



SOCIAL WORK AND TECHNOLOGY COLUMN

Watch Apps Are the Next Big Thing

Recently, I had been thinking about what the next big change could be for Social Work and Technology. I'll admit I'm not a super big visionary guy and it would be hard to come up with a technology that doesn't exist yet - but I think the next big frontier will be related to our watches. We have already seen the rise of the smart watch, what more can it become?

I remember in high school when calculator and TV remote watches came out. They were a big deal, especially when a classmate would randomly turn the TV on during class with a substitute teacher! I had a calculator watch and that wasn't very disruptive. After that I wore a standard Timex Ironman watch for a long time (I still wear them sometimes). I got my first GPS watch when we moved to Minnesota 10 years ago and that was really helpful for my running and biking experiences in a new place.

Last year a friend gave me an entry level smart watch. It only has basic features (primarily alerts) but I have really grown to like it. Many times my pocket and my wrist both buzz at the same time! It is handy to know who is calling or if a text is urgent or not without pulling out the phone. My wife has a new Apple Watch and I can definitely see many benefits from its more

advanced features. She can control her phone from her wrist as long as its connected to the same Wi-Fi. On a trip this winter she was able to answer a phone call from me in the hotel room while she was still playing in the pool with the kids.

Ok, enough about my family and watches! The smart watch has evolved into many things, include a medical device with many features. The newest Apple Watch has an EKG app which can be helpful for people with heart conditions. With my history of Atrial Fibrillation, this could be a huge benefit as most smart watches only measure basic heart rate. This additional feature makes it a much more valuable tool. Smart watches have been used for a while to track step counts and heart rates which can both be important indicators of wellness and are being used by many corporations and health insurance plans to track employee health outcomes and for co-pay reductions, etc.

If the traditional medical community is finding ways to use smartwatches to improve health outcomes, why can't we as social workers do the same thing?

Interestingly, as I was sitting down to write this I saw a headline in my e-mail about a company that is developing a watch application that they claim will help individuals with PTSD sleep better. Their thought is that if the watch detects a heart-rate spike during sleep, the person is probably having a nightmare, so the watch will buzz. Their hope is that this buzz would be enough to end the nightmare, but not actually wake the person up.

I did a quick search in an academic database and found lots of articles related to smartwatches with mental health applications. One of the articles was dated January 2015 - so this isn't quite the new frontier I thought it was, but I still think this is the new cutting edge for tech and social work.

Article titles included "Emotional Self-regulation of Individuals with Autism Spectrum Disorders: Smartwatches for Monitoring and Interaction," "Continuous Stress Detection Using Wearable Sensors in Real Life: Algorithmic Programming Contest Case Study," "Emotion Recognition Using Smart Watch Sensor Data: Mixed-Design Study," and "Detection of Stereotypical Motor Movements in Autism using a Smartwatch-based System." A few other areas of research to note are related to patients who are a fall risk, feedback for stroke patients, mindfulness/relaxation, Parkinson's and dementia.

I also noted several articles related to how accurate GPS or location data can be and I can imagine the possibility of using the watches as a tracking device for individuals at risk for elopement or getting lost in the community. Of course, it is relatively easy to take off a watch

and many of the benefits would be lost in that case. And in many ways, a smartphone can serve the same functions. I don't think smartwatches have reached the status of being universal yet as they can still be quite expensive. I do think their value will continue to increase, and in a few years, they will reach the ubiquitous status of smartphones.

Has a smartwatch impacted you significantly? Will Social Workers be ready to embrace and use this emerging technology?