Comparative and correlative study of optimism and mental health status in active and non-active elderly people

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Abstract: Our study adds to the growing body of research on mental health status and factors such as optimism that affect this variable. In view of our findings, we hope that the use of sport and physical activities as means of improving one’s mental health status, be more emphasized and recommended by psychologists and mental health experts.

Keywords: mental health, optimism, elderly people

Introduction
The term optimism embraces two closely correlated concepts: The first is the inclination to hope, while the second more generally refers to the tendency to expect good things in the future. From the literature here reviewed, it is apparent that optimism is a mental attitude that heavily influences physical and mental health, as well as coping with every day social and working life (Velden, 2007).

Peterson and Bossio (2001) concluded that optimists are more self–confident and have higher levels of self-efficacy in their ability to perform well and achieve goals. The world health organization (WHO) defines mental health as a state of well being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make contribution to his or her community (world health report, 2001).

Good mental health is crucial to the overall well – being of individuals, communities and societies – positive mental health is a resource every day living that enables people and communities to realize their fullest potential and to cope with life transitions and major life events.

Chang (1998) in his research on college population reveals knowledge concerning the benefits of optimism, which include lower levels of stress and lower trait anxiety.

Optimism and mental health status

The results of studies have shown a significant negative relationship between optimism and mental health. Optimism may significantly influence mental and physical well – being by promoting healthy lifestyle as well as by adaptive behaviours and cognitive responses, associated with greater flexibility and problem – solving capacity (Aspinwall, 2001). These coping strategies are in turn predictive of behaviors targeted at avoiding, and if necessary facing positively, health problems (Friedman, 2002).

Purpose of the study
Based on research done in various context, the present study compares the mean scores of optimism and mental health status in active and non–active elderly people. The correlation between these two variables is also studied in this research.

The unique quality of this study lies in the fact that no such study has been done before in Iran. It is expected to serve as starting point for further study. Darwin from literature following hypothesis are proposed:

- Optimism is related to mental health status.
- There are differences in level of optimism and mental health status in active and non–active elderly people.

Methods
1. sample
Participants were 190 elderly people (95 active and 95 non-active)
2. measures
Ganjie’s optimism questionnaire which was consisted of 37 items was used to gather data on participants’ optimism level and Goldberg’s GHQ-28 items questionnaire was used to obtain students mental health status.

Findings
- Statistical analysis
Statistical analysis was done by using independent "t" and person’s correlation tests. The first statistical analysis to be performed was coefficient alpha to measure the reliability of the instruments. Since the instruments were translated into farsi, and were used in a different culture at a different span of time An internal consistency estimate was computed for three instruments and the alpha value for optimism and mental health were respectively, 0.80 and 0.85. All of these values were above the cut off 0.70 suggested by Nunnally (1987).

Table 1 displays statistical index of quantitative variables of research. According to mean scores of variables, active people are more optimistic, and have better mental health status, or are less prone to mental disorders that non-active.

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>71</td>
<td>1.8</td>
<td>65</td>
<td>79</td>
</tr>
<tr>
<td>Optimism</td>
<td>18.4</td>
<td>3.5</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>Mental Health</td>
<td>22.8</td>
<td>9.0</td>
<td>10</td>
<td>49</td>
</tr>
</tbody>
</table>

Table 2 displays the means and standard deviations of variables for active and non-active elderly people.

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism</td>
<td>18.97</td>
<td>3.6</td>
<td>6</td>
<td>29</td>
</tr>
<tr>
<td>Mental Health</td>
<td>20.51</td>
<td>8.97</td>
<td>10</td>
<td>49</td>
</tr>
</tbody>
</table>

Table 3 shows significant differences at the level of a= 0.05 between active and non-active people regarding the mean scores of optimism and mental health (p-values = 0.026, 0.001). Active people were more optimistic and were less prone to mental disorders.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>‘t’ test</th>
<th>Degree of freedom</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism</td>
<td>active</td>
<td>95</td>
<td>18.97</td>
<td>3.34</td>
<td>2.24</td>
<td>188</td>
<td>0.026</td>
</tr>
<tr>
<td></td>
<td>Non-active</td>
<td>98</td>
<td>17.83</td>
<td>3.64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>active</td>
<td>95</td>
<td>20.51</td>
<td>8.97</td>
<td>3.459</td>
<td>188</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Non-active</td>
<td>98</td>
<td>25.03</td>
<td>9.106</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Correlation results
Correlation in table 4 show that elderly people’s optimism negatively correlated with mental health (r = - 0.332, p-value = 0.001), provide initial support for hypothesis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Correlation quotient</th>
<th>P - value</th>
<th>r2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimism with mental health</td>
<td>190</td>
<td>- 0.332</td>
<td>0.001</td>
<td>0.110</td>
</tr>
</tbody>
</table>

Discussion
Mental health is an integral and essential component of health. The WHO constitution states, ‘Health the state of complete physical, mental and social well – being and not merely the absence of disease or infirmity (Factsheet,2010).
There are many social, psychological and biological factors determine the level of mental health status of a person at any point of time. There are also specific psychological and personality factors such as optimism that make people vulnerable to mental health or mental disorders.
The current study compared optimism and mental health status in active and non-active elderly people, the link between these two variables was also explored in this study. The findings provide evidence
that confirmed significant differences in optimism and mental health status in active and non-active elderly people. The findings also confirmed relationship between these variables in elderly people. Active elderly people in this survey were more optimism and had better mental health status. Engaging in regular physical activities other than inducing physiological and bio-chemical changes in body and flux of enzymes that causes happiness and feeling of statisfaction and relaxation in an individual, can also change the attitute of a person toward himself or herself and his or her environment. Several studies have analyzed the correlation between optimism and healthy behaviors. Strutton (1992) in a sample of males and females aged between 65 – 80 years found that optimism was correlated with healthy behaviors such as abstaining from smoking, moderate consumption of alcohol, the habit of walking briskly and regular physical activity, regardless of demographical factors, current psychological conditions and body mass.

Implications
Our study makes two key contributions to the literature on mental health. First contributions conform this paper is that the study conducted on elderly people, while the earlier studies focused on adult and young people. The second contribution is the importance of physical activities on optimism and mental health status of people. Our results suggest the use of sport as a mean of enhancing people’s mental health.

Limitations
These results are based on self – reports of students in various colleges and from different fields of study. Our result may also be affected by some bias attitte that participants might take toward the variables.

Conclusion
Our study adds to the growing body of research on mental health status and factors such as optimism that affect this variable. In view of our findings, we hope that the use of sport and physical activities as means of improving one’s mental health status, be more emphasized and recommended by psychologists and mental health experts.

References


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