

**The Role of
Occupational
Therapy in the
Management of
Sport-Related
Concussion for
Children
& Adolescents: A
Scoping Review**

By: Tebogo Mokwena
Supervisors: Faye Jackson
Bhavna Bahgoo



Definition

- ❑ Sport-related concussion is a 'complex pathophysiological process' caused by trauma to the brain
- ❑ Characterised by:
 - ✓ Rapid onset of signs and symptoms that resolve spontaneously
 - ✓ Pathology that reflects a disturbance in brain function rather than structure
 - ✓ Signs and symptoms that develop sequentially and may involve loss of consciousness

The average child or adolescent experiences symptoms that typically last up to 4 weeks, however, 10-20% of concussions take longer and may continue to do so even after a year

Incident Rates

- ❑ International:
 - ✓ American children aged 18 years and younger suffer between 1.1 and 1.9 million reported sport-related concussions annually
- ❑ South Africa:
 - ✓ Currently no known studies
 - ✓ Rugby unions indicate that concussions are more common among youth rugby players compared to adults

Available incidence reports may substantially underestimate the extent of the problem!

Thus, paediatric and adolescent concussions pose a serious public health burden



Problem Statement

- ❑ Student-athletes are often expected to transition back into school & sports before symptoms resolve
- ❑ This creates a paradox where:
 - ✓ Return to pre-morbid functioning as soon as feasible
 - ✓ Without exacerbating symptoms
- ❑ This is where OT's come in

However, a gap lies in understanding how occupational therapists can assist in concussion management

Proposed framework



Intervention types

- Health Promotion
- Remediation/Restoration
- Maintenance
- Compensation/Adaptation
- Disability Prevention

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Approaches

- Client-Centred
- Occupation Based
- Tele-Active Rehabilitation
- Concussion and You Programme
- Cognitive Orientation to Daily Occupational Performance

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Return to School Protocol

- Step 1: Low-level Cognitive Activities at home
- Step 2: Introduction of School Activities at Home
- Step 3: Partial Return to School (1 - 2 Rest Breaks)
- Step 4: Part Time Return to School with accommodations (0 - 1 Rest Breaks)
- Step 5: Full Day Return to School and commence return to Sport
- Step 6: Return to Full academic activities

Figure 2.6: Proposed Concussion Intervention Framework

The proposed Concussion Intervention Framework illustrates the varying ways occupational therapists can provide intervention within concussion management