***Virtual Table: Coordinating Care Through Technology in Aging***

**Angie Kennedy**

Hello, my name is Angie Kennedy and I am the Associate Director for Research at the School of Social Work at Michigan State. Welcome to our Research Spotlight, where we profile some of the exciting work being done by School faculty members. Today I am joined by Dr. Paul Freddolino, a Professor here at the School. Dr. Freddolino’s work focuses on older adults and technology. We will be talking about a recent community-based project he led called, “Virtual Table: Coordinating Care Through Technology in Aging.” This project involved a partnership between MSU and the Otsego County Commission on Aging; it focused on piloting an intervention to introduce technology to older, isolated adults in Michigan. Thank you so much for joining me today, Dr. Freddolino.

**Paul Freddolino**

Hi Angie, thank you so much for this opportunity.

**Angie Kennedy**

Sure! So I’m going to jump right in here. Partnering with community-based organizations is such a key part of social work research. Can you talk a little bit about how you developed your collaborative relationship with the Otsego County Commission on Aging?

**Paul Freddolino**

Sure. This relationship actually grew out of our distance education work. In 1998 the School started an MSW program with a cohort of students in Gaylord, where we used interactive video – what today we would call video conferencing. Ten years later, when I was developing my first proposal for an intervention to teach older adults about technology, Gaylord appealed to us as a rural location where there was likely need for a program like we were thinking about. At that time, myself, and my colleagues Amanda Woodward and Tina Blascke-Thompson, connected with the Otsego County Commission on Aging (and I’ll use OCCOA as the acronym for the agency) and were successful in getting that project funded and delivered. Over the years I maintained contact with the agency, and when seeking a site for the Virtual Table pilot, I turned first to OCCOA, and they were interested in partnering again.

**Angie Kennedy**

That’s so great, so really a longstanding relationship with this organization. So, could you give us a brief overview of what the project involved and who you focused on to participate in the project and receive the intervention? And also, just talk a little bit about the main goals of the project?

**Paul Freddolino**

Sure. The basic goal of the project was to engage what we might call “hard to reach” older adults to learn about technology and to develop skills so that they would be able to share a meal “virtually” through video chat, with family and friends, and that’s where the title [of the project] Virtual Table came from. Our logo, which unfortunately you can’t see, was designed to reflect this. But basically it shows a table and a wifi symbol indicating that that’s the connection tool, that’s the virtual part of it, that’s the virtual table.

The participants we sought to engage were isolated older adults who received home-delivered meals from OCCOA through their Meals on Wheels program. Because they received food from the driver three times a week, we assumed that there was some element of trust with the driver, and thus we recruited the drivers to approach meal recipients to see if they would be interested in participating in a new program with MSU where they would learn about technology. The literature shows us that older adults can be very skeptical about technology and its value, and indeed even afraid of technology because of what they’ve heard about scams and identity thefts.

Through our weekly tutor sessions, which were run by peer tutors, we planned to teach them basic Information and Communication Technology skills like security and privacy, email, video conference tools like Zoom and Duo, and internet browsing. Then after the basic ICT skills were covered, we provided a 6-8 week “mini” course on telehealth, where we showed participants what is involved in telehealth, what to expect from telehealth providers, and how they have to prepare for and participate in telehealth sessions as patients. We ended with a simulated session where the participant was given a patient role to play, and a member of our team role-played a provider.

**Angie Kennedy**

That’s a lot! That’s a lot bundled into that intervention model.

**Paul Freddolino**

It was a lot, for a pilot!

**Angie Kennedy**

Right. So you’ve already discussed how the intervention relied on multiple people who played specific roles in the project, including volunteers, tutors, and the drivers who delivered the home-based meals to the participants. And you did share, you know you summarized their role, but could you talk a little bit about the volunteers and the tutors, especially, and how you recruited them, how you found people to participate in the project?

