

CHILD ATTACHMENT AND ADHD: A SYSTEMATIC REVIEW

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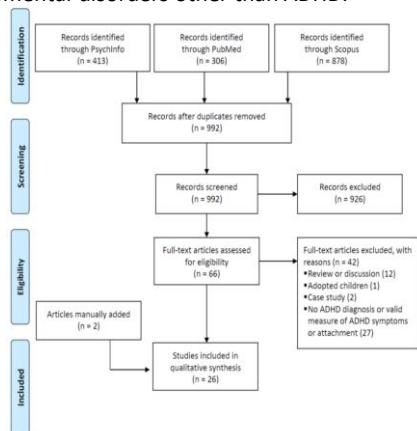
Introduction

Attention deficit hyperactivity disorder (ADHD) is a neurodevelopmental disorder with multifactorial origins, combining genetic and environmental factors. ADHD children exhibit behavioral characteristics similar to children with insecure or disorganized attachment, such as hyperactivity, impulsivity and difficulties with emotional regulation. Early relationships could act as a minimizing or amplifying factor for the genetic component underlying the phenotypic expression [1]. Early disturbances in mechanisms of stress regulation, caused by repeated episodes of separation or neglect, appear to have repercussions on the development of frontal structures that contribute to the regulation of behavior [2]. A previous review has identified an association between ADHD and attachment quality in adults and children including notably adopted samples with deprivation [3]. However, the nature of this association in the general population is not clear.

Objective: Conduct a systematic review of the literature that examines the association between ADHD symptoms and the quality of attachment in children. Studies with adopted, mistreated or deprived children were not included.

Method

A systematic review of the English literature was conducted between 2000 and 2020 [4]. Inclusion criteria were: (1) participants of the study had to be children or adolescents; (2) present a clinical diagnosis of ADHD, or an ADHD symptomatology as assessed by a validated questionnaire, (3) the research must include a measure of child attachment. Exclusion criteria were: (1) single case studies; (2) studies carried out on adopted, institutionalized or mistreated children or children with neurodevelopmental disorders other than ADHD.



Results

- 26 studies met the inclusion criteria
 - 12 included clinical ADHD children
 - 14 included community samples
- An association between insecure / disorganized attachment and ADHD was regularly observed. Behavioral difficulties of ADHD children could affect the building of parent / child relationships and attachment security.
- In some studies, the association could be explained by the presence of comorbidities (e.g. conduct disorders) and could be influenced by neuropsychological impairments or parental mental health.
- Association was not observed in ADHD children with predominantly inattentive presentation.
- The pharmacological treatment for ADHD was associated with a decrease of disorganized attachment.
- A causal link between insecure or disorganized attachment and the development of ADHD symptoms is still unclear

Discussion

- Comorbidities (e.g., anxiety, behavioral disorders), neuropsychological profiles and contextual factors (e.g., parental mental health) should be considered in future studies investigating the association between ADHD and attachment.
- Association between attachment quality and ADHD could be influenced by the methodology used to assess attachment. It seems important to replicate the results of the different studies by using simultaneously different procedures to assess attachment within the same sample of children.
- Longitudinal prospective studies including assessment of attachment and cognitive functioning at different points in time could help disentangle relationships between these factors.

References: [1] Franck et al. ADHD and attachment process: Are they related? *L'encéphale*, 2009; 35, 256-261. [2] Neuville et al. L'impact des relations précoces sur le développement cérébral: le trouble réactionnel de l'attachement vu par les neurosciences. *La psychiatrie de l'enfant*, 2017; 61, 417-436. [3] Storebø et al. Association between insecure attachment and ADHD: Environmental mediating factors. *J. Attention Disorders*, 2016; 20 (2), 187-196. [4] Wylock et al. Child attachment and ADHD: a systematic review. *Eur Child Adolesc Psychiatry*, 2021. <https://doi.org/10.1007/s00787-021-01773-y>

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