## ABSTRACT

Title: Comparison of the benefits of two muscle testing on a group of modern dancers – randomized interventional crossover study.

The main goal of this bachelor's thesis was to compare the benefits of two muscle tests among modern dance dancers. A secondary goal was to determine whether muscle testing as such is beneficial for dancers, regardless of the type of muscle test used. Another goal was to map muscle imbalances and muscle strength of the dancer, to identify which muscle groups are used most and which are weakened.

This pilot study involved 20 female modern dance dancers aged 18-25 years, who had been engaged in modern dance for at least three years prior to the start of the study. Exclusion criteria included serious orthopedic dysfunction, feverish and other acute conditions, and lack of interest in the study. All participants met the entry criteria and were thus included in the study.

Results were collected via a questionnaire survey. The results indicate that Muscle Testing: A Concise Manual was rated as more time-efficient, physically more pleasant, and more useful for training planning compared to SFT. Additionally, the usability of muscle testing as such in modern dance was positively evaluated by the dancers. At the beginning, three hypotheses were set, the first of which was confirmed and the dancers chose Muscle Testing: A Concise Manual as the more beneficial test. The second hypothesis was also confirmed, as muscle testing was found to be at least minimally beneficial for the dancers, regardless of the muscle test type. The third hypothesis *A muscle imbalance between the upper and lower limbs of the dancers with a predominance of muscle strength in the lower limbs will be found.* was also confirmed, with the dancers having mainly weakened m. latissimus dorsi whereas the lower limb muscles were strong.

## KEYWORDS

Muscle strength, Muscle testing, Functional muscle tests, Muscle Testing: A Concise Manual, modern dance, dancers.