Anxiety level of players and non-players policemen-
A comparative study

Rahul D Kalode and Keshao P Bhagat

Abstract
The purpose of the study is to compare the anxiety level of players and non-players policemen. In this study total 400 policemen (200 players and 200 non-players) were selected in the Vidarbha region. The age group selected for the study was 30 to 40 yrs. For data collection, survey method is used. The data collected from four districts viz Nagpur, Wardha, Chandrapur and Amravati. The data characteristics (descriptive statistics) such as frequency, mode, mean, standard deviation etc. determined 'Z' test of two means were used to analyze the data. The significance level was chosen to be 0.05 (or equivalently 5%). Whereas, the anxiety of players and non-players policemen has been found to be significantly different.

Keywords: Policemen (players and non-players), total anxiety, state anxiety, trait anxiety

1. Introduction
Everyone feels anxious now and then. It’s a normal emotion. Many people feel nervous when faced with a problem at work, before taking a test, or making an important decision. Anxiety disorders are different, though. They can cause such distress that it interferes with your ability to lead a normal life. This type of disorder is a serious mental illness. For people who have one, worry and fear are constant and overwhelming, and can be disabling. But with treatment, many people can manage those feelings and get back to a fulfilling life.

Anxiety has been defined in a variety of ways such as “a disturbed state” of the body (Johnson, 1951) [20] “emotional reactivity (Hardman & Johnson, 1952) [17], “arousal” (Skubie, 1956), nervousness” (Ekegami, 1970) [19], “neuroticism” (Krane, 1970) and “unrealistic and unpleasant state of body and mind (Pikunas, 1969) [25]. In medical terminology, anxiety is defined as “apprehension of anger accompanied by restlessness and a feeling of oppression in the epigastrium.” A variety of physiological reactions such as increased heart rate, rapid shallow breathing, sweating, muscle tension and drying of the mouth are associated with anxiety. Fear and anxiety differ in one important respect. Fear has an obvious cause and once that cause is eliminated, the fear will subside. In contrast, anxiety is an emotional reaction that is often irrational to conditions that may be unknown to others. Moreover, the intensity of the anxiety is often disproportionately greater than the magnitude of the objectively measured danger.

A variety of types – labels have been given to anxiety such as – trait anxiety, state anxiety, manifest anxiety, chronic anxiety, specific anxiety etc. Spielberger (1966) [31] was the first anxiety theorist to distinguish between states and trait anxiety. Later Burton (1970) [11] and Martens (1971) [22] also supported his concept. State Anxiety (A-state) is transitory state and fluctuates overtime and is characterized by subjective, consciously perceived feelings of apprehension and tension accompanied by or associated with activation or arousal of the autonomic nervous system. (Spielberger et al. 1970) [32].

Trait Anxiety (A-trait) is considered as an enduring personality characteristic defined as “a motive or acquired behavioral disposition they predisposes an individual to perceive a wide range of objectively non-dangerous circumstances is threatening and to respond to these with anxiety reactions disproportioned in intensity to the magnitude of the objective danger.” Competitive Anxiety (generated in a sport competitive situation.) is a “Specific form of anxiety that occurs as a function of the competitive situation” (Bird & Cripe, 1986) [9]. Based on the concept of trait and state anxiety Martens (1977) [23] developed the construct of sport
specific competitive situations threatening and respond to these situations with feeling of apprehension or tension.” CSA, maintains Martens, is the anxiety reaction triggered by particular competitive situation. The concept is no different maintains Martens, is the anxiety reaction triggered by these situations with feeling of apprehension or tension. CSA, specific competitive situations threatening and respond to

Endler (1978) [14] has suggested five facts of anxiety as given below:

1. Interpersonal ego- threat (threat to self-esteem as result of failure)
2. Physical danger (threat of personal harm)
3. Ambiguity (unpredictability and the fear of the unknown)
4. Disruption of daily routines (fear of disruption of daily habits)
5. Social evaluation (Fear being negatively evaluated by others).

An anxiety can be defined as an unpleasant feeling accompanied by a premonition that something undesirable is about to happen. The felling in closely related to the emotion of fear. Indeed it is very difficult to draw a sharp dividing line between them. The main difference is that usually fear is a reaction to a specific stimulus and has a “right now” quality about it. Anxiety ordinarily does not have an obvious cause and is not so much concerned with the here and now as with some future unpleasantness.

