



# **DEVELOPMENT OF A PERCEPTUAL SPEECH ASSESSMENT PROTOCOL FOR ZULU-SPEAKING CHILDREN WITH CLEFT PALATE**

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## ABSTRACT

**TITLE:** Development of a perceptual speech assessment protocol for Zulu-speaking children with cleft palate

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Currently a need exists in South Africa for an age-, linguistically- and culturally appropriate perceptual speech assessment protocol for Zulu-speaking pre-school children with cleft palate. The aim of this study was to develop a reliable perceptual speech assessment protocol for Zulu-speaking pre-school children with cleft palate based on the international guidelines ([www.eurocran.org](http://www.eurocran.org)). Furthermore the clinical applicability and relevance of these guidelines for the perceptual assessment of cleft palate speech in the Zulu language were determined. The aims were reached by following a mixed methods research approach and by conducting the research in four phases. In phase one the protocol was compiled with the assistance of an expert Zulu linguist, in phase two the protocol was pre-tested on 12 normal Zulu-speaking pre-school children between three and six years of age; in phase three the perceptions of speech-language therapists regarding the clinical applicability of the protocol were determined after administration thereof on 12 Zulu-speaking pre-school children with cleft palate between the ages of three and six years; and finally in phase four the relevance of applying the international guidelines to the Zulu language was reflected on. A critical analysis of the protocol indicated that the international guidelines ([www.eurocran.org](http://www.eurocran.org)) could be used to develop a perceptual speech assessment protocol in an African language namely Zulu. Results of the pilot study revealed that the protocol was age, culturally and linguistically appropriate for normal Zulu-speaking pre-school children. The speech-language therapist participants indicated that the protocol was clinically applicable to Zulu-speaking pre-school children with cleft lip and palate in terms of cultural sensitivity, administration time and its ability to elicit and identify cleft palate speech characteristics. The international guidelines ([www.eurocran.org](http://www.eurocran.org)) could be applied to the Zulu language with an

emphasis on the click sounds in Zulu. The results have clinical implications for cleft palate service delivery in South Africa. These implications were for in-service training of speech-language therapists regarding cleft palate to provide them with evidence-based guidelines for clinical practice. Implications for further research included the development of norms of speech development in the Zulu language and the standardization of the perceptual speech assessment protocol. This study is valuable as it is the first tool for the perceptual assessment of cleft palate speech in Zulu. The research methodology may serve as an example for the development of similar speech assessment protocols for children with cleft palate in other African languages.

**KEY WORDS:** Perceptual assessment, cleft lip and palate, Zulu perceptual speech assessment protocol, clinical applicability, international guidelines for the perceptual assessment of cleft palate speech, culturally sensitive.

## OPSOMMING

Tans bestaan daar 'n behoefte in Suid-Afrika vir 'n ouderdoms-, taal- en kultureel toepaslike persepsuele spraak assesseringsmateriaal vir Zoeloe-sprekende voorskoolse kinders met gesplete lip en verhemelte. Die doel van hierdie studie was om 'n betroubare en geldige Zoeloe persepsuele spraak assesseringsprotokol vir voorskoolse kinders met gesplete lip en verhemelte te ontwikkel gebasseer op die internasionale riglyne ([www.eurocran.org](http://www.eurocran.org)). Die kliniese toepaslikheid en relevansie van die internasionale riglyne vir die persepsuele assessering van gesplete lip en verhemelte is bepaal. Die doelwitte is bereik deur 'n gemengde kwalitatiewe en kwantitatiewe navorsingsmetode te volg asook deur die navorsing in vier fases uit te voer. In fase een is die protokol ontwikkel met die bystand van 'n Zoeloe taalkundige, in fase twee is die protokol getoets op 12 normale Zoeloe-sprekende kinders tussen drie en ses jaar, in fase drie is die persepsies van drie spraak-taalterapeute verkry aangaande die kliniese toepaslikheid van die protokol na afloop van evaluasies op 12 Zoeloe-sprekende voorskoolse kinders met gesplete lip en verhemelte tussen drie en ses jaar, in fase vier is gereflekteer op die toepaslikheid van die internasionale riglyne vir Zoeloe. 'n Kritiese analise van die protokol het aangedui dat die internasionale riglyne ([www.eurocran.org](http://www.eurocran.org)) gebruik kon word om 'n persepsuele spraak assesseringsprotokol in 'n Afrika taal, naamlik Zoeloe, op te stel. Resultate van die voorstudie het aangedui dat die protokol taal-, ouderdoms- en kultureel toepaslik was vir die normale Zoeloe-sprekende voorskoolse kinders. Die spraak-taalterapeute as deelnemers het aangedui dat die protokol klinies toepaslik was vir voorskoolse kinders met gesplete lip en verhemelte in terme van die kulturele sensitiwiteit van die protokol, administrasie tyd asook die vermoë om die spesifieke gesplete lip en verhemelte spraakkenmerke te ontlok. Die internasionale riglyne ([www.eurocran.org](http://www.eurocran.org)) kon gevolg word vir Zoeloe met insluiting van die suigklanke in die Zoeloe taalstruktuur. Die resultate het implikasies vir dienslewering in Suid-Afrika met betrekking tot gesplete lip en verhemelte. Hierdie implikasies sluit in-diens opleiding van spraak-taalterapeute in om aan hul riglyne te verskaf vir beste praktyk. Implikasies vir verdere navorsing omsluit die ontwikkeling van norme in terme van die spraak ontwikkeling in Zoeloe asook die moontlike standardisering van die persepsuele spraak assesseringsprotokol. Die studie is waardevol aangesien dit die eerste poging was om 'n persepsuele spraak assesseringsprotokol in Zoeloe te ontwikkel vir die evaluasie van kinders met gesplete lip en verhemelte. Die

navorsingsmetodologie kan gevolg word vir die ontwikkeling van soortgelyke spraak assesseringprotokolle vir kinders met gesplete lip en verhemelte in ander Afrika tale.

**SLEUTELTERME:** Persepsuele assessering, gesplete lip en verhemelte, Zoeloe persepsuele spraak assesseringsprotokol, klinies toepaslik, internasionale riglyne vir die persepsuele assessering van gesplete lip en verhemelte, kultureel sensitief.

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