

LIVE BETTER LONGER WEBINAR

Money on the Mind: Cognition and Financial Decisions

Wed 09.25.24
3pm ET (12pm PT)



IN CONVERSATION:

Duke Han, PhD

Professor, University of Southern California



Kaitlyn Phoenix

Deputy Editor, Hearst Health Newsroom

presented by

afar american federation
for aging research

Prevention

Transcript

Kaitlyn Phoenix:

All right, welcome everyone to the live better longer, webinar, which is a joint effort between afar and prevention. The topic at hand today is **Money on the Mind**, and we'll be exploring cognition and financial decisions, and how the aging brain affects our financial decision making as we get older.

I'm Kaitlyn Phoenix. I'm the deputy editor of the Hearst Newsroom, which produces content for Good Housekeeping, Women's Day, and of course, Prevention and our 2 partners, joining up today are afar the American Federation for Aging Research, which has been committed to advancing the Science of healthy aging for a while now, and is involved in so much research on the topic of aging. Then we also have Prevention, which is known for all of its science-backed, well-reported health, content that it produces. So, it's a perfect joint partnership between the 2.

During these Live Better Longer Webinars. We explore different aging topics with research experts and just as a reminder that the research and opinions offered during this webinar are for educational purposes only. They're not intended to serve as medical or pharmaceutical advice. AFAR and Prevention strongly encourage viewers, viewers to consult with their primary care physicians regarding any therapeutics that are mentioned during this event.

I am honored to be joined today by **Duke Han, PhD**.

He is a tenured professor of psychology, family medicine, neurology, and gerontology at the University of Southern California. He's an AFAR grantee, and he has done tons of research on this topic area. So, Duke, thank you so much for joining us today, I'm excited.

Duke Han: It's great to be here, Kaitlyn. Thank you so much for having me.

Kaitlyn Phoenix:

Thank you. I think we have a great conversation ahead of us. I'm excited to learn about this. From what I understand some of your research at the University of Southern California has been focused on the aging brain and potential degenerative changes that could hurt your ability to make wise financial decisions.

Do you mind explaining how you conducted your research and some of your key findings for us?

Duke Han:

Sure. So, I'll start off by sharing that. I first became interested in this topic through my work as a clinical neuropsychologist and as a clinical neuropsychologist, I am trained to give cognitive tests which help diagnose and treat a number of different neurological conditions, or they're used in the diagnosis and treatment of these conditions.

And so, a number of years ago, I was referred a string of patients where it was discovered they were making poor financial decisions, like giving away large sums of money to strangers or false charities, and it was presumed naturally that they had early dementia.

However, in many of these cases we would give hours of cognitive testing, and they would come out normal. And this was obviously frustrating to the care providers. At the time there was this clear change in financial behavior. It was logical that cognitive testing might actually show there's some sort of cognitive impairment.

But in case after case, we saw that these older adults actually didn't show any cognitive impairment based on our testing. And so that got me thinking that financial decision making might be one of the earliest signs of impending cognitive impairment or dementia even ahead of any noticeable signs.

And so, I was a part of a research center that was devoted to Alzheimer's disease at the time, so this started really a program of research focused on trying to understand how older adults make financial decisions and whether there are certain patterns in financial decisions that might predict cognitive decline or dementia later on in life. At USC we use many tools to investigate this topic ranging from brain imaging to behavioral economics tasks, we take into consideration health and the context of the older adult.

And I think we're constantly looking for new tools to try to understand this very important, very complex topic. So, when we talk about financial decision making it's not a simple matter. It really is, if you think about it, a very complex topic that involves and not just cognition, your ability to remember things, but also your ability to do calculations, your ability to make values on certain options, and to weigh all of those things together. It also involves things like emotional processing or being able to inhibit your emotions.

So, it does make sense to us that financial decision-making being such a complex ability might be one of the first things to go in the context of older age, or specifically when someone might be developing a dementia context. So, some of our findings currently from our lab highlight this.

