

Parent Correlates of Parent-Child Attachment and Relationship Quality in Children Diagnosed with ADHD: A Systematic Review Protocol

INPLASY202640003

doi: 10.37766/inplasy2026.4.0003

Received: 1 April 2026

Published: 1 April 2026

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ADMINISTRATIVE INFORMATION**Support** - Australian Government RTP.**Review Stage at time of this submission** - Preliminary searches.**Conflicts of interest** - None declared.**INPLASY registration number:** INPLASY202640003**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 1 April 2026 and was last updated on 1 April 2026.**INTRODUCTION**

Review question / Objective This systematic review aims to identify and synthesise empirical evidence on parental factors associated with parent-child attachment and relationship quality in children diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD).

Rationale Despite increasing evidence linking child ADHD with insecure parent-child attachment, and a well-established association with poorer parent-child relationship quality (Biederman & Faraone, 2005; Cavallina et al., 2015; Claussen et al., 2022; Johnston & Mash, 2001; Wylock et al., 2021), gold-standard parent training programs rarely target these constructs directly, and very few interventions have been designed to improve attachment quality in this population (Brown, Tallon, Kendall et al., 2025; Brown, Mustajbegovic, Boyes et al., 2025). Furthermore, little is known about the parental factors that may influence attachment and relationship quality in children with ADHD. Identifying modifiable parental

characteristics may clarify the mechanisms associated with attachment and broader relational difficulties and highlight potential targets for intervention. A systematic synthesis of the literature is therefore warranted to identify and summarise parental correlates of attachment and relationship quality in children with ADHD. It is anticipated that review findings could inform future research and intervention development, supporting the design of evidence-based programs that more directly address the parent-child relationship and are tailored to the needs of families of children with ADHD. No systematic review on this topic has been published or registered, making this work both timely and novel.

Condition being studied ADHD is one of the most common neurodevelopmental conditions of childhood, affecting approximately 5.9-7.1% of children and adolescents worldwide (Scandurra et al., 2019; Willcutt, 2012; Wolraich et al., 2019). ADHD is characterised by developmentally inconsistent levels of inattention and/or hyperactivity-impulsivity that emerge before the

age of twelve (American Psychiatric Association, 2013).

Parent-child attachment is defined as the emotional bond between a child and an adult caregiver (i.e., the attachment figure) and how the child seeks proximity when in a stressful situation (Zeanah et al., 2011). This enduring relationship is understood to play a critical role in socioemotional development and stress regulation (Zeanah et al., 2011). Research indicates that children with ADHD are disproportionately likely to display insecure attachment patterns compared to typically developing peers (Biederman & Faraone, 2005; Storebo et al., 2016; Wylock et al., 2021), highlighting the importance of understanding attachment processes within this population.

Parent-child relationship quality refers to the overall emotional climate and functioning of the parent-child relationship, including dimensions such as warmth, responsiveness, communication, conflict, and patterns of interaction (River et al., 2022; Rostad et al., 2016). In this sense, relationship quality can be understood as a broader construct that reflects day-to-day relational functioning across contexts. Attachment may be considered a component of this broader relational system, capturing the child's internal working model of the caregiver and expectations regarding availability and support, particularly in stressful or novel situations (River et al., 2022; Rostad et al., 2016; Zeanah et al., 2011). Thus, while attachment and relationship quality are closely related and overlapping constructs, relationship quality extends beyond attachment to include the wider emotional and interactional context of the parent-child relationship (River et al., 2022; Rostad et al., 2016). Consistent with this, research indicates that parent-child relationship quality is also often compromised in families of children with ADHD (Gerdes et al., 2007; Johnston & Mash, 2001).

