A Model for Cross-Cultural Translation and Adaptation of Speech-Language Pathology Assessment Measures: Application to the Focus on the Outcomes of Children Under Six (FOCUS©)

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Abstract

Purpose: In the absence of a gold standard, this study illustrates the process involved in the cross-cultural translation and adaptation of the FOCUS© and its shortened version, FOCUS-34© (the Parent Form and Instruction Sheet, as well as the Clinician Form and Instruction Sheet), while also determining the social validity and clinical applicability of the translated measure. The target language used as example was Afrikaans, one of the 11 official languages of South Africa.

Method: A two-phase cross-cultural translation model was employed in which Phase 1 (comprising a six-step blind back-translation procedure) was sequentially followed by Phase 2 (social validation and clinical applicability of the measure, using focus groups with stakeholders).

Result: The extensive process followed in Phase 1 resulted in a clear and appropriate translation acceptable to both stakeholder groups (parents and speech-language pathologists). Both groups questioned the meaning of certain concepts, explored cultural differences and requested the extension of some items. Parents also shared their emotional reactions towards assessment, while therapists focused on editorial changes to the measures.

Conclusion: A framework is proposed for cross-cultural translation and adaptation of assessment measures with suitability in the speech-language pathology discipline.

Key words:

clinician views, cross-cultural, International Classification of Functioning, Disability and Health (ICF), parental views, social validity, translation

Introduction

There is a growing interest in best practices for cross-cultural translation of assessment material in the speech-language pathology (SLP) profession where validated measures are needed. This has been driven by global increases in multilingualism and an increased awareness of the necessity to ensure service delivery to linguistically isolated and neglected populations. There is a need worldwide to close the gap between the relative linguistic homogeneity of the SLP profession and the linguistic diversity of the clients they serve (Neumann, Salm, Rietz, & Stenneken, 2017).

Despite acknowledgement that the development of new and tailor-made assessment material may be considered superior to translated existing material (Pascoe & Norman, 2011), this is not always feasible. Several reasons, such as a lack of funding, time, access and human resources, make it difficult to develop new material, particularly in low- and middle-income countries (Kammerer, Isquith, & Lundy, 2013). Countries on the continents of Asia and Africa, where most of the world's population live, are typically in this category. It has been established that traditional Western assessment and intervention approaches, techniques and material should be adapted for these contexts by considering cultural, language, climate and environmental differences, as well as the stages of social development (Hartley, Murira, Mwangoma, Carter, & Newton, 2009). However, Hartley et al. (2009) also state that with cooperation, flexibility and humility, nations could work together to develop appropriate

training and services. Test translation and cultural adaptation is thus a suitable alternative, if a rigorous process is followed that adequately addresses the cultural and linguistic factors to achieve equivalence between the original and translated measure (Bornman, Sevcik, Romski, & Pae, 2010; Garrels & Granlund, 2017; Pascoe & McLeod, 2016).

South Africa (SA), one of 54 countries on the African continent, boasts a multi-lingual, multicultural society named the "Rainbow Nation" by Archbishop Emeritus Desmond Tutu of Cape Town. It has eleven official languages and approximately seven million people from different races speak Afrikaans as a first language (12.2%), making it the third most common language spoken in SA after isiZulu and isiXhosa (Statistics South Africa, 2018). Afrikaans is also closer to English than other indigenous SA languages which are classified as belonging to the phyla of Niger Congo Bantu languages. Afrikaans is characterized by few noun classes and serial verbs and verb conjugation is almost non-existent. These characteristics were predicted to facilitate a more accurate translation.

The SLP profession was established in the 1950s in SA (Aron, Bauman, & Whiting, 1967). Despite its growth and development, the profession remains characterised by a predominance of SLPs who speak only English and/or Afrikaans and do not reflect the demographics of the nation (Pascoe & Norman, 2011; Pascoe & McLeod, 2016). Providing services across all eleven languages and cultures is therefore a daunting challenge. Moreover, there is a paucity of validated and reliable measures for children with communication disorders in ten of the eleven SA languages (the eleventh being English). However, resources for assessment and intervention that are developed in other English-speaking countries such as the UK, US, Canada and Australia are likely to be neither culturally nor linguistically appropriate to the SA context (Pascoe & McLeod, 2016). Adaptations for SA English is also needed, as was seen in the adaptation of the Mullen Scales of Early Learning into SA English (Bornman, Romski, Tönsing, Sevcik, White, Barton-Hulsey & Morwane (2018). Although

some language tests have been developed and normed for some of the SA languages (e.g., Buitendag, Louw & Hugo, 1991; Mphahlele, 2006), a dearth of assessment tools remain. Pascoe and McLeod (2016) made a significant contribution to address the SA dilemma by translating the Intelligibility in Context Scale (ICS) (McLeod et al., 2012), into ten of the eleven official SA languages (save English) and trialling it in six.