For example, we've recently found that a very particular brain region called the Entorhinal Cortex seems thinner in people who are more financially vulnerable. And this is adjusting for age, education, gender, even income. What's interesting about the Entorhinal Cortex is that it's one of the first- It's commonly known as one of the first to decline in the brain due to Alzheimer's disease. And so, these are older adults who show no cognitive impairment, but they have thinner cortex in the Entorhinal Cortex. And this correlates with financial vulnerability. So, this does seem to suggest that financial decision making might be one of the earliest signs of cognitive impairment. One of the earliest signs of impending dementia. We also found that persons who performed lower on very specific cognitive measures that are sensitive to Alzheimer's Disease tended to have greater financial vulnerability as well. And so, these are people that are not performing in the

impaired range yet on cognitive tests, but they're performing lower on these cognitive tests that we know are sensitive to Alzheimer's Disease down the road. And in this specific study that I'm talking about, we found that older adults, who were more willing to give away money to a stranger online performed lower on these very specific cognitive tests that are sensitive to Alzheimer's disease. And so, this again builds the case that financial decision making might be one of the earliest signs of impending cognitive decline or dementia.

Other research groups have done other studies that have supported this notion as well.

I need to say at this point, though, it's not that all older adults are going to experience financial decision-making impairment in older age. It's really only certain older adults that we think might be more vulnerable to something like dementia or cognitive decline it. Also, I also need to clarify that not all older adults who are showing poor financial decision making are going to develop dementia. Not all older adults who are going to develop dementia are going to show poor financial decision making. We know dementia is a very heterogeneous presenting disease. And so, it's not all the same all the time. I just need to make those caveats, but those are a few points from our research that I can share at this point.

Kaitlyn Phoenix:

This is so fascinating that these clues can show up earlier than we thought before in ways that we haven't really considered. So, wow it sounds like you pinpointed specific changes that occur in some people's brain that could put them at risk.

Do you have any idea why these changes happen to some people, but not everyone?

Duke Han:

Yeah, that's a great question. And it's a really important question. Because again, I think some people erroneously assume that as we grow older, we're just going to make poor financial decisions. That's absolutely not the case. We really think that very specific older adults might make poor financial decisions. And one of the reasons why we think that, or one of the reasons for that, is what we think is ages related Neuropathological Accumulation. And that's a that's a mouthful, and I'm just going to explain what I mean by that.

Kaitlyn Phoenix: Please do.

Duke Han:

So, as we grow older some of us are going to accumulate in our brains certain things that are not healthy. And in the case of something like Alzheimer's disease that's amyloid plaque and nerve fibrillary tangles. These are certain what we call pathological markers. And it's true that some of us actually accumulate more of these than others, and that's why some of us develop Alzheimer's disease sooner or quicker than others. And so, what we really think is that in these specific older adults that are showing poor financial decision making early on that, they have higher levels of these neuropathological markers.

And there's been a lot of advances in the area of Alzheimer's disease, really, just in the last few years or so. And so, one of the ways that we are planning to look more closely at this being a potential cause is by looking- You can now look in blood and take blood samples to look and see how someone might vary with respect to some of these neuropathological markers. And so, we're actually actively trying to do that right now in our studies. But to answer your question, we think that the reason why some older adults might make poor financial decisions and show changes in their brains ahead of any noticeable cognitive impairment is because of these neuropathological markers. These things that we know are not part of normal, healthy aging. They're part of normal, unhealthy aging and so we're trying to study that a little bit more closely.

Kaitlyn Phoenix:

Okay so, it sounds kind of like we don't know exactly why, but we are noticing these things that that are happening in the brain, and those things we're pretty sure are putting certain people at risk.

Duke Han:

Yes, I think the brain is very important for function, and I think anytime we see differences in brain imaging metrics like we do. We do think that that has an impact on its functioning. And so, and then your question, is, very smart in a sense. So, what's causing those brain changes? And we think it's this neuropathological accumulation. So, we're trying to study that a bit more intentionally.

Kaitlyn Phoenix:

Gotcha, and I know you've also found that people who are more willing to give money to a stranger may be at a higher risk of developing Alzheimer's disease.

Is there any relationship between this compromise financial decision making or vulnerability to fraud with other conditions of cognitive decline like Alzheimer's and dementia?

Duke Han:

Yeah. So, I think most people in my field at least accept the notion that if someone's showing very severe cognitive impairment that they're going to actually be at risk for making poor financial decisions. And we and others have published studies showing that significant cognitive impairment does have an impact on someone's ability to make financial decisions. So, we definitely think that a severe condition like Alzheimer's dementia or other types of dementia could have an impact on financial decision making.

