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Abstract

Assisting those with Neurological Disorders

Problem: Can a computer application assist Alzheimer's, Dementia, or Traumatic Brain Injury (TBI) participants regarding their interaction with friends, family, and caretakers? **Hypothesis:** If a computer application is used to help a participant with Alzheimer's, Dementia, or TBI regarding interaction with caretakers, then the participant will show an increase in the use of the user's name with a decrease in agitation level. **Procedure:** The user accessed the application, input their picture, name, relationship, and set the location. They then chose a time and created the event. The user then met with the participant, checked if the message had been received, and determined if the participant used their name and relationship. The user recorded the results in a questionnaire. **Results:** The application's efficiency was at a near 100% success rate for the experiment. For Alzheimer's participants, the application was about 85% effective. For TBI participants, the application did not have as much success as it did for Alzheimer's participants. TBI participants had a 62% success rate. The Dementia participants enjoyed the highest rate of success amount the three groups with a 92% success rate. A survey given to users revealed that the application had a positive effect on the participants and that the participants were less agitated than usual. In conclusion, the hypothesis was correct: All participants with Alzheimer's, Dementia, or TBI saw a significant increase in both using names while interacting with friends, family, and caretakers and showed a decrease in agitation level.