

**Deteksi Secara Dini Speech Delay Pada Anak Menggunakan Metode  
Certainty Factor Berbasis Website**  
(*Early Detection of Speech Delay in Children Using Certainty Factor Method on  
a Website-Based Platform*)

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**ABSTRACT**

*This research aims to develop a method for early detection of speech delay in children using the Certainty Factor (CF) method on a website-based platform. Speech delay in children can be an early indicator of more serious developmental issues, making early detection crucial for providing appropriate intervention.*

*The Certainty Factor method is used to measure the level of confidence, addressing the uncertainties that may arise in diagnosing speech delay in children. The certainty factor represents the level of confidence or uncertainty in a statement or diagnosis based on several influencing factors. In this context, the considered factors include aspects of language development in children ranging from 3 months to 7 years of age. In this study, a website will be developed as a platform for early detection of speech delay in children. Parents or caregivers can access this website and complete a questionnaire that covers speech development-related questions about their children. The questionnaire is designed based on relevant factors in the early detection of speech delay. Users are required to provide personal information (consultation data) and select the age of their child. The system will then automatically display the appropriate questionnaire or questions based on the selected age. After the questionnaire is completed, the system will process the obtained data and use the Certainty Factor method to determine the level of certainty regarding the presence of speech delay in the*

*child. The results will be presented to the users as a percentage. In accuracy testing, the Certainty Factor method achieved 96% accuracy out of 25 sample data. This indicates that only 1 data was miscalculated. Furthermore, black box testing resulted in 100% accuracy. Based on these testing results, the website is deemed suitable for early detection of speech delay. This research is expected to contribute to the field of early detection of speech delay in children. By detecting this developmental issue early, it is hoped that children with speech delay can receive appropriate interventions at an earlier stage, thereby increasing their chances of recovery and optimal development.*