Analysis of physical and mental health components among teaching professionals

AE Nelson Raj and Dr. P Anbalagan

Abstract
Aim: The purpose of this study was to analysis the physical and mental health components among teaching professionals.

Methodology: For the purpose of the study 30 subjects were selected from teaching professionals and divided in two equal groups according to their age’s namely experimental group I (35 to 40 years) and experimental group II (41 to 45 years) the subject’s age ranged from 35 to 45 years.

Statistical Tool: The collected data were statistically analyzed with independent ‘t’ test to find out the significant improvement between two groups. The groups during the analysis period between Experimental group I and Experimental group II the criterion measure were tested for significance by applying independent ‘t’ test at 0.05 level it was considered as sufficient for the present study.

Procedures: The following variables were determined for the study: Flexibility, Body composition, Cardio respiratory endurance and Mental toughness.

Discussion: Body composition and cardio respiratory endurance were found to be significantly. Flexibility and Mental toughness were found to be no significantly.

Conclusion: These data indicate that analysis of physical and mental health components among teaching professionals as a program executed under stable conditions for analysis Flexibility, Body composition, Cardio respiratory endurance and Mental toughness. The subjects were free to withdraw their consent in case of feeling any discomfort during the period of their participation but there were no drop outs during the study.

Keywords: Mental health components, teaching professionals, flexibility, body composition, cardio respiratory endurance and mental toughness

1. Introduction
Physical fitness combined good health and physical development the object of any program of physical fitness is to maximize an individual’s health, strength, endurance, and skill relative to age, sex, body and physiology. These ends can only be realized through conscientious regulation of exercise rest diet and periodic medical and dental examination. Exercise should be regular and vigorous but begun slowly and only gradually increased in strenuousness. Physical health can be defined as a state of well-being when all internal and external body parts, organs, tissues and cells can function properly as they are supposed to function. This physical health definition also includes physical health as a state of physical well-being in which a person is physically fit to perform their daily activities without restrictions.

Mental Health is “the emotional and spiritual resilience which enables us to enjoy life and survive pain, suffering and disappointment. It is a positive sense of wellbeing and an underlying belief in our and others dignity and worth. It is influenced by our experience and our genetic inheritance.” (World Health Organization). However, most tend to emphasize that mental wellbeing includes aspects of subjective wellbeing: ‘affect’ (the subjective experience of happiness), life satisfaction, and psychological wellbeing (such as mastery and a sense of control, having a purpose in life, a sense of belonging and positive relationships with others). It is more than the absence of mental health problems. Moran, A. P. (2012)

For major physical diseases, it is widely accepted that members of the public will benefit by knowing what actions they can take for prevention, early intervention, and treatment. However, this type of public knowledge about mental disorders (mental health literacy) has received much less attention.
There is evidence from surveys in several countries for deficiencies in the public’s knowledge of how to prevent mental disorders, recognition of when a disorder is developing, knowledge of help-seeking options and treatments available.

2. Methodology
The purpose of this study was to analysis of physical and mental health components among teaching professionals. To achieve the purpose of the study, (N=30) subjects were randomly selected from Bharathiar University and divided in two equal groups according to their age’s namely experimental group I (35 to 40 years) and experimental group II (41 to 45 years) the subject’s age ranged from 35 to 45 years. The selected subjects were tested on the following variables Flexibility, Body composition, Cardio respiratory endurance and Mental toughness and the criterion measure were tested for significance by applying independent ‘t’ test at 0.05 level it was considered as sufficient for the present study.

2.1 Selection of Test Items

Table I

<table>
<thead>
<tr>
<th>S. No</th>
<th>Variables</th>
<th>Test Items</th>
<th>Unit of Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flexibility</td>
<td>Sit and Reach</td>
<td>In Centimeter</td>
</tr>
<tr>
<td>2</td>
<td>Body Composition</td>
<td>Skin Fold Caliper</td>
<td>In Mille meter</td>
</tr>
<tr>
<td>3</td>
<td>Cardio Respiratory</td>
<td>Harvard step test</td>
<td>In Beat per minute</td>
</tr>
<tr>
<td>4</td>
<td>Mental toughness</td>
<td>Mental toughness</td>
<td>In points</td>
</tr>
</tbody>
</table>

3. Results and Discussion

- The result of the study showed that the obtained ‘t’ ratio of 1.09 was lesser than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was no significant different the age groups of 35-40 and 41-45 among teaching professionals.

- The result of the study showed that the obtained ‘t’ ratio of 3.37 was greater than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was significant different the age groups of 35-40 and 41-45 among teaching professionals.

- The result of the study showed that the obtained ‘t’ ratio of 1.25 was lesser than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was no significant different the age groups of 35-40 and 41-45 among teaching professionals.

- The result of the study showed that the obtained ‘t’ ratio of 4.63 was greater than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was significant different the age groups of 35-40 and 41-45 among teaching professionals.

Table II shows the mean difference of flexibility between 35-40 and 41-45 age group of among teaching professionals. The mean value of flexibility of 35-40 age group and 41-45 age group of among teaching professionals were 18.06 and 17.00 respectively. The obtained ‘t’ ratio of 1.09 was lesser than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was no significant difference between the age groups of 35-40 and 41-45 among teaching professionals.

