

Diagnostic Category: Traumatic Brain Injury Discipline: Multidisciplinary team

Reference	N	Intervention (n)	Telerehabilitation program's:	Platform & clinician's involvement	Outcomes
Country Study Design Quality (for RCTs)	Sample description (dx specifics, age, gender)	vs. Comparison (n) Frequency & duration	I. Focus II. Nature III. Target IV. Receiving client		Child-related outcomes Parent-related outcomes (+) significant between-group differences for RCTs or within group improvements for non-RCTs (-) no significant between-group differences for RCTs or within group improvements for non-RCTs
Baque et al., 2017 [20] Piovesana et al., 2017 [21] Australia RCT PEDro score: 7/10 High quality	N= 60 Children with at least 12 months post-acquired brain injury, which was acquired ≥ 28 days post-full-term birth 13; independently ambulant at Gross Motor Function Classification System equivalent level I or II 14; co-operative and had sufficient comprehension, attention and	Mitii (n=30) vs. Waitlist (n=30) 30 minutes/day 6 days/week, for 20 weeks (total 60 hours).	I. Gross motor capacity, performance and executive functions. II. Mitii is a web-based therapy program that uses a game-like design and is delivered in the client's home. It includes upper/lower extremity strengthening and visual-perceptual games. Gross motor activities included sit-to-stands, squats, lunges, aerobic and balance tasks. III. Child	Web (including VR games) + video conference monitoring from clinician. Three therapists, together, on a weekly basis, accessed each participant's programme remotely via the Mitii user interface 'Cockpit' and evaluated how frequently the participant logged into Mitii, time spent engaged in the program, games that	At 20 weeks (post-treatment): (+) <i>Functional strength</i> : Sit-to-stands 30 second repetitions maximum (+) <i>Functional strength</i> : Lateral step-ups 30 second repetitions maximum (-) <i>Functional strength</i> : Half-kneel to stand 30 second repetitions maximum (-) <i>Walking endurance</i> : 6-minute-walk test (-) <i>High-level mobility</i> : High-level Mobility Assessment Tool (-) <i>Functional mobility</i> : Timed-up and Go Test (-) <i>Habitual physical activity</i> : ActiGraph GT3X triaxial accelerometer measurements of step counts and vertical accelerations

	<p>concentration, visual and verbal abilities to perform required tasks.</p> <p>Mean age: 11.92 ± 2.5 yrs</p> <p>Age range: 8-16 yrs</p> <p>32M: 28F</p>		<p>IV. Child/Youth alone</p>	<p>were skipped and progress in each module.</p> <p>Weekly contact (via phone, email, videoconference) was maintained with participants in the intervention group to provide feedback, technical support and facilitate engagement.</p>	<p>(-) <i>Mobility limitations</i>: 28-item Mobility Questionnaire, parent-reported</p> <p>Acceptability and feasibility: Parents of the intervention group (n=21/25) reported their children were satisfied with the Mitii programme and that it had improved their child's lower limb strength, physical activity, and sport participation. Parents also reported that the frequency and daily duration was too long and difficult to maintain</p> <p>(-) <i>Intellectual ability</i>: Wechsler Intelligence Scale for Children</p> <p>(-) <i>Executive functioning</i>: Delis-Kaplan Executive Functioning System</p> <p>(-) <i>Cognitive functions</i>: Comprehensive Trail Making Test</p> <p>(-) <i>Executive functioning</i>: Tower of London Test</p> <p>(-) <i>Attention</i>: Test of Everyday Attention for Children</p> <p>(-) <i>Everyday executive functioning</i>: Behavior Rating Inventory of Executive Function (BRIEF) - Parent-reported</p>
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