal Maji

Abstract
The purpose of the study was, “Personality correlates of health related physical fitness awarness of elite track & field athletes”. The Researcher selected the three sports clubs viz. Pune Athletic Club (Sarasbaug), Sarasbaug Sports Club and Balewadi Sports Club (Balewadi) for data collection considering purposive sampling technique. Further, total thirty (n= 30) elite male track and field athletes, age 18-24 yrs, representing three different sports clubs from Pune city were selected considering random sampling technique i.e., 10 athletes from each of the three clubs for research purpose. After that researcher collects the data, from those athletes with the help of Personality and HRPF awareness questionnaire. After the data collection the researcher analysis the data with the help of descriptive statistics (Pearson’s product moment correlation method). To the personality correlate and awarness of track & field athletes.

Keywords: Personality, physical fitness awarness, track & field athletes

Introduction
Track and field is a sport which includes athletic contests established on the skills of running, jumping, and throwing. The name is derived from the sport's typical venue: a stadium with an oval running track enclosing a grass field where the throwing and jumping events take place. Track and field is categorized under the umbrella sport of athletics, which also includes road running, cross country running, and race walking. The foot racing events, which include sprints, middle- and long-distance events, race walking and hurdlng, are won by the athlete with the fastest time. The jumping and throwing events are won by the athlete who achieves the greatest distance or height. Regular jumping events include long jump, triple jump, high jump and pole vault, while the most common throwing events are shot put, javelin, discus and hammer. There are also "combined events" or "multi events", such as the pentathlon consisting of five events, heptathlon consisting of seven events, and decathlon consisting of ten events. In these, athletes participate in a combination of track and field events. Most track and field events are individual sports with a single victor; the most prominent team events are relay races, which typically feature teams of four. Events are almost exclusively divided by gender, although both the men's and women's competitions are usually held at the same venue. It is one of the oldest sports. In ancient times, it was an event held in conjunction with festivals and sports meets such as the Ancient Olympic Games in Greece. In modern times, the two most prestigious international track and field competitions are athletics competition at the Olympic Games and the IAAF World Championships in Athletics. The International Association of Athletics Federations is the international governing body [1].

The sport of track and field has its roots in human prehistory. Track and field-style events are among the oldest of all sporting competitions, as running, jumping and throwing are natural and universal forms of human physical expression. The first recorded examples of organized track and field events at a sports festival are the Ancient Olympic Games. At the first Games in 776 BC in Olympia, Greece, only one event was contested: the stadion footrace. The scope of the Games expanded in later years to include further running competitions, but the

1 Mike Rosenbaum, “Introductions to track and field events”. (New York: BBC publisher), 2014, p. 45.
introduction of the Ancient Olympic pentathlon marked a step towards track and field as it is recognized today—it comprised a five-event competition of the long jump, javelin throw, discus throw, stadion footrace [2], and wrestling [1]. Track and field events were also present at the Panhellenic Games in Greece around this period, and they spread to Rome in Italy around 200 BC. After the period of Classical antiquity (in which the sport was largely Greco-Roman influenced) new track and field events began developing in parts of Northern Europe in the middle Ages. The stone put and weight throw competitions popular among Celtic societies in Ireland and Scotland were precursors to the modern shot put and hammer throw events. One of the last track and field events to develop was the pole vault, which stemmed from competitions such as the Fierljeppen contests in the Northern European Lowlands in the 18th century [3].

That same year, the International Amateur Athletic Federation (IAAF) was established, becoming the international governing body for track and field, and it enshrined amateurism as one of its founding principles for the sport. The National Collegiate Athletic Association held their first Men's Outdoor Track and Field Championship in 1921, making it one of the most prestigious competitions for students, and this was soon followed by the introduction of track and field at the inaugural World Student Games in 1923. The first continental track and field competition was the 1919 South American Championships, which was followed by the European Athletics Championships in 1934 [5]. For most people, personality is “what makes one individual different from another”. The statement like “Mahatma Gandhi was a great personality”, “our history teacher does not possess and impressive personality”, and Shyam has no personality at all” are generally heard which speak volumes about individual differences which exist among people. Based on these descriptions, personality seems to refer to an 'attribute that people possess in large or small quantities, nor is it a concrete thing that one is – a sum total of all his traits and attributes which go to make him a unique individual like anyone else [6].

