

Guest editorial: Generating evidence to improve quality of life and other outcomes for children and adults with intellectual and other developmental disabilities

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Services for individuals with intellectual and other developmental disabilities (I/DD), including the educational, health and social care sectors, have been transitioning towards increased adoption of evidence-based practices (Department for Education and Department of Health, 2015; National Institute for Health and Care Excellence, 2022; Schalock *et al.*, 2011). Discussions have been ongoing regarding how this transition should occur to ensure contextual appropriateness. For example, although educational settings prioritise nurturing academic development, they are also increasingly responsible for catering to students' diverse needs and ensuring they safeguard their overall well-being and development. As a result, there have been calls for education to be evidence-informed (Nelson and Campbell, 2017), whereas others have argued for a more explicit focus on education being evidence-based (Owen *et al.*, 2022). In either case, there is a universal agreement that research findings should, at the very least, inform how educational settings design and offer their provision to their students. Similarly, evidence-based practices have been included in recommendations around supporting adults with I/DD, such as the NICE guidelines (National Institute for Health and Care Excellence, 2022).

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One field that is well suited to support this movement is applied behaviour analysis (ABA). This scientific field focuses on incorporating an understanding of a person's medical-biological, experiential and cultural contexts to design, with the person and their close social circle, support systems that will help them flourish and move towards outcomes that they value across different areas, such as academic, social, language and employability skills to name a few (Baer *et al.*, 1987; Gambrill, 2013). Strategies and tactics based on ABA have a long history of being implemented in mainstream and special education settings, as well as adult learning disability services to improve outcomes (Heward *et al.*, 2022). Moreover, many of those strategies are found in an evolution of the field called positive behaviour support (PBS). This branch of ABA focuses on incorporating evidence from various fields to improve the quality of life of individuals with I/DD who might be exhibiting behaviours described as challenging. As a result, it is gradually developing as its own stand-alone field in the UK, informed by ABA but also incorporating additional elements, such as a focus on evidence produced outside the field of ABA, values-based approaches and broader quality-of-life outcomes, to name a few (Gore *et al.*, 2013, 2022).

Both fields have been expanding their technology through research and lessons learned from clinical experience and synergistically influencing each other. For example, due to various valid criticisms regarding its historical application, ABA is increasingly moving

towards assent-based, humble and compassionate approaches to support (Breux and Smith, 2023; Kirby *et al.*, 2022; Penney *et al.*, 2023), a topic that PBS has historically prioritised (Carr *et al.*, 2002). Despite their benefits and the inherent commonalities in their research and application due to their historical ties, both fields have yet to produce the widespread impact in the UK that would be expected, considering their efficiency, effectiveness and widespread adoption in countries such as the USA and Canada.

In this special issue, the Sharland Foundation Developmental Disabilities Applied Behavioural Research and Impact Network (SF-DDARIN), a group of academics and practitioners, discuss in detail the reasons behind the limited impact produced by both fields in the UK and offers recommendations and examples on how to overcome barriers. Although SF-DDARIN has two workstreams, one focusing on skills development and the other on positive behavioural support, this special issue will primarily focus on actions taken by the skills-focused workstream.

The issue begins with an account by Grindle *et al.* (2024) of SF-DDARIN's historical development, current format, impact and outreach and priorities. It offers an excellent overview of how research impact can be optimised by carefully and methodically designing research projects in close collaboration with stakeholders while considering the different stages of research evidence. The authors highlight the need for an increased usage of evidence-synthesis methodologies such as systematic reviews. They also underline the need for mainstream research methodologies, such as Randomised Controlled Trials, which are not widely used within ABA and PBS.

The issue continues with Denne *et al.* (2024), who discuss in greater detail the different levels of research evidence and offer an account of how they approached research related to the online *Headsprout® Early Reading* programme. Although this programme is unfortunately meant to be discontinued, Denne *et al.* (2024) offer practitioners an excellent roadmap for approaching similar research endeavours to produce far-reaching and long-standing impact.

In a similar vein, Goyen *et al.* (2024) discuss a line of research focusing on an adapted version of a handwriting curriculum called *Handwriting Without Tears®* (a-HWT). They present data from a study focusing on the feasibility of implementing a-HWT in school settings and discuss outcomes and lessons learned. In this case, as well, there is a strong focus on implementation challenges and ways to identify and address them.

