

## Sensory Toys specified for Early Interventions in Autistic Children in Sri Lanka; The Influence of Design Elements

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Abstract - With the rise of Autism awareness in Sri Lanka, the obligation to develop enforceable products for Autistic children is also on the rise. One such way is to incorporate sensory toys in the sensory play activity in Autistic children, which stimulate or relax the senses, such as sight, smell, touch, taste and hearing. Thus, the use of sensory toys becomes more and more common among Autistic children as they capture their senses in an entertaining manner. The sensory processing defects are a common condition relevant to the Autistic children where it can be either hyper sensitive or hypo sensitive of their sensory systems. To overcome these effects the sensory toys are employed by them. Not every Autistic child contains all the senses to be hyper- or hypo- responsive; it can be either one or more senses that can possess those circumstances. Though the production of sensory toys for children with Autism Spectrum Disorder (ASD) is widely found in the global context. The groundwork search has shown that the production of sensory toys, specialised for autistic children is limited in Sri Lanka, so it is essential to point out to which depth will the design elements affect the production of sensory toys. In the development of the sensory toys, this study aims to identify which elements needed to be considered according to the extent of the diagnosed condition; as ASD is a spectrum disorder where the symptoms may differ from each individual. The initial data collection was done to analyse which design elements needs to be considered where it disclosed colour, texture and form are the main elements to be contemplated on. Following it included open ended questions from specialists and covert observations with four autistic children possessing different sensory delays to observe which design elements affects the development of sensory toys. The findings through data gathered revealed that even though colour and texture have a significant influence on hyper- and hyper- responsive Autistic children; the form is not concerned with reducing the uncomfortableness they gain through the senses but it is needed to include safety in the toy through curved edges and simple geometric forms. As the research studied the influence of the design elements of sensory toys

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towards their calming behaviour; the study can extend its limits to different Autistic levels, age categories and other neurodevelopmental disorders.

**Keywords:** Autism Spectrum Disorder, Hyper-responsive, Hypo-responsive, Sensory Toys, and Design Elements



Fig.1 - Types of Sensory Toys.