I will say, though again, it's a disease that changes over time. It's what we call progressive and so just because someone's diagnosed in an early-stage dementia doesn't necessarily mean that they can't make good financial decisions. Again, this is a very heterogeneous disease and what we mean by that is that there's a lot of variability in how people present in terms of their symptoms and their abilities. But, generally speaking, we do think that severe neurological conditions like dementia do have a negative impact on financial decision making.

Kaitlyn Phoenix:

Gotcha. What do you hope the future holds for this area of brain research? What do you hope scientists are able to figure out down the road?

Duke Han:

So, I think, one of the goals that we have is to see if we can use neuroimaging or tools like that to identify if someone might be more at risk for financial scam or fraud, or are making poor financial decisions. I think if we're able to, for example, scan someone and actually give an indication of how at risk someone might be. I think I can understand that that

would be very beneficial for a number of people who might have interests in this, and I know there are. I've worked with some people involved in the justice system, and they're very interested in something like that, because then they can help protect older adults, or at least prosecute certain bad actors that are taking advantage of those particularly vulnerable older adults.

However, I need to say at this point, we're just very far from being able to do that. So, a lot of the studies that we have done, and others are currently doing are the first studies in showing these associations, and actually this is for your listeners here: in science we don't really consider something fact just based on a single study. We really want to see certain finding replicated in different groups of people by different laboratories. Then we have more confidence in a particular finding. And so, since a lot of the work that we're doing is some of the first studies in this area. We really want to see this replicated in other laboratories and in other people's groups, actually, before we really want to take it and run with it. We're doing some of that ourselves, actually, where it's nice, because we're starting to see some replication of some of the work that we're doing. But we're still, I think, many years from being able to use a brain MRI to help diagnose or figure out if someone is at risk for financial vulnerability or financial or poor financial decision making.

So that's one, I think, eventual goal that we might get to. I think another one is. At least in the circles I'm in, there's a big interest in trying to develop a scale or a clinical measure of financial vulnerability. And that's something that I think a number of people are working on and are working on pretty aggressively. So, we may have something some more measures along those lines, sooner rather than later. So, yeah. So those are a couple future directions. I see of this particular area of research.

Yeah, I think some other future directions- we really need to see what some of these associations look like in more diverse populations, more representative populations, and we want to see more cause and effect in the science, you know, one causing something else. Again, a lot of these studies are actually very new. And so, until we get more of that kind of work, I think. You know, we're still a little bit young in our understanding of all this.

Kaitlyn Phoenix:

It sounds like it's early on, but it's also an exciting time like the future is wide open, and the possibilities for where this could go are pretty cool.

Duke Han:

Yeah, I think so, too. And I think I think there's more and more investigators trying to look at this. There are more and more research groups looking at this at different angles, looking at different types of scams and fraud, and how people might be vulnerable to those. Yeah, I think. It's an exciting time right now to see if we can understand this better.

Kaitlyn Phoenix:

Right now, what are the biggest takeaways for the average person? How can we protect our brains? What red flags should we be looking for in our behaviors to spot cognitive decline.

What do you hope people take away from this? At the moment.

Duke Han:

Yeah, I think this is a great question. And I'm always interested in the practical takeaways of something. So, I would say, for the average person listening or seeing this: anything that promotes brain health in older age will have positive effects on financial decision making in older age a lot of our work is focused on brain imaging and brain correlates of financial decision making in older age. And we're seeing a lot of them. And so, by extension. Anything that helps promote brain health will help promote financial decision making in older and age, so one resource I could point people to is, I'm a founding governance member of the [AARP Global Council on Brain Health](#) and this is an independent group of scientists with the task of trying to look at the scientific literature and trying to distill it for the lay person. What are the important aspects to maintaining brain health in older age? And so, we've worked on a number of different topics related to this, and all of the resources are freely available. If you go to <https://www.aarp.org/health/brain-health/global-council-on-brain-health/resource-library/> There's info packets on specific topics that are relevant to brain health and older age.

So, to make this more specific, anything that helps promote fun, physical activity or physical fitness helps brain health and older age. Also, cognitive activity, social activity, having a good diet, getting good sleep: all of these things help promote brain health in older age, and it's never too late or too early, really?