Finally, this special issue presents work conducted by Reardon *et al.* (2024) on training teaching staff, in a special education setting, to implement a mathematical programme titled *Teaching Early Numeracy to Children with Developmental Disabilities*. The authors outline the train-the-trainer programme used in the study and present data on its effectiveness, while discussing ways to overcome implementation barriers.

Along with these four valuable contributions, we are also privileged to include commentaries from esteemed colleagues working in the field of learning disabilities. The first commentary by Cameron *et al.* (2024) focuses on current technological developments, such as artificial intelligence, and how those can be combined with a robust understanding of developmental theory to develop cutting-edge interventions that can lead to accelerated outcomes for people with diverse needs. The authors offer an example of a newly developed virtual reality application called SocialWise VR that aims to support the development of fluent social skills. Rzos (2024) discusses their experience integrating evidence-based approaches as a senior leader in school settings. They provide an overview of barriers they have historically come across while drawing our attention to the importance of developing user-friendly technologies and ensuring our practice is tailored to the diverse and unique needs of each student. Vascelli (2024) highlights the need to improve progress monitoring approaches in educational settings and highlights Precision Teaching (Evans *et al.*, 2021) as a system that could support staff members to engage in

dynamic and strategic decision-making. They also offer a nice summary of essential evidence-based strategies that teaching staff can access to improve student outcomes. Finally, Peltier (2024) offers a detailed account of modern approaches to evaluating the multidimensional concept of implementation fidelity while also unpacking how recent developments in the area could affect research focused on mathematical skills.

Overall, this special issue is meant to draw attention to SF-DDARIN's valuable work and spark a discussion regarding ways to gather more evidence to allow greater integration of evidence-based behavioural strategies in UK policy and professional practice to help improve the quality of life of individuals with I/DD.

References

Baer, D.M., Wolf, M.M. and Risley, T.R. (1987), "Some still-current dimensions of applied behavior analysis", *Journal of Applied Behavior Analysis*, Vol. 20 No. 4, pp. 313-327, doi: [10.1901/jaba.1987.20-313](https://doi.org/10.1901/jaba.1987.20-313).

Breaux, C.A. and Smith, K. (2023), "Assent in applied behaviour analysis and positive behaviour support: ethical considerations and practical recommendations", *International Journal of Developmental Disabilities*, Vol. 69 No. 1, pp. 111-121, doi: [10.1080/20473869.2022.2144969](https://doi.org/10.1080/20473869.2022.2144969).

Cameron, M.J., Shahin, J. and Lockerman, N. (2024), "Commentary on 'Collective effort to enhance the quality of research evidence in intellectual and developmental disabilities: a case study of an academic-practice network'", *Tizard Learning Disability Review*, doi: [10.1108/TLDR-11-2023-0031](https://doi.org/10.1108/TLDR-11-2023-0031).

Carr, E.G., Dunlap, G., Horner, R.H., Koegel, R.L., Turnbull, A.P., Sailor, W., Anderson, J.L., et al. (2002), "Positive behavior support: evolution of an applied science", *Journal of Positive Behavior Interventions*, Vol. 4 No. 1, pp. 4-16, doi: [10.1177/109830070200400102](https://doi.org/10.1177/109830070200400102).

Denne, L.D., Roberts-Tyler, E.J. and Grindle, C.F. (2024), "Developing an evidence base for behavioural interventions: a case study of the Headsprout® Early Reading programme", *Tizard Learning Disability Review*.

Department for Education and Department of Health (2015), "Special educational needs and disability code of practice: 0 to 25 years", available at: https://assets.publishing.service.gov.uk/media/5a7dcb85ed915d2ac884d995/SEND_Code_of_Practice_January_2015.pdf (accessed 29 November 2023).

Evans, A.L., Bulla, A.J. and Kieta, A.R. (2021), "The precision teaching system: a synthesized definition, concept analysis, and process", *Behavior Analysis in Practice*, Vol. 14 No. 3, pp. 559-576, doi: [10.1007/s40617-020-00502-2](https://doi.org/10.1007/s40617-020-00502-2).

Gambrill, E. (2013), "Birds of a feather: applied behavior analysis and quality of life", *Research on Social Work Practice*, Vol. 23 No. 2, pp. 121-140, doi: [10.1177/1049731512465775](https://doi.org/10.1177/1049731512465775).

Gore, N.J., McGill, P., Toogood, S., Allen, D., Hughes, J.C., Baker, P., Hastings, R.P., et al. (2013), "Definition and scope for positive behavioural support", *International Journal of Positive Behavioural Support, Bild*, Vol. 3 No. 2, pp. 14-23.

