Exploring the tools for assessment of communication in multimodal communication and AAC

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Short Abstract

Gathering information to inform and review intervention is a complex and multi-faceted process, and a fundamental component of service delivery for professionals who work with people who cannot rely on speech alone to meet their communication needs. Published assessment tools are just one component of this process, but they are a commonly used one, often required by service providers and funding policies to demonstrate a need for service. There is therefore a need for professionals to have access to comprehensive and rigorous tools for communication assessment that are appropriately developed to profile the unique communication strengths and support needs of individuals.

This presentation will discuss the results of a research project which aimed to explore and evaluate the assessment tools used by professionals for communication assessment with people who cannot rely on speech alone to meet their communication needs. A multi-step, iterative, mixed methods research design was applied, comprising a scoping review, international survey, and analysis of the constructs and psychometric properties of assessment tools used by professionals. A focus of the analysis was the consideration of lived experience expertise in the development and validation of each tool.

Implementation of inappropriate or imprecise supports can have opportunity costs for individuals and be a waste of financial resources. As such, an exploration and appraisal of the tools used by professionals for communication assessment provides an opportunity for reflection on a key aspect of the assessment process, and has the potential to influence the delivery of more effective and accurate evaluations.

Long Abstract

Background & rationale: The process of gathering information to inform clinical judgements, intervention planning and to review and revise intervention decisions is a fundamental component of practice with people who cannot rely on speech alone to meet their communication needs across communication partners and contexts. Professionals seek to understand, among other things, the potential of verbal speech to meet communication needs, symbolic understanding and use, the role of body movements and facial expressions, use of objects and non-symbolic gestures, environmental supports, communication partner knowledge and skill, and the 'goodness of fit' of current communication supports.

A comprehensive and robust assessment process combining several complementary approaches to collecting information is typically advocated as best practice (Batorowicz et al., 2018; Deckers et al., 2024; Lackey et al., 2023; Lund et al., 2017; Wendelken & Williams, 2023). Published assessment tools are one component of this process, used by many professionals alongside approaches such as informal evaluation, observation in natural contexts, analysis of language samples, ethnographic interviews with individuals and their supporters, and descriptions or diaries kept by communication partners.

Formal, published assessment tools have many benefits. They can structure and simplify the assessment process, measure communication in relation to standardised and norm-referenced data to support access to funding and other supports, and they can facilitate the recognition of unique communication profiles and strengths. Published assessment tools also have several limitations. A primary critique is the potential for standardised assessment tools in particular to conceptualise non-standard communication and communication differences as deficits (Nair et al, 2023), which means that many available tools are not aligned with the philosophies and values of clinicians who aim to support and affirm the validity of diverse communication styles, preferences and modes. A further limitation of many standardised, norm-referenced assessment tools is that they are not developed for use with AAC users, and so have been shown to present a biased profile of their communication (Batorowicz et al., 2018; Loncke, 2022; Lund & Light, 2007). Furthermore, the models and frameworks underpinning the development of AAC assessment tools are limited (Burnham et al., 2023), and constructs measured can be varied and inconsistent across tools (Deckers et al., 2024).

There is, however, still a need for comprehensive and rigorous formal tools to support professionals in the process of assessment in AAC. Many professionals, particularly those with limited experience in AAC, will tend to rely on formal tools in their assessment practice (Dietz et al., 2012). It has also been identified that more experienced professionals appear to draw on implicit frameworks informed by theoretical knowledge and practical experience in their clinical decision-making, rather than engaging in explicit processes (Lynch et al., 2019). The limitation of these internal processes is that they lack transparency, and may exclude individuals, families and other professionals from the assessment and decision-making process. Reliance on only informal approaches may thus be a barrier to person-centred, strengths-based, collaborative practice in AAC assessment and decision-making (Burnham et al., 2023; Lynch et al., 2019). There is therefore a need for speech pathologists to have access to comprehensive, rigorous, and theoretically robust tools for assessment of people who cannot rely on speech alone, that are appropriately developed to profile their unique communication profiles and strengths, are informed by the knowledge and lived experience of a diverse range of communicators, and can support authentic and informed collaboration in assessment and decision-making.

<u>Method & Results</u>: The aim of this research was to explore and evaluate the assessment tools and practices used by professionals for conducting communication assessment with people who cannot rely on speech alone to meet their communication needs. A multi-step, iterative, mixed methods research design was applied.

First, a systematic search strategy was developed with aim of identifying communication assessment tools available to professionals. Through this process, a total of 234 studies were identified for full text review and 67 assessment tools were identified for inclusion in the research.

Secondly, a worldwide survey of professionals who provide communication assessment sought to explore which of the available assessment tools are typically used in practice, and the reasons why professionals choose to use the tools that they do in different practice settings. The survey also sought to understand the gaps in currently available assessment tools as judged by practising professionals, whether professionals have developed their own assessment tools to address those gaps, and the rationale, criteria and underlying frameworks of those tools.

Finally, communication constructs and psychometric properties were examined for the published tools that professionals identified they use in practice. Properties of interest included the underlying theoretical frameworks and constructs assessed by each tool, as well as components of validity and reliability. A key focus of this analysis was whether people with lived experience of communication disability and/or AAC use were included in the process of determining assessment criteria and construct validity for each tool.

This presentation will report on and discuss the findings of each step in this process.

<u>Conclusion</u>: The implementation of communication supports that do not to address the specific needs of individuals often leads to suboptimal outcomes, such as abandonment of supports and disillusionment with the potential of AAC. Published tools are an essential component of a comprehensive communication assessment process, which, when used in an individualised and rigorous way could serve to improve service delivery and outcomes.

It is therefore essential to have a thorough understanding of the development, rigor, constructs, and underlying frameworks of the tools used by professionals for assessment of communication, as well as how professionals use assessment tools to inform their service decisions. The use of formal assessment tools also has increasing relevance in the Australian context, given a focus of the current discussions around NDIS reform being an Agency preference for enhancing the rigour of allied health assessment and outcome measurement. The findings of this research therefore have the potential to inform critical evaluation of assessment tools and clinical assessment practices, and therefore lead to more accurate and effective evaluations, ultimately improving service quality and outcomes for individuals who use alternative communication modes.