Signs and symptoms
The symptoms of anxiety conditions are sometimes not all that obvious as they often develop slowly over time and, given we all experience some anxiety at various points in our lives, it can be hard to know how much is too much. Normal anxiety tends to be limited in duration and connected with some stressful situation or event, such as a job interview. The type of anxiety experienced by people with an anxiety condition is more frequent or persistent, not always connected to an obvious challenge, and impacts on their quality of life and day-to-day functioning. While each anxiety condition has its own unique features, there are some common symptoms including:

- **Physical**: panic attacks, hot and cold flushes, racing heart, tightening of the chest, quick breathing, restlessness, or feeling tense, wound up and edgy
- **Psychological**: excessive fear, worry, catastrophizing, or obsessive thinking
- **Behavioural**: avoidance of situations that make you feel anxious, which can impact on study, work or social life

These are just some of a number of symptoms that you might experience. If you've experienced any of these, check the more extensive list of symptoms common to the different types of anxiety conditions below. They’re not designed to provide a diagnosis – for that you'll need to see a doctor – but they can be used as a guide.

1.1 Hypothesis
It is hypothesized that the anxiety of players & non-players, policemen will be significantly different.

2. Methodology

2.1 Universe, Population, Sample Selection and sample size
In the present study, the complete Vidarbha region formed the universe of the study while all police officers working in this region formed the population of this study. In this study, data were collected from 400 police officers of Vidarbha region. Of these 400 policemen 200 had a sports background while other 200 were non sportspersons. The age of the policemen varied between 30 and 40 yrs.

2.2 Data collection
In the present study, data were collected by following survey method. Survey questionnaires are typically used for feedback research to determine the current status or “situation,” or to estimate the distribution of characteristics in a population. The standard questionnaires were used for the purpose of data collection. The data for this study was collected from four districts namely Nagpur, Wardha, Chandrapur & Amravati of Vidarbha by using the questionnaire made by Singh et al., Singh personal Stress Source Inventory.

2.3 Statistical Analysis and Significance Level
The data characteristics (descriptive statistics) such as Frequency, Mode, Mean, Standard deviation etc. were determined. ‘Z’ test of two means was used to analyze the data. The significance level was chosen to be 0.05 (or equivalently, 5%).

3 Analysis and Interpretation of the Data

3.1 Total Anxiety

Data Characteristics – Total Anxiety Factor

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attributes</td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>SD</td>
</tr>
<tr>
<td>SE</td>
</tr>
<tr>
<td>Skewness</td>
</tr>
<tr>
<td>Kurtosis</td>
</tr>
</tbody>
</table>

The descriptive statistics such as mean, standard deviation, standard error, Skewness and kurtosis indicated that the data was consistent and was fit for further analysis.

3.2 Total Anxiety

Table 1.1: Comparative assessment of the Total Anxiety of players and no players (policeman)

<table>
<thead>
<tr>
<th>Policemen</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>MD</th>
<th>Z Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Players</td>
<td>200</td>
<td>46.6</td>
<td>±4.6</td>
<td>39</td>
<td>52</td>
<td>-12.7</td>
<td>-5.243</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Non Players</td>
<td>200</td>
<td>59.3</td>
<td>±5.9</td>
<td>46</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N= Sample Size; SD: Standard Deviation; Min: Minimum; Max: Maximum; Z: Z Statistic; P: Probability

Above Table 4.6 presents results regarding the assessment of the policemen (with background as a player and non-players) from the study area with respect to total anxiety. It was evident from the results that the mean for policemen with background as a player was 46.6±4.6 (varying between 39 and 52), while that of policemen with background as non-players were 59.3±5.9 (varying between 46 and 69). The comparative assessment showed that there is a significant difference (P<0.05) in the level of total anxiety amongst policemen having different background (players and non-players).
Specifically, it is clear from the data that the policemen with a background as a non-player have higher levels of total anxiety. Thus, it is concluded that the policemen having background as non-player have remarkably higher level of total anxiety.

### 3.3 State Anxiety

State anxiety refers to temporary feelings of anxiety in a particular situation. Therefore a person with an anxious personality may find many different everyday tasks stressful compared to someone who only gets nervous in extreme situations.

