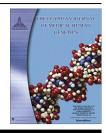


Ain Shams University

The Egyptian Journal of Medical Human Genetics

www.ejmhg.eg.net



## Clinical application of sensory integration therapy for children with autism



## To the Editor:

We read with great interest the research entitled "Effectiveness of sensory integration program in motor skills in children with autism" by Abdel Karim and Mohammed [1]. Sensory integration therapy (SIT) is the most common interventions delivered to children with autism spectrum disorder (ASD) who have atypical sensory behavior [2]. We applaud the authors for their effort to design and evaluate the effectiveness of the sensory integration programme that can be another alternative therapy for the clinician to follow in practice. However we would like to share our clinical opinions and request further clarification on this study.

The age of the participant in the current study ranged from three to five and half years old. A meta-analysis of 14 studies on sensory processing symptoms in individuals with ASD suggested that sensory symptoms should be evaluated in all children with autism with particular attention to children aged 6–9 years [3]. We appreciate clarification from the author why they have not considered 6–9 year old children as they have more sensory problems. Does it mean that SIT is only suitable and effective for children aged from three to five and half year old? Do the practitioners need to give extra attention to the age of the children when predicting the response to the sensory integration programme? Perhaps, the response from authors on such information may help the practitioner to plan SIT with ASD children.

Frequency and severity of the abnormal sensory behaviors varied greatly across samples of individuals with ASD [4]. Ben-Sasson et al. (2009) classified sensory modulation disorders (SMD) into three types which is over-responsivity, under-responsivity and seeking [3]. We like to request the opinion of the authors on the participant classification of SMD and how it may affect their response towards the SIT? In the current study a wide array of materials and activities was selected for SIT. There is no specific activity and duration reported for the intervention. Also, it is unclear whether the SIT was designed according to the individual sensory needs of each participant. We request the response from the authors on this matter as such information will help clinicians to implement SIT in routine clinical practice. Although all the results are significant, it is hard to see the clinical significance as there is no effect size reported for the intervention effect. Reporting effect size for this interesting study will surely strengthen the application of this study results to our clinical practice. It may be helpful to practice if the authors can recommend on the short term and long term parameters that can be evaluated among children with autism disorders when implementing SIT.

No doubt that this study is a good reference for the clinician as the assessment method and the range of activities is explained in detail. For that, we congratulate the authors and the editor for publishing this interesting work.

## References

- Abdel Karim AE, Mohammed AH. Effectiveness of sensory integration program in motor skills in children with autism. Egypt J Med Hum Genet 2015;16(4):375–80. <u>http://dx.doi.org/ 10.1016/j.ejmhg.2014.12.008</u>.
- [2] Rogers SJ, Sally Ozonoff S. Annotation: what do we know about sensory dysfunction in autism? A critical review of the empirical evidence. J Child Psychol Psychiatry 2005;46(12):1255–68. <u>http:// dx.doi.org/10.1111/j.1469-7610.2005.01431.x</u>.
- [3] Ben-Sasson A, Hen L, Fluss R, Cermak SA, Engel-Yeger B, Gal E. A meta-analysis of sensory modulation symptoms in individuals with autism spectrum disorders. J Autism Dev Disord 2009;39:1–11.
- [4] Lang R, O'Reilly M, Healy O, Rispoli M, Lydon H, Streusand W, et al.. Sensory integration therapy for autism spectrum disorders: a systematic review. Res in Autism Spectrum Disorders 2012;6:1004–18.

http://dx.doi.org/10.1016/j.ejmhg.2015.05.009

1110-8630 © 2015 The Authors. Production and hosting by Elsevier B.V. on behalf of Ain Shams University.

Peer review under responsibility of Ain Shams University.

This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Nazurah Alwi Physiotherapy Program, School of Rehabilitation Sciences, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia E-mail address: nazurahalwi@gmail.com

Dzalani Harun

Occupational Therapy Program, School of Rehabilitation Sciences, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Malaysia E-mail address: liedza69@yahoo.com

J.H. Leonard \*

Physiotherapy Program, School of Rehabilitation Sciences, Faculty of Health Sciences, Universiti Kebangsaan Malaysia, Jalan Raja Muda Abdul Aziz, 50300 Kuala Lumpur, Malaysia \*Tel.: +60 3 26878003; fax: +60 3 26878199. E-mail address: leonardjoseph85@hotmail.com