

Using sensory integration therapy, sensory-based interventions and sensory approaches with children and young people

March 2026

Purpose

We've written this Informed View to help occupational therapists make decisions about using sensory approaches and interventions with children and young people.

Context

The aim of occupational therapy is to enable children and young people to take part in the everyday activities – occupations – that bring meaning and purpose to their lives (RCOT 2024). Occupational therapists recognise that differences in how people process sensory information can affect their wellbeing and participation in the occupations they need and want to do. We use a range of approaches and intervention methods to help children and young people with sensory processing differences take part in the activities and routines that matter to them.

Sensory interventions and approaches include Ayres Sensory Integration Therapy®, sensory-based interventions and participation-focused sensory approaches.

- **Ayres Sensory Integration Therapy® (ASI)** is a trademarked play-based intervention, delivered in person by a trained therapist. The approach aims to address a person's underlying neural difficulties (Randell et al 2024) and is typically delivered in a clinic setting using specific equipment.
- **Sensory-based interventions** are strategies that are applied to or made available to a child or young person to support their self-regulation and participation within the home or school environment (Randell et al 2019). Approaches include the use of tools, such as weighted vests or therapy balls, and activities, such as movement breaks.
- **Participation-focused sensory approaches** aim to understand and work with a person's sensory strengths and needs, rather than change them (Council for Disabled Children). Sensory strategies are embedded into tasks, routines and environments to support the person's participation, self-regulation and performance, maintaining a clear link to their occupational goals.

The number of studies seeking to expand the evidence base and examining the effectiveness of ASI and sensory-based interventions is growing. However, their quality varies and outcomes don't always focus on changes in participation in meaningful occupations.

As a registered occupational therapist, you have a responsibility to actively seek out, understand and critically evaluate research relating to ASI, sensory-based interventions and participation-focused sensory approaches, and its outcomes. You should incorporate this evidence into your practice to ensure your interventions effectively enable children and young people to take part in the everyday activities and routines that are important to them. See [Professional standards for occupational therapy practice, conduct and ethics](#) (RCOT) for more guidance.

Although this Informed View isn't a systematic review, we've drawn on the findings of high quality, peer-reviewed evidence published from January 2015 to December 2025. We considered studies if the sensory interventions they examined fell within the scope of occupational therapy and measured outcomes showing changes in a child or young person's engagement in meaningful occupations within their natural environment, such as at home or school. We excluded pilot studies and provide a reference list later in this document.

RCOT view

1. **If sensory challenges affect a child or young person's engagement and participation in everyday life, you should consider this as part of the occupational therapy process.** Sensory differences don't always equate to sensory challenges requiring the involvement of an occupational therapist, and challenges don't always require direct sensory interventions (such as ASI or sensory-based interventions). Your priority should be identifying an approach that best supports participation and aligns with the child or young person's occupational goals.
2. **Accept referrals or requests for assistance that identify occupational challenges rather than those asking for a specific sensory assessment or intervention.** Focusing on the child or young person's difficulties with engagement, performance or participation in meaningful activities means that any interventions – including sensory approaches – are considered in relation to occupational goals. You can help others understand our focus and priorities by signposting to this guidance [Making great occupational therapy referrals | RCOT](#).
3. **Maintain your focus on occupation when using or recommending a sensory intervention.** Establish person-centred, occupation-focused goals before starting the intervention and use these to measure the impact and effectiveness of your involvement. Goals should prioritise meaningful occupational outcomes, rather than reductions in sensory symptoms or changes in underlying skills.
4. **Consider sensory issues in the context of the child or young person's participation in environments that matter to them.** Recommendations shouldn't rely solely on clinic-based observations. Using parent or teacher report measures – standardised where appropriate – alongside direct observations helps build a fuller picture of participation across settings.
5. **Be clear about the rationale and the evidence base for using or recommending sensory interventions.** You should understand and be able to explain the difference between:
 - sensory techniques aimed at remediating underlying neural or sensory processing difficulties, and
 - sensory interventions that support occupational performance by adapting tasks or environments, or by improving the person's capacity for self-regulation.
6. **Share information about the evidence base for sensory interventions with the child or young person, and where appropriate their family and caregivers,** so they can make informed decisions about whether it is an appropriate intervention for them.
 - A recent high-quality randomised controlled trial involving UK participants (Randell et al 2022) showed that ASI wasn't significantly better than other approaches at improving autistic children's behaviour and everyday functioning. It's also more costly. Caregivers reported improvements in wellbeing and function during the intervention, but there's no evidence this was maintained.
 - There's mixed evidence regarding the effectiveness of sensory-based interventions on children's participation in everyday activities, and the overall quality of these studies is often poor.
7. **You may choose to use ASI and sensory-based interventions in your practice, but these approaches should be part of a wider approach to address a child or young person's occupational needs.** These approaches should be clearly defined, time-limited and reviewed against meaningful participation outcomes. If you don't see evidence of benefit within the agreed timeframe, consider stopping the approach or exploring alternatives.
8. **Sensory interventions should be delivered as part of a coordinated, collaborative approach, rather than as a stand-alone intervention.** Working with parents, teachers and other caregivers ensures strategies are sustainable and consistently embedded into daily routines.
9. **Use coaching or modelling approaches – alongside or instead of any direct sensory interventions – to help caregivers understand and support a child or young person's sensory needs.** This will help them adapt environments, establish routines and embed strategies that support participation, development and wellbeing into the child or young person's everyday life.

