

## **The Relationship between Sensory Processing Disorder (SPD) and Participation Patterns in Daily Activities among Children with High Functioning Autism Spectrum Disorders (HFASD)**

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**Introduction:** Contemporary view of current health, which is based on the World Health Organization, at its core deals with the relationship between limitations, activities and participation in every day life. Children with HFASD, often integrated in inclusive education settings are found to be non-participant in everyday activities, particularly in the areas which involve communication and social function when compared to typical children. Although not included in the current diagnosis criteria, studies have found that children with HFASD exhibit atypical responses to sensory input, such as under/ over responsiveness, seeking and avoidence.

**Objectives:** The purpose of this study is to broaden the understanding of the influence of these sensory patterns on the participation of this specific population in out-of-school activities. This study examined differences in sensory processing patterns between typically developing children and those with high functioning autism disorders (HFASD). In addition, it explored the differences between the groups in their out-of-school activity participation. Finally, the study explored the relationships between sensory processing patterns and participation of children with HFASD.

**Methods:** 25 children with HFASD and 25 children with typical development, ages 6 to 11, were assessed using the Short Sensory Profile (SSP) and the Children's Assessment of Participation and Enjoyment (CAPE).

**RESULTS:** Significant differences were seen in sensory processing between typical and HFASD groups ( $p > 0.05$ ), as well as in participation in number of activities in which children participate, the number of individuals with whom they participate, the variety of environments in which they participate and the level of enjoyment from the activities. Significant and high correlations were found between sensory processing abilities and participation patterns.

**Conclusions:** This study provides evidence that clear differences exist in the sensory processing patterns of children with HFASD compared with peers, and have effect on their participation.

**Implications on practice:** The findings suggest that suitable intervention within home, school and community should be addressed taking into consideration the distinct sensory patterns of children with HFASD, thus enhancing participation in the various frameworks of their lives.