**Paul Freddolino**

Sure. The—recruiting volunteers is tough, and I’ll come back to that as one of our main findings. The Virtual Table model is based on that relationship between drivers and home-delivered meals recipients: They would be the ones to encourage the recipients to participate in the project. OCCOA staff generated the list of potential participants, and then the drivers connected with them and asked them if they wanted to participate. As part of the pilot (and it certainly didn’t hurt), we had funding to give each participant a tablet computer and a six-month data plan.

Once we received their informed consent, we began the weekly tutoring sessions. The tutors were generally older adult volunteers who had been active for, in some cases, back to that original project I talked about, in the OCCOA’s Computer Club. The schedule for sessions had to be flexible because of missed appointments and because participants varied in how quickly they learned, so some folks learned it in six—content in six weeks, some took eight weeks or ten weeks, to basically learn it all. This flexible approach had to be maintained during the telehealth portion as well.

In addition to tutors, there was another group of volunteers that we recruited, and these folks contacted each participant weekly. This was not related to technology, but was rather a friendly contact, kind of a “How are you doing? How are things going? Do you have any questions about the project?” but it was really meant to be a person-to-person connection for these isolated, older adults. Initially these were done by phone, but as the participants learned to use Zoom or Duo these chat contacts then shifted to video.

**Angie Kennedy**

It’s exciting! It’s a lot of different people in different roles to sort of juggle as you were implementing this, I’m guessing.

**Paul Freddolino**

Yes. I should mention that we had two key people at the agency, the Director and their Director of Volunteers and Research, who orchestrated so many of these parts behind the scene. They were the ones who kept track of hours and gift cards for the participants when they did research interviews, just a whole number of things that were done kind of in the background, and it could not have happened without those two folks.

**Angie Kennedy**

Right, all that coordination, and scheduling…

**Paul Freddolino**

Yeah.

**Angie Kennedy**

Yeah. I know you were attempting to carry out this project during Covid-19, sort of the peak of it. What adaptations were you forced to make and how did that shape the project, and did you have any other kind of challenges to implementing the intervention?

**Paul Freddolino**

Yeah, I think the Covid…Covid had an impact. We started right in the middle of lockdowns and restrictions. One example of an impact is that our original idea—and in community-engaged research and participatory research—you try to get the community engaged as early in the process as you can. So we planned to have focus groups with people from the community, with people who might become tutors, and people who might become volunteers, and with people who might become participants. We had to change those focus groups from in-person focus groups to Zoom focus groups, and that had some limit in term, that had some impact on who got involved in those early focus groups to help us design the project. Then throughout the pilot, some participant and some tutors were hesitant to have in-person contact, and so video was often used for tutor sessions. We had originally intended to have video chat as one of the early tools that we would teach people to help them connect with that virtual table idea, with family and friends. It turned out to be an incredibly wise decision that we had made, or had stumbled onto, because it actually enabled us to use that video connection to carry on the intervention. Not something that we had planned, but something that became very fortuitous.

**Angie Kennedy**

Mm hmm. Wow. You know, Covid really made everybody have to completely adapt and change what we were doing, so it’s wonderful that you were already, you know, technology was integral to the intervention and then you just kind of expanded that focus to adapt, it sounds like.

**Paul Freddolino**

Yeah, we were very fortunate and it just reinforced—let me make one other quick note…

**Angie Kennedy**

Sure!

**Paul Freddolino**

…is that we had originally thought about Zoom as the platform because we use that on campus, we know we can get a free Zoom account for people, but our participants found Zoom more problematic that Duo, and Duo, if you’re not familiar with it, is a Google app that comes, if you get Gmail you’ve got access to Duo as an app. And our participants found Duo much easier to use, because we gave them a Gmail account, and we got them on Chrome, it was easy for them to access Duo and that became their preferred alternative, for a lot of them.

**Angie Kennedy**

That’s so interesting. So that was unexpected for you all, because you were just thinking Zoom was the way to go.