Table III shows the mean difference of body composition between 35-40 and 41-45 age group of among teaching professionals. The mean value of Body composition of 35-40 age group and 41-45 age group of among teaching professionals were 14.85 and 17.50 respectively. The obtained ‘t’ ratio of 4.63 was greater than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was significant difference between the age groups of 35-40 and 41-45 among teaching professionals.

Table IV shows the mean difference of cardio respiratory endurance between 35-40 and 41-45 age group of among teaching professionals. The mean value of cardio respiratory endurance of 35-40 age group and 41-45 age group of among teaching professionals were 143.06 and 155.13 respectively. The obtained ‘t’ ratio of 3.37 was greater than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was significant difference between the age groups of 35-40 and 41-45 among teaching professionals.

Table V shows the mean difference of mental toughness between 35-40 and 41-45 age group of among teaching professionals. The mean value of mental toughness of 35-40 age group and 41-45 age group of among teaching professionals were 57.86 and 55.53 respectively. The obtained ‘t’ ratio of 1.25 was lesser than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was no significant difference between the age groups of 35-40 and 41-45 among teaching professionals.

Table II: Significance of Mean Difference between 35-40 Age Group And 41-45 Age Group of Teaching Professionals on Flexibility

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age Group</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>‘t’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility</td>
<td>EG I 35-40</td>
<td>18.06</td>
<td>2.65</td>
<td>0.68</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td>EG II 41-45</td>
<td>17.00</td>
<td>2.67</td>
<td>0.69</td>
<td></td>
</tr>
</tbody>
</table>

*significance at 0.05 level of confidence

Table III: Significance of Mean Difference between 35-40 Age Group And 41-45 Age Group Of Teaching Professionals On Body Composition

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age Group</th>
<th>MEAN</th>
<th>SD</th>
<th>SE</th>
<th>‘t’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Composition</td>
<td>EG I 35-40</td>
<td>14.85</td>
<td>1.59</td>
<td>0.41</td>
<td>4.63</td>
</tr>
<tr>
<td></td>
<td>EG II 41-45</td>
<td>17.50</td>
<td>1.52</td>
<td>0.39</td>
<td></td>
</tr>
</tbody>
</table>

*significance at 0.05 level of confidence

Table IV: Significance Of Mean Difference Between 35-40 Age Group And 41-45 Age Group Of Teaching Professionals On Cardio Respiratory Endurance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Age Group</th>
<th>MEAN</th>
<th>SD</th>
<th>SE</th>
<th>‘t’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiorespiratory Endurance</td>
<td>EG I 35-40</td>
<td>143.06</td>
<td>9.30</td>
<td>2.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EG II 41-45</td>
<td>155.13</td>
<td>10.23</td>
<td>2.64</td>
<td>3.37*</td>
</tr>
</tbody>
</table>

*significance at 0.05 level of confidence

Table V: Significance of Mean Difference between 35-40 Age Group And 41-45 Age Group Of Teaching Professionals on Mental Toughness

<table>
<thead>
<tr>
<th>Variable</th>
<th>AGE GROUP</th>
<th>MEAN</th>
<th>SD</th>
<th>SE</th>
<th>‘t’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Toughness</td>
<td>EG I (35-40)</td>
<td>57.86</td>
<td>2.69</td>
<td>0.69</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>EG II 41-45</td>
<td>55.53</td>
<td>6.68</td>
<td>1.72</td>
<td></td>
</tr>
</tbody>
</table>

*Significance at 0.05 level of confidence
Table IV shows the mean difference of mental toughness between 35-40 and 41-45 age group of among teaching professionals. The mean value of mental toughness of 35-40 age group and 41-45 age group of among teaching professionals were 57.86 and 55.53 respectively. The obtained ‘t’ ratio of 1.25 was lesser than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was no significant difference between the age groups of 35-40 and 41-45 among teaching professionals.

4. Discussions on Findings
The result of the study showed that the obtained ‘t’ ratio of 1.09 was lesser than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was no significant different the age groups of 35-40 and 41-45 among teaching professionals on flexibility. The result of the study showed that the obtained ‘t’ ratio of 4.63 was greater than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was significant different the age groups of 35-40 and 41-45 among teaching professionals on body composition. The result of the study showed that the obtained ‘t’ ratio of 3.37 was greater than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was significant different the age groups of 35-40 and 41-45 among teaching professionals on cardio respiratory endurance. The result of the study showed that the obtained ‘t’ ratio of 1.25 was lesser than the required table value of 2.14 for the degree of freedom 2 and 14 at 0.05 level of confidence. Hence there was no significant different the age groups of 35-40 and 41-45 among teaching professionals on mental toughness.

5. Conclusion
From the results of this study, the following conclusions were drawn

- It was concluded that there was no insignificant mean difference on Flexibility among teaching professionals.
- It was concluded that there was significant mean difference on Body composition among teaching professionals.
- It was concluded that there was significant mean difference on Cardio respiratory endurance among teaching professionals.
- It was concluded that there was no insignificant mean difference on mental health among teaching professionals.

6. References
2. Susan S Han et al. Sustainability of Teacher Implementation of School-Based Mental Health Programs, journal of abnormal child psychology, 1991.