Critical Review:

Exploring cultural considerations for assessing the speech and language of First Nations children.

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This critical review examined cultural considerations required for Speech-Language Pathologists (SLPs) when assessing the speech and language of First Nations children. Reviewed study designs included expert opinions, qualitative studies and non-randomized clinical trials. The evidence gathered provides suggestive evidence of cultural considerations for SLPs when assessing the speech and language of First Nations children. However, existing evidence is limited to expert opinions and nonexperimental designs, thus reason-based practice is currently the best guide for SLPs. Recommendations for clinical practice and future research are discussed.

Introduction

Speech-language pathologists (SLPs) specialize in the assessment of speech, language, and communication skills. In Canada, SLPs are often working with children who speak other languages and come from different cultural backgrounds from their own. Cultural and linguistic diversity impacts all aspects of communication, which must be considered when an SLP is completing assessment of typical and atypical communication.

One population of cultural and linguistic diversity in Canada are First Nations communities. The unique cultural and linguistic characteristics of this population were recognized by the College of Audiologists and SLPs Ontario (CASLPO) when they were deemed a 'special interest group'. A large gap in the literature exists on providing culturally relevant and appropriate speech and language assessments to First Nations children on and off reserve. Data from the 2016 census revealed that the Indigenous Peoples of Canada - First Nations, Inuit and Métis, are the youngest and fastest growing population in Canada. One-third of First Nations people were aged 14 years or younger in 2016 (Statistics Canada, 2017). There are over 600 unique First Nations in Canada, speaking roughly 50 different First Nation languages within 11 different language families (Statistics Canada, 2017; Ball & Bernhardt, 2008).

As speech-language pathologists (SLPs), it is imperative to consider the diverse cultural and linguistic backgrounds of the children we assess. However, very little research exists on First Nations English Dialects (FNED), cultural communication styles and language development (Ball & Bernhardt, 2008). Assessment tools used by SLPs do not account for these differences and have been standardized on

non-First Nations Canadian children (Findlay & Kohen, 2013). This raises concern regarding the validity and appropriateness of using these tools with First Nations children (Eriks-Brophy, 2014).

Additionally, many SLPs may be unaware of cultural and dialect differences within the community they are working in. This may give rise to difficulties distinguishing between language differences and disorders (Ball & Bernhardt, 2008). Peltier (2011) reported that lack of familiarity with cultural communication styles and features of Anishinaabe FNED often lead to SLPs misidentifying typical patterns as disordered. Ball & Bernhardt (2008) also described phonological and phonetic characteristics of FNED across many First Nation languages as well as differences in morphosyntax, vocabulary usage and discourse. These many factors are at risk of being misinterpreted by SLPs as a language disorder, and not a language difference. As a result, the assessment process may be underestimating the language abilities of First Nations children and accounting for the large representation of First Nations children requiring speech and language services (Findlay & Kohen, 2013; Sterzuk, 2008).

A survey study by Ball and Lewis (2011) revealed that 67% of SLP respondents did not feel that their preservice training or continuing education opportunities prepared them appropriately to work with Indigenous families. SLPs also noted that what they did know about working with Indigenous families, they had to "learn on the job" (Ball & Lewis, 2011). Furthermore, 70% noted that Western-based approaches in practice are not appropriate when working with Indigenous families (Ball & Lewis, 2011).

As the Indigenous population continues to grow quickly, it is imperative as practicing SLPs to determine

ways to address the cultural and linguistic diversity of these children in our assessments. This is especially true as culturally appropriate tools have yet to be developed. Thus, this research question seeks to assess cultural considerations appropriate to apply to the assessment of speech and language of First Nations children.

Objectives

The primary objective of this paper was to critically evaluate the literature to determine what cultural considerations SLPs should take into account when conducting speech and language assessments with First Nations children.

Methods

Search Strategy

Articles related to the topic of interest were found by searching online databases, including CINAHL, Proquest, PubMed, OVID, Google Scholar and iPortal: Indigenous Studies Portal Research Tool. Databases were searched using the following keywords:

[(speech and language) AND (assessment OR screening) AND (First Nations OR Indigenous) AND (Canada) AND (children)].

Selection Criteria

Papers selected for inclusion were required to relate to cultural competency and assessment of speech and language in children. Articles that looked at intervention programs and that applied to teachers (versus speech-language pathologists) were excluded. Books and dissertations were also excluded.

Data Collection

Reviewed papers included two expert opinions (level 5 evidence), two qualitative studies (level 4 evidence), one single group study without controls (level 3 evidence) and one comparative study without concurrent controls (level 2c evidence).

