

PromOTing Social Participation for Young Individuals Following Concussion

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

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Session Objectives:

1. Understand the relevance of anxiety and depression amongst young individuals following the onset of a concussion or post-concussive symptoms.
2. Recognize the distinct value of occupational therapy in promoting social skills to enhance relationships and mitigate feelings of isolation for persons with concussive symptoms.
3. Develop evidence-based interventions within the scope of occupational therapy for young individuals experiencing anxiety and depression following diagnosis of a concussion.

PICO: Amongst individuals, ages 13-25, experiencing symptoms of anxiety and depression following concussion, what interventions within the scope of Occupational Therapy will increase social participation?

Methods:

- **Databases:** (1) PUBMED; (2) CINHAL; (3) PsychINFO
 - Limits: 2011-2021; peer reviewed; in english language; full-text access
- **Search Terms:** **P(1):** Brain Injuries, mild traumatic brain injury, post-concussion syndrome, head injury, TBI, brain concussion, traumatic brain injuries, concussion, mild head injuries / **P(2):** Anxiety, depression, psychological effects, generalized anxiety disorder, social anxiety, mental health, psychosocial factors, well being, emotional states, adaptation psychological, models, psychological / **I:** Psychosocial intervention, psychosocial functioning, psychosocial health, occupational therapy, occupational therapy practice, occupational therapy service, occupational therapy interventions, communication skills training, social skills training, mental health education, psychological techniques / **O:** Social participation, social involvement, social behavior, social adjustment, socialization, quality of life, psychological well being, satisfaction, personal satisfaction, communication, communication skills, social skills, social interaction.
- **Evaluation of Literature:** 614 articles were identified after eliminating duplicates; screening narrowed to 10 articles for the critical review process.

Results of Systematic Literature Review:	
Aerobic exercise and physical activity	<i>AOTA's strength of evidence: Strong</i> With 4/4 reporting statistical significance and clinical relevance aerobic exercise and yoga were found to improve QOL, mood, and energy levels reducing concussive symptoms (Donnelly et al, 2021; Gauvin-Lepage et al., 2020; Rytter et al., 2019; Wise et al., 2012)
Emotional well-being strategies	<i>AOTA's strength of evidence: Moderate</i> With 3/3 reporting statistical significance and clinical relevance interventions such as mindfulness, peer support groups, and coping strategies were found to be effective in reducing symptoms of anxiety and depression; in addition, peer support groups increased community engagement (Bay & Chan, 2019; Hanks et al., 2012; Sasse et al., 2014).
Use of technology	<i>AOTA's strength of evidence: Strong</i> Mixed results were found using technology-based interventions. 2/3 articles reported video discharge and text messaging instructions were ineffective in managing concussive symptoms. However 1/3 reported phone calls to encourage adherence to intervention programs were effective in promoting symptom relief activities. Thus technology-based interventions should be used with caution. (Hoek et al., 2021; Suffoletto et al., 2013; Wise et al., 2012)

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