



Sensory processing characteristics of students with special needs

Implications for occupational therapy in Mongolian special education

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Background



- In **2023**, occupational therapists began working for the first time in general education schools in Mongolia, highlighting the need to better understand how disabilities affect students' participation in educational settings.

- The World Federation of Occupational Therapists recommends school-based occupational therapy approaches that are **strengths-based, collaborative, educationally aligned, and occupation-focused**.

- To ensure occupational therapy is **accessible and effective**, it is essential to investigate the **sensory processing differences and diverse needs** of students with disabilities.

Purpose of the Study



The purpose of this study is to identify the sensory processing characteristics of students with special needs in order to inform occupational therapy and educational practice in Mongolian special education.

Methodology

- **Design & Participants:** A mixed-methods study involving 130 students aged 6–20 years (Grades 1–9) from Special School No. 63 in Ulaanbaatar, Mongolia.

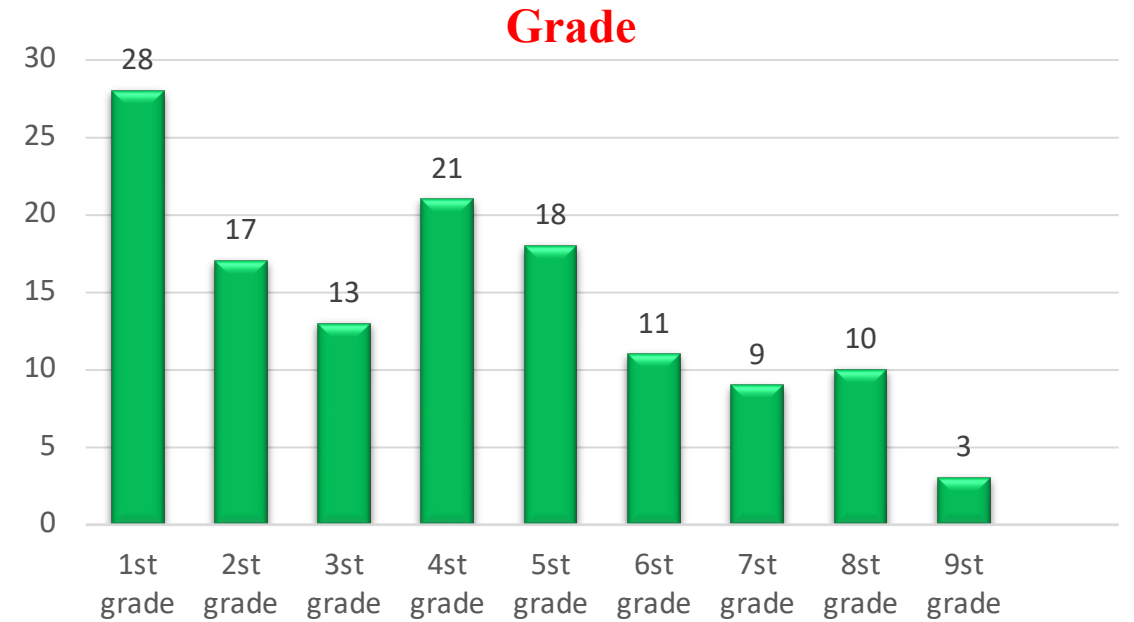
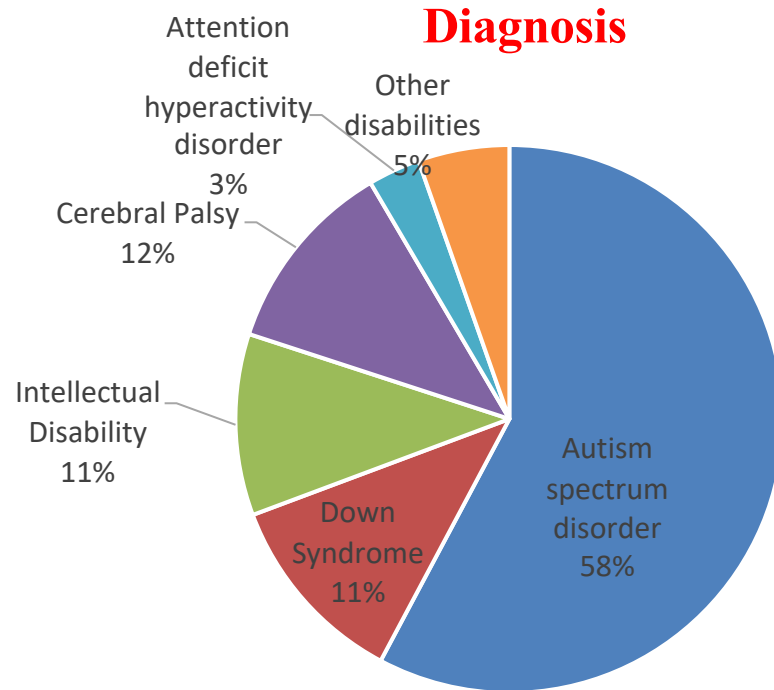
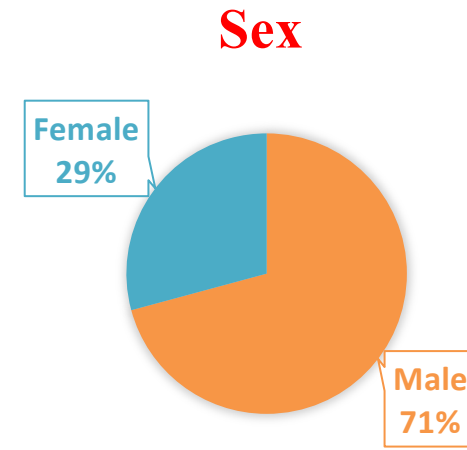
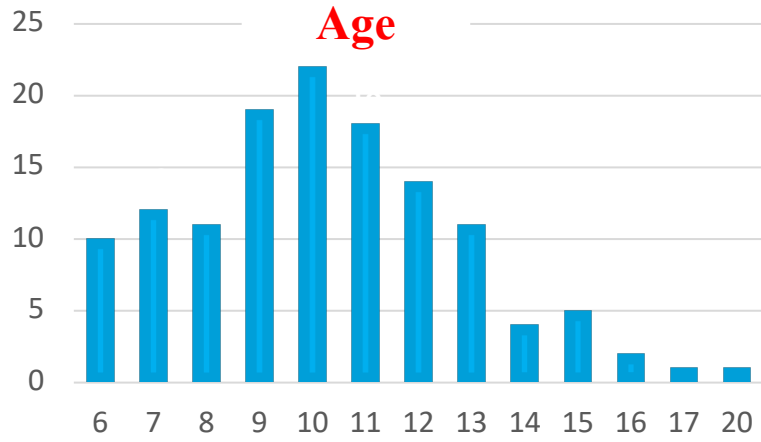
Data Collection: Sensory processing characteristics were assessed using The Sensory Profile™ 2 (W.Dunn, 2007), a parent-reported questionnaire consisting of 84 items across 9 sensory domains, administered via Google Forms.

