

The impact of prior physical conditioning in initial recruit training success: A systematic review

Beranek, D; Howe, A; Campbell, Patrick G.; Orr, Rob Marc; Fontenelle Dumans Canetti, Elisa

Licence:
Unspecified

[Link to output in Bond University research repository.](#)

Recommended citation(APA):

Beranek, D., Howe, A., Campbell, P. G., Orr, R. M., & Fontenelle Dumans Canetti, E. (2023). *The impact of prior physical conditioning in initial recruit training success: A systematic review*. 540. Poster session presented at Australian Physiotherapy Association, Brisbane, Queensland, Australia. https://ignite2023.physio/wp-content/uploads/2023/09/Ignite2023_Abstract_book_V5.pdf

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

For more information, or if you believe that this document breaches copyright, please contact the Bond University research repository coordinator.

The impact of prior physical conditioning on initial tactical recruit training success: a systematic review

Beranek D¹, Howe A, Campbell P, Orr R, Canetti E

¹*Bond University Tactical Research Unit*

Poster Presentations Saturday Lunchtime, Exhibition Hall, October 7, 2023, 12:50 PM - 1:32 PM

Aim: To determine whether recruits who underwent a physical conditioning program prior to initial tactical training had increased rates of success.

Design: Systematic Review

Method: A systematic search, following the PRISMA protocol and registered in the Open Science Framework, was conducted to identify relevant studies. Keywords, derived from three themes (physical conditioning, tactical, and recruits), were employed in the search of database CINAHL, ProQuest, PubMed, Scopus, SportDiscus, and Web of Science. Studies were screened against inclusion/exclusion criteria with data extracted and analyzed. The Joanna Briggs Institute critical appraisal tools were used to assess methodological quality of included studies by two authors independently with a Kappa analysis to determine inter-rater agreement.

Results: Of 14,411 identified articles, 13 studies informed the review. The mean quality of studies was considered 'good' with a Kappa of 0.81 between raters. Seven studies identified that an increase in physical fitness, through use of preconditioning programs, resulted in lower rates of injury. Three studies attributed increased basic training pass rates to physical conditioning programs. However, three studies failed to find a change in attrition rates following the programs.

Conclusion: The volume of evidence suggests that programs aimed at increasing muscular conditioning and aerobic endurance prior to tactical training would result in fewer injuries and increased pass rates although reductions in absolute attrition may not change.

Key Practice Points:

- Recruits are less likely to be injured if they are fitter and / or have completed additional training prior to completing training for a tactical occupation.