**Paul Freddolino**

Yeah. I had never used Duo, before our participants started to say “Let’s use Duo.” And I said “Okay.”

**Angie Kennedy**

And, from your perspective, was it in fact, kind of more user-friendly and straightforward to use?

**Paul Freddolino**

It was easier to use, it doesn’t have as many features, but it was easier for people to click on a link, a simple link, and get right into the conversation. Whereas as sometimes with a Zoom link, there are a couple of extra steps that people had to go through, and some of them just didn’t want to mess with that, essentially.

**Angie Kennedy**

Interesting, that’s so interesting.

**Paul Freddolino**

Yeah, yeah.

**Angie Kennedy**

Could you share the key findings from the project?

**Paul Freddolino**

Sure! The basic one, again this was a pilot—we committed to recruiting 25 participants and we got 25 participants—and 20 of them finished, one person passed away, four others dropped out between the beginning and our post-test. Among the 20 folks who completed, I’d say there were three statistically significant findings. One, the number of different technologies that people used increased from the beginning to the mid-point, after our technology training, and stayed at an increased level at the post-test when we were doing the telehealth. The same thing happened with the frequency of technology use. Again, it was increased by the mid-point and it sustained at that level at the post-test. And considering one of the basic ideas was to get people to use technology, those findings were important. The other, I think very significant finding, was that at the mid-point survey, we introduced the Patient Activity Measure, the PAM, and what the PAM does, it measures an individual’s self-perception of their competence to deal with their health and their health care. So, “I know what my diagnosis is, I know how to use my medications, I know where to go for help if I’m not feeling well,” those types of questions. And there was significant increase between the time right before we started telehealth and the time we ended the telehealth, and that’s part of the telehealth. We were really talking to patients about what they could and should be doing in relationships to providers, and so we think that that was the mechanism that led to that increase in the PAM scores.

**Angie Kennedy**

That’s great.

**Paul Freddolino**

Unfortunately, we did not find significant differences in loneliness, in social networking, in depression, or in computer self-efficacy. And we think—and there are a number of studies that are showing the same kinds of things—and this is kind of a very strange way of saying it, but our population of participants was healthier than we thought they would be: They were less depressed, they were less lonely, they were more connected at the beginning than we thought they would be, so it was going to be harder to improve because they started out at a pretty decent level. It’s kind of a ceiling effect, there is only so much positive change we could bring, because they were already in pretty decent shape.

**Angie Kennedy**

So that’s nice. I mean, that’s a good…

**Paul Freddolino**

Yeah.

**Angie Kennedy**

Despite not finding, you know, finding what you expected, it’s in a good way. Your project led to some unexpected connections between some of the participants—could you talk a little bit about that?

**Paul Freddolino**

Yeah, this was absolutely one of the most delightful outcomes from the project and it was so totally, it’s sort of like we slapped ourselves in the head and said, “God, why didn’t we think of that?” Basically, we were teaching people tools that we were hoping that they would use to connect with family and friends, over a meal or a beverage, that was the virtual table idea, right?

**Angie Kennedy**

Mm hmm.

**Paul Freddolino**

But we found that many of them either had no family or friends to connect with (they were really isolated), or they had family and friends who didn’t have the needed technology or the technology skills, so our participant could Zoom but their sister in California couldn’t.

**Angie Kennedy**

Mm hmm.

**Paul Freddolino**

So they started asking us “Can you help connect us with each other?” With the other participants in the project. Remember the tutoring was done one-on-one in this, so the tutors would work with each participant separately, these were not group sessions, so they didn’t know initially who else was in the project.

**Angie Kennedy**

Right.

**Paul Freddolino**

They asked if we could help connect them, and this led to a Friday night Zoom party every other month. It came from their request, they knew that we could have multiple people on Zoom because that’s how we connected with them, and so we started every other month, a Friday night Zoom party, and it was, it was great fun. We were able to provide them with a Domino’s pizza and a soft drink, and a little dessert, for each of these parties so we had our virtual table in that way, it was a communal meal, every other Friday. Participants discovered that they lived close to each other, some even in the same apartment complex.

