Supplementary Table S1: The PRISMA Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Title
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	We reviewed the checklist and applied it for our abstract.
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Introduction
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Introduction Lines 84-86
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Selection criteria Lines 104-117
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Databases and strategy Lines 95-100
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Databases and strategy Lines 95-100
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Selection of studies Lines 119-124
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Data collection Lines 126-133
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	TIDieR Checklist (Supplementary Table 1) and Table 2. Summary of the articles included.
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	TIDieR Checklist (Supplementary

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			Table 1) and Table 2. Summary of the articles included.
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Evaluation of methodological quality Lines 135-141
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	Not applied
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	TIDieR Checklist (Supplementary Table 1) and Table 2. Summary of the articles included.
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	Not applied
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	TIDieR Checklist (Supplementary Table 1) and Table 2. Summary of the articles included.
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Not applied
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	Not applied
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Not applied
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Evaluation of methodological quality Lines 126 – 132 and Table 3. Analysis of the methodological quality of the studies using

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			the TESTEX scale.
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	Not applied
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Figure 1. PRISMA flowchart of the search strategy and study selection.
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	Figure 1. PRISMA flowchart of the search strategy and study selection.
Study characteristics	17	Cite each included study and present its characteristics.	TIDieR Checklist (Supplementary Table 1) and Table 2. Summary of the articles included.
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Evaluation of the methodological quality of studies using TESTEX. Lines 157-158
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	TIDieR Checklist (Supplementary Table 1) and Table 2. Summary of the articles included.
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	Evaluation of the methodological

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			quality of studies using TESTEX. Lines 157-158
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Not applied
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	Not applied
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	Not applied
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Not applied
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	Not applied
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Discussion Lines 302-310
	23b	Discuss any limitations of the evidence included in the review.	Limitations and strengths Lines 354-381
	23c	Discuss any limitations of the review processes used.	Limitations and strengths Lines 354-381
	23d	Discuss implications of the results for practice, policy, and future research.	Practical implications Lines 383-388
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	Databases and strategy Lines 90-91
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Databases and strategy Lines 90-91
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	Not applied
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	Funding Line 426
Competing interests	26	Declare any competing interests of review authors.	Conflicts of Interest Line 433
Availability of data, code and	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Not applied

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other materials			

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

Supplementary Table S2. Characteristics of the included studies according to the TIDieR template and checklist.

Author	Intervention	Justification	Materials	Procedures	Professionals	Modality	Place	Duration	Adaptations	Compliance with the protocol	Modifications	Measurement
Converse et al. [25]	Tai Chi Training for Attention Deficit Hyperactivity Disorder: A Feasibility Trial in College Students.	Tai chi has been shown to improve physical and mental health, and the observed improvements in cognitive function indicate that Tai chi training may have the potential to serve as a therapy for ADHD.	The CAARS-S:L DSM-IV inattentive symptoms subscale as the primary outcome measure. Pittsburgh Sleep Quality Index and mindfulness (Five Facet Mindfulness Questionnaire).	Participants with ADHD were assigned to three seven-week intervention groups: Tai Chi, Active Control (cardioaerobic capacity), and Inactive Control (no contact).	Instructor with more than twenty years of experience.	In person.	UW-Madison athletic facilities.	60 minutes, 2 times a week, for 7 weeks.	Not reported.	Through the instructor's records.	Not reported.	Through the instructor's records.

Dinu et al. [26]	The Effects of Different Exercise Approaches on Attention Deficit Hyperactivity Disorder in Adults: A Randomised Controlled Trial.	Non-aerobic interventions using mind-body exercises have not yet produced robust results.	Test of Variables of Attention (TOVA) Task, Delay Discounting Test (DDT) y Iowa Gambling Task.	Adults with ADHD and controls were randomly assigned to 10 minutes of aerobic exercise (cycling) or mind-body (Hatha yoga) exercise. Immediately before and after exercise, participants completed the Variables of Attention Test, the Delay Discounting Task, and the Iowa Gambling Task to measure attention and impulsivity.	The yoga exercises were aimed at beginners and were taught by a qualified yoga instructor.	In person.	laboratory in Institute of Psychiatry, Psychology & Neuroscience, King's College London.	10 minutes of aerobic exercise (cycling) or mind-body exercise (Hatha yoga) depending on the assigned group.	Using an indoor cycling mobile app (Motosumo, Herlev, Denmark), which provided average RPMs.	After completing the session, the protocol was considered complete.	Changes in inclusion criteria. People with depression and anxiety were added, as long as they were not using medication.	After completing the session, the protocol was considered complete.
Fritz & O'Connor [27]	Effects of a 6 Week Yoga Intervention on Executive Functioning in Women Screening Positive for Adult ADHD: A Pilot Study.	Regular yoga class attendance requires careful planning, but adults with elevated ADHD symptoms exhibit planning deficits.	Flanker Inhibitory Control and Attention Test, the Dimensional Change Card Sort test, the List Sorting Working Memory test and the Mindful Attention Awareness Scale (MAAS)-Trait.	Thirty minutes before and 30 minutes after their yoga session, they were asked to complete the mindfulness scale and the POMS-BF using instructions.	Certified yoga instructors.	In person.	local Yoga Studio.	2 sessions of 90 minutes per week, for 6 weeks.	Not reported.	By attendance.	Not reported.	By attendance.
Gapin et al. [28]	Acute exercise is associated with specific executive functions in college students with ADHD: A preliminary study.	For the prescription of exercise as a complementary therapy, it is important to identify the possible mechanisms of action of intense exercise on cognition in	Stroop Test, Trail Making Test, Digit Span (DS) Test, Blood sampling for BDNF and Heart rate.	The exercise protocol included a 5-minute warm-up, a 30-minute steady-state exercise session at an intensity of 50% to 65% of HR, and a 5-minute cool-down. An alarm was set on the HR monitor to alert patients when their HR was	The researchers in charge.	In person.	In the research laboratory in charge of the study.	A single 40-minute session.	According to heart rate.	By attendance.	No modifications / Not necessary.	After completing the session, the protocol was considered complete.