10. **Review the acceptability and outcomes of sensory interventions from the perspective of the child or young person, their family, teachers and others.** Consider opportunity costs, such as the impact of time away from the classroom on learning and social participation.
11. **Ensure fair access. Does the level of intervention required to make a difference exclude some people from accessing it?** Consider alternative approaches that may achieve the desired outcome with a lower economic or opportunity cost, such as collaborating with caregivers and teachers to embed sensory strategies within home, school, and community settings.
12. **The term 'Sensory Processing Disorder' is not recognised as an independent diagnosis** in the Diagnostic and Statistical Manual of Mental Disorders 5 (American Psychiatric Association 2013) and should be avoided.
13. **The Health and Care Professions Council (HCPC) does not specify that a particular type or level of qualification in sensory interventions, for example ASI, is expected of occupational therapists, or is required to work with people who have sensory processing challenges.** Occupational therapists are skilled professionals who can assess and help people with sensory issues. Some occupational therapists choose to undertake additional training in sensory interventions. HCPC – the regulator of occupational therapists in the UK – requires occupational therapists to 'only practise in the areas where you have the appropriate knowledge, skills and experience to meet the needs of a service user safely and effectively' and 'to undertake additional training to update your knowledge, skills and experience if you wish to widen your scope of practice' (HCPC 2023).

References

Acuña C, Gallegos-Berrios S, Barfoot J, Meredith P, Hill J (2025) Ayres Sensory Integration® With Children Ages 0-12: A Systematic Review of Randomized Controlled Trials. *American Journal of Occupational Therapy*, 79(3), 7903205180. doi: 10.5014/ajot.2025.051023

American Psychiatric Association (2013) *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington, DC: American Psychiatric Association Publishing.

Council for Disabled Children (2024) *Sensory differences and approaches to intervention*. London: Council for Disabled Children. Available at: <https://councilfordisabledchildren.org.uk/resources/all-resources/filter/clinical-practice/sensory-differences-and-approaches-intervention> Accessed on 20.01.26

Fedewa A, Davis MAC, Ahn, S (2015) Effects of Stability Balls on Children's On-Task Behavior, Academic Achievement, and Discipline Referrals: A Randomized Controlled Trial. *American Journal of Occupational Therapy*, 69(2), 6902220020p1–6902220020p9. doi: 10.5014/ajot.2015.014829

Health and Care Professions Council (2023) *The standards of proficiency for occupational therapists*. London: Health and Care Professions Council. Available at: <https://www.hcpc-uk.org/standards/standards-of-proficiency/occupational-therapists/> Accessed on 20.01.26.