Globally, the challenge remains to develop culturally valid, contextually relevant and reliable SLP resources that will meet the needs of the unique populations they serve (Pascoe & Norman, 2011; Romski et al., 2018). However, despite universal agreement that a linguistic translation alone cannot be regarded as sufficient adaptation of a measurement instrument for use in another cultural setting, there is not universal consensus on how translations should be conducted (Banville, Desrosiers, & Genet-Volet, 2000; Gjersing, Caplehorn, & Clausen, 2010). In fact, Epstein, Santo and Guillemin (2015) reviewed guidelines for cross-cultural adaptation of measurements and demonstrated that despite 31 different guidelines reported for this process, no evidence for a gold standard emerged. A lack of consistency currently exists with regard to the methodology that should be considered as superior, and thus preferable and recommended for test translations.

Given the advantages of cross-cultural test translation in the absence of new test development, an international collaboration was established to develop and evaluate a methodology for the translation of clinical tools relevant to the SLP profession in the SA context. The International Classification of Functioning, Disability and Health (ICF) (WHO, 2001) was used as a framework for such translation. Clinicians and researchers have been encouraged to use the ICF to guide clinical research, practice and student education, to inform the selection of assessment tools and to measure outcomes (Bornman & Louw, 2019; Cunningham, Washington, Binns, Rolfe, Robertson, & Rosenbaum, 2017; Threats, 2010).

The ICF (WHO, 2001) provides a standardised language (impacting positively on translation) as well as a conceptual framework for gathering data and measuring clinical outcomes. It considers the interaction between different factors that potentially contribute to a person's health status. It allows for the holistic consideration of children with communication disorders and for understanding the effects of the disorder on a child's ability to communicate in structured and natural contexts, as well as the ways in which environmental and personal factors influence the child. Hence, the ICF attempts to move away from diagnosis to a holistic view of health and functioning and also allows comparison between different cultures based on language, environmental conditions and beliefs, which are important considerations when planning interventions (Zakirova-Engstrand & Granlund, 2009).

The ICF framework comprises two levels. Firstly, Functioning and Disability, which is divided into Body Function and Structures (sensory, mental, speech or voice functions), and Activities and Participation (ability to execute tasks or actions in everyday life situations, e.g., mobility, communication and self-care). Secondly, Contextual Factors, which is divided into Environmental Factors (the physical, social and attitudinal environment in which people live their lives) and Personal Factors (age, habits, lifestyle, and social background) (Raghavendra, Bornman, Granlund, & Björk-Åkesson, 2007; WHO, 2012).

Considering the above, the Focus on the Outcomes of Children under Six (FOCUS©) (Thomas-Stonell, Oddson, Robertson, & Rosenbaum, 2013), a outcome measure with a strong theoretical and clinical origin developed within the ICF framework, was selected for the purposes of this study. The FOCUS© captures "real-world" changes in the communication participation of pre-school children (between 1;6 - 5;11 years of age) who have a variety of speech, language and communication disorders, following SLP intervention (Oddson, Thomas-Stonell, Robertson, & Rosenbaum, 2019; Thomas-Stonell, Oddson, Robertson, & Rosenbaum, 2010; Thomas-Stonell, Washington, Robertson, & Rosenbaum, 2013; Westby,

2015). The FOCUS© consists of 50 items and can be completed either by parents or SLPs. Following requests from SLPs, the 50 items were streamlined and narrowed down to 34 items. Oddson et al. (2019) compared the original FOCUS© and the FOCUS-34© and found a correlation of .98 between change scores on two versions. The shortened FOCUS-34© can therefore be seen as equivalent to the original 50-item FOCUS© (Oddson et al., 2019) as it preserves the clinical integrity, internal consistency, reliability, and validity of the full FOCUS© (CanChild, 2019).

The FOCUS© was freely available when the current study was done, as was the case for the German translation (Neumann et al., 2017), making it attractive for use in resource-constrained environments. Six further reasons also influenced this selection. First, extensive research is available on its development and validation. The FOCUS© was developed over a 13-year-period with input from 11 partner sites in five Canadian provinces (Thomas-Stonell et al., 2010). The original English FOCUS© has high inter- and intra-rater reliability (r>.95) and construct validity (Thomas-Stonell, Oddson, Washington, Robertson, & Rosenbaum, 2013), and it has been translated into 11 different languages to date. For example, the German translation has shown overall good psychometric properties: internal consistency (Cronbach a=0.959), test-retest reliability (intra-class correlation coefficient = 0.974) and split-half reliability (r=0.832) (Neumann et al., 2017). These translations are all monitored by the FOCUS© team who review back-translations to ensure fidelity with the original items. A complete list of the FOCUS© translations is available online (https://hollandbloorview.ca).

