

INPLASY PROTOCOL

To cite: Akbar et al. Effects of Neuromuscular Training on Athletes Physical Fitness in Sports: A Systematic Review. Inplasy protocol 2021100119. doi: 10.37766/inplasy2021.10.0119

Received: 30 October 2021

Published: 30 October 2021

Corresponding author:
Saddam Akbar

justsaddamakbar4@gmail.com

Author Affiliation:
Universiti Putra Malaysia

Support: Self finance.

Review Stage at time of this submission: Preliminary searches.

Conflicts of interest:
None declared.

Effects of Neuromuscular Training on Athletes Physical Fitness in Sports: A Systematic Review

Akbar, S¹; Geok, SK²; Bashir, M³; Raza, A⁴.

Review question / Objective: This systematic review aimed to investigate the effects of neuromuscular training on players' physical fitness.

Condition being studied: Neuromuscular training on Athletes Physical Fitness in sports.

Eligibility criteria: Inclusion criteria: with the aim of evaluating the effectiveness on performance. (1) Published in English individual and team sport athletes aged 17-26 years who had to have either participated in their usual training routine/standardized protocol.(2) Include male and female:(3) Studies involved neuromuscular training interventions;(4) Skill-related fitness components (speed, power, reaction time, agility, balance, coordination), Health-related fitness components (cardiovascular endurance, muscular strength, muscular endurance, flexibility, body composition); (5) the design of the study was restricted to randomized controlled trails (RCT) and non-randomized control trial (NRS)single-group trials with pretest and post-test design and with two or more groups. (6) Meta-analysis, published review articles and authentication studies.

INPLASY registration number: This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 October 2021 and was last updated on 30 October 2021 (registration number INPLASY2021100119).

INTRODUCTION

Review question / Objective: This systematic review aimed to investigate the effects of neuromuscular training on players' physical fitness.

Condition being studied: Neuromuscular training on Athletes Physical Fitness in sports.

METHODS

Search strategy: Search Strategy through the electronic databases, the following databases were reviewed: Google Scholar,

ECOHOST, Mendeley, ProQuest, PubMed, Web of Science, Science Direct and Scopus. The search covered the period between 2011 and 2021. The search terms used were “neuromuscular training ”OR “neuromuscular exercise” “OR” functional Training “OR” functional movement “OR” fundamental movement “OR” motor skill “OR” physical fitness” OR “physical endurance” OR “cardiovascular fitness” OR “physical conditioning” OR “skill-related fitness” OR “skill related fitness” OR “skill related physical” OR “skill-related physical” OR “skill related physical fitness” OR “skill-related physical fitness” OR “speed” OR “power” OR “agility” OR “balance” OR “coordination” OR “reaction time” OR “health related physical fitness” OR “health related physical” OR “health related fitness” OR “health-related physical” OR “health-related physical” OR “health-related components” OR “ health related components” OR “aerobic endurance” OR “muscular strength” OR “muscular endurance” OR “cardiovascular endurance” OR “body composition” OR “flexibility” OR “player” OR “athlete” OR “sportsman” OR “sportswoman”.

Participant or population: Male and Female Athletes.

Intervention: Neuromuscular Training.

Comparator: One, two and more Groups.

Study designs to be included: RCT and Non-RCT.

Eligibility criteria: Inclusion criteria: with the aim of evaluating the effectiveness on performance. (1) Published in English individual and team sport athletes aged 17-26 years who had to have either participated in their usual training routine/standardized protocol.(2) Include male and female:(3) Studies involved neuromuscular training interventions;(4) Skill-related fitness components (speed, power, reaction time, agility, balance, coordination), Health-related fitness components (cardiovascular endurance. muscular strength, muscular endurance, flexibility, body composition); (5) the design

of the study was restricted to randomized controlled trails (RCT) and non-randomized control trial (NRS)single-group trials with pretest and post-test design and with two or more groups. (6) Meta-analysis, published review articles and authentication studies.

Information sources: Google Scholar, ECOHOST, Mendeley, ProQuest, PubMed, Web of Science, Science Direct and Scopus.

Main outcome(s): Not reported.

Quality assessment / Risk of bias analysis: Not reported.

Strategy of data synthesis: Not reported.

Subgroup analysis: Not reported.

Sensitivity analysis: Not reported.

Language: English.

Country(ies) involved: Pakistan and Malaysia.

Keywords: Neuromuscular Training, Physical fitness, skill-related fitness components, Health-related fitness components, Athletes.

Contributions of each author:

Author 1 - Saddam Akbar.

Email: justsaddamakbar4@gmail.com

Author 2 - Soh Kim Geok.

Email: kims@upm.edu.my

Author 3 - Marriumbashir.

Email: marriumbashir@gmail.com

Author 4 - Ali Raza.

Email: aliraza09055@gmail.com