

## eAppendix. Full Search Strategy per Database

(work in progress)

Research question:

*Welcher Typ von Bewegung fördert welche Art von positiver mentaler Gesundheit bei Jugendlichen? Erste Ergebnisse einer systematischen Literaturanalyse*

***Which type of physical activity promotes which type of positive mental health in adolescents? Preliminary results from a systematic review***

### Overview databases & results

For Medline ALL (via Ovid): Date last searched: **May 17<sup>th</sup>, 2024.**

List of other databases that will be searched.

	Before deduplication	After deduplication
Medline (Ovid)	3203	
PsycInfo (Ovid)		
Cochrane CENTRAL		
SPORTDiscus (via EBSCOhost)		
CINAHL with Full Text (via EBSCOhost)		
Web of Science		
Google Scholar (first 200)		
Total		

XX duplicate records removed\*

\* Duplicate records will be removed using a fully automated AI-based deduplication solution, Deduklick (1).[1] Borissov, N.; Haas, Q.; Minder, B.; Kopp-Heim, D.; von Gernler, M.; Janka, H.; Teodoro, D.; Amini, P. Reducing systematic review burden using Deduklick: A novel, automated, reliable, and explainable deduplication algorithm to foster medical research. Syst. Rev. 2022, 11, 172.

### Medline ALL (via Ovid)

Concepts: 1 AND 2 AND 3 AND 4

#### 1) Physical activity

(exp Exercise/ NOT (Cool-Down Exercise/ OR Muscle Stretching Exercises/ OR Physical Conditioning, Animal/ OR Post-Exercise Recovery/ OR Preoperative Exercise/ OR Stair Climbing/ OR Warm-Up Exercise/))  
OR  
(exp Sports/ NOT (exp Athletic Performance/ OR Return to Sport/ OR Sports for Persons with Disabilities/))  
OR  
(physical activit\* OR sport\* OR walking OR running OR jogging OR swimming OR exercis\* OR strength training\* OR resistance training\* OR weight training\* OR aerobic OR physical endurance OR physical fitness OR physical strength OR physical condition\* OR physical train\* OR active transport\* OR commut\* OR travel mode\* OR biking OR cycling OR bike OR bicycl\* OR recreation\* OR athletics OR badminton OR ballet OR baseball OR basketball OR biathlon OR bodybuilding OR boxing OR canoeing OR cross-fit OR dancing OR danc\* OR fencing OR football OR golf\* OR gymnast\* OR gym OR hiking OR hockey OR horse-riding OR horseback-riding OR judo OR jiu-jitsu OR ju-jitsu OR karate OR kayaking OR kung-fu OR martial-art\* OR padel OR pilates OR rowing OR rugby OR skating OR skateboarding OR skiing OR soccer OR softball OR surfing OR squash OR taekwondo OR Tai Chi OR Tai Ji OR tennis OR triathlon OR volleyball OR water-polo OR waterpolo OR wrestling OR yoga OR zumba).ab,ti.

## 2) Mental health

(search technique to increase relevance:

'Focus' for subject headings, text word search in title and author keyword field only)

exp \*Self Concept/ OR \*Mental Health/ OR \*Psychological Well-Being/

OR

(Body image OR Connectedness OR Emotional health OR Happiness OR Health literacy OR Life quality OR Life satisfaction OR Mental health OR Optimism OR (Perceived adj3 (appearance\* OR competence\* OR fitness OR mood\*)) OR (Positive adj3 (affect\* OR mood\*)) OR Psychologic\* health OR Psychosocial health OR Quality of life OR Relaxation OR Resilience OR Satisfaction with life OR Self-confidence OR Self-concept OR Self-efficacy OR Self-image OR Self-perception\* OR Sense of belonging OR Social health OR Vitality OR Well-being OR Wellbeing).ti,kf