Second, assessment measures developed within the ICF framework are not commonly used in SA at present – apart from the translated ICS (McLeod et al., 2012. Although the FOCUS© includes body functions and personal factors, 90% of the items address activity and participation (Thomas-Stonell et al., 2013). It is important for SLPs to assess the possible negative effect of speech and language impairments on children's ability to participate in

various “real-world” social contexts (Neumann et al., 2017) that could include increased socialisation, independence, communication intent and intelligibility (Thomas-Stonell et al., 2013). This communication participation can be seen at home, at school or in the community, where knowledge, information, ideas or feelings are exchanged and may take the form of speaking, listening, reading, writing or nonverbal communication (Eadie et al., 2006).

Third, the FOCUS© and the FOCUS-34© are quick to administer, taking only 10-15 minutes to complete (Washington et al., 2013; Oddson et al., 2019). Both are available online and require little training to administer and interpret. Fourth, the FOCUS© involves a parental perspective. The involvement of parents in their children’s lives can never be underestimated. Children experience different learning opportunities depending on where they live, what their parents enjoy doing and what their values and desires for their families and children are (Balton, Uys, & Alant, 2019). Participation in activities is meaningful for both parents and children, and through parental involvement, parents are given a voice. Apart from the fact that the FOCUS© can be administered independently by parents (using the parent set), it can also be completed by SLPs (using the clinical set that is identical to the parent set) (CanChild, 2019; Oddson et al., 2019; Washington et al., 2013).

Fifth, the FOCUS© is a valuable measure of therapy outcomes. It can be effectively used to determine whether speech and language therapy makes a difference, as it measures whether the child’s ability to communicate and participate in real-life changes over time (Washington, Thomas-Stonell, McLeod, & Warr-Leeper, 2014). According to Cunningham et al. (2017), this should be the ultimate goal of all speech-language intervention efforts. Sixth and finally, few measures offer such high levels of psychometric merit based on research studies (e.g. Thomas-Stonell, Oddson, Robertson et al., 2013; Thomas-Stonell, Oddson, Washington et al., 2013; Thomas-Stonell, Washington et al., 2013; Washington et al., 2013).

Following the demonstrated clinical value and relevance of the FOCUS©, the first aim of the current international collaborative research was to apply the process and required steps involved in the cross-cultural translation of the FOCUS© and the shortened version FOCUS-34© (both the Parent Form and Instruction Sheet, as well as the Clinician Form and Instruction Sheet) into Afrikaans. The second aim was to determine the social validity and clinical applicability of the FOCUS© and the FOCUS-34© in Afrikaans and in the SA context.

Method

Approval was obtained from the Institutional Review Boards of the University of Pretoria, SA and the East Tennessee State University, US. Parents and SLPs provided written informed consent. Permission was received from the authors of the FOCUS© (Thomas-Stonell et al., 2013) to conduct the blind back-translation of the FOCUS© and FOCUS-34©.

ICF Framework

The ICF (WHO, 2001) framework was adopted to position the current research in accordance with recommendations by several SLP professional associations and researchers (Cunningham et al., 2017; McLeod & Threats 2008; Washington et al., 2013) internationally. This allowed for the selection of the FOCUS© as the example for the proposed cross-cultural translation of an assessment tool.

Research Design

The cross-cultural translation of the FOCUS© (and subsequently the FOCUS-34©) into Afrikaans followed a two-phase model, conceptualised from the work of Banville, Desrosiers and Genet-Volet (2000), Gjersing, Caplehorn and Clausen (2010), and Lenz, Soler, Dell'Áquilla and Uribe (2017). Phase 1 consisted of the actual translation of the FOCUS© and the FOCUS-34©. Phase 2 entailed the social validation and clinical applicability of the FOCUS-34©. The two-phased process is outlined in Figure 1.

