

Original Paper

## Effect of 8 weeks selective training program with instructions focus of internal and external attention on statical balance of multiple sclerosis patients

Shams A (M.Sc)<sup>\*1</sup>, Taherii H (Ph.D)<sup>2</sup>, Nikkhah K (Ph.D)<sup>3</sup>

<sup>1</sup>M.Sc in Motor Behavior, Faculty of Physical Education and Sport Sciences, Ferdowsi University of Mashhad, Mashhad, Iran. <sup>2</sup>Associate Professor in Motor Behavior, Ferdowsi University of Mashhad, Mashhad, Iran. <sup>3</sup>Associate Professor, Neurology Department, Mashhad University of Medical Sciences, Mashhad, Iran.

---

### Abstract

**Background and Objective:** Multiple sclerosis (MS) is the most common progressive neurologic disorder among young adults. This disease leads to lesions regarded to as demyelinating plaques which are scattered in the white matter of CNS hence create various neurological problems. This study was done to evaluate the effect of 8 weeks selective training program with instructions focus of internal and external attention on statical balance of MS patients.

**Methods:** In this quasi-experimental study, 23 MS patients were non-randomly divided into, two interventional and one control groups. Training program for two interventional were carried out in 8 weeks, three sessions per week, and each session lasted about one hour. Pre and post test to evaluate the fall risk of subjects using Biodex system was performed in three groups.

**Results:** Statical balance was significantly improved in the two interventional compared to control group ( $P < 0.05$ ).

**Conclusion:** The training program with instructions focus of internal and external attention significantly improves statical balance of MS patients.

**Keywords:** Multiple sclerosis, Training, Statical balance

---

\* Corresponding Author: Shams A (M.Sc), E-mail: shams.atena@yahoo.com

Received 10 Dec 2014

Revised 6 Jun 2015

Accepted 20 Jun 2015