Results

Expert Opinions

Expert opinions by Indigenous SLPs and SLPs working within communities can provide strong insights on the nature of service delivery when working with First Nations children, especially as existing data is insufficient. However, these must be interpreted with caution as they are not well-controlled studies, and therefore have potential for bias in interpretation. Additionally, the sampling method of references by the authors are often not included.

Eriks-Brophy (2014) provided an expert opinion that discussed considerations for SLPs when assessing the language of Canadian Aboriginal children, strengths and limitations of various assessment approaches and suggestions for developing new assessment practices to better capture the needs and abilities of Aboriginal children. The author is an expert in the area with relevant publications. Selection criteria for references were not described; however, the review was comprehensive in terms of the references included. Eriks-Brophy advised SLPs to consider best assessment practices with bilingual and culturally and linguistically diverse (BCLD) children when assessing the language of First Nations (FN) children. She also recommended considering factors such as language socialization practices, cultural variations and different learning styles within the child's community. Various assessment biases that impact the validity of current assessment procedures were discussed in detail. The author suggested assessing Aboriginal children's language abilities using a variety of different measures, learning about the child's community and involving community members in the process where possible.

Overall, this study provides suggestive evidence that clinicians need to consider a variety of factors related to the speech and language assessment of Canadian Aboriginal children.

Peltier (2011) described methods of performing a culturally sensitive and relevant speech and language assessment and interventions for Ojibway-speaking Anishinaabe people of the Great Lakes region of Ontario. Peltier is an Indigenous SLP who has worked in many First Nation communities within Ontario. In this paper, she paired her experience as an Aboriginal woman and an SLP to express her opinion which she supported with comprehensive evidence from the literature. However, the author does not acknowledge the potential for her own bias in the paper. Selection criteria for references were not specified. Peltier urged SLPs to engage with and establish partnerships within the community to understand culturally appropriate practices that can guide culturally appropriate assessments. Peltier recommended a "wait-and-see" approach for these differences while providing teachers education on FNED dialect differences. The author also called for the development of culturally appropriate assessment tools and an assessment model that involves multiple home and clinic visits to better inform the intervention approach.

Overall, this study provides suggestive evidence of culturally appropriate assessment approaches for

clinicians to consider when assessing the language of First Nations children.

Survey Research

Survey research studies collect qualitative information regarding people's knowledge, attitudes, experiences and observations. These can serve to collect community specific information from various Aboriginal cultures across Canada. However, they are at risk of presenting bias due to researchers' subjectivisms, which can influence the data collected and presented.

Ball and Bernhardt (2008) conducted a survey study to explore problems related to the lack of knowledge regarding First Nations English dialects (FNED). The goal was to form initial recommendations for developing culturally relevant assessment practices. No details were provided with regards to the conduct of the included literature review or two group forums conducted. Minimal information was provided to describe participants and no details were provided on the recruitment process. As well, no details regarding how themes were identified were reported. The authors recommended involving the primary caregiver directly in assessments and intervention, allowing up to a half hour of non-verbal play before beginning an assessment, completing language comprehension tasks before starting language production tasks, changing task contexts and learning more about the culture of the community by talking to community members, learning families' opinions on language, and attending community events.

This study provides somewhat suggestive evidence of factors SLPs should consider when assessing the language of children within First Nations communities.

Ball and Lewis (2011) conducted a survey study to assess the knowledge and skills of SLPs and the relevance of their goals and tools to develop ideas to best support Indigenous children's speech and language development. Adequate detail was provided with regards to the conduct of the survey. The recruitment process and participant characteristics were described. Details regarding how themes were identified and coded from responses were reported. The authors reported that SLPs need to deepen their knowledge regarding the cultural values and ideal styles of language interactions for their specific community. SLPs need to partner and work collaboratively with Indigenous families. They should be involved in every step of a screening or assessment process to ensure that families know that their language and role is valuable. The authors encouraged use of criterion-referenced assessments, dynamic assessments and storytelling in place of norm-referenced assessments. They advised

collaborating with community members to review current assessment tools and to develop a more culturally appropriate approach.

Overall, this study provides suggestive evidence of methods to appropriately assess the speech and language of Indigenous children.

Non-Randomized Clinical Trials

Non-randomized clinical trials performed within communities and involving community providers offer the benefit of greater external validity and generalizability of results relative to studies performed in clinical settings. However, caution should be applied when interpreting these findings as this design is subject to bias during the selection process of participants.