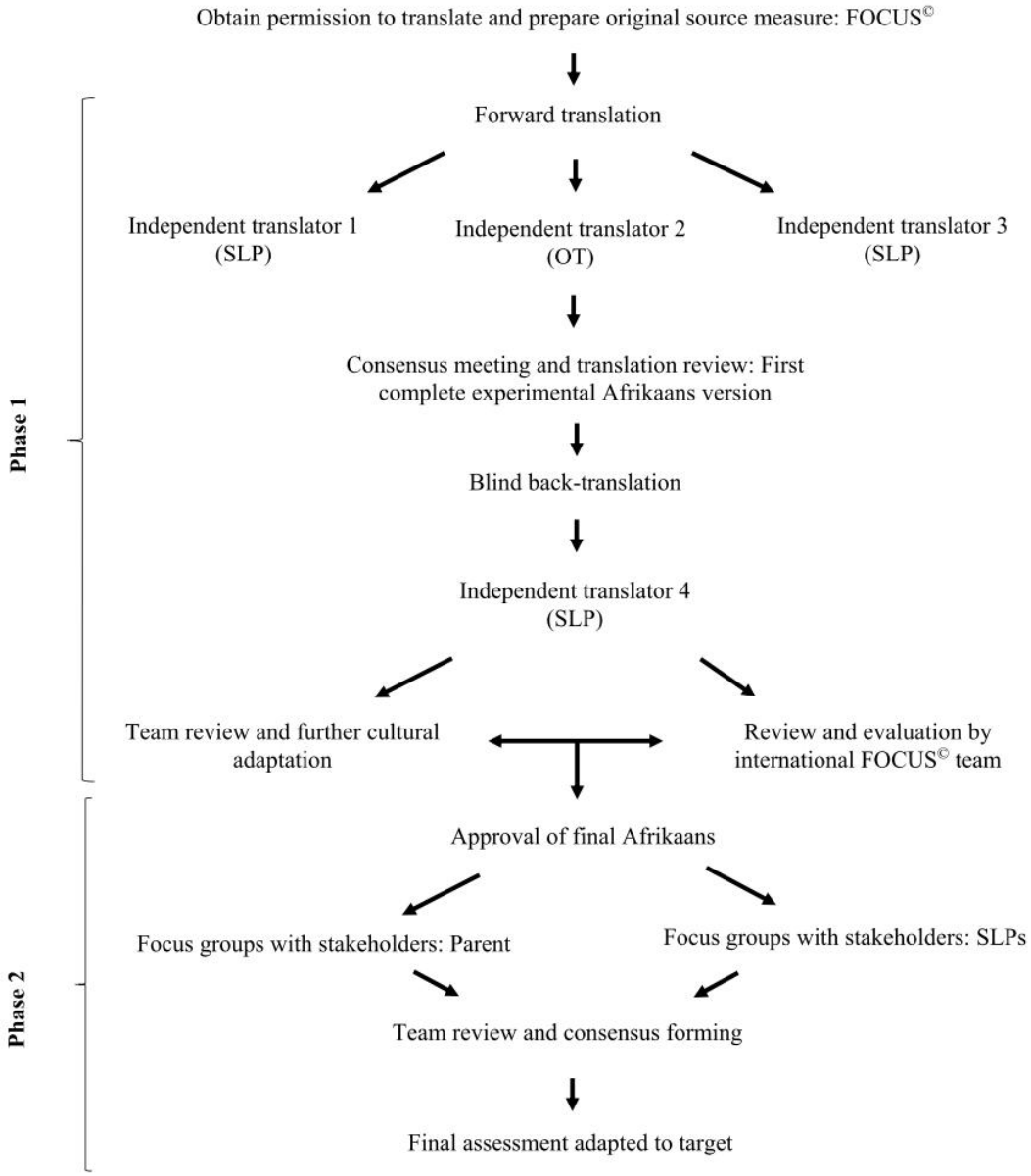

Figure 1: Two-phase procedures and guidelines for translation, social validation and clinical applicability

(Conceptualised from Banville, Desrosiers, & Genet-Volet (2000); Gjersing, Caplehorn, & Clausen (2010); Lenz, Soler, Dell'Áquilla, & Uribe (2017); Wild et al. (2005).)

Phase 1: Translation

a. Participants

Four bilingual clinicians (three SLPs and an OT) who are proficient in the source language (English) and spoke the target (Afrikaans) as their first language, took part in Stage 1. Two SLPs and the OT did the forward translation and one SLPthe blind back-translation.

b. Procedure

The six steps followed in the cross-cultural translation of the outcomes measures into Afrikaans are described in Table I.

c. Material

As justified earlier, the FOCUS© (and subsequently the FOCUS-34©) was selected for translation from the original English version into Afrikaans, including the Parent Form and Instruction Sheet, as well as the Clinician Form and Instruction Sheet.

Phase 2: Social Validation and Clinical Applicability

a. Participants

Two sets of participants (a parent participant group and an SLP group) consented to participate in the second phase of the research. The ideal size of a focus group is described as being between five to ten participants, with the researcher and note taker (Jacobsen, 2021). Seven Afrikaans-speaking parents (all mothers) of children with communication disorders under the chronological age of six years old were included in the parent focus group. They were selected as potential participants since they were parents of children who were receiving speech and language therapy at the time of the study, and since they used Afrikaans as first language. Participant 5 terminated intervention between the time she consented to participate and the focus group. Due to the recent termination of therapy, she was still included in the focus group.