**Angie Kennedy**

Wow.

**Paul Freddolino**

It was fun. It was a great outcome that we had not anticipated. And we know some of the participants are still in contact with each other, which is great.

**Angie Kennedy**

That is really, really great. So you mentioned that this was a pilot study. What are the next steps for you in terms of this work?

**Paul Freddolino**

Well, we plan to revise our content and develop connections with other home-delivered meals programs in the state to try to replicate the model. Couple of types of revisions that we need to do are our written materials. It’s important to give older adults things in writing so that they can get access to them when they want them. All of our materials were tied to the particular tablet that we gave to each of them. In future replications we’re probably not going to have access to enough funding to give everyone the same tablet, so we’re going to have to depend on the devices that they have, or help them maybe get a smart phone. But we’ve got to have materials that are then targeted to a broader range of devices. We’re not going to create all of this new content ourselves. We need to find a set of links that we can provide to people so, that we’ll teach them how to access links online, and they will go to an Android, to Samsung, to Apple, to use the resources that those folks, those vendors, build online, and there’s that kind of material out there, we will just have to have developed tools to help our participants access those other tools. On the telehealth content, we need to upgrade the production values of the videos. We just did simple Zoom videos with the four of us from MSU who were in charge of the project doing the videos. We’re going to get actors doing the videos, a more diverse set of actors. We, we had an opportunity to provide the telehealth content to five different senior centers in the Detroit area—this is kind of an add-on to the project—and most of the participants in those settings were African American. Say, before [unintelligible] these videos, is different. We had Australian videos, we had American videos, but there were no minority people in the videos, so we really had to, have to upgrade the videos that we use for telehealth.

**Angie Kennedy**

Mm hmm, that makes sense.

**Paul Freddolino**

But that’s, yeah, that’s what’s next.

**Angie Kennedy**

That’s exciting!

**Paul Freddolino**

It is.

**Angie Kennedy**

It’s nice when a pilot, when you can learn so many great lessons from the pilot and have it be really successful, and then, you know, have your next steps already to, you know, unfolding.

**Paul Freddolino**

Yeah. Well, we are literally two days from now, so on Friday we will be hearing if we got funding to pay for these next steps that I just described.

**Angie Kennedy**

Oh, wow.

**Paul Freddolino**

And if we don’t get that funding we will seek funding from another source because our team is committed to upgrading this and to getting out to do some replications. Because we do think there’s a lot of promise from this model. We’ve been presenting at conferences and people are saying “You know, that’s a great idea to utilize that relationship with the drivers to help grab these hard-to-reach people.”

**Angie Kennedy**

Right. Yeah, once you do it, it seems so logical, like, oh why hasn’t anyone done this before.

**Paul Freddolino**

Yeah. We had several people at the, so there’s the American Society of Gerontology just had its meeting last—er Gerontology Society of America just had its meeting last weekend and a couple of people said “Wow, you know, what a simple idea and yes, what a great way to reach some of these hard-to-reach people.”

**Angie Kennedy**

Mm hmm. It makes so much sense. Is there anything else you’d like to add?

**Paul Freddolino**

No, I really, it’s exciting to see the positive results, we look forward to replicating in other communities. Because there’s a tremendous need to reach the hard-to-reach older adults, that’s been our objective since the very beginning. In some ways, if you will, [it was] a disappointment that the people we connected with were not the worst of the worst in terms of some of these isolation and loneliness characteristics. But that’s the target population that we want to try to reach through these interventions. We’re going to keep at it.

**Angie Kennedy**

Right. Wonderful. Well thank you so much for sharing your work with us today.

**Paul Freddolino**

Thank you, Angie, really appreciated the opportunity. Take care.

**Angie Kennedy**

Thank you.