

Completion Report

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Subject of Research Project : Heuristic Evaluation of Video modeling mobile application for autistic children between Malaysia and Japan

Autism Spectrum Disorder is a specified neurodevelopmental disorder correlated with social coping conditions and limited and repeated behaviours (Ousley & Cermak 2014). Compared to peers their age, most children with autism require greater assistance with daily tasks and have trouble performing fundamental life skills. Living skills are crucial for these children to possess in order to help them become more independent since they continually require assistance from their parents or guardians to do tasks. This research was carried out to evaluate a video modelling application known as Autism Made Easy in Malaysia and Japan.

The main goal of Autism Made Easy is to assist children who have difficulty applying basic self-care skills to ease their daily living activities. The development of Autism Made Easy aimed to provide a platform where children could experience virtual learning anytime and anywhere, and it creates a more enjoyable and interactive learning platform. The application's content is integrated with video modeling to train basic self-care skills among children with autism. They can improve their daily life skills by learning through this application, and as a result, they will become more self-sufficient in the future. Aside from video modelling, this application allows children to play simple interactive games that test their knowledge and memory in life skills. The application's content is based on the necessary daily life skills suggested by parents of children with ASD.

A heuristic evaluation was performed to obtain feedback on the Autism Made Easy mobile application. Three (3) experts from Japan and seven (7) experts from Malaysia have taken part in the evaluation. At the start of the observation, participants received thorough explanations and directions regarding the tasks. The observations were carried out in a naturalistic setting, and participants were left to behave independently of the observer.

The results have shown that Autism Made Easy is effective for learning daily living skills because the video lessons, activities, and visual step-by-step content can be learned repeatedly. Children with autism spectrum disorder may learn mainly by watching visually, so this application may be effective for them to learn while watching. Autism Made Easy will be useful to improve the children's current condition and familiarise them with the basic essential needs/activities of daily life as it contains features like Flash cards, sounds and instructions.

Further recommendations include: more features can be added to help students to focus and improve more; short clips of activities can be value added; open pants, sit on toilet, rinse, flush, wear pants, etc.; add option of muting the background music video; provide videos on how to cater for low-functioning autism, thus able to cater for all and to extend to other languages.

Publication of the Results of Research Project:

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.) 1) 10-12 Mac 2023 / Johor Convention & Exhibition Center, Berjaya Waterfront Hotel, Johor Bharu, Malaysia / Autism Summit 2023 (JAS23) / Video Modelling in Developing Self-Care Skills for Children with Autism Spectrum Disorder / Wan Fatimah Wan Ahmad, Aliza Sarlan, Manisah Mohd. Ali & Iman Nur Nabila. Gold Medal Poster Award
Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.)
Book (Publisher and Date of the Book, Title and Author of the Book, etc.)