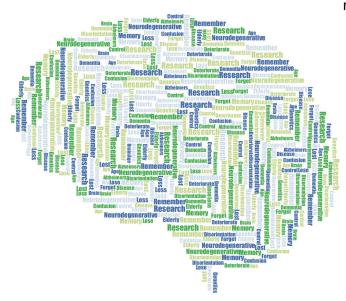


Childhood cognitive problems could lead to mental health issues in later life

7 April 2021



Credit: CC0 Public Domain

Children experiencing cognitive problems such as low attention, poor memory or lack of inhibition may later suffer mental health issues as teenagers and young adults, a new study reveals. Targeting specific markers in childhood for early treatment may help to minimise the risk of children developing certain psychopathological problems in adolescence and adult life, such as borderline personality disorder, depression and psychosis.

Cognitive deficits are core features of mental disorders and important in predicting long-term prognosis—the researchers' work indicates that individual patterns of such deficits predate specific mental disorders.

Analysing data from an initial UK cohort of 13,988 individuals born between April 1991 and December 1992, researchers discovered a number of key and specific links between <u>childhood</u> <u>cognitive</u> <u>problems</u> and <u>mental health issues</u> in later life,

namely:

- Deficits in sustained attention in eight-yearolds precede development of <u>borderline</u> <u>personality disorder</u> (BPD) symptoms at 11-12 years and depression at 17-18 years;
- Difficulties with inhibition in eight-year-olds were associated with psychotic experiences at 17-18 years; and
- Working memory deficits in 10-year-olds were related to hypomania at 22-23 years.

The international team of researchers from the UK and Finland, led by experts from the University of Birmingham, published its findings today in *JAMA Network Open*.

The leading author of the study Dr. Isabel Morales-Muñoz, from the University of Birmingham's Institute for Mental Health and the Finnish Institute for Mental Health, in Helsinki, commented: "Our study highlights the potential impact of childhood cognitive deficits on young people's <u>mental health</u>, suggesting specific associations with certain conditions. Prevention strategies focussed on easing these specific cognitive issues could help to reduce the likelihood of such children developing linked mental health problems in adolescence and early adulthood."

The study was the first analysis following subjects over a significant period of time to explore specific associations between cognitive deficits in childhood and several psychopathological issues in young people.

Deficits in sustained attention at eight years being associated with BPD symptoms at 11-12 years is consistent with similar deficits in adult BPD patients linked to difficulties in sticking to therapy programmes. Previous evidence also suggests a significant link between adult BPD and childhood Attention Deficit Hyperactivity Disorder (ADHD) symptoms -indicating that ADHD could represent a



risk factor for BPD.

The study also supports the theory that lack of inhibition in childhood precedes later psychotic experiences, with a lack of inhibitory control common in psychotic disorders such as schizophrenia.

Researchers found that working memory deficits in childhood were linked to hypomania in <u>young adults</u>, but when they checked for co-existing psychopathological conditions this association disappeared—indicating that further investigation is needed.

Mental disorders cause a significant disease burden globally and at least 10% of children andadolescents worldwide have a mental disorder. 75% of mental disorders diagnosed in adults have their onset in childhood and adolescence.

Bipolar disorder, depression and psychosis commonly emerge during adolescence and continue in young adulthood—potentially related to anomalies in the way adolescents mature caused by psychosocial, biological or environmental factors.

"It's crucial to study the onset of mental disorders at these early stages and evaluate which <u>risk factors</u> predate these conditions and in what way. These factors are core features of mental disorders such as psychosis and mood disorders," commented coauthor Professor Matthew Broome.

"Deficits in cognitive function, ranging from decreased attention and working memory to disrupted social cognition and language, are common in psychiatric disorders. They severely compromise quality of life and could potentially predate serious mental health conditions by several years," commented the senior author of the study Professor Steven Marwaha.

More information: Longitudinal Associations between Cognitive deficits in childhood and psychopathology in adolescence and young adulthood, Isabel Morales-Muñoz, Rachel Upthegrove, Pavan K Mallikarjun, Matthew R Broome and Steven Marwaha, *JAMA Network* *Open*, 2021.

Provided by University of Birmingham



APA citation: Childhood cognitive problems could lead to mental health issues in later life (2021, April 7) retrieved 24 May 2021 from <u>https://medicalxpress.com/news/2021-04-childhood-cognitive-problems-mental-health.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.