

## D7

### **Controlled Sensory Integration Therapy for Development of Verbal Communication in Young Children With Autism (2 – 6 Years)**

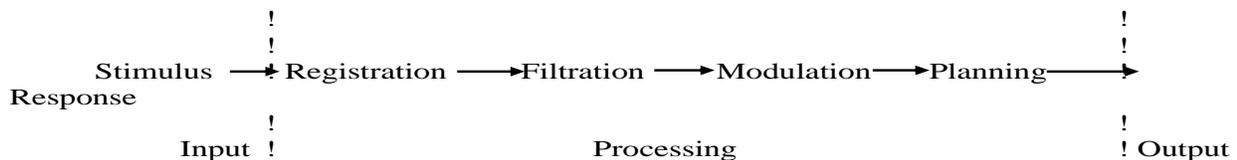
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**Purpose:**The purpose of this study is to facilitate all the Domains of development in early childhood focusing on facilitating speech and communication through controlled sensory integration therapy in children with autism spectrum disorder. Neuro muscular development (Gross motor and Fine motor skills), Cognitive development, Sensory development, Speech and language development, Social development, Functional development.

This study is undertaken based on the following principles of Sensory Integration:

Sensory Integration is organization of sensation by the brain for use in everyday life. Sensory Integration is a developmental process. Sensory Integration involves our ability to take in information through the senses, organize the information in the brain, and use it to respond appropriately to a particular situation. The process involves the central nervous system, which consists of the spinal cord and the brain. It is through senses that the child explores the environment and learning / development takes place. Sensory Integration begins at conception and continues from infancy through childhood. Matures and integrated at approximately eight to ten years of age, continues to be refined throughout our lives.

#### **Process of sensory Integration:**



**Method:**Children with development delay in predominantly cognition, speech & language and social development domains underwent Early Intervention programme. They received facilitation in all domains through O.T, P.T, Speech and Play through individual and group sessions. Control group in the age group of 3 – 6 years was given additional S.I therapy for 21 days in a constructed environment and then followed up with intense speech facilitation. This block was repeated twice with an interval of 2 months. Sensory Integration focused on integrating vestibular, auditory and visual senses. Facilitation for communication through play. The duration of session was 2 hours.

**Results:** Evaluation was done using standardized sensory profile and development quotient tool. Children who went through the sensory block showed progress in the following areas:

Establishing eye contact-Better arousal and regulation-Improved focus and attention -Improved comprehension (Simple – Complex)-Improved association and joined attention-Improved sensory feedback from oral structure to the brain. In 40% - 50% of the children after the 1st block, pointing and receptive skills emerged. After the Second block, children started producing more words meaning fully like asking for needs. After the Third block expressive skills developed. However overlapping of communication skill was present.

**Conclusions:** Controlled sensory input facilitates verbal communication in children with autism thereby the percentage of children with non-verbal feature is reduced. Earlier it is done as an intervention, chances of communication is increased. In children with autism speech regression is at 1 ½ - 2 years. S.I programme followed by speech facilitation done between 2 – 6 years during the language development phase, increases the chances of number of children who can speak. Able to communicate, decrease lots of challenges faced by the parent and child. Able to communicate, the child has increased level of confidence, leading to enhanced social development. By facilitating the child to communicate lot of behaviour issues can be solved which is an important challenge in children with autism.