A comparative analysis on ability to handle pressure and concentration between open and closed skill athletes

Sahil Preet Bedi

Abstract
The purpose of this study was to compare Ability to Handle Pressure and Concentration between Open and Closed Skill Athletes. For this purpose, Eighty (N=80) female university level athletes of 19 to 25 years of age group were selected to act as subjects. They were further divided into two groups which includes n = 40 open skill athletes and n=40 closed skill athletes. The psychological sub-variable namely Ability to Handle Pressure and Concentration were taken up for the present study. To determine the significant differences between Open and Closed Skill Athletes, Unpaired t-test was employed for data analyses. To test the hypothesis, the level of significance was set at 0.05. The t-value 0.37 was found statistically insignificant (P>0.05) for the sub-variable namely Ability to Handle Pressure. In case for the sub-variable namely Concentration, the t-value 0.21 was found statistically insignificant (P>0.05).

Keywords: Comparative analysis, ability to handle, pressure and concentration

1. Introduction
Mental toughness is arguably one of the most important characteristics for success in athletic performance. Mental strength won’t compensate for lack of skill, but in close contests it can make the difference between winning and losing. Toughness is being able to create positive emotions upon command, enabling us to bring all our talent and skills to life in a moment. Mental is to be strong and resilient; able to withstand great strain without tearing or breaking. Mental toughness is being able to reach your ideal competitive state. This is the personal state of being that allows an individual to perform with his greatest potential. It is a state of being where an individual feels most energized, most confident and most strong. Despite this being known to psychology researchers, performers and coaches alike, of scientific rigor has a meant a lack in clarity towards the definitive concept of mental toughness.

2. Methodology
2.1. Subject
For this purpose, Eighty (N=80) female university level athletes of 19 to 25 years of age group were selected to act as subjects. They were further divided into two groups which includes n = 40 open skill athletes and n=40 closed skill athletes of various games and sports. The purposive sampling technique was used to attain the objectives of the study. 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.

Table 1: Details of selected open and closed skill athletes.

<table>
<thead>
<tr>
<th></th>
<th>A-Open Skill</th>
<th>Sample</th>
<th>B-Closed Skill</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball</td>
<td>20</td>
<td>Track and field</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Handball</td>
<td>20</td>
<td>Gymnastic</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>40</td>
<td></td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>
consultation with experts. With the above criteria’s in mind, the psychological sub-variable namely Ability to Handle Pressure and Concentration taken up for the present study:-

**Mental Toughness**
- Ability to handle pressure
- Concentration

### 2.3. Tools

In order to measure the level of Mental Toughness of the subject’s questionnaire have been used in this study.

#### Table 2: In order to measure the level of Mental Toughness

<table>
<thead>
<tr>
<th>Tools</th>
<th>Authors</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Toughness</td>
<td>Goldberg</td>
<td>1998</td>
</tr>
</tbody>
</table>

#### 3. Statistical Technique

To determine the significant differences between Open and Closed Skill Athletes, Unpaired t-test was employed for data analyses. To test the hypothesis, the level of significance was set at 0.05.

### 4. Results

#### Table 3: Insignificant differences in the mean scores of open and closed skill athletes on the variable mental toughness i.e., ability to handle pressure.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Open Skill</th>
<th>Closed Skill</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to Handle Pressure</td>
<td>3.64</td>
<td>0.88</td>
<td>0.14</td>
<td>3.56</td>
<td>0.97</td>
<td>0.16</td>
<td>0.37</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level Degree of freedom= 38

The descriptive statistics shows the Mean and SD values of open skill athletes on the sub-variable ability to handle pressure as 3.64 and 0.88 respectively. However, closed skill athletes had Mean and SD values as 3.56 and 0.97 respectively. The t-value 0.37 as shown in the table above was found statistically insignificant (P>0.05). While comparing the mean values of both the groups, it can be noticed that open skill athletes have exhibited better ability to handle pressure than the closed skill athletes. The comparison of mean scores of both the groups has been presented graphically in figure-1.

#### Fig 1: Mean, SD, SEM Scores of open and closed skill athletes on the variable mental toughness i.e., ability to handle pressure.

#### Table 4: Insignificant differences in the mean scores of open and closed skill athletes on the variable mental toughness i.e., concentration.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Open Skill</th>
<th>Closed Skill</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td>3.74</td>
<td>1.12</td>
<td>0.19</td>
<td>3.69</td>
<td>1.10</td>
<td>0.17</td>
<td>0.21</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level Degree of freedom= 38

The Mean and SD values of open skill athletes on the sub-variable concentration were 3.74 and 1.12 respectively. However, closed skill athletes had Mean and SD values as 3.69 and 1.10 respectively. The t-value 0.21 as shown in the table above was found statistically insignificant (P>0.05). When compared mean values of both the groups, it can be seen that open skill athletes have shown better concentration than the closed skill athletes. The comparison of mean scores of both the groups has been presented graphically in figure-2.

#### Fig 2: Mean, SD, SEM scores of open and closed skill athletes on the variable mental toughness i.e., concentration.

### References

10. Rathore MS, Singh YP, Dubey A. A Comparative Study of Mental Toughness of the Team and Individual Players...
