

## **Effect of One-Year Exercise Programme on Psychological State of Elderly People**

**Mridha<sup>1</sup>, S. & Banerjee<sup>2</sup>, A. K.**

<sup>1</sup>Reader, Department of Physical Education, University of Kalyani, West Bengal-741235, E-mail:

sanjib\_mridha@rediffmail.com

<sup>2</sup>Vice-Chancellor, University of Kalyani, West Bengal, Pin- 741235

### **Abstract**

Number of elderly people is increasing very fast than any other segment of our population. They face many problems due to various reasons. Their sufferings are intensified by fixed and reduced income, dispersal of children and fellow friends, and loss of social support. The purpose of this study was to observe the effect of one-year exercise programme on psychological state of elderly people.

Twenty male subjects in each of the three groups (Group-A:60-69 years, Group-B:50-59 years and Group-C:40-49 years) were the subjects of this study. Each group sub-divided into one experimental group (N=10) and one control group (N=10). All experimental groups (AE, BE & CE) underwent into individual specific exercise programme (50-70 min/session, 5 sessions/week for one year). Exercise programme consisted of suppling exercise, jogging/walking, stretching, and cool-down exercise. Control groups (AC, BC & CC) did not take part in any physical activity programme. Psychological state was measured by Anxiety (Spielberger's State-Trait anxiety Inventory, 1970) and Depression (Depression Scale – Karim & Tiwary, 1986). Pre- and post-tests were conducted before and after one- year experimental period. Intra- and inter-group comparisons (pre- and post-test data) were made by paired and independent t-test and level of significance was set at 0.05 level of confidence.

It was observed after that after one-year experimental period state anxiety and depression level reduced significantly ( $p < 0.05$ ) in all experimental groups and trait anxiety significantly reduced in AE & CE groups. And in control groups trait anxiety and depression of three groups and state anxiety of AC & CC increased significantly after one-year duration. Therefore it may be concluded that regular moderate physical exercise can reduce and maintain psychological state of elderly people.

**Key Words: Elderly People, Psychological State**

### **Introduction**

The number of elderly people is rising faster than any other segment of our population. In the elderly, changes - as a result of aging, have deleterious impacts upon bodily systems, those are likely to be: i) reduced capacity of respiratory system to take inadequate quantity of oxygen, ii) reduced efficiency of gastrointestinal system in extracting nutrition, iii) diminished output of the cardiovascular system, due to heart's decreased strength and/or hardening and shrinking of arteries iv) slowing and

reduced efficiency of urinary system at excreting toxins and other body waste (*Mahajan, 1997*). Decline in these functions, in turn, have severe repercussions on the psychosomatic and psychological performance (*Weg, 1983*).

The psychological problems faced by the elderly are complex and numerous. Three sources are account for the increase in major psychological problems; because older people can – i) become exposed to stress of poor health due to their reduced physical and mental functioning, ii) become exposed to economic stress due to