

The Foot Core System Participation In Sensory Integration Disorders. Anatomical, Biomechanical And Sensory Implications.

Dr Marc Janin ^{a, b}

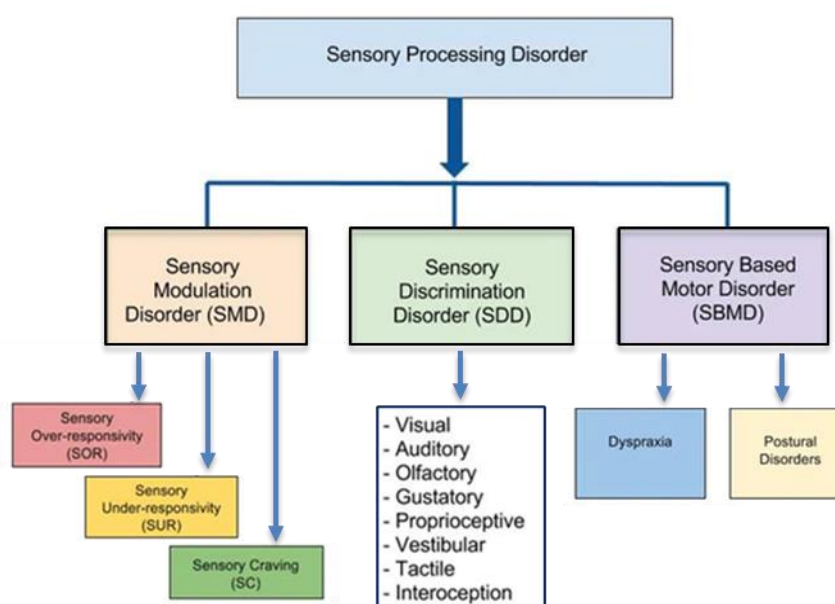


Keywords:

- Sensory Integration Disorders
- Sensory Processing Disorders
- Dys Proprioception Syndrome
- Foot Core System

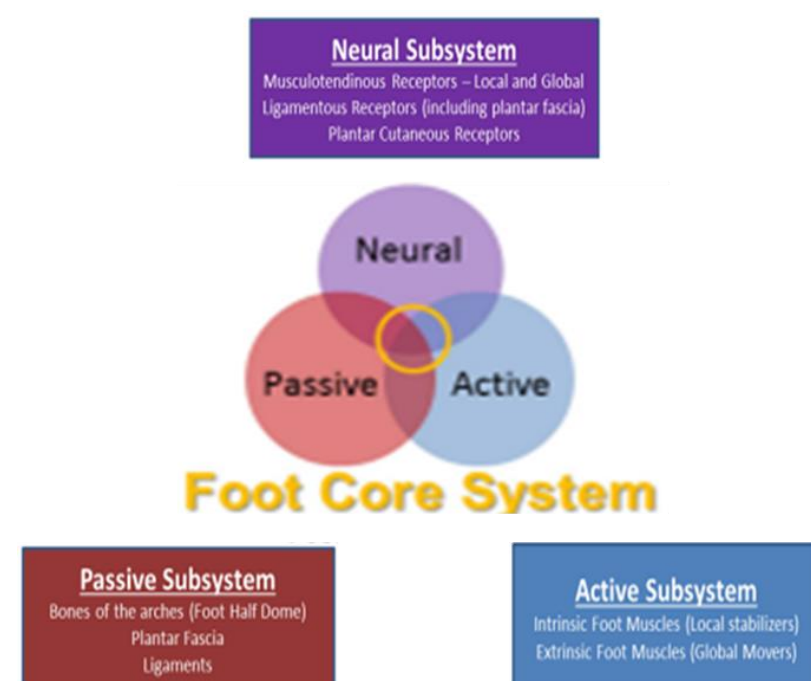
Sensory Integration Disorders, Sensory Processing Disorders or **Dys Proprioception Syndrome** are neurophysiologic disorders in which sensory input is poorly detected, modulated, interpreted and/or to which atypical responses occur induce a deficit in perceptuo-motor synchronization. Clinically objective signs are in 3 areas:

