Comparison and assessment of mental health among different playing positions in handball

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Abstract

Objectives: The purpose of the study was to assess & compare mental health of state level handball players playing at different positions.

Methods: One hundred five (15 for each playing position) state level handball players aged 16 to 22 years were selected. Mental health inventory developed by Dr. Jagdish & Dr. A. K. Srivastava (1983) was used to assess mental health. Descriptive statistics was used to characterize different playing positions on mental health & one way analysis of variance was used compare mental health at different playing positions of state level Handball players and paired mean comparison by post hoc test. The level of significance was set at .05 levels.

Results & Conclusions: According to the norms based on mental health inventory, the mental health of players Goalkeeper (M=1.64), Right winger (M=1.56), Left winger (1.56), Right shooter (M=1.52), Left shooter (M=1.57), Centre player (M=1.54), Pivot player (M=1.57) respectively, playing at different position possess average mental health (1.57 to below 1.76).

Keywords: Mental health, Handball players

1. Introduction

Mental health is a level of psychological well-being, or an absence of a mental disorder; it is the "psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment". Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community. The positive dimension of mental health is stressed in WHO's definition of health as contained in its constitution: "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

The mental health & physical health are interrelated. It is not the mere absence of mental illness. Good mental health is the ability to respond to the many varied experiences of life. Poor mental health affects physical well-being also &vice versa. Psychological factors are considered to play a major roll. Disorders, such as hypertension, peptic ulcer & asthma (Jain, R., & Goel, P. 2004) are.

There are three broad outstanding characteristics found in people who possess a high degree of mental health. These characteristics are overlapping but they do serve as rough guides. In the first place, the well-adjusted person feels comfortable about him/her. His/her has self-respected. He/she can “live with himself/herself” on pretty good term’s most of the time. (Mishra, S. C., Ramkrishnan, K. S., & Kutty, K. S. 2009).

2. Objectives of the study

For the purpose of the study following two objectives were formulated:

1) First objective was to characterize different playing positions of state level handball players on their mental health.

2) Second objective was to compare the mental health at different playing positions of state level handball players.
3. Methodology

3.1 Subjects

One hundred five state level handball players were selected as a subject for this study, these 105 Handball players divided into seven playing positions in Handball game each playing positions having 15 players. The age of subjects were ranged from 16 to 22 years.

3.2 Test for mental health

Mental health inventory developed by Dr. Jagdish & Dr. A. K. Srivastava (1983) was used to collect data for mental health.

3.3 Classification of the Mental Health According the Level of Mental Health

<table>
<thead>
<tr>
<th>Level/State of M.H.</th>
<th>Very Good</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
<th>Very Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norms</td>
<td>195.89 &amp; Above</td>
<td>175.45 to below 195.89</td>
<td>157.01 to below 176.45</td>
<td>137.57 to below 157.01</td>
<td>Below 135.57</td>
</tr>
</tbody>
</table>


1) To characterize different playing positions of state level Handball players on their mental health, descriptive statistics were used.

2) To compare mental health of different playing positions of state level Handball player’s, one way analysis of variance was used and paired mean comparison by post hoc test. The level of significance was set at .05 levels.

3.4 Findings

| Table 1: Descriptive Statistics of Different Playing Positions of Handball in Mental Health |
|-----------------------------------------------|-----------------------------------------------|
| N                                            | Mean                          | Std. Deviation | Std. Error | Minimum | Maximum |
| Goal keeper                                  | 15                            | 164.80         | 5.75       | 1.48    | 148.00   | 172.00   |
| right winger                                 | 15                            | 156.46         | 5.28       | 1.36    | 147.00   | 164.00   |
| left winger                                  | 15                            | 156.06         | 4.07       | 1.05    | 150.00   | 166.00   |
| right shooter                                | 15                            | 152.46         | 4.83       | 1.24    | 146.00   | 163.00   |
| left shooter                                 | 15                            | 157.06         | 6.32       | 1.63    | 147.00   | 170.00   |
| centre player                                | 15                            | 154.06         | 5.13       | 1.32    | 144.00   | 163.00   |
| pivot player                                 | 15                            | 157.60         | 3.52       | 0.90    | 150.00   | 165.00   |
| Total                                        | 105                           | 156.93         | 6.11       | 0.59    | 144.00   | 172.00   |

From the following table-1 mean and standard deviation of different playing position of handball players, 164.80, 156.46, 156.06, 152.46, 157.06, 154.06, & 157.60 and 5.75, 5.28, 4.07, 4.83, 6.32, 5.13 & 3.52 of goal keeper, right winger, left winger, right shooter, left shooter, centre player and pivot players respectively.

| Table 2: One Way Analysis of Variance of Mental Health among Different Playing Position of Handball Game |
|---------------------------------------------------------------|---------------------------------------------------------------|
| S.V                                                           | Sum of Squares | df | Mean Square | F                | Sig.   |
| Between Groups                                               | 1372.26        | 6  | 228.71      | 8.89*            | .000   |
| Within Groups                                                | 2520.26        | 98 | 25.71       |                   |        |
| Total                                                        | 3892.53        | 104|             |                   |        |

Table- 2 clearly indicated that the calculated ‘F’ ratio 8.89 is significant at 0.05 level of significance, it is calculated that there are significant difference among different playing position of handball players, so post hoc is applied for paired mean comparison among different playing position of handball players’.