		people with ADHD.		above or below the target rate.								
Kallweit et al. [29]	Adult ADHD: Influence of Physical Activation, Stimulation, and Reward on Cognitive Performance and Symptoms.	Exercise has shown improvement in childhood ADHD. A similar inhibitory effect is expected for adults with ADHD.	Block Design and Vocabulary. "Tour-/Routenplaner" and bicycle ergometer.	Participants completed 13 minutes of cycling on an ergometer. After 3 minutes, they were required to reach a heart rate of at least 70% of their maximum pulse rate, and for the next 10 minutes, they were required to maintain a pulse rate between 70% and 85%.	The researchers in charge.	In person.	In the research laboratory in charge of the study.	A single 13-minute session.	According to heart rate.	By attendance.	No modifications / Not necessary.	After completing the session, the protocol was considered complete.
Kouhbanani et al. [30]	Mind-body exercise affects attention switching and sustained attention in female adults with Attention Deficit/Hyperactivity Disorder: A randomized, controlled trial with 6-month follow-up.	There is evidence of the effectiveness of Pilates training on cognitive skills. However, it is unclear whether this mind-body training can be effective for adults with ADHD.	The Wisconsin Card Sorting Test, Continuous Performance Task.	The protocol consists of specific exercises performed on mats that require body awareness, strength, stretching, and balance. The exercises were performed 8 to 10 times in 2 or 3 sets. The intensity of the exercises was gradually increased.	A physical trainer with at least five years of experience in Pilates.	In person.	It is not specified where the training took place, but the evaluations were in the laboratory in charge of the research. .	60 minutes, 3 times a week for 24 weeks.	According to the level and difficulty reported by the participants.	By attendance.	No modifications / Not necessary.	By attendance.
LaCount et al. [31]	Acute Effects of Physical Exercise on Cognitive and	There's a published study examining the acute effects of	AX-Continuous Performance Test and Barkley Adult	Following a 3-minute warm-up, participants performed 16	The researchers in charge.	In person.	In the research laboratory in charge of the study.	A single 16-minute session.	According to heart rate.	After completing the session, the protocol was	No modifications / Not necessary.	After completing the session, the protocol was

	Psychological Functioning in College Students with Attention Deficit/Hyperactivity Disorder.	physical exercise on executive functions in college students with ADHD. Further research is needed on this topic.	ADHD Rating Scale - Modified (BAARS-M), Dass-21.	minutes of HIIT, consisting of eight sets of 20-second cycling followed by 120 seconds of rest (8 × 20 × 120). Targeting a heart rate (85% HRmax), the participants completed the cognitive task after a 15-minute recovery period (HR < 130 bpm).						considered complete.		considered complete.
Mehren et al. [32]	Effects of Acute Aerobic Exercise on Response Inhibition in Adult Patients with ADHD.	To investigate the effects of a single session of aerobic exercise on response inhibition, assessed using a Go/No-go task, and associated changes in task-related brain activation in adult patients with ADHD.	The experimental paradigm was programmed using Cogent 2000 v125, functional magnetic resonance imaging using two 3 Tesla MRI scanners.	In the exercise condition, they cycled on an ergometer for 30 minutes. The target heart rate was between 50 and 70% of their maximum heart rate. The control group watched a movie.	The researchers in charge.	In person.	In the research laboratory in charge of the study.	A single 30-minute session.	According to heart rate.	After completing the session, the protocol was considered complete.	No modifications / Not necessary.	After completing the session, the protocol was considered complete.
Mehren et al. [33]	Acute Effects of Aerobic Exercise on Executive Function and Attention in Adult Patients With ADHD.	Previous studies investigating the acute effects of exercise on ADHD or brain activation have not considered physical fitness as a factor.	Eriksen flanker task, Visual Task test, functional magnetic resonance imaging using two 3 Tesla MRI scanners.	In the exercise condition, they cycled on an ergometer for 30 minutes. The target heart rate was between 50 and 70% of their maximum heart rate. The control group watched a movie.	The researchers in charge.	In person.	In the research laboratory in charge of the study.	A single 30-minute session.	According to heart rate.	After completing the session, the protocol was considered complete.	According to heart rate.	After completing the session, the protocol was considered complete.

Rassovsky & Alfassi [34]	Attention Improves During Physical Exercise in Individuals With ADHD.	Most previous studies examined the effects of physical activity on attention before and immediately after exercise training. This study aimed to perform an attentional task during exercise training.	Conners Continuous Auditory Test of Attention (CATA).	The test was administered twice: at baseline, in a sitting position, and while walking on a treadmill at a speed of 5 km/h.	A trained research assistant.	In person.	In the research laboratory in charge of the study.	A single 14-minute session.	Not necessary.	After completing the session, the protocol was considered complete.	No modifications / Not necessary.	After completing the session, the protocol was considered complete.