



Kent Academic Repository

Rizos, Konstantinos (2024) *Commentary on “developing an evidence base for behavioural interventions: a case study of the Headsprout® Early Reading programme”*. Tizard Learning Disability Review, 29 (1). pp. 29-33. ISSN 1359-5474.

Downloaded from

<https://kar.kent.ac.uk/112387/> The University of Kent's Academic Repository KAR

The version of record is available from

<https://doi.org/10.1108/TLDR-02-2024-0005>

This document version

Author's Accepted Manuscript

DOI for this version

Licence for this version

CC BY-NC (Attribution-NonCommercial)

Additional information

This author accepted manuscript is deposited under a Creative Commons Attribution Non-commercial 4.0 International (CC BY-NC) licence. This means that anyone may distribute, adapt, and build upon the work for non-commercial purposes, subject to full attribution. If you wish to use this manuscript for commercial purposes, please contact permissions@emerald.com.

Versions of research works

Versions of Record

If this version is the version of record, it is the same as the published version available on the publisher's web site. Cite as the published version.

Author Accepted Manuscripts

If this document is identified as the Author Accepted Manuscript it is the version after peer review but before type setting, copy editing or publisher branding. Cite as Surname, Initial. (Year) 'Title of article'. To be published in **Title of Journal**, Volume and issue numbers [peer-reviewed accepted version]. Available at: DOI or URL (Accessed: date).

Enquiries

If you have questions about this document contact ResearchSupport@kent.ac.uk. Please include the URL of the record in KAR. If you believe that your, or a third party's rights have been compromised through this document please see our [Take Down policy](https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies) (available from <https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies>).

Commentary on "Developing an evidence base for behavioural interventions: A case study of the Headsprout® Early Reading programme."

Introduction: Educational institutions confront numerous challenges in effectively integrating interventions for individuals with intellectual and other developmental disabilities in the quest for evidence-based practices (Schalock et al., 2011; Sturmey and Didden, 2014). This commentary delves into the research journey outlined in the original paper, concentrating on the Sharland Foundation Developmental Disabilities Applied Behavioural Research and Impact Network (SF-DDARIN) and its implications for practitioners and stakeholders in educational settings. Drawing from the author's professional experience as an educational leader with a role equivalent to a deputy headteacher, the commentary aims to provide insights and recommendations to help improve daily practice.

The Research Journey: Prior to the present study by Denne et al. (2024; this issue), a previous endeavour undertaken by Domitrovich et al. (2008) offered a comprehensive framework for evaluating the implementation quality of school-based interventions, mainly focusing on behavioural and mental health interventions within the USA. While both studies share commonalities, the systematic methodology used by SF-DDARIN sheds light on the intricacies involved in translating research findings into practical applications within the United Kingdom's health, social care and education sectors. This nuanced approach provides valuable insights that enrich our understanding of the efficacy of behavioural interventions and implementation challenges. Both articles acknowledge challenges in implementing practices effectively (Denne et al., 2024; Domitrovich et al., 2008). These challenges include difficulties implementing evidencebased models with the necessary procedural fidelity, adapting interventions to specific contexts and dealing with various additional barriers to implementation. Despite concerted efforts to collaborate across academic and applied settings to bolster the evidence base, the implementation hurdles for interventions targeting individuals with intellectual and other developmental disabilities persist (Denne et al., 2020). Reflecting on my experience as a member of the senior leadership team of a special education school committed to evidence-based approaches grounded in applied behaviour analysis, I encountered daily practical concerns. These included, among other things, navigating barriers related to linguistic and cultural intricacies, making necessary adaptations and ensuring staff proficiency in varied technological skills to ensure their successful implementation.

Integration of Evidence-Based Approaches in Educational Settings: Educational institutions, including schools, increasingly emphasise evidence-based practices in their pedagogical approaches (Pellegrini and Vivanet, 2021). This shift is reflected in policy documents, underscoring the importance of aligning interventions with empirical research to inform decision-making (Diery et al., 2020). As an educational leader who has identified, trained others and overseen the implementation of many interventions across special education settings, I have witnessed firsthand, on multiple occasions, the transformative impact of evidence-based approaches on teaching and learning outcomes for students with intellectual and other developmental disabilities. However, translating these research findings and integrating these approaches into daily practice necessitates careful consideration of contextual factors and practical constraints and demands (Gersten and Dimino, 2001). It is important to recognise that schools should strive to be evidence-informed rather than strictly evidence-based or evidence-driven hubs of education. This approach acknowledges the complexities of the broader world and makes possible the adaptation to diverse needs and dynamics in educational settings (Kumah et al., 2022).

