

Abstract

Title:

Exercises and motor tests used for military personnel training and testing: a systematic review.

Objective:

The aim of this bachelor thesis was to determine what exercises and motor tests are most commonly used to develop and test strength abilities in military personnel and then compare their frequency and purpose of use in military training.

Methods:

This bachelor thesis was conducted in the form of a systematic review dealing with exercises and motor tests designed for training and testing the strength abilities of military personnel. The methodological procedure of the study was conducted based on the recommendation of PRISMA. To initially select potentially suitable studies, a script was constructed and used to search the Web of Science, Scopus, and PubMed databases. A non-systematic search of the Google Scholar database was conducted for added other studies. The selected studies had to meet predefined inclusion criteria, and all studies were checked for risk of bias before inclusion in the systematic review.

Results:

When testing the strength of military personnel, the highest frequency was recorded in motor tests, where the resistance was formed by the weight of one's own body (cranks, seats, and push-ups). Furthermore, strength endurance testing prevailed over other types of strength abilities, up to 58%. It was also found that in the training programs used to develop and maintain the strength of soldiers, the greatest emphasis was placed on the development of muscles in the lower limbs, 29% opposite to other muscle groups. It was also found that the development of strength abilities in training programs is dominated up to 56 % by the inclusion of exercises with external load, which allows more training, variability various loads and intensities, and unlike testing, exercises for complex development of the whole body and specific muscles, which may have a positive effect on the muscle dysbalance.

Keywords: exercises, motor tests, strength, military personnel