Sensory processing and everyday life

Susan Allen Advanced Clinical Specialist Occupational Therapist, Dingley Specialist Children’s Centre, Reading
Sue Delport MSc (OT), Lecturer in Occupational Therapy, Cardiff University
Kath Smith Consultant Occupational Therapist, MBB Connections Ltd & The Sensory Project, Cornwall

1 Definition

‘Sensory Integration sorts, orders and eventually puts all the sensory inputs together into whole brain function.’ Ayres (1979) Ph What emerges from this process is increasingly complex behaviour, the adaptive response and occupational engagement.

2 Theory

Sensory Integration is a theory based on the concept that brain ‘Integration is the process of the unfolding of genetic coding in conjunction with the interaction of the individual with the physical and social environment.’ As a result of experience, there are changes in the nervous system. (Spitzer and Foxley 1998)

Sensory qualities of the environment can positively or negatively interact with function and development. (Schneider et al, 2008)

3 Process of typical development

Ayres, 1979 believed that sensory integration is integral to the process of healthy development ‘when the functions of the brain are whole and balanced, body movements are highly adaptive, learning is easy and good behaviour is a natural outcome.’

4 Disorder

Sensory processing difficulties can influence self-regulation, movement, learning and interaction with others (Allen & Smith, 2011). It can interfere with skills that support performance, such as engagement and attention, as well as skills that enable the learning of new motor skills (Cosby, 2010; Janney, 2008).

5 Therapeutic approach

1. Sensory Integration Therapy - Direct 1:1 Therapy

With an Occupational Therapist, Physical Therapist or Speech and Language Therapist with postgraduate training, in an environment providing a variety of sensory opportunities adhering to Sensory Integration fidelity tool (Parham,2007).

Evidence identifies changes following Sensory Integration Therapy to goals set by family and therapists through Goal Attainment Scailing (Miller, 2007).

a. functional behaviour
b. motor skills
c. attention
d. cognitive skills
e. social skills
f. self-harm

‘Minimum standards are recommended by the International Coalition for Excellence in Sensory Integration

2. Consultation by a qualified therapist

Consultation offers a chance to re-frame behaviours with new understanding – a therapist-client-carer opportunity to collaborate to develop strategies to overcome challenges (Bundy, 2002). May include:

• Assessment to identify sensory processing concerns
• Parent or staff education to refame behaviours or motor difficulties

3. Off the Shelf Programmes - off the shelf programme, available to all

• Ideally delivered by suitably trained professionals
• Less research is available in this area, but developed through careful clinical reasoning

• Based on sensory integration theory
• Some of the useful tools are available from: www.ateachabout.com

Author: Diana Henry
Tools for Teachers (2001)
Tools for Tots (2007)

www.alertprogram.com Authors: Mary Sue Williams and Sherry Shellenberger,

Takes Vibe (2001)
www.starsensesci.tv Authors: Carolyn Murray-Stalisky and Betty Paris

6 References


Sensory processing Measure® Home. Los Angeles: WPS


Spitzer and Foxley 1998

Taylor Trott 1991

Terry Trott 1991