Title: *Older adults' learning and adaptation as resilience processes to counter social isolation during the COVID-19 pandemic*

Rachel Wu CIC Profile

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YouTube Recording with Slides

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Transcript

Rachel Wu:

Slide 1

Alright, thank you. So my lab is interested in learning across the lifespan, and we developed a model that looks something like this- a theoretical model where we think all three of these things here in the middle are really important for functional independence and you know cognitive development and things like that across the lifespan, so from infancy all the way to older adulthood. So what we think we need is learning what to learn and how to learn and motivation to learn and also cogn- like, you know, the basic abilities to do things like planning or you know remember things and things like that. And so the idea is that as you're engaging in real world skill learning, you're gonna get access to improve all of these things, which then will lead to long-term functional independence in an environment that's changing. And so this is kind of the holy grail for maintaining functional independence in older adulthood where you're not relying on somebody else day to day.

Slide 2

And so in the model we kind of conceptualize it as a car. So you're, you know, if you have a lot of cognitive abilities you know if your working memory is great for example or your attentional shifting abilities are great, then you have you know what we call a really robust engine, right? And if you have motivation to learn and adapt, you have the fuel, but the issue is that a lot of cognitive training programs just focus on the engine or just focus on the fuel or something like that, but they don't actually give learners a sense of where to go right. So for GPS, you would need learning what to learn and how to learn and all three of these things then provide you with the ability to learn new stuff to adapt in a changing environment.

Slide 3

And so this is all- this was all kind of fed into this big study that we did that ended up in an NSF career award where we got older adults to take a lot of new classes with us and, you know, and learn a lot of new stuff. They didn't want to learn- in the anticipation that there might be a situation in the future where they would have to learn themselves out of a jam, you know, if they didn't want to be dependent on somebody else. And so they were taking painting classes or, you know, like tech classes or Spanish or photography, music, composition on an iPad, things like that. So really difficult classes. They did this for three months.

Slide 4

And so this is a relatively complex slide but I just wanted to show you real quick. We ran two versions of this and we were in the middle of the third one before COVID hit, but if you see this purple dotted line here that's kind of where older adults would typically be in terms of cognitive composite scores on this particular assessment we did from the NIH [inaudible]. And this is where a control group kind of rested the whole time from pre-test to post-test in the intervention. And then this green group is the first time we ran the intervention. This red group is the second time and we also did a baseline version before the intervention started. And this is kind of where undergrads would land as well. So this is where middle-aged adults landed. So this gap here is a 30-year gap, so we tried to bridge that gap even in just six weeks. So this tells us that there's a lot of promise and this is probably why we got the career award because there's a lot of promise in bridging this cognitive development- or cognitive decline, so to say, even just in six weeks. So we were in the middle- this is the middle age group sorry. So, we're in the middle of running this and then COVID hit bam everything had to change and we were like- we had to shut down the intervention and everything.

Slide 5

And so we turned lemons into lemonade and so we asked for money to look at how the older adults in our interventions have been doing compared to older adults who are not because the entire time in the intervention we were like things are going to change, you never know how things are going to change, you're going to have to learn new stuff and then bam everything changes. They have to learn how to do their own nails because they can't go to the nail salon. They have to learn how to fix their own toilets. They have to, you know, learn how to order food online or whatever. And so we were getting a lot of emails, you know, from the participants saying you know look at all the stuff I've learned. This is great. And meanwhile all the other older adults that we were talking to who were not in the intervention were telling us about how they were losing social connections and all these things. So we wanted to study this and so look at how their learning and adaptive behaviors have been changing over time and their personal beliefs about what they are capable of doing at different ages and then social connectivity and then well-being in isolation. And so we actually have a group of younger middle age and older adults as well as older- who are not in the intervention as well as older adults who are in the intervention so we can see like maybe the older adults in our intervention were more similar to younger adults in terms of

how they're adapting, and so it would be interesting to see that. And we can also look at disparities because our sample is approximately 30 percent racial ethnic minorities as well as a low lower SES [socioeconomic status] lower income participants. And then we can also look at resilience trajectories as well because, maybe if you've dealt with a lot of stress your whole life, this is not actually that much more stressful. So it'd be interesting to tease those things apart as well. So it's a big team of collaborators, and we're really excited to see what comes out of it. Thank you.