METHODS

Search strategy A systematic search strategy will be developed to identify studies examining parental factors associated with parent-child attachment and relationship quality in children diagnosed with Attention-Deficit/Hyperactivity Disorder. Searches will combine keywords with controlled-vocabulary terms related to ADHD, attachment or parent-child relationship quality, parents or caregivers, and children. Search terms will be combined using Boolean operators (AND, OR) and adapted for each database, including PsycINFO, PubMed, EMBASE and Scopus. An example search strategy is provided as follows: ADHD terms (ADHD OR attention deficit

hyperactivity disorder* OR attention deficit disorder* OR Attention Deficit Disorder* with Hyperactivity OR Brain Dysfunction OR Minimal or Hyperkinetic Syndrome OR Minimal Brain Dysfunction OR Attention Deficit and Disruptive Behavior?r Disorder* OR Dysfunction, Minimal Brain OR Externalizing Disorder), attachment and relationship terms (attachment OR attachment security OR attachment style OR parent child relations* OR relationship quality* OR parent child interact*), parent terms (parent* OR mother* OR father* OR caregiver*), child terms (child OR p? ediatric OR adolescen* OR youth). These terms will be combined as follows: (ADHD terms) AND (attachment or relationship terms) AND (parent terms) AND (child terms).

Search strategies will be tailored for each database to incorporate database-specific subject headings (e.g., MeSH terms or thesaurus terms where available). Reference lists of included studies and relevant review articles will also be screened to identify additional eligible studies.

Participant or population Included studies will involve children under 18 with a primary ADHD diagnosis and their parent(s). Studies including children with comorbid conditions (e.g., Autism Spectrum Disorder) will be included, provided ADHD is the primary diagnosis or when there is a sub-sample and clearly reported data for a clearly defined ADHD group. Studies will be excluded if they include children with a mean age of 18 or greater. Studies directed towards children with a substance-related disorder and/or an intellectual disability will also be excluded. Note. Parent(s) refers to the child's primary caregiver(s). The term is not restricted to the biological mother or father of the child and may therefore include legal guardians.

Intervention The primary exposures of interest are parental factors (i.e., characteristics, attributes, behaviours or internal states) that may be associated with parent-child relationship/attachment quality in children with ADHD (e.g., parental mental health, parental reflective functioning, parental attachment style, parenting style, parental ADHD symptoms, sex, age, socioeconomic status). Both validated measures and parent-reported assessments of these constructs will be included.

Comparator A comparator group is not strictly required.

Study designs to be included This review will include primary empirical studies that examine associations between parental characteristics and

attachment quality or parent-child relationship quality in children diagnosed with ADHD. Eligible study designs include observational studies (cross-sectional, cohort, case-control) and experimental/intervention studies that report relevant baseline data. Case studies, commentaries, reviews/meta-analyses, and non-human studies will be excluded.

Eligibility criteria No additional inclusion or exclusion criteria will be applied beyond those outlined in the PECO(S) framework and language restriction sections.

Information sources A systematic search will be conducted in the following electronic databases: PsycINFO, PubMed, Scopus, and Web of Science. These databases were selected to capture literature across psychology, psychiatry, developmental science and health sciences, where research relating to parental factors, attachment and ADHD is commonly published.

In addition to searching electronic databases, grey literature will be searched to minimise publication bias. This will include doctoral dissertations and theses, preprints (e.g., PsyArXiv), and relevant institutional or government reports. Only studies reporting sufficient methodological and outcome information to meet eligibility criteria will be included.

To ensure comprehensive coverage, the reference lists of included studies and relevant review articles will also be manually screened to identify additional eligible studies. Forward citation tracking of included articles will also be conducted. A hand search will also be conducted to obtain any relevant studies not identified in the initial search.

Main outcome(s) The primary outcome of interest is child attachment quality, measured using validated attachment assessments grounded in Attachment Theory.

Additional outcome(s) Given the limited number of studies directly assessing attachment in children diagnosed with ADHD, studies examining parent-child relationship quality will also be included as secondary outcomes. These may include validated measures of relational or affective aspects of the dyad, such as relationship closeness, perceived relationship quality, warmth, responsiveness or conflict reported by parents, children, or observers. Outcome measures focused solely on general parenting practices or behavioural management strategies (e.g., discipline techniques, rule enforcement), without assessing the quality of the parent-child relationship, will be excluded.

Data management All publications identified will be stored, organised and managed using the citation software, EndNote (Clarivate Analytics, Philadelphia, USA). A two-step screening process will be undertaken using Covidence (Veritas, Health Innovation, Ltd, n.d.) with two reviewers at each step to ensure rigour. The first author will search electronic databases, and two reviewers will independently screen the resulting studies for relevant titles and abstracts. The first reviewer will also search reference lists and contact authors if necessary. Agreement between reviewers will be checked; any disagreements regarding eligibility for inclusion will be resolved by seeking additional information in the full-text articles and through discussion. If the two reviewers cannot agree, a third member involved in the review team will be consulted.