Table I: Steps followed in Phase 1 of the FOCUS© and the FOCUS-34© translation process

Steps included in the cross-cultural translation	Description
Step 1 Permission to translate the FOCUS© (and subsequently the FOCUS-34©) and preparation of preliminary versions in MS Word. This permission forms an important first step (Skarżyński et al., 2019).	Permission was obtained from the authors of the FOCUS© (Thomas-Stonell, Oddson, Robertson, & Rosenbaum, 2013) to translate it. An M Word version of the material was prepared in the source language to facilitate ease of translation. This included both the Parent Form and Instruction Sheet as well as the Clinician Form and Instruction Sheet.
Step 2 Forward translation of the FOCUS-34© from the source language (English) into the target language (Afrikaans).	Forward translation of all the FOCUS© material mentioned in Step 1 in the target language (Afrikaans) by three bilingual clinicians; two SLPs and one occupational therapist.
Step 3 Consensus meeting and translation review of preliminary versions in order to merge the versions into one translation version. Preparation of first experimental version.	A consensus meeting was held to review and evaluate the three preliminary versions of the translations and to reconcile the terms and constructs. Discussions mostly focused on the use of more scientific terminology versus more colloquial language. Thereafter, the first complete experimental Afrikaans version was compiled.
Step 4 Blind back-translation from the target language (Afrikaans) to the source language (English).	Blind back-translation from the target language (Afrikaans) to the source language (English) by a fourth bilingual SLP who had not been involved in the forward translation process, and who was not familiar with the original English version of the material.
Step 5 Team review to ensure harmonisation of the new translation with the source version.	The blind back-translation identified inconsistencies between the original material and the forward translation. Following the team review, changes were made to eliminate any discrepancies. This was done until consensus was reached among all four clinicians involved in the process. This process resulted in a second complete Afrikaans version.
Step 6 Approval of final Afrikaans version for field testing.	Following minor changes suggested by the FOCUS© team, the final Afrikaans version of all the material was submitted and approved. This final Afrikaans version was then accepted and added to the FOCUS© website: www.focusoutcomemeasurement.ca

Notes: SLPs= Speech-language pathologists

Six Afrikaans-speaking SLPs were selected as participants in the SLP focus group. They were required to be actively working as clinicians, to have paediatric caseloads and to speak Afrikaans as their first language. The participants are described in Tables II and III respectively.

Table II: Biographical information of the parent participants

	P 1*	**P 2**	**P 3**	**P 4**	**P 5**	**P 6**	**P 7**
First language	Afr	Afr	Afr	Afr & Eng	Afr	Afr	Afr
Relationship status	Married	Married	Married	Life partner	Married	Married	Married
Employment status	None	Part-time	Full-time	Full-time	Full-time	None	Part-time
Age (in years)	40 yrs	39 yrs	34 yrs	25 yrs	33 yrs	41 yrs	33 yrs
Highest educational qualification	8-10 yrs post school	5-7 yrs post school	1-4 yrs post school	5-7 yrs post school	1-4 yrs post school	1-4 yrs post school	8-10 yrs post school
Adults in home	2	2	2	2	2	2	2
Children 0-4 yr old in home	2	0	2	1	2	2	1
Children 5 yr+ in home	2	1	0	0	1	0	1
Age and gender of child(ren) receiving SLP	5;10 M 3;11 M	4;11 M	4;6 M	1;9 M	4;3 F	8;10 M* *	6;5 F
SLP services (yrs;mths)	3;1	3;0	1; 8	1;9 months	Unsure	1;6	4;5

Notes: Afr = Afrikaans; Eng = English; yrs = years; SLP = Speech-language pathology

*Participant 1 was the mother of two children who were both receiving SLP services.

**Although Participant 6 was the parent of a child with a chronological age of 8 years 10 months, this child functioned at a significantly lower cognitive age.

Table III: Biographical information of the SLP participants

	SLP 1	SLP 2	SLP 3	SLP 4	SLP 5	SLP 6
Currently practising as SLP	Yes	Yes	Yes	Yes	Yes	Yes
Work context	School	Private practice	Private practice	University	Private practice	University
Highest qualification	Master's	Master's	Master's	Master's	Bachelor's	Doctorate
Years' experience as SLP	35 years	20 years	18 years	28 years	32 years	17 years
Areas of specialisation	AAC, ASD	AAC, Adult neuro, Auditory processing	AAC Multiple disabilities	AAC	Child language	AAC
Work primarily with	Children	Children & adults	Children & adults	Children & adults	Children	Children & adults
Familiar with FOCUS©	No	Yes	No	Yes	Yes	No
Ever used FOCUS©	No	No	No	No	Yes	No
Familiar with ICF	Yes	Yes	Yes	Yes	Yes	Yes
Used ICF for assessments	No	No	Yes	Yes	Yes	Yes
Paediatric clients p/w	50 p/w	15 p/w	35 p/w	1 p/w	45 p/w	1 p/w

Notes: SLPs = Speech-language pathologists; AAC = Augmentative and alternative communication; ASD = Autism spectrum disorder; ICF = International Classification of Functioning, Disability and Health; p/w = per week

b. Material

Only the Afrikaans version of the FOCUS-34© was included in Phase 2 as it is shorter and preserved the clinical integrity, internal consistency, reliability and validity of the FOCUS© as explained earlier (CanChild, 2019). This included the translated Parent Form and Instruction Sheet (for focus group 1) as well as the Clinician Form and Instruction Sheet (for focus group 2).

