

1. Methods

1.1. PRISMA checklist

The PRISMA checklist for our systematic review is presented in Table S1 at the end of the supplementary information.

1.2. Eligibility criteria

The scales and their accepted cut-off points included the Kiddie Schedule for Affective Disorders and Schizophrenia–Present and Lifetime [1] which is a Diagnostic and Statistical Manual of Mental Disorders (DSM)-based semi-structured interview (scoring 3 for each item is indicative of the presence of the respective symptom), the Adult ADHD Self-Report Scale [2] (at least 6 symptoms classified as occurring often or very often in each section), Conner’s Adult ADHD Rating Scale–Self Report [3] (score 1.5 standard deviation higher than the mean), the Strengths and Weaknesses of ADHD Symptoms and Normal Behavior Rating Scale (an average standard deviation cut-off of 1.65), the Swanson, Nolan and Pelham Rating Scale–IV Parent Version Questionnaire (cut-off points of 1.78 and 1.44 for inattention and hyperactivity) [4], the German Adaptive Diagnostic Checklist for ADHD (6 of 9 symptoms rated as “often” or “very often” in each subscale) [5], and the Diagnostic Checklist for Hyperkinetic Disorders, which is an International Classification of Diseases-10–DSM-based rating scale (cut-off points according to ICD-10 and DSM criteria).

1.3. Outcome variables

In the Go/No-Go task, response inhibition is reflected by the ability to inhibit a motor action in the case of a No-Go trial [6]. In the Stroop task, inhibition is reflected by the ability to suppress the meaning of a written word and focus on the color [7]. In the Flanker task response,

inhibition is operationalized by identifying the target defined by its location while ignoring one or more distracting items that flank the target in the same or opposite direction [8]. Finally, in the NEPSY-II, inhibitory control is measured by looking at a series of shapes or arrows, and naming the shape or direction or an alternative response, depending on the color or shape of the arrow [9]. In the N-back task, participants are required to identify a stimulus that repeats the one presented “n” items before its onset. In the digit span task, participants are read or shown a list of digits and asked to recall them in order. In the Corbi Cubes test, the participant repeats sequences of touches in different cubes (either forward or backward).

Table S1: The PRISMA checklist			
Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	3-4
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	5-6
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	7
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	7

Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	7-8
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	8
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	8-9
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	8-9
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	8-9
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	9- Supplementary
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	10
Summary	13	State the principal summary measures (e.g., risk ratio, difference in	n/a

measures		means).	
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	10, 12
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	10, 30
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	12, Fig. 4 legend
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	8-9
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	10-14
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	10, Fig. 2
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	10-14, Tables 1, 2

Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	n/a
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	10, Fig. 2
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	12,14-16, Fig. 4
DISCUSSION			
Summary of evidence	24	15-20	16-26
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	26
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	26
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	n/a

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For more information, visit: www.prisma-statement.org.

References

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