HER® as an Example: The Headsprout Early Reading programme (HERVR) serves as a pertinent example of the complexities involved in simplifying and translating research insights into practical applications within educational establishments. While HERVR has shown promise in enhancing reading skills (Grindle et al., 2021; Storey et al., 2020), challenges arose during implementation, particularly concerning its adaptation to UK phonetics when it was

implemented in school settings under my purview. A particularly intriguing challenge was the voicing in American English, which posed difficulties in transferring to UK phonetics, leading to incorrect responses from the learners. This highlights the importance of considering linguistic and cultural nuances when implementing interventions developed in diverse contexts (Cycyk et al., 2021). The challenges pose significant barriers to their implementation, particularly in international contexts. As the original paper notes, considerations such as language adaptation are crucial to ensure the effectiveness of interventions for individuals with intellectual and other developmental disabilities. In addition, staff expertise with technological utilities is essential to simplify implementation and effectively support pupils and their facilitators (Backfisch et al., 2021). In my experience, HERVR occasionally encountered barriers stemming from staff members' limited expertise with technological tools, revealing significant gaps in their knowledge. Simplicity in implementation is essential, with interventions designed not to require complex handling or problem-solving, primarily for the pupils and subsequently for the people supporting them (Lendrum and Humphrey, 2012).

Barriers and Practical Challenges: The barriers identified in the research process resonate with practical challenges faced by practitioners and stakeholders in educational settings, such as staff turnover, workload pressures and external factors which, as the paper rightly mentions, have been evidenced in the literature (Schaeffer et al., 2005). Moreover, the discrepancy between ideal conditions in efficacy trials and real-world contexts underscores the need for adaptive approaches in educational practice. In a practical setting, ongoing support and professional development are constantly needed to address these challenges and enhance the fidelity and effectiveness of interventions. Furthermore, ensuring consistent and accurate data collection across different settings and personnel can be quite challenging. Variability in data collection methods, interpretation and recording practices can impact the reliability and validity of outcomes, making it difficult to assess intervention effectiveness accurately. Often overlooked is ensuring the long-term sustainability of evidence-based practices beyond the research study or initial implementation phase. Sustainability stands as one of the most crucial aspects of an intervention, particularly if it seeks to make a meaningful impact on the service recipients' lives. Strategies for embedding interventions into routine practice and securing ongoing support and resources are essential for sustained effectiveness and impact. In addition, collaborative partnerships between researchers, practitioners and stakeholders are vital for aligning interventions with empirical research and effectively addressing the unique needs of this population (Vlcek and Somerton, 2023).

Addressing Practical Concerns: When designing interventions, it is important to consider the target population's unique characteristics. For self-paced programmes catering to individuals capable of independent learning, there is often room to take instructional risks that may prove more feasible and suitable. For groups relying heavily on tutors or support staff, the efficiency and ease of implementation of intervention are often paramount, often outweighing considerations of comparative efficacy. The success of an intervention largely hinges on its implementation fidelity. Simplicity in understanding, executing and troubleshooting is key. Complex interventions, when "teaching early reading skills to adults with intellectual disabilities (READ-IT) using a support worker/family carer mediated online reading programme" (Denne et al., 2024, p. 8; this issue), introduce multiple layers of delivery and necessitate validations of a cultural and social nature that extend beyond mere clinical data observation. Furthermore, it is vital to reconsider the practice of adapting interventions originally developed for typical populations to diverse ones. While we all share the same biology and physiology, differences in mental and cognitive constructs cannot be overlooked. Each population deserves interventions specifically designed for them, acknowledging that while crossover insights are valuable, they are not universally applicable. Understanding learning processes in typical populations does not always translate to insights into diverse populations and vice versa. Tailored focus is essential for

truly effective interventions..

Conclusion: As Immanuel Kant highlighted, we ought to avoid theory not informed by experience as that would lead to mere intellectual play (Guyer, 2010). All scientific endeavours are occasionally guilty of indulging in this intellectual play. While it is crucial to use the insights of theorists, it is perhaps even more vital to confront biases that may arise from the controlled environment of clinical settings and embrace the unpredictability of life beyond the lab and among diverse populations. The research journey exemplified by the SF-DDARIN model offers valuable insights into the complexities of integrating evidence-based practices in education. While theoretical frameworks provide a foundation for interventions, navigating skillfully practical challenges and contextual nuances is essential to ensure their effective implementation. By proactively addressing obstacles, we can significantly enhance the impact of evidence-based practices in educational settings, fostering inclusivity, effectiveness and responsiveness to the needs of all learners. Ultimately, this pursuit lies at the heart of our mission and drives our dedication to making a meaningful difference in the lives of those we serve.