The image shows a screenshot of the 'CHILD Sensory Profile 2' Caregiver Questionnaire form. The form is titled 'CHILD SENSORY PROFILE 2' and is for '3:0 to 14:11 years'. It includes fields for 'Test Date', 'Birth Date', and 'Age'. Below these are fields for 'Child's First Name', 'Child's Middle Name', 'Child's Last Name', and 'ID Number'. There are also fields for 'Gender' (Male/Female), 'Birth Date', and 'Test Date'. The form includes instructions for marking responses and a legend for response categories: 'Almost Always' (90% or more of the time), 'Frequently' (75% of the time), 'Half the Time' (50% of the time), 'Occasionally' (25% of the time), and 'Almost Never' (10% or less of the time). The form is branded with the Pearson logo and 'PsychCorp'.

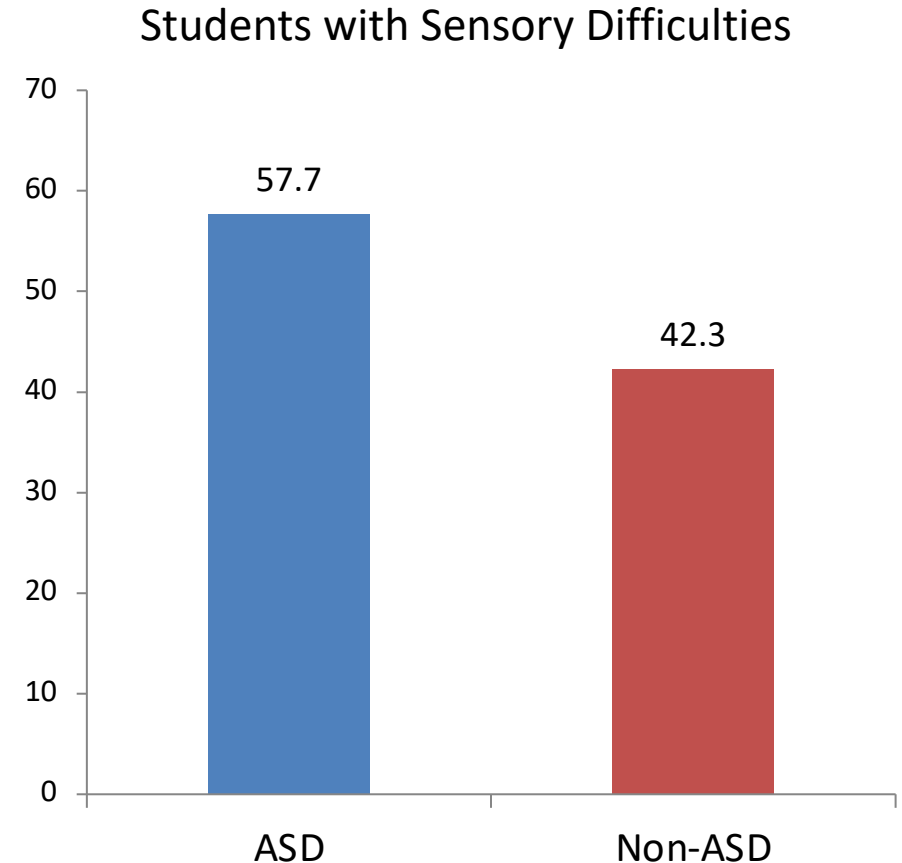
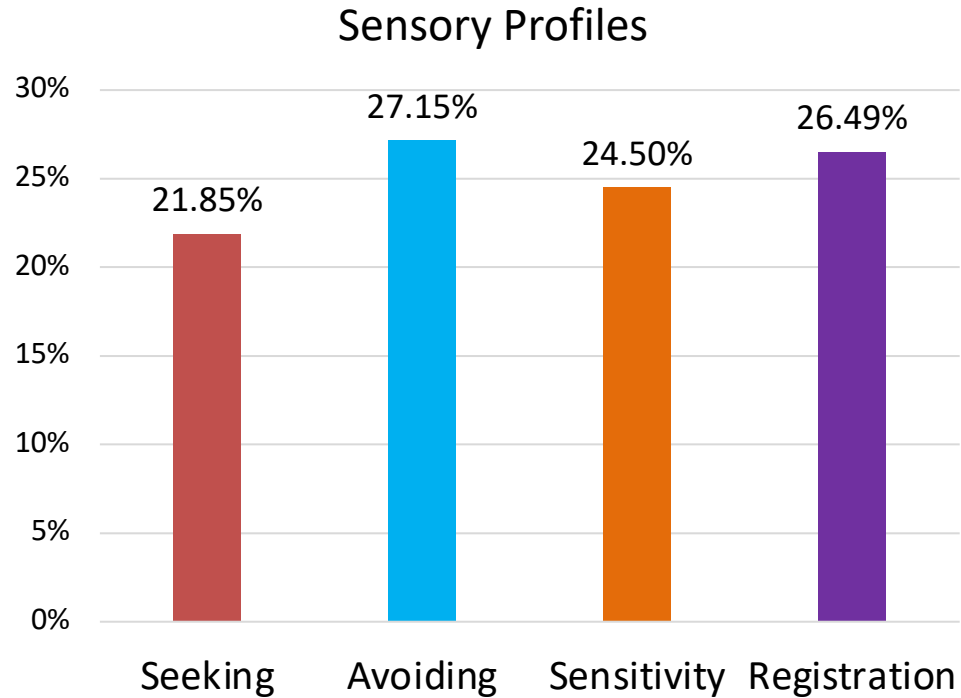


Ethics & Analysis: Informed consent was obtained from parents or guardians, and the data were analyzed using descriptive quantitative and qualitative methods.

Results



Sensory Processing Profiles



Key finding:

- Sensory processing differences were present across diagnostic groups, not limited to students with autism.

Implications for Occupational Therapy



- Individualized intervention
- Collaboration in schools
- Application in Mongolia



Discussion

Occupational therapists at Western Sydney University, Australia, have evaluated 'The Sensory Form' as an effective tool for assessing children's sensory processing characteristics and planning interventions to support participation based on these characteristics.

(Mills, Michail, Bye, 2020)

However, it was emphasized that there is a need to develop a clearer, more concise, and simplified version of the tool, along with user guidelines and training programs, to improve its usability for non-professional users such as parents and teachers.

(Mills & Chapparo, 2018)

Conclusion

- This study identified diverse sensory processing characteristics among students with special needs in Mongolian special education.
- Sensory processing differences were observed across diagnostic groups, highlighting the need for individualized, sensory-based occupational therapy interventions.
- These findings support the development of collaborative, school-based occupational therapy practice to enhance students' participation and learning.
- Future efforts should focus on developing culturally and linguistically appropriate sensory assessment tools and promoting strength-based, experiential teaching strategies aligned with students' individual sensory profiles.

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Thank you for your attention