## 3) Adolescents (12-19 years)

(Adolescent/ OR Young Adult/ OR (adolescen\* OR teen\* OR youth\* OR juvenil\* OR young adult\* OR early adulthood OR young person\* OR young individual\* OR young people\* OR young population\* OR girl\* OR boy OR boys OR student\* OR secondary school OR middle school OR high school OR highschool).ab,ti)

## 4) Limitations: Exclusion of animal studies, conference abstracts, letters, notes, diseases (clinical context)

**Study type filters:** Interviews, Observational studies, Randomized controlled trials

**Years:** from 2009 - 2024

"Document Analysis"/ or focus groups/ or interviews as topic/ or narration/ or qualitative research/ or exp "personal narratives as topic"/ or "Surveys and Questionnaires"/ or ((depth or face or group or guided or indepth or informal or semistructured or structured or unstructured) adj4 (discussion or discussions or interview or interviewed or interviews or questionnaire or questionnaires)).ti,ab. or (ethnographic or ethnography or (field adj1 work) or fieldwork or (focus adj1 (group or groups)) or (groups adj2 interviewed) or (key adj1 (informant or informants)) or (qualitative adj2 (research or studies or studies or synthesis))).ti,ab.

[based on: VonVille, Helena. Filters for qualitative studies. University of Pittsburgh; Qualitative studies filter (updated 13 May 2024)

<https://hsls.libguides.com/Ovid-Medline-search-filters/qualitative-studies#s-lg-box-32403562> ]

OR

(cohort studies/ OR longitudinal studies/ OR follow-up studies/ OR prospective studies/ OR retrospective studies/ OR Non-Randomized Controlled Trials as Topic/ OR Observational Study/ OR (cohort\* OR longitudinal OR prospective OR observation\* OR quasi-experimental OR experimental OR before-and-after OR pre-post OR intervention\* OR follow-up OR followup).ab,ti)

[based on: VonVille, Helena. Filters for Epidemiological studies. University of Pittsburgh; Cohort studies (Updated 13 May 2024)

<https://hsls.libguides.com/c.php?g=1380905&p=10281035> ]

OR

(exp randomized controlled trial/ OR controlled clinical trial.pt. OR random\*.ab. OR placebo.ab. OR clinical trials as topic/ OR trial.ti.)

[Cochrane RCT filter, MEDLINE Sensitivity-maximizing version (2023 revision) for Ovid, ISSG Search Filter Resource]

NOT (letter or news or comment or editorial or congress).pt. NOT (exp animals/ NOT humans/)

NOT (Review.pt. OR Systematic Review.pt. OR meta analysis.pt OR Cross-Sectional Studies/ OR systematic review.ti OR literature review.ti. OR umbrella review.ti OR review of reviews.ti OR cross-sectional.ti)

NOT (anorexia OR arrhythmia\* OR cancer\* OR cardiovascular disease\* OR chemotherap\* OR chronic OR concussion OR cystic fibrosis OR diabet\* OR disorder\* OR disable\* OR disabilit\* OR disease\* OR doping OR epilepsy OR illness\* OR implant\* OR injur\* OR myocardial infarct\* OR multiple sclerosis OR orthodont\* OR orthopedic OR orthopaedic OR pain OR patient\* OR postpartum OR pregnan\* OR psychiatr\* OR rehabilitat\* OR screening OR sick OR sickness OR surg\* OR syndrome\* OR suicid\* OR therap\* OR transplant\*).ti.

AND

2009:2025.(sa\_year).

