

A Web-Based Mobile App with Smart Watch to Support Social Engagement in Persons with Memory Loss

Hayley R. McCarron, MPH; Rachel Zmora, MPH; Joseph E. Gaugler, PhD

Social Support Aid

- Mobile phone app with facial recognition software, paired with smart watch
- Social Support Aid (SSA)

Mixed Methods

- Pilot randomized controlled trial
- Quantitative survey (N=48)
- Qualitative semi-structured interview (N= 13)

Results

- No effect on quality of life or social interactions
- Qualitative data explain the lack of effect

Qualitative Results

Outcomes

- The majority of participants did not think their use of the SSA had any effect, although some mentioned positive and negative outcomes from using it.

Reasons why useful or not

- Most participants did not find the SSA to be useful. Caregivers and persons with memory loss offered a variety of reasons the SSA was not useful: 1) complexity 2) enrollment process 3) impractical 4) stigmatizing 5) functionality.

Recommendations for improvement

- Although most participants did not find the SSA to be useful in its current state, most felt it had potential to be beneficial. Several offered recommendations for how the SSA could be improved.

"If it had been a little bit easier getting them enrolled, then I think it would have been more useful...We were reluctant to reach out to anybody who wasn't pretty close to us, to get them to put up with that process. There were a number of them who gave it a good try and just never made it [into the database]. We were not able to get them enrolled...The only people we had enter themselves into it were people that we were already reasonably close to and that we really weren't having any problem remembering. If the circle were a little wider and if we had been able to get some people who were a little more distant from us enrolled, I could see where it would really help with social interactions."

"I wasn't always providing backup and that gave him more confidence...So he didn't have to rely on me giving cues or asking me any questions because he was able to use it and found an answer himself. I think that's important."

"And in a way it assumes that the person [with memory loss] can make the connection between the name that's on the watch and the person that's looking at you...And so just seeing one little row of print on the watch, assuming they remember that that's where it is, it didn't connect with Nathan at all. I mean he was like "ok, so now what do I do?" ...You know, conceptually it was hard for me to help Nathan understand what was going on, how the two pieces of technology interacted."

"My ability to use technology, it turns out, is much more diminished than I kind of expected it was. I just had trouble giving people instructions well enough to effectively get them enrolled in the system. I was not a very good guide."

"I have a Bluetooth interface between my hearing aids. Being able to, for instance, have some way of recognizing a face the way this system is designed, and to be able to speak—rather than look at my watch—to be able to hear the name of the person in my ears without even anything more than that would be extremely helpful. Even to someone who has no hearing aids. But being able to put something as inconspicuous [as an] earphone, to be able to connect wirelessly to a system that would recognize a face and put a name to it would be extremely helpful."

"Well, it didn't help because [my mother] wouldn't wear it...She felt having that big phone around her neck just drew a lot of attention."

"I think it was frustrating and then it got that way for me, too, because I couldn't keep explaining it and explaining it and demonstrating. Because then it would just get to be a fight, arguing about what it was doing. He just could not quite comprehend [the SSA]."

