Full source reference:

Laatsch, L., Dodd, J., Brown, T., Ciccia, A., Connor, F., Davis, K., ... & Yaeger, L. (2020). Evidence-based systematic review of cognitive rehabilitation, emotional, and family treatment studies for children with acquired brain injury literature: From 2006 to 2017. *Neuropsychological rehabilitation*, 30(1), 130-161.

Free access link:

https://pureadmin.gub.ac.uk/ws/portalfiles/portal/198621307/Brain.pdf

Article Overview:

This systematic review summarises research exploring effective treatments for children with specific types of acquired brain injury (ABI) published from 2006 to 2017 (age of children: post-birth to 18). Fifty-six articles were included in this review.

Sample: Young people with an ABI post birth to 18 years of age

Key take home messages:

- There is strong evidence for family/caregiver-focused interventions, including Stepping Stones Triple P (SSTP), Family Problem Solving (FPS), and Counselor Assisted Problem Solving Sessions (CAPS). Therefore family/caregiver training and/or involvement is a core component to successful cognitive/behavioural rehabilitation in children with traumatic brain injury.
- 2. There is strong evidence for direct interventions to improve attention, memory, executive functioning, and emotional/behavioural functioning.
 - Attention and memory interventions ←attention process training (APT) and Amat-c.
 - Executive functioning interventions ← TOPS and CAPS; training of metacognitive strategies and guided internet-based interventions in younger children
 - Emotional/CBT interventions ← family-based problem-solving therapy (CAPS)
 as a practice standard for older adolescents following traumatic brain injury; CBT
 for adolescents; context-sensitive, individualized interventions in the classroom
 setting for school-age children with traumatic brain injury.
- 3. There is strong evidence to support technology-based interventions, including five practice guidelines including TOPS, FPS, Neuropage, and CogMedTM. These interventions target domains such as EF, family problem-solving and social factors, and are completely self-guided by the patient via internet/computer/tablet. It is important to note that evidence for the efficacy of CogMed in children with ADHD has been inconsistent.
- 4. A total of 15 studies sustained treatment benefit with follow-up ranging from 3 to 12 months after ending treatment.
- 5. There are age implications: metacognitive and/or self-guided strategies more effective in older adolescents, whereas younger, school-aged children may benefit more from parent/teacher-guided interventions e.g. family problem-solving interventions.