

## **A Fidelity Measure of Ayres Sensory Integration ® Intervention**

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### **Introduction**

Although many occupational therapists around the world claim to provide sensory integration intervention to children, the ways they provide this intervention vary widely. For some, it consists of sensory-motor exercises that are directed by the therapist. For others, it is an improvisational process in which the therapist collaborates with the child to choose activities. This inconsistency presents a fidelity problem. Fidelity is how faithful an intervention session is to theoretical principles and treatment philosophy.

### **Objectives of the Project**

- 1. Examine fidelity in research on SI intervention effectiveness.
- 2. Develop a reliable and valid fidelity instrument to measure how well an observed therapy session reflects the principles of Ayres Sensory Integration ® (ASI) intervention.

### **Methods**

A systematic analysis of published research showed that conclusions cannot yet be drawn about effectiveness of ASI intervention because of fidelity problems (Parham et al., 2007). To deal with this issue, a fidelity instrument was developed to measure how closely an individual occupational therapy session accurately represents ASI. The instrument involves observing videotaped therapy sessions and rating them on 10 therapeutic strategies identified in research as key elements of ASI.

### **Results**

A series of studies involving international groups of occupational therapists showed that the Fidelity Measure is reliable and valid.

### **Conclusion**

The Fidelity Measure can be used to document that the intervention in a research study reflects valid delivery of ASI intervention.

### **Contribution to occupational therapy practice**

The Fidelity Measure can be used in research and clinical practice to verify that a therapy session accurately represents ASI. It is an evidence-based tool for teaching therapists how to provide this intervention. Ultimately, it may contribute to improved research and communication about ASI intervention.