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The biomechanics of women in combat

Pamela Mc Cauley

University of Central Florida, USA

If women are to compete for combat roles, a concerted effort needs to be placed on implementing physical training programs to increase muscular strength, particularly of the upper body. The leading cause of injury in the US Army is musculoskeletal injuries, accounting for almost 31% of hospitalizations for male and female soldiers. This clearly adversely affects military training, resulting in lost days and increased medical costs. An enhanced training program targeting upper body strength requirements would benefit the armed forces across the board. Given acceptable fitness levels coupled with effective physical fitness training, women can be successful in meeting the physical requirements for military task performance. The way forward is to treat this problem as a need to address “fitness level at entry” and training programs rather than “women’s issues” and rather than relaxing the Physical Readiness Testing standards for female soldiers. This does not mean women need to be elite athletes to be trained to increase their muscular strength and thus their ability to meet and exceed the requirements. A consistent and focused strength training plan can accomplish the goal of increasing muscular strength of the upper and lower body. Enhancing the physical readiness of all members of the military through upgraded and updated physical training programs in synergy with adding women soldiers to combat duties, will benefit the Armed Forces and result in a stronger military with fewer injuries for male and female soldiers.

Biography

Pamela Mc Cauley is an internationally recognized researcher and expert in the area of ergonomics, biomechanics and human engineering. She is a tenured Full Professor and Director of the Ergonomics Laboratory in the Department of Industrial Engineering and Management Systems at the University of Central Florida. She has received distinction as a Fulbright Specialist Awardee for her research and has lead research projects funded by the Department of Defense, National Security Agency, Army Research Lab and the National Science Foundation. She is the author of over 80 technical publications including an Ergonomics textbook, “*Ergonomics: Foundational Principles, Applications and Technologies*”.

drpamelamccauley@transformingyourstemcareer.com