c. Procedure

A script was developed to guide the two focus groups (Naudé & Bornman, 2017). The script included an introduction (welcome; introduction of participants; aim of study; purpose of the focus group; administrative details), discussion section (main questions formulated to guide the discussion on the FOCUS-34© forms; instruction sheets with probes a timed agenda; member checking), as well as a closing section (appreciation and dissemination of results). The first author facilitated both the focus groups, while the second author typed key points during the discussions for member checking. Both groups were audio recorded, with participant permission (De Sonneville-Koedoot, Adams, Stolk, & Franken, 2015).

d. Data analysis

A research assistant transcribed both audio recordings verbatim. An inductive thematic analysis using the six steps outlined by Clarke and Braun (2013) was conducted for each focus group. Both authors first familiarised themselves with the data by reading and re-reading the transcripts. Next followed the searching-for-themes step, during which the transcripts were organised as key ideas (patterns). Thereafter, the themes in each were reviewed and a coding framework was created to incorporate the theme categories discussed in the previous step. Themes reflected the theoretical interests that guided the research.

Finally, segments were summarised under a main theme that reflected the most prominent ideas represented in each theme category for both focus groups. A concept map was created to visually represent the major themes and subthemes in a colourful and organised fashion for each focus group. Two tables were compiled as an additional visual aid in data and theme representation. Frequency, relevance to the research, and patterns were considered when crafting main themes for both the focus groups.

Result

Phase 1

The final Afrikaans versions of the FOCUS© and the FOCUS-34© are available from the Bloorview Research Institute (https://hollandbloorview.ca)

Phase 2

Results for the two focus groups are discussed separately, starting with the parent perceptions (first the Parent Instruction Sheet, then the Parent Form), followed by the SLP perceptions (first the SLP Instruction Form, then the SLP Form) and finally, the differences in the responses that parents and SLPs gave to the questions asked about the translations.

Parents' Perceptions of the Afrikaans FOCUS-34© (Instruction Sheet and Form)

Parents reached consensus that the Afrikaans translation of the Parent Instruction Sheet was *clear* and *appropriate* for SA Afrikaans-speaking parents of children with communication disorders, and that it was therefore acceptable.

Review and discussion of Part 1 and Part 2 of the FOCUS-34© Parent Form were done item by item. Five themes emerged as parents discussed the content of the Afrikaans FOCUS-34© (see Table IV).

The parents reached consensus that the Afrikaans FOCUS-34© would be useful in capturing changes in a child's development during intervention and in measuring treatment outcomes. The suggested changes were forwarded to the authors of the FOCUS-34©, which resulted in the final (third) Afrikaans version that is available to clinicians on the FOCUS© website.

Table IV: Themes from the Parent Focus Group

Theme	Specific FOCUS-34© question	Verbatim parent examples
a. Questioning the meaning of certain concepts included in the measure	Q1: My child is comfortable when communicating.	*"What is 'comfortable' – physical, or emotionally? Maybe change word order in Afrikaans to make more sense."*
b. Cultural differences between Afrikaans- and English-speaking children and families	Q4: My child is confident communicating with adults who do not know my child well.	*"Who are others? If they are strangers, Afrikaans children would be shyer than English children and it would be a cultural issue; but if it was familiar others (e.g., grandparents, aunts, uncles) they would be okay."*
c. Use of the terms "talk" and "communicate" when applying the FOCUS-34© to children who need or use AAC	Q32: My child is reluctant to talk.	*"My child does not use speech to communicate, so he doesn't talk, but sometimes he is reluctant to communicate and sometimes not. For me it makes sense if we substitute 'talk' with 'communicate'."*
d. Expand the content of the items (e.g., consider the role of "receptive abilities" in communication participation)	Not applicable	*"There are no questions about what your child understands? Is that not important? These questions look at how communication helps, but doesn't ask about understanding? Children understand more than what we think - and that must be terrifying for them."*
e. Emotional responses of parents to meetings and assessments of their children	Not applicable	*"I hate parent meetings – you leave with everything that your child can't do instead of them (referring to SLPs) emphasising what your child can do and the journey you have already travelled."*

Notes: SLPs = Speech-language pathologists ; AAC = augmentative and alternative communication

SLPs' perceptions of the Afrikaans FOCUS-34© (Instruction Sheet and Form)

The SLPs agreed that the instructions were clearly translated and appropriate for SA Afrikaans-speaking clinicians. However, suggestions for minor editorial changes were made, e.g., a consensus-based suggestion was proposed for a more accurate translation of the term

"snapshot" to describe the aim of the FOCUS-34©. These suggestions were conveyed to the authors of the assessment measure.

Review of Part 1 and Part 2 of the Clinician Form was conducted item by item with the seven SLPs. Five themes emerged as SLPs reviewed and discussed the content of Part 1 and Part 2 of the Afrikaans Clinician Form, as shown in Table V.

The first two themes overlapped with those identified in the parents' thematic analysis, which was expected, given the nature of the task at hand. The term "comfortable" caused some confusion, but the researchers could use the FOCUS© manual to clarify its semantic meaning and explain that it referred to "confidence" and not "physical comfort".

