SINHALA LETTER WRITING DIFFICULTY IDENTIFICATION AND LETTER WRITING PRACTICE IN DYSLEXIA

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Abstract

Sinhala Letter Writing difficulty identification and letter writing practice in Dyslexia is a research project aimed at identifying letter writing difficulties in individuals with dyslexia in Sinhala language, which has not been extensively studied before. The project's focus on Sinhala language is crucial, as it is a unique language with its own set of challenges in letter writing. The project incorporates machine learning algorithms and mobile applications to provide personalized interventions and support to individuals with dyslexia in their letter writing practice.

The project emphasizes the importance of early identification and intervention in dyslexia research, and the scope of the project can lead to better outcomes for individuals with dyslexia by providing timely support. The project also focuses on the identification of underlying neural mechanisms involved in letter writing difficulties in dyslexia, which can contribute to a better understanding of the disorder.

The project's scope is important, as it aims to develop interventions that are culturally and linguistically sensitive to Sinhala language, addressing the unique needs of individuals with dyslexia in Sinhala-speaking countries. The use of assistive technologies such as speech-to-text and text-to-speech in the project's scope can greatly benefit individuals with dyslexia in their letter writing practice.

The evaluation of the project included feedback from domain experts and the target audience, highlighting the importance, development, usability, and other aspects of the system. The evaluation on functional and non-functional requirements indicated that the project has met its initial objectives and provided personalized interventions and support to individuals with dyslexia.

Despite the promising results, the evaluation of the project has some limitations. These limitations include a small sample size, lack of a control group, and limited generalizability to other languages and cultures. Nonetheless, the project's scope and focus on early identification and intervention, combined with the use of machine learning

algorithms and mobile applications, can have a significant impact on individuals with dyslexia across different languages and cultures.

Key words: dyslexia, early intervention, assistive technologies, letter writing, machine learning, personalized interventions, Sinhala language, speech-to-text, text-to-speech, usability.