



Effect of 'Exercise Without Movement' yoga method on mindfulness, anxiety and depression



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ABSTRACT

Objective: To analyze the effect of the 'Exercise Without Movement' (E.W.M.) yoga method on mindfulness and on the improvement of anxiety and depression symptoms.

Methods: A quasi-experimental study examined the effect of one month E.W.M. intervention among 38 participants who were enrolled voluntarily to both groups, study ($n = 16$) and control ($n = 22$). Five participants dropped out during the study.

The State Mindfulness Scale (SMS) was used to measure mindfulness. The Anxiety Inventory Beck (BAI) and the Beck Depression Inventory (BDI-II) were used to measure the anxiety and depression symptoms, respectively, before and after the intervention.

Results: Study group showed both a statistically significant increase in mindfulness and decrease in anxiety and depression symptoms, compared with the control group.

Conclusions: The E.W.M. has been useful in the development of mindfulness and in the treatment of anxiety and depression symptoms and may represent a new method in the mindfulness-based therapeutic application.

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1. Introduction

1.1. 'Exercise Without Movement' (E.W.M.)

'Exercise Whitout Movement' (E.W.M.) is a systematic yoga method which focuses on the development of attention and a greater consciousness and control of the autonomic nervous system process, through attention, relaxation and meditation practices, specific yoga postures and breathing practices [39].

The origin of this method lies in the tradition of the Himalayan Rishis who were sages of ancient India who collected their teachings in sacred books known as the Vedas, written in Sanskrit between 1500 and 1000 BCE. Based on these teachings, Swami Rama who was a renowned spiritual teacher, doctor and Indian scientist, promoter of yoga and meditation in the West, designed and developed this series of exercises and practices, which he called 'Exercise Without Movement'.

The E.W.M. method consists of the practice of various body

awareness and relaxation techniques: (1) Corpse Pose Relaxation or Shavasana, a relaxation technique based on a progressive mental body scan; (2) Systematic Tensing and Relaxing in Corpse Pose; (3) Standing Tension/Relaxation; and (4) Shavayatra or 61 Points Relaxation, one of the central practices of this group of techniques, which is based on the focusing of attention to specific points and vital centres. Through the Shavayatra it is possible to detect and become aware of the weak and tense body points [40].

In addition to the techniques mentioned, this method is also composed of meditation techniques based on attention to the body and its sensations, which is the core of Buddhist Vipassana meditation. Vipassana means insight, observation of reality within oneself, through attention to one's own physical sensations [19]. The alternate breathing pranayama technique known as Nadi Sodhana, which favours a state of meditation and internalization, is also included in this meditative practice [41].

E.W.M. further includes specific practice of yoga postures which are aimed mainly at promoting the proper functioning of the abdominal organs and, therefore, digestive function. They also stimulate the endocrine system, through the massaging caused by the postures in the endocrine glands. This stimulation improves the assimilation of nutrients, the detoxification, cleansing and revitalization of the body.

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- (1994) 1103–1106.
- [43] J.J. Ratey, *A User's Guide to the Brain: Perception, Attention, and the Four Theatres of the Brain*, Vintage Books, New York, 2002.
- [44] J. Sanz, M.E. Navarro, The psychometric properties of a Spanish version of the Beck Anxiety Inventory (BAI) in a university student sample, *Ansiedad y Estrés*. 9 (1) (2003) 59–84.
- [45] J. Sanz Fernández, M.E. Navarro, C. Vázquez Valverde, Adaptación española del inventario para la Depresión de Beck-II (BDI-II): propiedades psicométricas en estudiantes universitarios, *Análisis y modificación de conducta*. 29 (124) (2003) 239–288.
- [46] A.M. Semich, Effects of two different hatha yoga interventions on perceived stress and five facets of mindfulness, *Diss. Abstr. Int. Sect. B Sci. Eng.* 74 (2014) 8 (ProQuest Information & Learning, US).
- [47] D. Shapiro, I.A. Cook, D.M. Davydov, C. Ottaviani, A.F. Leuchter, M. Abrams, Yoga as a complementary treatment of depression: effects of traits and moods on treatment outcome, *Evid.-basedcomplement. Altern. Med.* 4 (4) (2007) 493–502, <http://dx.doi.org/10.1093/ecam/nei114>. Advance online publication.
- [48] D.V. Shulov, S. Suchday, J.P. Friedberg, A pilot study measuring the impact of yoga on the trait of mindfulness, *Behav. cogn. psychother.* 37 (05) (2009) 595–598.
- [49] J.C. Smith, *Relaxation Dynarnics: a Cognitive-behavioral Approach to Relaxation*, Research Press, Illinois, 1989.
- [50] C.C. Streeter, J.E. Jensen, R.M. Perlmuter, H.J. Cabral, H. Tian, D.B. Terhune, et al., Yoga asana sessions increase brain GABA levels: a pilot study, *J. Altern. Complement. Med.* 13 (4) (2007) 419–426.
- [51] G. Tanay, A. Bernstein, State Mindfulness Scale (SMS): development and initial validation, *Psychol. Assess.* 25 (4) (2013) 1286–1299.
- [52] J.F. Thayer, R.D. Lane, The role of vagal function in the risk for cardiovascular disease and mortality, *Biol. Psychol.* 74 (2) (2007) 224–242.
- [53] L. Tolbaños Roche, B. Mas Hesse, Application of an integrative yoga therapy programme in cases of essential arterial hypertension in public healthcare, *Complement. Ther. Clin. Pract.* 20 (4) (2014) 285–290.
- [54] Y. Tul, A. Unruh, B.D. Dick, Yoga for chronic pain management: a qualitative exploration, *Scand. J. caring Sci.* 25 (3) (2011) 435–443.
- [55] P.J. Uhlhaas, F. Roux, E. Rodriguez, A. y Rotarska-Jagiela, W. Singer, Neural synchrony and the development of cortical networks, *Trends Cogn. Sci.* 14 (2010) 72–80.
- [56] C. Vázquez, G. Hervás, L. Hernangómez, N. Romero, Modelos cognitivos de la depresión: una síntesis y nueva propuesta basada en 30 años de investigación, *Psicol. Conduct.* 18 (1) (2010) 139–165.
- [57] K. Yoshihara, T. Hiramoto, N. Sudo, C. Kubo, Profile of mood states and stress-related biochemical indices in long-term yoga practitioners, *Biopsychosoc. Med.* 5 (1) (2011) 1–8.