<p>| Table 3: Paired Mean Comparison among Different Playing Position in Handball Players |
|-----------------------------------------------|-----------------------------------------------|
| (I) positions                               | (J) positions                               | Mean Difference (I-J) | Std. Error | Sig.          | 95% Confidence Interval |
| Goalkeeper                                  |                                              |                        |            |               |                        |
| right winger                                | 8.33*                                        | 1.85                   | .000       | 4.65          | 12.00                   |
| left winger                                 | 8.73*                                        | 1.85                   | .000       | 5.05          | 12.40                   |
| right shooter                               | 12.33*                                       | 1.85                   | .000       | 8.65          | 16.00                   |
| left shooter                                | 7.73*                                        | 1.85                   | .000       | 4.05          | 11.40                   |
| centre player                               | 10.73*                                       | 1.85                   | .000       | 7.05          | 14.40                   |
| pivot player                                | 7.20*                                        | 1.85                   | .000       | 3.52          | 10.87                   |
| right winger                                |                                              |                        |            |               |                        |
| left winger                                  | .40                                          | 1.85                   | .829       | -3.27         | 4.07                    |
| right shooter                               | 4.00*                                        | 1.85                   | .033       | 32            | 7.67                    |
| left shooter                                | - .60                                       | 1.85                   | .747       | -4.27         | 3.07                    |
| centre player                               | 2.40                                         | 1.85                   | .198       | -1.27         | 6.07                    |
| pivot player                                | -1.13                                       | 1.85                   | .542       | -4.80         | 2.54                    |
| left winger                                  |                                              |                        |            |               |                        |
| right shooter                               | 3.60*                                       | 1.85                   | .055       | -0.7          | 7.27                    |
| left shooter                                | -1.00                                        | 1.85                   | .590       | -4.67         | 2.67                    |
| centre player                               | 2.00                                        | 1.85                   | .283       | -1.67         | 5.67                    |
| pivot player                                | -1.53                                       | 1.85                   | .410       | -5.20         | 2.14                    |
| right shooter                               |                                              |                        |            |               |                        |
| left shooter                                | -4.60*                                       | 1.85                   | .015       | -8.27         | -92                     |
| centre player                               | -1.60                                       | 1.85                   | .390       | -5.27         | 2.07                    |</p>
<table>
<thead>
<tr>
<th></th>
<th>pivot player</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>left shooter</td>
<td>-5.13*</td>
<td>1.85</td>
<td>.007</td>
<td>-8.80</td>
<td>-1.45</td>
</tr>
<tr>
<td>centre player</td>
<td>3.00</td>
<td>1.85</td>
<td>.108</td>
<td>-6.70</td>
<td>6.67</td>
</tr>
<tr>
<td>pivot player</td>
<td>-5.53</td>
<td>1.85</td>
<td>.774</td>
<td>-4.20</td>
<td>3.14</td>
</tr>
<tr>
<td>centre player</td>
<td>-3.53</td>
<td>1.85</td>
<td>.059</td>
<td>-7.20</td>
<td>.14</td>
</tr>
</tbody>
</table>

*The mean difference is significant at the 0.05 level.*

Table-3 clearly indicated that significant difference is found between the mean of goal keeper & right winger, goal keeper & left winger, goal keeper & right shooter, goal keeper & left shooter, goal keeper & centre player, goal keeper & pivot player, right winger & right shooter, right shooter & left shooter, right shooter and pivot player and insignificant difference is found between the mean of right winger & left winger, right winger & left shooter, right winger & centre player, right winger & pivot player, left winger & right shooter, left winger & left shooter, left winger & centre player, left winger & pivot player, right shooter & centre player, left shooter & centre player, left shooter & pivot player and centre player & pivot player.

4. Discussion of findings

Gopinath, P. (2013) [2] conducted a study on the topic “A comparative study of self-confidence and mental health among sports men and non-sports men college students.” The results shows that sports men having higher level of self-confidence and mental health as compared with non-sports men. Kaur, S. & Rani, N. (2013) [1] conducted a study “Influence of mental health on sports performance of selected national level sportsperson.” The results show that no significant difference in socio-economic status (SES) of difference groups as respect to their mental health. There was significant difference found in emotional stability (EM), overall adjustment (OA), autonomy, security-insecurity, self-concept and intelligence of groups as respect to their mental health. Agashe, C. D., & Tiwari, S. (2012) [3] conducted a study on the topic “Effect of aging and emotional stability on positive mental health of retired football players.” Result shows that low neurotic subjects possess significantly better positive mental health as compare to high neurotic subject’s mental health but the roll of ageing and interaction effect of these. The present study significant difference is found among different playing position of handball players and according to the norms based on mental health inventory, the mental health of players Goalkeeper (M=1.64), Right winger (M=156.46), left winger (156.06), Right shooter (M=152.46), Left shooter (M=157.06), Centre player (M=154.06) and Pivot player (M=157.60) respectively, playing at different position possess average mental health (157.01 to below 176.45). Mental health is a level of psychological wellbeing. An individual’s emotional health can also impact physical health and poor mental health can lead to problems such as substance abuse. Maintaining good mental health is crucial to living a long and healthy life. Good mental health can enhance one’s life, while poor mental health can prevent someone from living an enriching life. According to Richards, Campania & Nurse Burke (2010), there is growing evidence that is showing emotional abilities are associated with prosocial behaviours such as stress management and physical health”. It was also concluded in their research that people who lack emotional expression are inclined to anti-social behaviours. These behaviours are a direct reflection to their mental health. Self destructive acts may take place to suppress emotions. In this study there is found average mental health in all seven playing position of handball players, due to involving of team game activity which generate social and emotional behaviours in handball players.

5. Conclusions

It was calculated that there are significant difference among different playing position of handball players. Goal keepers have better mental health compare to other positional players of handball games.

6. References