Based on the results, changes were made to the translation and submitted to the authors of the FOCUS-34© for consideration. Overall, the SLPs indicated that they would use the Afrikaans FOCUS-34© as they viewed it to be a useful addition to their existing assessment batteries. They were of the opinion that it provides a practical method to involve parents in assessment and that it would be useful to them as a much-needed outcomes measure, e.g., to follow up on children's progress.

Table V: Themes from the Speech-Language Pathologist (SLP) Focus Group

Theme	Specific FOCUS-34© question	Verbatim SLP examples
a. Questioning the meaning of certain concepts included in the measure	Q1: My child is comfortable when communicating.	*"What is 'comfortable'? Is the child at ease, physically comfortable, or is he shy when communicating? Is this about the child's self-awareness or not?"*
b. Cultural differences between Afrikaans- and English-speaking children and families	Q4: My child is confident communicating with adults who do not know my child well.	*"Sometimes there are differences between Afrikaans and English children."*
c. Expand the content of the items (e.g., items on play)	Q2: My child is included in play activities by other children.	*"Play is so important, and more useful for some cases than others; for children who are severely disabled, one would have to complete this question differently, I would suggest to add questions to make it more applicable to the disabled population."*
d. Forms	Parent Form Clinician Form	*"Expand the forms to also include teachers, occupational therapists and other team members."*
e. Editorial changes	Questions Part 1: 7, 10, 18, 19, 21	• *Changed word choice for "together" ("saamvoeg" changed to "bymekaar voeg") (Q7)* • *Changed position of verb (Q10; Q18)* • *Changed the second reference to "my client" in the sentence to "him/her" (Q19; Q21)*
f. Editorial changes	Questions Part 2: 1, 2, 3, 9	• *Changed the second reference of "my client" in the sentence to "him/her" (Q1; Q3; Q9)* • *Changed position of verb (Q2)*

Differences in the parents' and SLPs' views regarding the translations

During the focus group discussions, several differences were observed between the views of parents and those of the SLPs (see Table VI). These differences are attributed to the

focus group participants' roles, namely parents advocating for their children, as opposed to SLPs focusing on details to effectively measure and capture change by means of this assessment measure. These differences also emphasise the importance of the clinical application of the ICF (WHO, 2012) in measuring outcomes, with the emphasis on detecting meaningful change in the lives of children and their families (Cunningham et al., 2017) and family-centred intervention (Dilollo & Favreau, 2010).

Table VI: Observed differences between the views of Parents and Speech-Language Pathologists regarding the translation of the FOCUS-34©

Parents	Speech-Language Pathologists
• Attitude: Emotional responses relating their lived experience and speaking from the heart • Listened to one another; supportive, warm, relaxed atmosphere; showed empathy, person focused • Requested more items to capture small improvement for children with severe communication disabilities	• Attitude: Own knowledge on the forefront; try to convince others of point; competitive • Limited cohesion of group despite knowing each other professionally; awareness of time; task focused • More critical regarding editorial aspects of translation • Requested more items (e.g., items on play) to increase their perceived clinical usability of measurement

Discussion

The FOCUS© and the FOCUS-34© are two of a few purpose-designed measures for broad speech and language outcomes suitable for children, with established reliability and validity (Oddson et al., 2019). They were developed to be reflective of the ICF framework and capture real-life changes in children's communication skills associated with speech-language intervention (Washington et al., 2013). The dearth of culturally responsive SLP assessment instruments, and the limited clinical use of the ICF in SA, underscore the value of this study pertaining to the translation of the FOCUS© and the FOCUS-34© into Afrikaans and the process followed to determine its clinical applicability and social validity.

This cross-cultural translation process was more challenging than suggested by the measure's format, as various forms of equivalence – including conceptual, metric, item, operational, linguistic and functional equivalence – needed to be considered (Bornman et al., 2018; Garrels & Granlund, 2017; Pascoe & McLeod, 2016). The questions in the Parent and Clinician Forms were constructed to be completed by either parents or SLPs and were succinct and to the point. However, the independent translators all experienced difficulty in conveying the exact same meaning in so few words and sticking to one single sentence in each question. In some questions, colloquial expressions were felt to be clearer but had to be changed since they did not follow the English syntax. Technically transferring the translations to the FOCUS© and the FOCUS-34© required English templates and was time consuming. The six-step process, which included forward and blind back-translation, and which culminated in the approval of the final Afrikaans version by the authors for field testing, was resource intensive. Communication with the authors took place via email due to the correspondents being spread over three different time zones. Face-to-face communication might have speeded up the process, as small differences could have been resolved verbally. A comprehensive cross-cultural translation process that involves collaboration, such as the one described in this research, takes time (Clark, 2012). However, it proved to be time well spent.