Methodology

This chapter contains the method of research design, population, sample, tools used for research apparatus or instrument employed statistical tools and procedures systematically. The study was conducted to establish the relation between personality and health related physical fitness awareness of track and field athletes belonging to Pune city. Standard procedure was followed to conduct this study. The data were collected with the help of standard questionnaires viz., HRPF (health related physical fitness) awareness and 16 PF. The methodology in details is given below.

Research design

This is a correlation study under the descriptive research. In this research, the investigator established the relationship between personality and health related physical fitness awareness of athletes of Pune city. The two variables were assessed by two separate questionnaire.

Selection of the subject

Sample

Out of the population, the researcher selected only three sports clubs viz. Pune Athletic Club (Sarasbaug), Sarasbaug Sports Club and Balewadi Sports Club (Balewadi) for data collection considering purposive sampling technique. Further, total thirty (n= 30) elite male track and field athletes, age 18-24 yrs, representing three different sports clubs from Pune city were selected considering random sampling technique i.e., 10 athletes from each of the three clubs.

Variables

There were two dependent variables as follows:-

- Personality.
- Physical fitness awareness.

Tools used

The researcher has gone through the available literature in the library, reports of previous research studies and web. Further, after a thorough discussion with the research guide, following questionnaires for survey have been chosen, which is easy to conduct in the field situation and requires minimum assistants, less money and less time.

The standard questionnaires administered in this study are given below.

<table>
<thead>
<tr>
<th>Criterion measures</th>
<th>Author</th>
<th>Questionnaire</th>
<th>Sl. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>T. K. Bera (2005)</td>
<td>HRPF awareness</td>
<td>1</td>
</tr>
<tr>
<td>Points</td>
<td>Raymond B Cattell (1943)</td>
<td>16 PF (Personality factors)</td>
<td>2</td>
</tr>
</tbody>
</table>

- The standard 16 PF questionnaire constructed by Raymond B Cattell with accepted level of reliability (0.92) and Validity (0.82) was the tool for the present study. There were 187 test items which were assessed with three points scale.
- Another standard questionnaire was health related physical fitness awareness, which was developed by T. K. Bera with the accepted level of reliability (0.74) and Validity (0.82). There were 25 test items which were assessed with three points scale.

Data collection

The researcher carried an authorization letter from the Principal of Bharati Vidyaapeeth University’s College of Physical Education, Pune and met the coaches / Heads of the other sports clubs situated in Pune city. After receiving permission from the Heads of the respective institutes/clubs, the researcher finalized the schedules (i.e., date and time) for data collection. However, prior to data collection, the researcher discussed with the subjects about the purpose of this research project and the steps for data collection. The students’ doubts, if any, were clarified. The athletes were asked to fill up HRPF and 16 PF questionnaires. Now the scores were preserved for data analysis.

Statistical Design

Descriptive statistics have been employed to process the data.

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Further, to establish relationship between the scores of personality and physical fitness awareness, Pearson’s product moment correlation method was employed.

**Data analysis**

To find out the relationship of personality and physical fitness awareness of elite track and field athletes, Pearson product moment correlation method was applied. The mean and standard deviation of both the groups for the above mentioned items were calculated. The scores of personality and physical fitness awareness were computed for determination of correlation of coefficients.

In order to determine the significance of relationship between scores of HRPF awareness and 16 PF, the level of significance was set at 0.05.

### Descriptive statistics of HRPF awareness and 16 PF of runners

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Variable</th>
<th>No. of Runners</th>
<th>SD</th>
<th>Mean</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HRPF awareness (Points)</td>
<td>13</td>
<td>6.16</td>
<td>62.62</td>
<td>0.160</td>
</tr>
<tr>
<td>2</td>
<td>16 PF (Personality) (Points)</td>
<td>13</td>
<td>11.47</td>
<td>167.54</td>
<td></td>
</tr>
</tbody>
</table>

Represents the relationship of two variables (HRPF awareness and 16 PF) of the athletes participated in running event. Total number of such athletes was thirteen (n=13). However, for the athlete of running event, the mean value of HRPF awareness was 62.62 (points) and the SD value was 6.16, whereas for the 16 PF the mean and SD values of these athletes were 167.54 and 11.47 respectively. Further, the coefficient of relationship between the personality and physical fitness awareness as obtained was 0.160 which was not statistically significant even at the 0.05 level (r=0.160, p>0.05), because the calculated value (r=0.160) is less than the tabulated value (r=0.514). These findings in turn suggest that the runners personality has no relation with the physical fitness awareness.