To start, actually, you can always do something incrementally more than what you're doing to help promote brain health in terms of red flags. I think our work and others have really pointed to the fact that financial decision making might be one of the first areas that impending cognitive impairment might happen actually. And so, I think, you know, if someone's starting to show poor financial decision making, or becomes the victim of scammer fraud that could be a sign of something like cognitive impairment, but it's not always the case. This is another important point. I need to say. The people committing scams, fraud and financial exploitation are just getting more and more savvy and we have people in our research study where they've been the victims of scammer fraud and there's really nothing wrong with them. There's no cognitive impairment. There's no signs of brain dysfunction. And it's really because the people committing the scam, fraud or financial exploitation are just getting more savvy. And know how to pull out the right strings. So, I need to very clearly say, just because someone experiences scammer fraud or financial exploitation, it doesn't necessarily mean they're going to cognitively decline. You know. There's really this *other* that needs to be considered in our discussion of all this, that of the person actually committing the crime. And so, I think, those are some things to look out for. But some other behaviors to spot cognitive decline, I think, you know, just because financial decision making is a complex behavior. I think other complex behaviors could also maybe be indicators of cognitive decline. So, if someone, for example, is starting to get into more car accidents. We know driving is a complex behavior as well. It might be other areas of life that might require integration of multiple different brain systems that might be indicators of potential cognitive decline. And so those are just some thoughts to answer that question.

Kaitlyn Phoenix:

I think those are all important things to be for people to keep in mind, and I especially am happy that you mentioned, you know, just because you fell for a scam or something that doesn't mean you're destined to have dementia or something. You know these scammers are getting very, very tricky, and anyone can fall for them.

But it also makes sense that if that is happening and some other things are happening, or you're making other poor financial decisions. It could potentially be an indicator down the line.

Duke Han: Yeah, I think if there's a habit or a pattern or something.

Kaitlyn Phoenix: Oh, yeah.

Duke Han:

I think it's a little bit different than an individual sort of experience, and I think that might be one way to make a distinction. But yeah, our, our study currently interviews people who've been the victims of scammer fraud or financial expectation, and those that have not and we follow these individuals over time. And that's really just to see changes over time, and I have to say we have lots of examples of very bright, very intact, nothing wrong, people that have unfortunately experienced this scammer fraud, and it's really all attributable to that bad actor.

Kaitlyn Phoenix:

Yeah, yeah. We have one question here. We don't want to be prescriptive but what advice would you give regarding over-the-counter supplements or vitamins that people hear about for brain health? What should people keep in mind? I know they're advertised a lot. What should people keep in mind about that?

Duke Han:

Yeah, no, I think that's a great question, as one that we often get in the community we do for what it's worth. We do. Community talks on brain health because we believe in it. So much. And actually, this specific topic we have a [report](#) on the Global Council on Brain Health website. So, the general consensus among the experts when we considered this was that there wasn't really anything that really did promote brain health or prevent dementia. Generally speaking, across the board. Now, it may be different if someone has a deficiency in a particular vitamin or a nutrient level, lots of examples of how that could cause cognitive decline or cognitive impairment. But, generally speaking, at least from when we reviewed what was out there. There's really not much of anything that really shows a significantly huge brain benefit, and I know that runs contrary to a lot of advertising of a lot of these supplements. So, we felt very strongly that we wanted to get that message out. At least in our review of the literature there is nothing that is significantly beneficial.

Kaitlyn Phoenix:

Good to know. We have another question: Here in your studies or in other studies, are you seeing if this is an issue impacting all communities or are any cultural or socioeconomic groups more vulnerable? How much does access to healthcare or social services impact this vulnerability?

Duke Han:

Yeah, that's a great question. So, I am very interested in these considerations in different racial and cultural groups, actually. And it's commonly known that older minoritized adults actually experience more scam and fraud and so we have a paper actually showing that it's not because at older minoritized at people, groups are more susceptible, we argue that it's because they're targeted more. They're targeted more by those bad actors. And so, this is an area and a topic that we're continuing to do work in, and we're really interested in. We think that financial decision making is different, based on context based on a culture based on family families, and these are all really important contextual factors that we need to consider. It's not all the same for everyone.

And I can just share that we see financial literacy as an important factor. As for making good financial decisions and the level of financial literacy or the access to financial literacy varies greatly in terms of socioeconomic status. Who gets that information? And it's incredibly important, because we also see that as something that completely explains any racial differences in financial decision making and we have a paper showing just that financial literacy helps explain away any racial differences in financial decision making. And so that points to the importance of financial literacy for equity considerations. If we want people to make optimal financial decisions, then we really need to open access to all people to develop financial literacy. So, these are really important considerations and we're trying to think through all of these a bit more, and we have a lot more to do in the long road ahead. But great question, and I really appreciate that. So, thanks for asking it.

