

What's the Evidence?

Speech and Language Therapy & Occupational Therapy for children and young people with autism and/or learning disabilities

Key findings

- Speech & Language Therapists and Occupational Therapists provide individualised therapy using a range of different tools and techniques alongside advice and support for families.
- The broad range of interventions therapists use make it impossible to appraise the effectiveness of either of these therapies as a whole.
- NICE guidance is the best source for recommendations on the management of autism with reference to speech & language and occupational therapies.

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What were we asked?

We were asked whether there was any evidence that Speech and Language Therapy or Occupational Therapy are effective treatments for children and young people with autism and/or learning disabilities.

What did we do?

First we carried out a general Internet search for Speech and Language Therapy and Occupational Therapy in autism and learning disabilities. Then we searched NHS Evidence, The Cochrane Library, TRIP Database, NICE guidance, and PubMed. Searches were performed in July and August 2016. This summary was reviewed by clinical experts in the subject area, as well as by members of our [Family Faculty](#).

What did we find?

Speech and Language Therapists (SaLTs) and Occupational Therapists (OTs) are qualified health professionals regulated by the Health and Care Professions Council.¹ Both work with families in the community on a one-to-one basis, and also in schools alongside teachers and other professionals.

SaLTs provide treatment, support and care for children who have difficulties with communication, eating, drinking or swallowing.² OTs provide practical support to help children overcome barriers so that they can do the activities that matter to them: with the aim to increase children's and young people's independence.³

Autism and learning disability covers a wide spectrum ability. So therapeutic strategies are tailored to the individual needs and their goals.

In the NHS, therapy services for children are commissioned locally, therefore the criteria for accessing ongoing SaLT and OT varies.

SaLTs and OTs use various approaches to assessment, and provide a wide range of advice and therapy interventions, that it is not possible to catalogue comprehensively in this summary. The broad range of the interventions provided by SaLTs and OTs make it impossible to appraise the effectiveness of these therapies as a whole.

One example of an intervention delivered by SaLTs to children and young people with autism is the Picture Exchange Communication System (PECS). This intervention uses picture cards to help children communicate with others. There have been numerous studies evaluating PECS. The Communication Trust concludes that the PECS approach has a moderate level of evidence of effectiveness.⁴

An example of an intervention carried out by some OTs is Sensory Integration Therapy. Therapists use play-based activities to influence the way a child responds to sensations. The aims are to reduce distress, improve concentration and how they interact with others.⁵ The effectiveness of this therapy has been widely researched but results are inconclusive.^{6,7} A large [randomised controlled trial](#) to test the effectiveness of Sensory Integration Therapy has been funded by the National Institute for Health Research and is due to start in January 2017.⁵

NICE guidance for children and young people with autism provides the best available evidence-based resource for the management of autism.⁸

What's the evidence for SaLT and OT in children and young people with autism?

- NICE guidance recommends a wide range of interventions and therapies. However, the guidance does not specify who should deliver the interventions. The NICE recommendation for interventions aimed at increasing communication could be delivered or supervised by SaLTs. OTs could be involved in delivering interventions such as the recommendation to 'make adjustments to the social and physical environment'.⁸
- Surveys of parents or carers of children and young people with autism have asked about the interventions they thought were most important for their child. In a survey of 56 parents, more than two-thirds felt that their child needed regular SaLT, and more than two-thirds stated that OT was important.⁹ In another survey of 101 families, SaLT was important to half of all those asked, and 3 out of every 5 asked felt OT was important.¹⁰

What's the evidence for SaLT and OT in children and young people with learning disabilities?

- SaLTs aim to address issues that are important to the child and/or their parent or carer when communication difficulties are a major factor.¹¹ Therapy may include using augmentative and alternative communication systems to supplement spoken words.
- OTs can also play a role in working with young people with learning disabilities. OTs aim to help young people with learning disabilities to become more independent, and to support young people in the activities that they want to do.¹²

- NICE guidance recommends that both SaLTs and OTs should be involved in delivering effective care to people with learning disabilities whose behaviour challenges.¹³
- The outcomes of OT for people with learning disabilities can be difficult to measure. This is because there are a limited number of tools that can accurately measure change. However, it has been recognised that a good working relationship between the OT and the person with a learning disability is important. Better outcomes are likely when this relationship is good.¹⁴
- It has also been recommended that OTs should do more to gain feedback from people with learning disabilities.¹⁵
- These research findings come from work with adults with learning disabilities, not children. However it is likely that these findings would be equally relevant when working with children and their families.

