Little Mermaid: Improving Social Communication Level for Mildly Autistic Children Using Video Call-Based Mobile Application Game

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Mildly autistic children lack effective social communication skills, making it crucial to utilize modern technology to elevate their social communication and help them blend in with their community. This study improved social communication skills for preschool children aged 4-6 with mild autism by using a mobile application game that relies on video calls. A survey filled out by 2,536 autistic individuals and medical professionals optimized the application's UI/UX to their likings. After implementation of the application, an experiment was conducted with two groups: 300 participants who used the application for 12 weeks (1 hour daily) and a control group of 100 who did not use the application. We tested the effectiveness of the application in improving social communication with consideration for gender and demographic areas. Both groups were assessed before and after the experiment using the standard Social Communication Questionnaire. The results of an unpaired t-test indicated a significant difference in social communication between the experimental group and the control group with a P-value of 0.0001. An unpaired t-test found no significant difference in social communication levels between participants from urban or rural regions, nor between male or female participants. This concluded that the application is an effective tool to improve social communication skills for mildly autistic children all around the country, regardless of their gender or socioeconomic background, taking the first step toward the formation of a global network for mildly autistic children.

Awards Won:
Third Award of $1,000
American Psychological Association: Complimentary student affiliate memberships
American Psychological Association: Third Award of $500
University of Arizona: Renewal Tuition Scholarship