

(e.g. sibling or cousin controls) are informative.⁵ And unfortunately, the association between maternal obesity and child ADHD did not survive this interrogation. A systematic review and meta-analysis concluded that rather than being a true cause, the association between maternal obesity and ADHD is explained by familial confounding.³

But is that case closed? The new results presented from the Swedish birth cohort adds another provocative association into the mix – namely, that of an association between paternal obesity and childhood ADHD. Here the investigators' explanation for the association is familial clustering through hereditary pathways. This requires us to stop and rethink these relationships. We now become interested, not in ruling out confounding, but in clarifying it; in other words, trying to identify some of these multifactorial genetic pathways. Confounders become, not nuisance factors we wish to ignore, but factors that we need to understand in their own right if we are to make progress in understanding the etiology of neurodevelopment in children.

DATA AVAILABILITY STATEMENT

Not required.

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CO-OP helps children and young people with executive function deficits achieve their occupational performance goals

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The Cognitive Orientation to daily Occupational Performance (CO-OP) approach has established effectiveness for children with developmental coordination disorder^{1,2} and there is growing evidence of its applicability/usefulness for children with brain injury.³ In their study, Lebrault et al. further explore the effectiveness of CO-OP for children and young people with acquired brain injury (ABI), with particular focus on children with resulting executive function deficits.⁴ Executive function deficits are evident in many childhood disorders such as attention-deficit/hyperactivity disorder, so the findings have broader implications than just children and young people with ABI.

The use of single-case experimental design is an appropriate and effective way to investigate effectiveness of CO-OP with this population and is a welcome addition to the body of knowledge.⁵ The findings which showed statistically significant improvement in occupational performance for most (26/35) of the trained goals, which were also maintained at follow-up, demonstrate that CO-OP should be considered as an intervention option for these children and young people. The person-centred nature of the approach with goal setting being done directly with the children and young people is key to harnessing motivation and promoting engagement in therapy.

This commentary is on the original article by Lebrault et al. on pages 501–513 of this issue.

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The question of dosage is an interesting area for consideration. The CO-OP guidelines recommend 10 sessions as the standard protocol. This study used a total of 14 x 45-minute sessions applied twice a week for 7 weeks with the rationale for more sessions being the participants severe executive function deficits. The authors noted that 'participants seem to become more effective in the use of the metacognitive strategy as the intervention progressed: as sessions progressed'. One could hypothesize that more sessions were needed to enable time for the children and young people to master the metacognitive strategy process. Further exploration of dosage and the rationale for additional sessions is important for clinical application. In the absence of a clear rationale for additional sessions for children with executive function deficits, it would be difficult to convince funding bodies to fund these additional therapy sessions.

In the discussion, the authors explore the important roles of significant others in supporting the children and young people with ABI and the application of the CO-OP approach at home and in supporting the practice of goals outside of therapy. The authors briefly mention the possible negative impact of unfavourable family circumstances on goal attainment. A measure of parent engagement would have been useful to explore this more rigorously and would be an important addition to future CO-OP studies given the essential role caregivers play. The child or young person's perceptions of CO-OP based on their experience would add to our understanding of feasibility in future studies. Consumer

advisors to the study would have provided important perspectives to study design, interpretation of the results, and implementation of findings and is recommended for future CO-OP studies.

DATA AVAILABILITY STATEMENT

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Magnetic resonance imaging sequences for children with spastic cerebral palsy: Is two better than one?

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The power of brain magnetic resonance imaging (MRI) lies in its flexibility. The same scanner can be programmed (using 'sequences' of radio frequency pulses) to provide many types of brain tissue characterization, often all acquired during a single scanning session. Optimized MRI sequences are available to examine gray and white matter anatomy at the millimeter

scale, to examine white matter fiber microstructure, to examine correlates of neural activity in near real time, and for many more tissue contrasts. Brain MRI has been particularly transformative in the care of individuals with cerebral palsy (CP), where, as standard of care, it facilitates diagnosis and can help predict symptom severity years before symptoms occur.

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