![Graphical representation of mean values of HRPF awareness and 16 PF of runners](image)

The result as presented in Fig.4.1 also indicates similar findings, although there were differences in the mean values of the physical fitness awareness and the personality of the runners. This, in turn, suggests that there was no relationship between the scores of physical fitness awareness and the personality.

### Descriptive statistics of HRPF awareness and 16 PF of Jumpers

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Variable</th>
<th>Number of Jumper</th>
<th>SD</th>
<th>Mean</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HRPF awareness (Points)</td>
<td>11</td>
<td>5.33</td>
<td>57.92</td>
<td>0.227473</td>
</tr>
<tr>
<td>2</td>
<td>16 PF (Personality) (Points)</td>
<td>11</td>
<td>12.35</td>
<td>153.25</td>
<td></td>
</tr>
</tbody>
</table>

Represents the relationship of two variables (HRPF awareness and 16 PF) of the athletes participated in jumping event. Total number of such athletes was eleven (n=11). However, for the athlete of jumping event, the mean value of HRPF awareness was 57.92 (points) and the SD value was 5.33, whereas for the 16 PF the mean and SD values of these athletes were 153.25 and 12.35 respectively. Further, the coefficient of relationship between the personality and physical fitness awareness as obtained was 0.227 which was not statistically significant even at the 0.05 level (r=0.227, p>0.05), because the calculated value (r=0.227) is less than the tabulated value (r=0.553). These findings in turn suggest that the jumpers’ personality has no relation with the physical fitness awareness.
The result as presented in Fig. 4.2 also indicates similar findings, although there were differences in the mean values of the physical fitness awareness and the personality of the jumper. This, in turn, suggests that there was no relationship between the scores of physical fitness awareness and the personality.

Descriptive statistics of HRPF awareness and 16 PF of throwers

<table>
<thead>
<tr>
<th>Correlation</th>
<th>SD</th>
<th>Mean</th>
<th>Number of Thrower</th>
<th>Variables</th>
<th>Sl. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.807</td>
<td>3.61</td>
<td>60.33</td>
<td>6</td>
<td>HRPF awareness (Points)</td>
<td>1</td>
</tr>
<tr>
<td>13.16</td>
<td>164.83</td>
<td>6</td>
<td>16 PF (Personality) (Points)</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Represents the relationship of two variables (HRPF awareness and 16 PF) of the athletes participated in throwing event. Total number of such athletes was six (n=6). However, for the athlete of throwing event, the mean value of HRPF awareness was 60.33 (points) and the SD value was 3.61, whereas for the 16 PF the mean and SD values of these athletes were 164.83 and 13.16 respectively. Further, the coefficient of relationship between the personality and physical fitness awareness as obtained was 0.807 which was statistically significant even at the 0.05 level (r=0.807, p>0.05), because the calculated value (r=0.807) is more than the tabulated value (r=0.707). These findings in turn suggest that the jumpers personality has relation with the physical fitness awareness.

The result as presented in Fig. 4.3 also indicates similar findings, although there were differences in the mean values of the physical fitness awareness and the personality of the throwers. This, in turn, suggests that there has relationship between the scores of physical fitness awareness and the personality.

Descriptive statistics of HRPF awareness and personality of running, jumping and throwers

<table>
<thead>
<tr>
<th>Correlation</th>
<th>SD</th>
<th>Mean</th>
<th>Number of athletes</th>
<th>Variables</th>
<th>Sl. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.267</td>
<td>5.37</td>
<td>62.37</td>
<td>30</td>
<td>HRPF awareness (Points)</td>
<td>1</td>
</tr>
<tr>
<td>11.74</td>
<td>166.87</td>
<td>30</td>
<td>16 PF (Personality) (Points)</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
Represents the relationship of two variables (HRPF awareness and 16 PF) of the athletes participated in running, jumping and throwing event. Total number of such athletes was thirty (n1=30). However, for the athlete of running, jumping and throwing event, the mean value of HRPF awareness was 62.37 (points) and the SD value was 5.37, whereas for the 16 PF the mean and SD values of these athletes were 166.87 and 11.74 respectively. Further, the coefficient of relationship between the personality and physical fitness awareness as obtained was 0.267 which was not statistically significant even at the 0.05 level (r=0.267, p>0.05), because the calculated value (r=0.267) is less than the tabulated value (r=0.349). These findings in turn suggest that the runners, jumpers and throwers personality has no relation with the physical fitness awareness.