Kaitlyn Phoenix: For our audience, do you mind defining what financial literacy is?

Duke Han:

Yeah, great question. So, by financial literacy. We consider it a conceptual knowledge that helps the ability to make a decision so it could include things like your ability to do

numerical calculations. But really, we consider it more your knowledge base, essentially your knowledge base about financial matters. And it's interesting that financial literacy is not something that's taught in school readily. Unless you're an economist or something like that it's not part of like the high school, or, you know, sort of middle school and elementary school tracked system in the United States.

So where do people get this information? Right? And it's it. They get it from their families, from their social groups. In our work, it really makes a big difference honestly, in terms of how people make decisions. So, from our perspective, we want equal access. We want everyone to have the ability to develop that. And we know there are certain people groups in our country's history that have been disadvantaged actually in terms of education opportunities and other opportunities. So, it really points to this idea that you know, just like we developed normal literacy in a particular topic, and that literacy helps us get by in life, financial literacy helps us make better financial decisions. And so, the more that we can help promote that and be as open with access to that as possible, the better it will be for older adults.

Kaitlyn Phoenix:

Definitely. You mentioned how other researchers are looking at other forms of scams or fraud do the cognitive changes that you're studying impact, other kinds of important decision making, such as like medicine, routine, or other decisions that impact their health.

Duke Han:

Yeah, so, we do think that that could be the case. And that's mostly because of how we understand the specific brain regions that we're finding that play into financial decision making. So, I'll try to explain this. Basically, our brain imaging research is implicating a specific brain region, specific brain networks, that are involved in prospective memory. So, the ability to imagine a certain outcome after a decision and also brain networks that are involved in making a value judgment on something. So, if you think about it, being able to imagine a certain outcome and making a value judgment on something doesn't have to be tied to finances. It could be tied to any decision, a decision in terms of health. You know social decisions, things like that. And all these same brain regions are actually implicated in those other types of decisions. So, we do think our work has implications for

other types of decisions. We just haven't really focused on those other decisions as of yet. So yeah, no, that's a great question.

Kaitlyn Phoenix:

And so, it, yeah, it definitely sounds like, there's so much to explore here.

We have another question from the audience. Is there any evidence that specific diets lessen the risk of developing the plaque that you mentioned?

Duke Han:

So I, from what I understand, we do have knowledge about certain diets being involved in brain health and in cognition and cognitive decline. So, the Mediterranean diet is one that often gets a lot of attention, and that's a diet that's high in fish and fruits and vegetables and whole grains. And there's other diets that are sort of similar to that that have been found actually to be associated with less cognitive decline in older age, and the presumption being also less of these neuropathological markers. Also, because we do believe, again, that these neuropathological markers are the reason why people experience brain changes or cognitive decline fundamentally in older age. So, yeah, you know.

And this actually raises another interesting point, if I may. And you know, it's a little bit of a diversion, but it's such an important point I just wanted to share with your viewers here. So, there's a really great scientific paper that points to the fact that a lot of people assume that there's going to be a decline as we grow older in cognition. I think most people see this as a very uniform line that goes down as we all grow older. And what this [particular paper](#) did, and the first author was Bob Wilson from the Rush, Alzheimer's Disease Center. I'm happy to share this reference if people are interested. But what this paper did was it took that declining line and we do see that declining line when you look at large populations of older adults. But what it did was it took it statistically, removed all the neuropathological markers that we know for the most part. So, it removed the influence of amyloid tau, tdp, 43. Microvascular changes, these things that we know that happen, that are wrong or pathological in aging and once you statistically remove each one of those known pathological markers, what you get is not a declining line anymore. You get a flat line when it comes to cognition into older age. And so, what that points to is that it's not that aging is associated with cognitive decline, it's actually these neuropathological markers that cause cognitive decline, because if you statistically remove the impact of

