Supporting Interaction: Exploring Reports on PODD for Children with Communication Support Needs

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Short Abstract

This conference presentation reviews previous studies reporting on the implementation of Pragmatic Organization Dynamic Display (PODD), an Augmentative and Alternative Communication (AAC) system, designed to support interaction and communication across a range of contexts for individuals with communication support needs (CSN). We know that AAC interventions not only facilitate communication development, but also enhance well-being, and foster broader development. However, there is limited evidence available reporting on PODD, reflecting a lack of information more broadly about implementation of commercially available AAC systems.

This scoping review aimed to explore and map what is known about the implementation of PODD for children with CSN. Quantitative evaluations of the effectiveness of PODD were outside of the scope of this project and presentation. The review searched databases and grey literature and included 31 publications from seven countries. Information reported by these authors was charted and themes were descriptively mapped across three categories: Benefits of PODD, Challenges of PODD, and Facilitators for Implementation. The presentation will focus on the qualitative descriptive content analysis of these charted concepts. Findings suggest that while PODD is perceived to support communication, there is a lack of detail in many reports, limiting the ability to draw conclusions. Further research is needed to report on the implementation of PODD.

Long Abstract

Background: Pragmatic Organization Dynamic Display (PODD) is an Augmentative and Alternative Communication (AAC) system developed to support children with Communication Support Needs (CSN). Despite its global use, research on PODD's implementation is limited (Mirenda, 2014), reflecting broader gaps in the evidence for AAC systems more generally (Murray et al., 2020).

Aims: This scoping review aims to map the existing literature on the implementation of PODD, focussing on qualitative reports rather than a quantitative evaluation of its effectiveness. We explore what has been reported regarding implementation of PODD across a diverse range of sources using a qualitative descriptive approach.

Method: As part of a larger formal scoping review, a qualitative descriptive content analysis (Sandelowski, 2000) was completed to summarise concepts about PODD implementation reported in the literature. This scoping review included development of a charting table, developed jointly by the authors, to extract information from the diverse range of sources (n=31) regarding implementation of PODD. Findings of the qualitative descriptive content analysis used to count and descriptively summarize concepts about implementation of PODD reported in the literature will be the focus of this presentation. The scoping review methodology will not be the focus of the presentation.

Results: The outcomes and key findings reported by the sources were broadly categorized as: Benefits of PODD, Challenges of PODD, and Facilitators for Implementation.

Benefits: Content analysis identified several themes describing benefits reported by more than one source to be related to PODD implementation including increase in communication skills, supports autonomy, supports communication environment, behaviour, improved relationships, and academic improvements. For example, Bayldon, Clendon & Doell's (2023) paper reported development of multisymbol messages "both children expressed a number of multi-symbol messages of three or more symbols" (p.759).

Challenges: Content analysis identified six challenges reported by more than one source such as demanding on resources, time, access difficulties, making PODD available, challenges seeing and using PODD as a communication tool, and practical difficulties with message construction. For example, McKenzie, (2017) reported that "not knowing how to use the system" was a challenge when implementing PODD (p.2).

Facilitators: Sources reported three facilitators that were perceived to support PODD implementation such as a team approach, supportive communication environments, and effective communication partners. For example, Harper (2020) reported the benefits of a supportive school culture "they [school staff] are carrying their PODD around, or you see them modelling or chatting and then you kind of think twice if you've forgotten yours (I#C)"(pp.109-110).

Discussion:

This presentation provides an in-depth synthesis of the current literature on PODD implementation, offering an efficient way to understand previous reports without the need to individually locate and study each source. The primary goal of this review was to map and present key insights from various reports. Sources described a range of benefits, challenges, and facilitators perceived to be related to PODD implementation. However, many reports lacked detail sufficient to facilitate a comprehensive summary of the findings or support understanding of how PODD was implemented in the study contexts. Specifically, a large number of sources did not include basic demographic information about participants or descriptions of the PODD type/s implemented. This lack of detail limits the ability to draw broader conclusions about the applicability of the reports to diverse populations and to the various types of PODD used in clinical practice. Furthermore, while Partner Assisted Scan (PAS) was not a predominant theme, it was suggested in the literature that PODD used in conjunction with PAS increased communication efficiency for some children with complex physical access needs. PAS involves a communication partner assisting the AAC user in navigating the PODD system and further research is needed to investigate this access method. More broadly, further research is necessary to address the gaps in the literature and provide a clearer understanding of the implementation and effectiveness of PODD.

Conclusion: While this presentation provides insights into the implementation of PODD, it also highlights the current lack of rigorous evidence needed to report on quantitative effectiveness of the system. Without providing conclusions about the efficacy of PODD the presentation provides a qualitative descriptive analysis that summarises what is known about PODD implementation. Sharing and synthesising reports and experiences may offer others with insights into their own experiences and highlights areas for further research in this important area.

References

Bayldon, H., Clendon, S., & Doell, E. (2023). Shared Storybook Intervention for Children with Complex Physical, Cognitive and Sensory Needs Who Use Partner-Assisted Scanning. *International Journal of Disability, Development, and Education*, 70(5), 751–768. https://doi.org/10.1080/1034912X.2021.1913719

Harper, L. (2020). Whole school approach to language immersion using augmentative and alternative communication for students with multiple disabilities and complex communication needs. [Master's thesis, Queensland University of Technology]. QUT ePrints. https://eprints.qut.edu.au/198051/1/Liesl%20Harper%20Thesis.pdf

- McKenzie, S. (2017, May 17-20). A whole school approach to AAC: Curriculum, play & personal care [Conference session]. AGOSCI 13th Biennial Conference, Melbourne, Australia. https://www.agosci.org.au/AGOSCI-conference-2017-Presentations
- Mirenda, P. (2014). Revisiting the mosaic of supports required for including people with severe intellectual or developmental disabilities in their communities. *Augmentative and Alternative Communication*, 30(1), 19-27. https://doi.org/10.3109/07434618.2013.875590
- Murray, J., Lynch, Y., Goldbart, J., Moulam, L., Judge, S., Webb, E., Jayes, M., Meredith, S., Whittle, H., Randall, N., Meads, D., & Hess, S. (2020). The decision-making process in recommending electronic communication aids for children and young people who are non-speaking: The I-ASC mixed-methods study. *Health Services and Delivery Research*, 8(45), 1-158. https://doi.org/10.3310/hsdr08450
- Sandelowski, M. (2000). Focus on research methods: Whatever happened to qualitative description? Research in Nursing & Health, 23(4), 334-340. <a href="https://doi.org/10.1002/1098-240x(200008)23:4<334::aid-nur9>3.0.co;2-g">https://doi.org/10.1002/1098-240x(200008)23:4<334::aid-nur9>3.0.co;2-g