Kaplan Kılıç B, Bumin G, Öğütlü H, Türkçapar MH (2025) Comprehensive Effects of Occupational Therapy Using Ayres Sensory Integration® in Children With ADHD: A Randomized Controlled Trial. *American Journal of Occupational Therapy*, 80(1), 8001185020. doi: 10.5014/ajot.2025.051083

Kashefimehr B, Kayihan H, Huri M (2017) The Effect of Sensory Integration Therapy on Occupational Performance in Children with Autism. *OTJR: Occupation, Participation and Health*, 38(2), 75-83. doi: 10.1177/1539449217743456

Macphee FL, Merrill BM, Altszuler AR, Ramos MC, Gnagy EM, Greiner AR...Pelham WE (2019) The Effect of Weighted Vests and Stability Balls With and Without Psychostimulant Medication on Classroom Outcomes for Children with ADHD. *School Psychology Review*, 48(3), 276-289. doi: 10.17105/SPR-2017-0151.V48-3

Piller A, Osborne B, McHugh Conlin J (2024) Perceived Impact of Sensory Integration Therapy on the Family. *OTJR: Occupational Therapy Journal of Research*, 45(4), 519-526. doi: 10.1177/15394492241280039

Piller A, McHugh Conlin J, Glennon TJ, Andelin L, Auld-Wright K, Teng K, Tarver T (2025) Systematic review of sensory-based interventions for children and youth (2015-2024). [Online]. *Frontiers in Pediatrics*, 13, 1720179. doi: 10.3389/fped.2025.1720179

Piragasam GA, Rabi NM Masnan AH (2018) The Use of Sensory Balls in the Classroom: Effects on Behavioural and Academic Functioning of Students with Learning Disabilities. *International Journal of Academic Research in Business and Social Sciences*, 8(4), 1124-1146. doi: 10.6007/IJARBSS/v8-i4/4150

Randell E, McNamara R, Busse M, Delport S, Williams-Thomas R, Maboshe W...Ahuja A (2024) Exploring critical intervention features and trial processes in the evaluation of sensory integration therapy for autistic children. *Trials*, 25(131). doi: 10.1186/s13063-024-07957-6

Randell E, Wright M, Milosevic S, Gillespie D, Brookes-Howell L, Busse-Morris M...McNamara R (2022) Sensory integration therapy for children with autism and sensory processing difficulties: the SenITA RCT. *Health Technology Assessment*, 26(29). doi: 10.3310/TQGE0020

Randell E, McNamara R, Delport S, Busse M, Hastings RP, Gillespie D...Warren G (2019) Sensory integration therapy versus usual care for sensory processing difficulties in autism spectrum disorder in children: study protocol for a pragmatic randomised controlled trial. *Trials*, 20(113). doi: 10.1186/s13063-019-3205-y

Royal College of Occupational Therapists (2025) *Making great occupational therapy referrals*. London: Royal College of Occupational Therapists. Available at: <https://www.rcot.co.uk/explore-resources/children-young-people-families/making-great-occupational-therapy-referrals> Accessed 23.12.25

Royal College of Occupational Therapists (2024) *Occupational therapy with children and young people*. London: Royal College of Occupational Therapists. (Leaflet). Available at: <https://www.rcot.co.uk/media/655/download?attachment> Accessed 16.02.26

Royal College of Occupational Therapists (2021) *Professional standards for occupational therapy practice, conduct and ethics*. London: Royal College of Occupational Therapists. Available at: <https://www.rcot.co.uk/explore-resources/standards-guidelines/professional-standards-conduct-ethics> Accessed on 23.12.25

Schaaf RC, Ridgway EM, Jones EA, Dumont RL, Foxe J, Conly T...Molhom S (2025) A Comparative Trial of Occupational Therapy Using Ayres Sensory Integration and Applied Behavior Analysis Interventions for Autistic Children. *Autism Research*, 18(10), 2120-2134. doi: 10.1002/aur.70099

Spira G (2021) A sensory intervention to improve sleep behaviours and sensory processing behaviours of children with sensory processing disorders. *Irish Journal of Occupational Therapy*, 49(1), 11-20. doi: 10.1108/IJOT-09-2020-0014

van Jaarsveld A, Liebenberg E, Van Rooyen FC, van Rensburg EJ (2021) Promoting the development of foundation phase learners in under-resourced environments using Ayres Sensory Integration® principles and custom-designed, low-cost playgrounds. *South African Journal of Occupational Therapy*, 51(1), 9-17. doi: 10.17159/2310-3833/2021/vol51n1a3

Yamanishi Y, Orita Y, Nagayoshi M, Nishimura R, Shinjyo T, Masuda K...Iwanaga R (2025) Examining the Effectiveness of Ayres Sensory Integration® Intervention for Children With Developmental Coordination Disorder in Improving Motor Coordination and Daily Activity Function: A Randomized Controlled Trial. *Cureus*, 17(1), e76971. doi: 10.7759/cureus.76971