#### Data Characteristics – State Anxiety Factor

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Players</th>
<th>Non Players</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>23.9</td>
<td>28.7</td>
</tr>
<tr>
<td>SD</td>
<td>±2.4</td>
<td>±3.1</td>
</tr>
<tr>
<td>SE</td>
<td>0.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Skewness</td>
<td>1.039</td>
<td>0.924</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.853</td>
<td>0.769</td>
</tr>
</tbody>
</table>

The descriptive statistics such as mean, standard deviation, standard error, Skewness and kurtosis indicated that the data was consistent and was fit for further analysis.

#### State Anxiety

#### Table 2.1: Comparative assessment of the State Anxiety of players and no players (policeman)

<table>
<thead>
<tr>
<th>Policemen</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>MD</th>
<th>Z Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Players</td>
<td>200</td>
<td>23.9</td>
<td>±2.4</td>
<td>19</td>
<td>27</td>
<td>-4.8</td>
<td>-2.982</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Non Players</td>
<td>200</td>
<td>28.7</td>
<td>±3.1</td>
<td>22</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N= Sample Size; SD: Standard Deviation; Min: Minimum; Max: Maximum; Z: Z Statistic; P: Probability

Above Table 4.7 presents results regarding the assessment of the policemen (with background as a player and non-players) from the study area with respect to State Anxiety. It was evident from the results that the mean for policemen with background as a player was 23.9±2.4 (varying between 19 and 27), while that of policemen with background as non-players were 28.7±3.1 (varying between 22 and 34). The comparative assessment showed that there is a significant difference (P<0.05) in the level of State Anxiety amongst policemen having different background (players and non-players). Specifically, it is clear from the data that the policemen with a background as a non-player have a higher level of State Anxiety.

Thus, it is concluded that the policemen having background as non-player have a remarkably higher level of State Anxiety.

### 3.4 Trait Anxiety

Trait anxiety relates to an aspect of personality in which nervousness is a stable personality trait in an individual.

#### Data Characteristics – Trait Anxiety Factor

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Players</th>
<th>Non Players</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>21.7</td>
<td>25.8</td>
</tr>
<tr>
<td>SD</td>
<td>±3.2</td>
<td>±3.7</td>
</tr>
<tr>
<td>SE</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.697</td>
<td>0.852</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.436</td>
<td>0.521</td>
</tr>
</tbody>
</table>

The descriptive statistics such as mean, standard deviation, standard error, Skewness and kurtosis indicated that the data was consistent and was fit for further analysis.

#### Trait Anxiety

#### Table 3.1: Comparative assessment of the Trait Anxiety of players and no players (policeman)

<table>
<thead>
<tr>
<th>Policemen</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>MD</th>
<th>Z Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Players</td>
<td>200</td>
<td>21.7</td>
<td>±3.2</td>
<td>17</td>
<td>25</td>
<td>-4.1</td>
<td>-2.237</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Non Players</td>
<td>200</td>
<td>25.8</td>
<td>±3.7</td>
<td>20</td>
<td>32</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N= Sample Size; SD: Standard Deviation; Min: Minimum; Max: Maximum; Z: Z Statistic; P: Probability

Above Table 4.8 presents results regarding the assessment of the policemen (with background as a player and non-players) from the study area with respect to Trait Anxiety. It was evident from the results that the mean for policemen with background as a player was 21.7±3.2 (varying between 17 and 25), while that of policemen with background as non-players were 25.8±3.7 (varying between 20 and 32). The comparative assessment showed that there is a significant difference (P<0.05) in the level of Trait Anxiety amongst policemen having different background (players and non-players). Specifically, it is clear from the data that the policemen with a background as a non-player have a remarkably higher level of Trait Anxiety.

Thus, it is concluded that the sports participation can help the policemen in coping with the pressures of their professional work in a more appropriate way.

### 4. Hypothesis Testing

- On the basis of the statistical analysis of the information received during the research study, it is observed that there is a significant difference in the level of anxiety of players & non-players policemen, hence, the hypothesis, which states that “It is hypothesized that the anxiety of players & non-players policemen will be significantly different”, is accepted.

### 5. Conclusions

On the basis of the study results, it is concluded that the players policemen as non-player have remarkably higher level of guilt proneness, suspiciousness and tension. Moreover, the anxiety levels are also significantly (P<0.05) high in the non-players policemen. Hence, in broader sense it is evident that the sports participation can help the policemen in coping with the pressures of their professional work in a more appropriate way.
6. Reference