Database:

Ovid MEDLINE(R) ALL <1946 to May 16, 2024>

#	Query	Results from 17 May 2024
1	(exp Exercise/ not (Cool-Down Exercise/ or Muscle Stretching Exercises/ or Physical Conditioning, Animal/ or Post-Exercise Recovery/ or Preoperative Exercise/ or Stair Climbing/ or Warm-Up Exercise/)) or (exp Sports/ not (exp Athletic Performance/ or Return to Sport/ or Sports for Persons with Disabilities/)) or (physical activit* or sport* or walking or running or jogging or swimming or exercis* or strength training* or resistance training* or weight training* or aerobic or physical endurance or physical fitness or physical strength or physical condition* or physical train* or active transport* or commut* or travel mode* or biking or cycling or bike or bicycl* or recreation* or athletics or badminton or ballet or baseball or basketball or biathlon or bodybuilding or boxing or canoeing or cross-fit or dancing or danc* or fencing or football or golf* or gymnast* or gym or hiking or hockey or horse-riding or horseback-riding or judo or jiu-jitsu or ju-jitsu or karate or kayaking or kung-fu or martial-art* or padel or pilates or rowing or rugby or skating or skateboarding or skiing or soccer or softball or surfing or squash or taekwondo or Tai Chi or Tai Ji or tennis or triathlon or volleyball or water-polo or waterpolo or wrestling or yoga or zumba).ab,ti.	1,053,027
2	exp *Self Concept/ or *Mental Health/ or *Psychological Well-Being/ or (Body image or Connectedness or Emotional health or Happiness or Health literacy or Life quality or Life satisfaction or Mental health or Optimism or (Perceived adj3 (appearance* or competence* or fitness or mood*)) or (Positive adj3 (affect* or mood*)) or Psychologic* health or Psychosocial health or Quality of life or Relaxation or Resilience or Satisfaction with life or Self-confidence or Self-concept or Self-efficacy or Self-image or Self-perception* or Sense of belonging or Social health or Vitality or Well-being or Wellbeing).ti,kf.	422,993
3	Adolescent/ or Young Adult/ or (adolescen* or teen* or youth* or juvenil* or young adult* or early adulthood or young person* or young individual* or young people* or young population* or girl* or boy or boys or student* or secondary school or middle school or high school or highschool).ab,ti.	3,407,144
4	(("Document Analysis"/ or focus groups/ or interviews as topic/ or narration/ or qualitative research/ or exp "personal narratives as topic"/ or "Surveys and Questionnaires"/ or ((depth or face or group or guided or indepth or informal or semistructured or structured or unstructured) adj4 (discussion or discussions or interview or interviewed or interviews or questionnaire or questionnaires)).ti,ab. or (ethnographic or ethnography or (field adj1 work) or fieldwork or (focus adj1 (group or groups)) or (groups adj2 interviewed) or (key adj1 (informant or informants)) or (qualitative adj2 (research or studies or studies or synthesis))).ti,ab. or (cohort studies/ or longitudinal studies/ or follow-up studies/ or prospective studies/ or retrospective studies/ or Non-Randomized Controlled Trials as Topic/ or Observational Study/ or (cohort* or longitudinal or prospective or observation* or quasi-experimental or experimental or before-and-after or pre-post or intervention* or follow-up or followup).ab,ti.) or (exp randomized controlled trial/ or controlled clinical trial.pt. or random*.ab. or placebo.ab. or clinical trials as topic/ or trial.ti.)) not (letter or news or comment or editorial or congress).pt. not (exp animals/ not humans/) not ((Review or Systematic Review or meta analysis).pt. or Cross-Sectional Studies/ or systematic review.ti. or literature review.ti. or umbrella review.ti. or review of reviews.ti. or cross-sectional.ti.) not (anorexia or arrhythmia* or cancer* or cardiovascular disease* or chemotherap* or chronic or concussion or cystic fibrosis or diabet* or disorder* or disable* or disabilit* or disease* or doping or epilepsy or illness* or implant* or injur* or myocardial infarct* or multiple sclerosis or orthodont* or orthopedic or orthopaedic or pain or patient* or postpartum or pregnan* or psychiatr* or rehabilitat* or screening or sick or sickness or surg* or syndrome* or suicid* or therap* or transplant*).ti.) and 2009:2025.(sa_year).	2,577,422
5	1 and 2 and 3 and 4	3,203