Gore, N.J., Sapiets, S.J., Denne, L.D., Hastings, R.P., Toogood, S., MacDonald, A., Baker, P., et al. (2022), "Positive behavioural support in the UK: a state of the nation report", *International Journal of Positive Behavioural Support, Bild*, Vol. 12 No. 1, pp. 4-39.

Goyen, E., Grindle, C.F., Totsika, V. and Sapiets, S.J. (2024), "Implementation of an adapted handwriting without tears® programme for children with developmental disabilities in a special education setting", *Tizard Learning Disability Review*.

Grindle, C.F., Denne, L.D., Roberts-Tyler, E.J., Sapiets, S., Hughes, C.J., Hastings, R.P., Gore, N.J., et al. (2024), "Collective effort to enhance the quality of research evidence in intellectual and developmental disabilities: a case study of an academic-practice network", *Tizard Learning Disability Review*.

Heward, W.L., Critchfield, T.S., Reed, D.D., Detrich, R. and Kimball, J.W. (2022), "ABA from a to Z: behavior science applied to 350 domains of socially significant behavior", *Perspectives on Behavior Science*, Vol. 45 No. 2, pp. 327-359, doi: [10.1007/s40614-022-00336-z](https://doi.org/10.1007/s40614-022-00336-z).

Kirby, M.S., Spencer, T.D. and Spiker, S.T. (2022), "Humble behaviorism redux", *Behavior and Social Issues*, Vol. 31 No. 1, pp. 133-158, doi: [10.1007/s42822-022-00092-4](https://doi.org/10.1007/s42822-022-00092-4).

National Institute for Health and Care Excellence (2022), "Social work with adults experiencing complex needs", available at: www.nice.org.uk/guidance/ng216/resources/social-work-with-adults-experiencing-complex-needs-pdf-66143778560197 (accessed 3 August 2023).

- Nelson, J. and Campbell, C. (2017), "Evidence-informed practice in education: meanings and applications", *Educational Research*, Vol. 59 No. 2, pp. 127-135, doi: [10.1080/00131881.2017.1314115](https://doi.org/10.1080/00131881.2017.1314115).
- Owen, K.L., Watkins, R.C. and Hughes, J.C. (2022), "From evidence-informed to evidence-based: an evidence building framework for education", *Review of Education*, Vol. 10 No. 1, p. e3342, doi: [10.1002/rev3.3342](https://doi.org/10.1002/rev3.3342).
- Peltier, C. (2024), "Commentary on 'Overcoming implementation challenges through using a train-the-trainer approach to teach numeracy in a special school setting'", *Tizard Learning Disability Review*, doi: [10.1108/TLDR-11-2023-0032](https://doi.org/10.1108/TLDR-11-2023-0032).
- Penney, A.M., Bateman, K.J., Veverka, Y., Luna, A. and Schwartz, I.S. (2023), "Compassion: the eighth dimension of applied behavior analysis", *Behavior Analysis in Practice*, doi: [10.1007/s40617-023-00888-9](https://doi.org/10.1007/s40617-023-00888-9).
- Reardon, D., Apanasionok, M.M. and Grindle, C.F. (2024), "Overcoming implementation challenges through using a train-the-trainer approach to teach numeracy in a special school setting", *Tizard Learning Disability Review*.
- Rizos, K. (2024), "Commentary on 'developing an evidence base for behavioural interventions: a case study of the headsprout[®] early reading programme'", *Tizard Learning Disability Review*, doi: [10.1108/TLDR-02-2024-0005](https://doi.org/10.1108/TLDR-02-2024-0005).
- Schalock, R.L., Verdugo, M.A. and Gomez, L.E. (2011), "Evidence-based practices in the field of intellectual and developmental disabilities: an international consensus approach", *Evaluation and Program Planning*, Vol. 34 No. 3, pp. 273-282, doi: [10.1016/j.evalprogplan.2010.10.004](https://doi.org/10.1016/j.evalprogplan.2010.10.004).
- Vascelli, L. (2024), "Commentary on 'Implementation of an adapted handwriting without Tears[®] programme for children with developmental disabilities in a special education setting'", *Tizard Learning Disability Review*, doi: [10.1108/TLDR-09-2023-0022](https://doi.org/10.1108/TLDR-09-2023-0022).

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