

Supplementary S1. Search Strategy and Search Terms

A comprehensive literature search was conducted to identify randomized controlled trials evaluating the effects of exercise interventions on health promotion. The search strategy was developed using a combination of Medical Subject Headings (MeSH) and free-text keywords. The strategy was adapted for each database to account for differences in indexing and search functions.

The databases searched included PubMed/MEDLINE, Scopus, Web of Science, and ScienceDirect. The final search was completed on 15 January 2024.

Search Concepts

The search strategy was structured around the following key concepts:

- 1. Exercise and physical activity
- 2. Health promotion and health outcomes
- 3. Musculoskeletal and mental health
- 4. Randomized controlled trials

PubMed/MEDLINE

MeSH Terms	Keywords
<ul style="list-style-type: none">• Exercise• Exercise Therapy• Physical Activity• Health Promotion• Mental Health• Musculoskeletal Diseases• Quality of Life• Randomized Controlled Trial	<ul style="list-style-type: none">• exercise intervention*• physical activity• resistance training• aerobic exercise• mind-body exercise• tai chi OR Baduanjin OR yoga• digital exercise OR online exercise OR technology-assisted exercise• mental well-being• psychological health• musculoskeletal pain• occupational health• older adults OR elderly

Search Strategy (Example)

(Exercise OR Exercise Therapy OR Physical Activity OR exercise intervention*
OR resistance training OR aerobic exercise OR mind-body exercise)
AND
(Health Promotion OR mental health OR psychological well-being OR quality of life)
AND
(Musculoskeletal Diseases OR musculoskeletal pain OR occupational health)
AND
(Randomized Controlled Trial OR RCT)

Scopus

TITLE-ABS-KEY (exercise OR physical activity OR exercise intervention*
OR resistance training OR aerobic exercise OR mind-body exercise
OR tai chi OR yoga OR Baduanjin)
AND
TITLE-ABS-KEY (health promotion OR mental health OR psychological well-being
OR quality of life)

Supplementary S1. Search Strategy and Search Terms (Continued)

AND

TITLE-ABS-KEY (musculoskeletal OR pain OR occupational health)

AND

TITLE-ABS-KEY (randomized controlled trial OR RCT)

Web of Science

TS = (exercise OR physical activity OR exercise intervention*

OR resistance training OR aerobic exercise OR mind-body exercise)

AND

TS = (health promotion OR mental health OR psychological well-being)

AND

TS = (musculoskeletal OR pain OR occupational health)

AND

TS = (randomized controlled trial OR RCT)

ScienceDirect

(exercise OR physical activity OR exercise intervention*

OR resistance training OR mind-body exercise)

AND

(health promotion OR mental health OR quality of life)

AND

(musculoskeletal OR pain)

AND

(randomized controlled trial)

Search Limits

The following limits were applied:

- Publication period: January 2020 to December 2023
- Language: English
- Study design: Randomized controlled trials
- Full-text availability

Search Adaptation

The search strategy was modified as necessary for each database, including the use of Boolean operators, truncation symbols, and database-specific field tags, to ensure optimal retrieval of relevant studies.