INTERVENTIONS FOR IMPROVING OCCUPATIONAL PERFORMANCE
POST-CONCUSSION IN CHILDREN AND ADOLESCENTS: A SCOPING REVIEW

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Presented in Partial Fulfillment of the Master of Science in Occupational Therapy degree at Thomas Jefferson University

Objectives of Presentation:
● Recognize the significant impact of concussion on immediate and long-term mental and physical well-being in the pediatric population.
● Identify the need for novel and effective interventions that address the impact of pediatric concussions.
● Describe current concussion interventions and management practices and the gap that exists in the literature.
● Discuss interventions within the scope of OT practice to address occupational performance in children and adolescents post-concussion.

Clinical Question: What interventions within the scope of occupational therapy practice are indicated in the current literature to improve occupational performance in children and adolescents who have experienced a concussion?

Methods: Identifying relevant studies
● Identifying relevant studies using PubMed, Scopus, and ERIC databases
  ○ Key words: “brain concussion”, concuss*, mild traumatic brain injur*, post-concuss*, post concussion syndrome, rehabilitation, return to play, recovery of function*, cognit*, executive function*, balance, learning, memory, attention*

Resulting Themes:
Rest (Cognitive/Physical) as an Intervention 4, 7, 13, 14, 17, 18, 19, 20, 21, 22, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 38, 39, 42, 44.
● First step of recovery is combined cognitive and physical rest which involves complete elimination of cognitive load, screen time, and physical exertion.

Progressive Return to Functional Activity 4, 7, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 33, 34, 39, 40, 41, 42, 44
● Consensus of medical professionals involves recommendations that return to functional activity should be progressive and dependent on progressive absence of symptoms.

Adaption and Accommodations 9, 13, 14, 17, 19, 20, 22, 23, 24, 25, 27, 28, 30, 33, 38, 40, 41
● Adapting academic expectations, environments, and routines can improve children’s return to meaningful occupations post-concussion.

Interventions addressing specific symptoms 1, 12, 16, 20, 29, 30, 33, 37, 42
● Some research exists examining specific interventions for concussion rehabilitation
● Current interventions predominantly target education, leisure and play skills.

Health Education and Promotion 13, 14, 15, 17, 21, 22, 23, 25, 26, 27, 28, 30, 34, 38, 40, 41
● Increase concussion awareness, prevention, and health promotion through collaboration between an established key player and all potentially impacted parties (i.e. school staff, coaches, children and families)
● General education and CDC fact sheets recommended as means of concussion awareness and prevention.

Implications:
● OTs can bring an individualized approach to the interdisciplinary management of pediatric concussion
  ○ Provide direct intervention, modify routines or environments, and provide preventative education
● OT educators should ensure that all students learn the clinical details of pediatric concussion and receive training in interprofessional collaboration and advocacy
● OT research should focus on producing higher level evidence for specific interventions used with the pediatric concussion population and should examine efficacy of existing RTP and RTL treatment standards
References