- motor execution control,
- spatial location
- multisensory integration

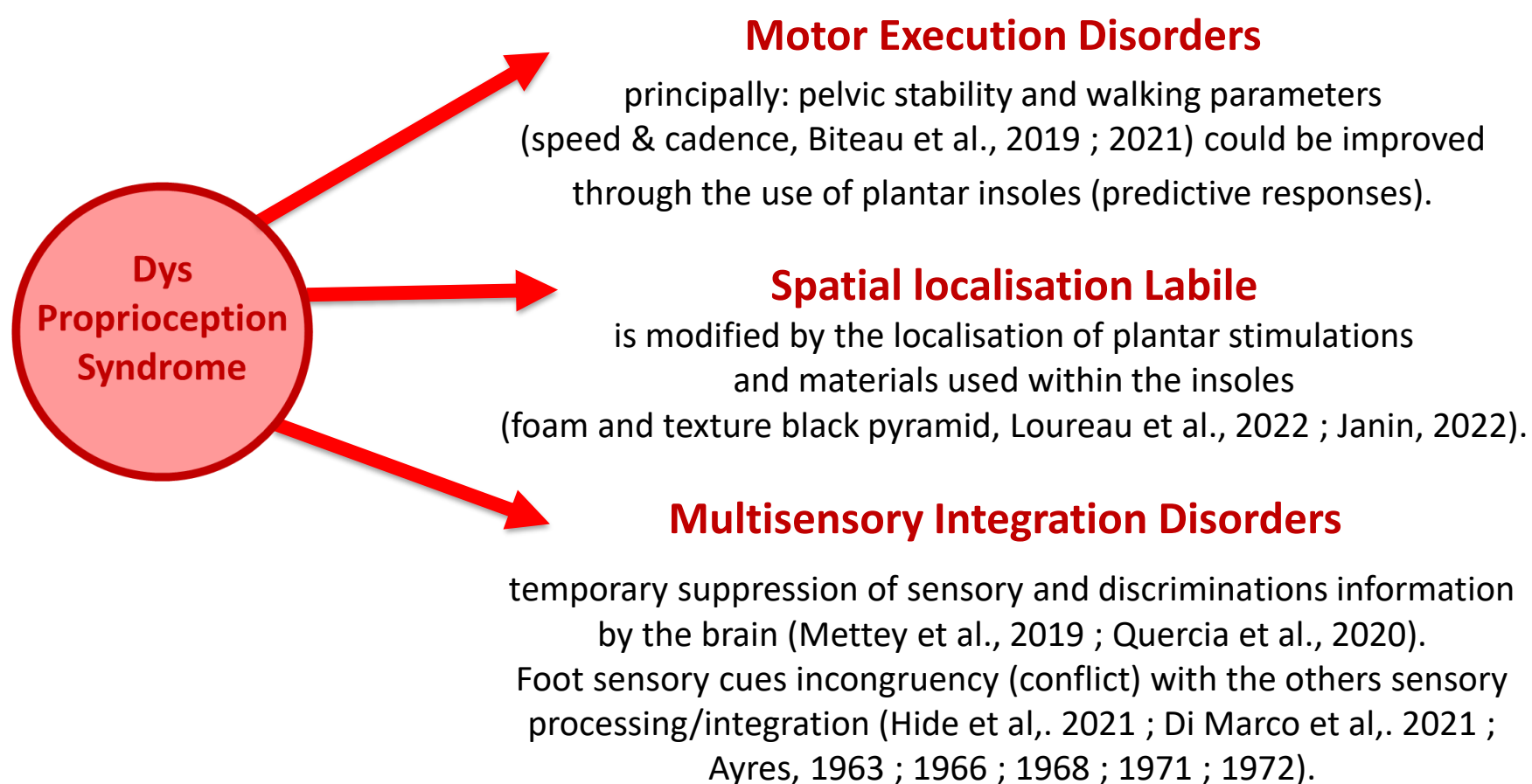


The **Foot** is a complex structure: many articulations and multiple degrees of freedom. To activate muscles for proper movement, the mechanical information's:

- **Passive:** bony & articular structures
- **Active:** muscles & tendons
- **Neural:** sensory receptors must be **combined continuously** with **multisensory information's**.



Foot is implicated in those 3 fields:



To professionals concerned, there is strong evidence that Foot Core intervention demonstrates positive outcomes for improving individually generated goals of functioning, participation and cognition. To obtain results, treatment of the plantar modality must always be included in clinical multidisciplinary care.