these neuropathological, these pathological aspects of aging, you get a flat line in terms of cognition, you maintain your cognition into older age. There's a little bit of a dip right before death, actually, you know, because these studies follow older adults until they die. So, there's a very slight dip right before death, but for the most part it's just flat. And so it's not correct, in my opinion, to say that aging is always associated with cognitive decline. It's if someone starts having these neuropathological markers, then you start getting that cognitive decline. A lot of older adults do have these neuropathological markers, that's why overall you see this decline. But it's an interesting point to make that if you focus on brain health, if you do the things that are important for brain health, it helps reduce those neuropathological markers in the brain, and therefore it helps reduce cognitive decline as we grow older. So that's an important point I just wanted to come back to. And I think it's inspiring frankly, you know, for all of us to do what we can do, what we need to do to maintain our brain health in older age. Because I think a lot of people have this fatalistic notion that I'm going to get older, my cognition is going to decline. I don't know if people know this, but only 35% of people over age 85 have Alzheimer's disease, and only 25% of those over age 80 have mild cognitive impairment. That means the vast majority of older adults do not have those things so I really just wanted to drive home this point that as we grow older, there's a lot we can do actually to maintain our brain health, maintain our cognition. I hope that people can take some inspiration in that and don't automatically assume that things are going to get worse.

Kaitlyn Phoenix:

I like that. You don't have to look at aging as this doom and gloom thing. It doesn't have to be that way.

Duke Han:

Yeah, exactly, I think there's a lot that we can do. Actually, there's instances of people getting better in terms of aging, their brains getting stronger in aging and their cognition getting stronger. So, yeah, I think it's this ageist view of everything's just going to get worse is just frankly, not helpful. And it's not all true. So, I think it's something important for all of us to keep in mind.

Kaitlyn Phoenix:

Yeah, this is a question from our audience. Can you talk a bit more about the cognitive tests where lower scores indicate people at higher risk of poor financial decision making? Also, would people who make poor decisions due to brain changes be considered to have a mild cognitive impairment.

Duke Han:

So, the second question I'll answer, and I'll say it doesn't. Just because someone's having brain changes doesn't mean that they have mild, cognitive impairment. Actually, we have research showing from the National Institute on Aging showing that people show brain changes sometimes years ahead of any sort of noticeable cognitive change actually. And so, I did want to say that just because we might seem to see something on brain imaging, doesn't necessarily mean someone's going to have cognitive impairment. And I think that's in some ways helpful, because it just shows that it's not a complete one to one sort of loss if that makes sense.

Then the first part if you don't mind reading that again.

Kaitlyn Phoenix:

Yeah, can you talk a bit more about the cognitive tests where the lower scores indicate a higher risk of poor financial decision making? So, maybe they're asking like what those tests might be or something.

Duke Han:

Yeah, so the cognitive tests that we use in our research are cognitive tests that are used in clinics around the world and they test different aspects of cognition. Things like memory, visual and verbal memory, language, ability, visual spatial ability, different forms of attention, and what we call executive functions. So, these higher order cognitive abilities, things like multitasking or keeping track of multiple things at once. Those are the cognitive tests that we use and they're all very standardized cognitive tests that are used to help diagnose things like dementia or a brain injury or some other neurological condition. And what we're seeing is that the tests that we know are particularly sensitive to Alzheimer's disease, those are the tests that seem to be sensitive to financial vulnerability or making poor financial decisions in our older adults. And it's interesting because our study at USC,

we're studying older adults who have no real, clear signs of cognitive impairment yet. And so, what we're seeing is that older adults who are financially vulnerable in our studies are performing, not in the impaired range yet, but they're performing lower on these measures that are also sensitive to Alzheimer's disease.

Kaitlyn Phoenix:

Another question from the audience is about artificial intelligence. So, it says, the bad guys will use AI to their advantage when trying to take advantage of someone. So, the question is whether AI or other emerging tech can or will be used as a defensive mechanism to aid being to aid those being affected by cognitive decline?