Once initial articles are chosen for the review, two reviewers will check all full-text articles against inclusion and exclusion criteria. Any disagreements about inclusion will be resolved through discussion and/or consultation with a third reviewer. For transparency, the final systematic review will include a PRISMA flow diagram depicting the process of selecting and screening articles, as well as reasons for excluding non-eligible results.

Data charting will be conducted by a single reviewer and checked by a second reviewer using a customised data charting spreadsheet created and managed in Microsoft Excel (Microsoft Corporation, Redmond, USA). As the reviewer begins charting the studies, it may become apparent that additional unforeseen data could be usefully charted. Therefore, it is likely that charting will become an iterative process whereby the spreadsheet may be modified to accommodate relevant data. To ensure that there is consensus within the research team regarding the charting process and that the collected data are as "rich" as possible, a trial run of data charting will be conducted on the first five results (Daudt et al., 2013; Levac et al., 2010).

The spreadsheet will contain key citation details such as title, author(s), year of publication, type of evidence source, and location. It will also contain study aim(s), participant details and sample size, study design and methodology, and key findings that relate to the systematic review aim.

Quality assessment / Risk of bias analysis The methodological quality and risk of bias of all included studies will be independently assessed by two reviewers. Discrepancies will be resolved through discussion, and a third reviewer will be consulted if consensus cannot be reached. For observational studies, risk of bias will be assessed using the Joanna Briggs Institute Critical Appraisal

Checklist for Analytical Cross-Sectional Studies. Key domains to be evaluated include: Selection bias (representativeness of the sample), measurement bias (validity and reliability of exposure and outcome measures), confounding (consideration and control of potential confounders), and reporting bias (completeness and transparency of reported results).

Each domain will be rated as low, moderate, or high risk of bias, with justification provided for each judgment. A summary table of risk of bias assessments will be included in the review, and the potential impact of study quality on the findings will be considered in the synthesis.

Strategy of data synthesis A narrative synthesis will be conducted to summarise the findings of the included studies. Given the anticipated heterogeneity in study designs, measures of parental characteristics, and assessment of attachment or parent-child relationship quality, a meta-analysis is not expected to be feasible. Studies will first be summarised descriptively in tables, including key information such as study design, sample characteristics, measures used, and main findings. Findings will then be synthesised narratively, with studies grouped according to outcome type. Attachment quality will be synthesised as the primary outcome. Parent-child relationship quality will be examined as the secondary outcome and further grouped into conceptually related domains where possible (e.g., affective climate, conflict/negativity, communication and involvement/engagement).

Within each outcome domain, findings will be discussed in relation to categories of parental factors with consideration given to the direction and consistency of associations across studies. Effect measures will include correlation coefficients, regression coefficients, odds ratios, or mean differences, depending on how associations between parental factors and attachment-related outcomes are reported in the included studies. Where possible, similarities and differences in findings will be explored in relation to study design, measurement approaches, and sample characteristics. The potential influence of study quality and risk of bias on the interpretation of findings will also be considered during synthesis.

Subgroup analysis Not applicable.

Sensitivity analysis Not applicable.

Language restriction Studies published in English will be included in the review. Studies published in other languages will be included where an English translation is available. Where necessary, AI-

assisted translation tools may be used to assist with preliminary translation of study abstracts or full texts to determine eligibility.

Country(ies) involved The review will be coordinated in Australia, seeking papers globally.

Other relevant information Not applicable

Keywords Attention-Deficit/Hyperactivity Disorder; ADHD; attachment; parent-child relationship; parenting; parental factors; attachment quality; neurodevelopmental disorders.

Dissemination plans The findings of this systematic review will form part of the author's doctoral thesis and are intended for publication in a peer-reviewed journal. Findings may also be presented at relevant academic conferences and seminars related to developmental psychology, attachment research, and neurodevelopmental disorders, including Attention-Deficit/Hyperactivity Disorder research.

Contributions of each author

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