Peltier (2014) aimed to examine children's narrative skills and compare evaluation results from two different scoring methods: the Narrative Scoring Scheme (NSS) (a Western-based, computer software program analyses) and scoring by elders within the community (Anishinaabe analyses). Participants were from the Nipissing First Nation and included 4 elders and 8 children between the ages of 8 and 10 years old. All the participating children were English-speaking and unilingual. Eligibility criteria was specified, and participants were adequately described. Children's storytelling circles were held within the community and each child told between 1 to 7 stories. Outcome measures included scoring of narrative structures traditionally employed in speech and language assessments (NSS) and story rating scales completed by the elders. The NSS scoring was completed solely by the researcher who was familiar with the participants and unblinded from the Elders' scorings. Results revealed both agreement and disagreement between the two scoring systems. Many features of children's story content and structure are considered valuable to both Elders and the NSS. However, the NSS generated higher scores for proficiency of narrative features while Elders' generated higher scores for narratives that were culturally driven. The author also reported that a circle setting, and a talking stone is an effective and culturally appropriate way to bring children and community members together and is traditionally used in Anishinaabe communities.

Overall, this study provides suggestive evidence for clinicians to consider cultural differences between Western and Anishinaabe-based perspectives when analyzing narratives.

Kramer et al. (2009) aimed to assess the diagnostic accuracy of a published dynamic assessment tool in

distinguishing language differences from language disorders in 17 grade 3 children from the Samson Cree First Nation in Alberta, Canada. The children were classified as normal language learners (NLL) or as having possible language learning difficulties (PLLD) by school personnel. Prior standardized assessment results or diagnoses by SLPs were not disclosed. Eligibility criteria of participants were not described. Information regarding randomization and blinding of researchers were provided in sufficient detail to enable replication. Two examiners met with the children where they were asked to develop a story to accompany a wordless picture book. Stories were then scored by the evaluators using the Dynamic Assessment and Intervention tool (DAI). The children then participated in two teaching sessions that focused on narrative elements and were re-tested by producing another narrative with a new wordless picture book. Researchers then classified children as having a language disorder based on the score differences from both test phases. Appropriate statistical measures were employed for calculating effect size between the test and retest phases. The authors reported that after the teaching session, the scores of children identified as normal language learning (NLL) and possible language learning difficulties (PLLD) changed. However, greater differences were noted in the NLL group, suggesting that the PLLD children had more difficulty incorporating the new information from the teaching phase and may have required more time to consolidate new learnings. A comparison between school personnel's identification of participants language abilities and the DAI's classification was found to have an overall agreement of 94.1%, sensitivity of 100% and specificity of 91.7%.

This article provides suggestive evidence that the use of the DAI may be an accurate tool for identifying First Nation children with a language impairment.

Discussion

Overall, the results from the literature recognize and identify multiple variables at play that may influence the assessment of speech and language of First Nations children. However, evidence at this point is limited and predominantly expert opinions and nonexperimental designs. Thus, reason-based practice is currently the best guide for SLPs when conducting assessments with First Nation children.

The articles presented a call for continuous deepening of cultural competency specific to that community. SLPs should talk to community members, attend community events and engage and establish partnerships within the community. This will help SLPs

identify cultural values and practices and become more familiar with language interaction styles. Additionally, SLPs should be collaborating with community members and reviewing current assessment tools and methods. This will help guide the SLPs in developing and conducting more culturally appropriate assessment approaches.

Another major finding identified in the papers was to directly involve primary caregivers and family members in every step of the assessment process as possible. There is a long history of distrust between First Nations and Western care providers. Thus, involving families can help to rebuild that trust and show families that their language and participation is valuable (Peltier, 2017). Involving families also helps SLPs to better understand and respond to any difficulties or behaviours that may be encountered (Peltier, 2017).

Lastly, the articles identified a need for the development of culturally appropriate assessment tools. As no specific tools currently exists, SLPs should modify their assessment approach when working with First Nation families. A variety of measures, such as criterion-referenced, dynamic assessments, storytelling, etc. should be applied in addition to traditional methods. Assessment should also be done over multiple visits with the child and in a variety of contexts, such as home and clinic visits. This will help paint a more representative picture of children's speech and language abilities.

Clinical Implications

There are many factors and cultural considerations at play that may impact the assessment of the speech and language of First Nations children. SLPs must continue to learn about the culture specific to the children they are working with and look to reason-based practice to best guide them. This review provides many suggestions and methods to modify assessment approaches. It also stresses the importance of collaborating with communities to develop more culturally appropriate practices. Further research is necessary, especially research involving other First Nation groups across Canada. This review highlights the need for the development of more culturally appropriate assessment tools, or an assessment tool specifically designed for First Nations children.

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