Duke Han:

Yeah. So, I think I understand that if AI or machine learning can be used to help like any other technological advances. I do think that there are ways that AI and machine learning could help actually protect against or help an older adult who's experiencing cognitive decline, help sift through what may be a scam versus what may be real. And I think that is just one example that comes to mind. But like all new technologies, it's a double-edged sword, we also know that these bad actors are using AI and machine learning to nefarious ends and actually making more compelling sorts of material to try to convince older adults to give money. So, one very concrete example is the well-known grandparent scam where someone contacts an older adult and says, you know your grandchild is in a prison in some foreign country. If you don't send money, then they'll be stuck there for a long time. I recently heard that bad actors are actually using deep fake technology to use pictures or images of their grandchildren or loved ones in what look like prisons and things like that. So, to kind of make this point, technology has always been a double-edged sword. I think all of us experience constant scam calls on our phone calls. On the one hand, we get more scam phone calls. On the other hand, technology companies are also getting smarter and trying to head those off. So, I think in the same way, AI could be used to try to identify when something just does not seem real or legitimate. And that could be a good use of AI in this case. So, this technology has always been a double-edged sword when it comes to financial scams and fraud of older adults.

Kaitlyn Phoenix:

And this is a question along those same lines, along with AI and machine learning. Can you tell us more about how other providers or industries that work with older adults, such as banks, social workers, doctors and how they're using this research or collaborating with you?

Duke Han:

So, I actually think there is a lot of interest from banks, companies and financial companies in trying to protect older adults from being taken advantage of, and I think things are still at an early stage. At a broad level, like at a bank, they might use some of this knowledge to try to help protect their older adults, who have money in the banks. And so, I think the same goes for private companies, and there's always a sort of pull between agency and letting people do what they want. And so that's something that is a constant topic to navigate. So, I've been involved in a number of different meetings, actually with different private companies, and I think at this point a lot of it is sort of just trying to understand this better. So, I think that's always the first step, and then from that point once there's a level of appreciation or understanding of the issues. Then ideally, you know, interventions can be developed to try to do something about this. But yeah, I know there's a lot of interest from private companies and trying to help protect older adults, and that's been a good thing to see.

Kaitlyn Phoenix:

I have one more question to wrap up with, and it's actually one that we touched on in the article you helped write for Prevention. How can we be proactive in protecting our financial decision making? Should we be implementing power of attorney or something like that? What advice would you give to someone who's concerned about protecting their own assets, or maybe a loved one who might be having cognitive changes and might seem vulnerable for financial risk?

Duke Han:

Yeah so, I think one of the things that I always try to stress is the more advanced planning the better when it comes to this. And I think this is good for multiple different reasons. It

helps the older adult, or the person in question, sort of set up what they want ahead of time so it's clear to everyone what they want, if something were to happen, so, setting up like legal directives like you mentioned, and other sorts of power of attorney structures. I think that will help address when or if this does unfortunately become an issue that everyone will be on the same page. And the person in question would also have their wishes honored. I usually recommend as much advanced planning as possible.

I will say also, and we touched on this a little bit in our conversation, people feel a lot of shame about being scammed. A lot of people become the victim of Scammer fraud just unintentionally, or it's like a one-off, or it just happens, and it's not always the fault of the older adult. And in fact, it's always the fault of the bad actor, right? So, I think that people feel a lot of shame about it, and I think the more that people are willing to talk about when these happen I think the better, because what often happens is that something will happen, and people will feel a lot of shame about it and won't talk about it. So, no one will know, but the more that we can address the shame and the fact that this is happening and it's just happening more and more. The more that it gets brought into the light, and the more that people can address this, either at the Government letter level in terms of instituting new policies or just at the individual level, just putting things into place that might help reduce the chances of this happening again.

You know, focus on brain health. I think it's never too early again to do that. That's something else that could be done. And then we talked about this, that financial literacy is something that can also be increased, or you can always learn more about your financial situation, about financial concepts. You can learn financial literacy at any age, so that's something that I would recommend to people as well.

Kaitlyn Phoenix:

I think those are some really good, actionable takeaways that we all could use. Some reminders for all of us. You know, it's so easy to just put off legal directives. “Oh, we'll do it next month when I'm less busy”, you know, but it's important to get that stuff taken care of now, so that you're ready if in case something happens. Yeah, I agree.

Duke, thank you so much for your time today, I thought this was really interesting. I learned a lot. So, thank you, I appreciate it. I hope everyone else at home did too.

Again, emails will go out afterwards with some of the links that we talked about, and the recording. You can also help AFAR continue to offer these free webinars by going to

<https://www.afar.org/donate> and provide some support that way. Thank you so much to everyone for joining us today.

Duke Han: Yeah, thanks for having me, Kaitlyn. It was great to be here.

Watch a recording of the Live Better Longer “Money on the Mind: Cognition and Financial Decisions” Webinar [Here](#).