The result as presented in also indicates similar findings, although there were differences in the mean values of the physical fitness awareness and the personality of the runners, jumpers and throwers. This, in turn, suggests that there were no relationship between the scores of physical fitness awareness and the personality.

**Discussion of Findings**

Keeping in mind the importance of the test taken for relation between personality and physical fitness awareness, the researcher has conducted this piece of research. There were 30 athletes from different sports coaching clubs of Pune city. Relationship between personality and physical fitness awareness has been measured by using two separate questionnaires and the score were recorded in marks.

Personality of athletes consists of different types of traits and physical fitness awareness depends upon different types of factors which makes every individual athlete differ from each other. It was, therefore, thought to determine the relationship of these two important aspects of human beings. In fact, logically both these variables must be related with each other. However, the result revealed that there is no relationship between personality and physical fitness awareness, because the calculated value (0.267) is less than the tabulated value (0.349).

The results further confirmed that no statistically significant relationship was seen between the scores of overall personality and overall physical fitness awareness exclusively for runners, because the calculated value (0.160) is less than the tabulated value (0.514). Similar result was evident in the case of athletes of jumping event, where there was no relationship between personality and physical fitness awareness, because the calculated value (0.227) is less than the tabulated value (0.553).

It was thought that there must be a significant relationship between personality and physical fitness awareness of the athletes of throwing event, but amazingly the calculated value (0.807) is more than the tabulated value (0.707) and hence there was no significant relationship between the variables of throwers.

**Discussion of hypothesis**

HO1:- In case of runners, jumpers and throwers since calculated value of ‘r’ is less than tabulated value (0.349) the null hypothesis has been refuted at 0.05 level of significance.

HO2:- In case of runners, since calculated value of ‘r’ is less than tabulated value (0.514) the null hypothesis has been refuted at 0.05 level of significance.

HO3:- In case of jumpers, since calculated value of ‘r’ is less than tabulated value (0.553) the null hypothesis has been discarded at 0.05 level of significance.

HO4:- In case of throwers, since calculated value of ‘r’ is more than tabulated value (0.707) the null hypothesis may be accepted at 0.05 level of significance.

**Summary**

In this chapter the contents of the entire previous chapters has been illustrated.

The purpose of the study has been to assess relation between personality and physical fitness awareness of track & field athletes in Pune city. For this purpose, 30 male subjects were selected as a sample. The age group of subjects was ranged in between 18-24 years. Considering the steps of correlation study, the data have been collected by the researcher and analyzed through Mean, Standard Deviation and correlation methods. The level of significance has been set at 0.05 level of confidence.

The 16 PF oriental questionnaire developed by Raymond B Cattell was collected from national psychological corporation, Agra, test was selected for the collection of data because it was found to be most reliable and have been very often used in research in profession physical education and sports.

The HRPF awareness questionnaire developed by T K Bera was selected for the collection of data because it was found to
be most reliable and have been very often used in research in profession physical education and sports.

**Conclusion**

This study, within the limitations, draws the following conclusions -

- There was no relationship between personality and physical fitness awareness of runners.
- There was no relationship between personality and physical fitness awareness of jumpers.
- Interestingly, there was a relationship between personality and physical fitness awareness among the throwers.
- Overall, health related physical fitness awareness has no statistically significant relationship with the personality level of track and field athletes.

**Contribution to the knowledge**

Literature revealed that personality may have a favourable impact with one’s awareness of physical fitness and same results were expected in this study. However, the quality of personality seems to improved according to the increment of physical fitness awareness. However, this study did not agree with this. This study contributed an evidence of physical fitness awareness cannot be explained in terms of the scores in personality exclusively among the elite track and field athletes. This study, therefore, made a special contribution to the knowledge also in the field of individual games.

**References**

1. Mike Rosenbaum, Introductions to track and field events. (New York: BBC publisher), 2014, 45.