Increasing global population diversity and health disparities have necessitated the intensification of global health initiatives with emphasis on cross-cultural assessment and cross-cultural translation (Banville et al., 2000; Epstein et al., 2015; Gjersing et al., 2010; WHO, 2012). However, to date – as far as could be determined – there is not a single, universally agreed upon method of cross-cultural adaptation of assessment material (Riley, Gichuru, & Robertson, 2012). This study demonstrated that the translation of an assessment measure is more than the mere process of changing text from one language to another, as linguistic comparability needs to be ensured (Clark, 2012). Our translation process was

informed by strong evidence of well-established methods that emphasise cross-cultural and conceptual validity as well as linguistic equivalence, to enable us to achieve culturally appropriate outcomes in the Afrikaans FOCUS© and the FOCUS-34©.

In order for intervention to evolve from merely emphasising the communication disorder (with subsequent clinician-driven outcomes) to becoming holistic and patient-centred (as promoted by the ICF), the FOCUS© and the FOCUS-34© include the perspectives of both families and SLPs. Family-centred care is especially relevant for SLPs serving children and these measures allow for a balanced and trusting relationship between SLPs and families. According to Barry and Edgman-Levitan (2012), shared decision making is the pinnacle of family-centred care (and is most effectively performed when done within the ICF framework). This framework allows for integrating child- and family-reported perceptions about the impact of the communication disorder with the goals and preferences for treatment. The SLP provides clinical information such as the assessment results, diagnosis and treatment options. By taking the communication disorder (body structure and function), activities and participation, environmental factors and personal factors into account, the foundation is laid for shared decision making in which the child and family are viewed holistically. Including both parents and SLPs in the social validation and clinical applicability phase of this study was beneficial, as it led to a multiple-stakeholder view: the two groups complemented one another, and parents' voices were heard. Inclusion of both participant groups mirrored the FOCUS© and the FOCUS-34©, which were meant to be completed by both parents and SLPs (Oddson et al., 2019). Parents had also been actively involved in the development of the FOCUS© items (Thomas-Stonell et al., 2010).

Using the FOCUS© and the FOCUS-34© to measure treatment outcomes is one way of improving services in an evidence-based manner and to inform clinical decision making. Describing the methodology used in the current study, with the theoretical justification for

doing so, helps to create wider multicultural understanding by allowing clinicians to reflect on their own beliefs, norms and values. It also directs them to reassess their influence on the families they provide services to, who might not share their same cultural background.

Finally, the ICF (WHO, 2001) framework was used innovatively as a framework for international collaboration and to raise awareness of the multiple benefits of its application value for SLPs in SA. Using the ICF (WHO, 2012) framework as a vehicle for international collaboration, a new measure in Afrikaans to assess the outcomes of treatment was made available to SLPs and parents in SA. The Afrikaans FOCUS-34© serves to measure functional communication changes in children due to intervention, thus filling an existing gap.

Clinical Implication

The Afrikaans FOCUS-34© can now be added to the assessment batteries of SLPs working with young Afrikaans-speaking children in SA. It is a responsive outcomes measure that captures participation changes following speech and language intervention (CanChild, 2019). Moreover, it covers the ICF components of Activities, Participation and Personal factors, which provide a holistic perspective of the child in his/her everyday life settings.

Furthermore, using the methodology described in this paper, the FOCUS-34© can be translated into any of the other nine official SA languages. Understanding the cross-cultural translation process and procedures is essential to being an informed SLP, as their scope of practice requires them be cross-culturally responsive and to conduct language assessments and interventions across different languages – especially given the increasingly global, multilingual world.

Limitation

A limited number of participants were utilised in Phase 2 of the study and all were from the same geographical region, thus restricting generalisability. The purposive sampling

of the SLPs may have led to sample bias, as the clinicians all graduated from the same university, although spanning a range of 18 years. Furthermore, all the parents who consented to participate were mothers, and all had some post-school education, albeit of differing lengths. In the German FOCUS© validation study it was shown that mothers with a high level of education had a significant positive impact on the results of all the subdomains of the measure (Neumann et al., 2017). Had mothers with lower educational levels been included in the current study, the results may have differed. In order to preserve the integrity of the original FOCUS© , no questions could be changed. The reliability and validity of the Afrikaans FOCUS-34© remain to be determined and further item analysis is recommended to determine if responses are influenced by different assumptions and cultural expectations. This research, however, focused on the rigorous translation process and the clinical applicability and cultural validity of the Afrikaans FOCUS-34©.

Conclusion

Translation is a difficult task, but when appropriate procedures are used such as the ones described in this paper, it can be a reasonable alternative to creating new instruments. One should never assume that an instrument developed in one culture is appropriate to use in another and that it will yield valid results (Ægisdóttir, Gerstein, & Çinarbaş, 2008). To be considered valid, cross-cultural translation of instruments must adhere to a rigorous methodology.

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Declaration of interest statement

The authors report no conflicts of interest for this study.

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