

A Sensory Room Without Room

Soliman, Rahma (School: Obour STEM School)

Ahmed, Basmala (School: Obour STEM School)

Our aim is to help children with sensory processing disorder which is a neurological disorder that disrupts how the brain responds to external stimuli to achieve the desirable improvements in their sensory processing by using our sensory integration training device. The device is in an octagonal shape including integrated senses in each face to be as a toy. 1 in every 6 children have SPD. The behavioral therapy they need is introduced in sensory rooms that have many problems: deficiency of training, high cost and the need of scientific knowledge. So, what will happen if SPD children receive low cost, easy, joyful, and effective training anywhere besides behavioral therapy in sensory rooms. To answer this question the device was used by children through three steps: the first and second steps were by inviting three children who vary in their disorder level under the supervision of a doctor two different times and ended up by some improvements in our device. Lastly, was with 31 SPD children over a course of 3 months. Economic and social surveys were completed by the parents in addition to the sensory processing scale that is based on ASPSII and ABASII (behavioural scales). When comparing children's responds before and after, the effectiveness of behavioral therapy increased by average 12.8%. Moreover, parents were satisfied with the offered equality in chances of high-quality behavioral therapy and 65% of them admitted that it is helpful to deal with device without needed scientific knowledge with affordable cost.