What do we think?

- Many children and young people with special educational needs or disabilities have communication, eating, drinking or swallowing needs. SaLTs can assess and advise on how to address such needs. Communication needs are not only relevant to education, but also for accessing leisure and, in the future, work activities.
- Many children and young people with autism and/or disabilities benefit from OT to increase independence, and to do activities that are important to them.

- It is likely that a long-term commitment to SaLT or OT will be needed in order to maximise the benefits from therapy.
- If you think your child would benefit from either SaLT or OT, we recommend you discuss with your GP or paediatrician.

Signposts to other information

- The NHS have produced a video explaining speech and language therapy:
www.nhs.uk/video/pages/speechandlanguagetherapy
- The NHS provide information about occupational therapy:
www.nhs.uk/conditions/occupational-therapy/
- The Communication Trust provides a database of evidenced interventions that aim to support children's speech, language and communication (requires free registration):
www.thecommunicationtrust.org.uk/projects/what-works

We would like to hear your feedback on this summary – please email us at pencru@exeter.ac.uk if you have any comments or questions.

Note: the views expressed here are those of the Peninsula Cerebra Research Unit (PenCRU) at the University of Exeter Medical School and do not represent the views of the Cerebra charity, or any other parties mentioned. We strongly recommend seeking medical advice before undertaking any treatments/therapies not prescribed within the NHS.

References

1. Health and Care Professions Council. [Online] Available at: <http://www.hcpc-uk.co.uk/>
2. Royal College of Speech and Language Therapists. What is speech and language therapy? [Online] Available at: https://www.rcslt.org/speech_and_language_therapy/what_is_speech_and_language/what_is_an_slt
3. College of Occupational Therapists. What is occupational therapy? [Online] Available at: <https://www.cot.co.uk/ot-helps-you/what-occupational-therapy>
4. The Communication Trust. Picture Exchange Communication System. [Online] Available at: <http://www.thecommunicationtrust.org.uk/projects/what-works/intervention.aspx?letter=P&ID=54>
5. National Institute for Health Research. Evaluation, Trials and Studies. HTA- 15/106/04: A pragmatic Randomised Controlled Trial of Sensory Integration Therapy versus usual care for sensory processing difficulties in Autism Spectrum Disorder in children: impact on behavioural difficulties, adaptive skills and socialisation (SenITA) [Online] Available at: <http://www.nets.nihr.ac.uk/projects/hta/1510604>
6. Watling, R., & Hauer, S. (2015). Effectiveness of Ayres Sensory Integration® and sensory-based interventions for people with autism spectrum disorder: A systematic review. *American Journal of Occupational Therapy*, 69 (5),1-12.
7. Pollock, N. (2009) Sensory integration: A review of the current state of the evidence. *Occupational Therapy Now*. 11 (5), 6-10. [Online] Available via <http://www.pencru.org/evidence/otherissues/treatmentstherapies/sensoryintegrationinasd/>
8. National Institute for Health and Social Care Excellence. Autism: the management and support of children and young people on the autism spectrum. (CG170). National Collaborating Centre For Mental Health. [Online] Available at: <https://www.nice.org.uk/guidance/cg170>
9. Siklos S., & Kerns K.A. (2006) Assessing need for social support in parents of children with autism and down syndrome. *Journal of Autism and Developmental Disorders*. 36:921-933.
10. Brown H.K., et al. (2012) Unmet needs of families of school-aged children with an autism spectrum disorder. *Journal of Applied Research in Intellectual Disabilities*. 25:497-508.
11. Royal College of Speech and Language Therapists. Role of speech and language therapy with learning disability [Online] Available at: https://www.rcslt.org/clinical_resources/learning_disabilities/role
12. College of Occupational Therapists. Learning disabilities. [Online] Available at: <https://www.cot.co.uk/ot-helps-you/learning-disabilities>
13. National Institute for Health and Social Care Excellence. Challenging behaviour and learning disabilities: prevention and interventions for people with learning disabilities whose behaviour challenges. (NG11). [Online] Available at: <https://www.nice.org.uk/guidance/ng11>
14. Lillywhite A., & Haines D. (2010) *Occupational therapy and people with learning disabilities. Findings from a research study*. College of Occupational Therapists. [Online] Available at: http://www.cot.co.uk/sites/default/files/publications/public/OT-PLD_0.pdf
15. Ball, J & Shanks, A. (2012) Gaining feedback from people with learning disabilities. *British Journal of Occupational Therapy*. 75 (10):471-7