## Abstract

Title: Effect of passive stretching on current patient's mental state

Objectives: This thesis presents a pilot theoretical - empirical experiment, where the main subject of the experiment is to evaluate the effect of passive stretching hypertonic or shortened muscles, i.e. decreased muscle tone on current patient's mental state. The theoretical part summarizes the neurophysiologic basis of emotions by search form. Through the implementation and follow-up experiment, we aim to demonstrate the positive impact of stretching exercise on current psychological state.

Methods: Two groups of patients participated in this research, thirty without pain and thirty with pain. We chose questionnaire PANAS-X (Watson, Clark, 1994) to diagnose their current mental state. The first group, patients without pain, completed the questionnaire before and immediately after the experimental intervention, i.e. passive stretching hypertonic muscles. The second group, patients with pain, went through stretching exercise unit twice a week for three weeks. As for this group, we compare the situation before the first therapy with the state after six sessions. We evaluated the change in the individual sublevels of positive and negative emotions by the methodology of the questionnaire.

Results: During the experiment three out of four predefined hypotheses have been confirmed fully and one partially. The results of both groups show that stretching has generally positive effect on one's current mental state i.e. increasing positive emotions and reducing negative feelings. As expected, the changes were more substantial in case of patients with pain and those with more shortened muscles.

Keywords: static stretching, physiology of emotions, change of muscle tension, endorphins