References

Backfisch, I., Lachner, A., Stu¨rmer, K. and Scheiter, K. (2021), “Variability of teachers’ technology integration in the classroom: a matter of utility!”, *Computers & Education*, Vol. 166, p. 104159, doi: 10.1016/j.compedu.2021.104159.

Cycyk, L.M., De Anda, S., Moore, H. and Huerta, L. (2021), “Cultural and linguistic adaptations of early language interventions: recommendations for advancing research and practice”, *American Journal of Speech-Language Pathology*, Vol. 30 No. 3, pp. 1224-1246, doi: 10.1044/2020_AJSLP-20-00101.

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

Denne, L.D., Gore, N.J., Hughes, J.C., Toogood, S., Jones, E. and Brown, F.J. (2020), “Implementing evidence-based practice: the challenge of delivering what works for people with learning disabilities at risk of behaviours that challenge”, *Tizard Learning Disability Review*, Vol. 25 No. 3, pp. 133-143, doi: 10.1108/TLDR-05-2020-0009.

Diery, A., Vogel, F., Knogler, M. and Seidel, T. (2020), “Evidence-based practice in higher education: teacher educators’ attitudes, challenges, and uses”, *Frontiers in Education*, Vol. 5, p. 62, doi: 10.3389/feduc.2020.00062.

Domitrovich, C.E., Bradshaw, C.P., Poduska, J.M., Hoagwood, K., Buckley, J.A., Olin, S., Romanelli, L.H., Leaf, P.J., Greenberg, M.T. and Ialongo, N.S. (2008), “Maximizing the implementation quality of evidence-based preventive interventions in schools: a conceptual framework”, *Advances in School Mental Health Promotion*, Vol. 1 No. 3, pp. 6-28, doi: 10.1080/1754730X.2008.9715730.

Gersten, R. and Dimino, J. (2001), “The realities of translating research into classroom practice”, *Learning Disabilities Research & Practice*, Vol. 16 No. 2, pp. 120-130, doi: 10.1111/0938-8982.00013.

Grindle, C.F., Murray, C., Hastings, R.P., Bailey, T., Forster, H., Taj, S., Paris, A., et al. (2021), “HeadsproutVR Early Reading for children with severe intellectual disabilities: a single blind randomized controlled trial”, *Journal of Research in Special Educational Needs*, Vol. 21 No. 4, pp. 334-344, doi: 10.1111/1471-3802.12531.

Guyer, P. (Ed.) (2010), *The Cambridge Companion to Kant's Critique of Pure Reason*, 1st ed. Cambridge University Press, Cambridge, doi: 10.1017/CCOL9780521883863.

Kumah, E.A., McSherry, R., Bettany-Saltikov, J., Van Schaik, P., Hamilton, S., Hogg, J. and Whittaker, V. (2022), "Evidence-informed vs evidence-based practice educational interventions for improving knowledge, attitudes, understanding and behaviour towards the application of evidence into practice: a comprehensive systematic review of undergraduate students", *Campbell Systematic Reviews*, Vol. 18 No. 2, p. e1233, doi: 10.1002/cl2.1233.

Lendrum, A. and Humphrey, N. (2012), "The importance of studying the implementation of interventions in school settings", *Oxford Review of Education*, Vol. 38 No. 5, pp. 635-652, doi: 10.1080/03054985.2012.734800.

Pellegrini, M. and Vivanet, G. (2021), "Evidence-based policies in education: initiatives and challenges in Europe", *ECNU Review of Education*, Vol. 4 No. 1, pp. 25-45, doi: 10.1177/2096531120924670.

Schaeffer, C.M., Bruns, E., Weist, M., Stephan, S.H., Goldstein, J. and Simpson, Y. (2005), "Overcoming challenges to using evidence-based interventions in schools", *Journal of Youth and Adolescence*, Vol. 34 No. 1, pp. 15-22, doi: 10.1007/s10964-005-1332-0.

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.

Storey, C., McDowell, C. and Leslie, J.C. (2020), "Headsprout early reading for specific literacy difficulty: a comparison study", *Journal of Behavioral Education*, Vol. 29 No. 3, pp. 619-633, doi: 10.1007/s10864-019-09336-7.

Sturmey, P. and Didden, R. (Eds) (2014), *Evidence-Based Practice and Intellectual Disabilities*, 1st ed., Wiley, London, doi: 10.1002/9781118326077.

Vlcek, S. and Somerton, M. (2023), "Collaborative engagement between stakeholders in the education of Australian students with disability: a scoping review", *International Journal of Inclusive Education*, pp. 1-18, doi: 10.1080/13603116.2023.2216693.