# **W&L After Class**

# With Guest Wythe Whiting

**Episode Transcript** 

### **Ruth Candler**

Welcome to another episode of W&L After Class: The Lifelong Learning Podcast. I'm your host, Ruth Candler. Today we're joined by professor of cognitive and behavioral science Wythe Whiting. He's going to help us explore the complex connections between mental health, sleep, physical activity, and cognitive functioning. In our tech driven world where attention is a prized commodity, we'll discuss how modern technologies impact our ability to focus during daily tasks, and the implications it has on our mental well-being.

We'll also navigate the vast landscape of social media, examining its powerful influence on mental health. You'll be very interested to learn about the relationship between scrolling through feeds and the mental state of users, and shedding light on the hidden dynamics that shape our online experiences. I hope you enjoy this conversation with Wythe as we unravel the threads connecting cognitive and behavioral science to the intricacies of our daily lives. Wythe, welcome, and thanks for joining us on W&L After Class.

### **Wythe Whiting**

Thank you, it's a pleasure to be here.

### **Ruth Candler**

So I'd like to kick things off by having you give us a brief overview of your field of study.

# **Wythe Whiting**

I had kind of a, I guess, maybe a midlife shift in research area. I'm trained as sort of a classical cognitive psychologist, where I did research on memory and attention and aging. But the nice thing about W&L is you can just kind of follow your passions and let, you know, your research questions take you where you want to go. And so, I started collaborating with Carla Murdoch, who is a clinical psychologist, and her area of research was more into mental health and well-being. And so, we started to combine

forces and come up with research questions that were sort of the intersection of those two topics.

#### **Ruth Candler**

So, you say that you're a cognitive and behavioral psychologist by training? Can you explain for us what that means in comparison to clinical psychology, or even bio psychology, which was a term that I hadn't heard before research in this podcast?

# **Wythe Whiting**

Yes, so cognitive psychology is basically the science of trying to measure specific cognitive processes in the brain. So, without using any fancy, functional MRI technology, where, you know, you get to see the pretty pictures of the brain, you know, lighting up in specific areas. Instead, we measure cognitive processes through behavior. So typically, that is, you know, we give people a list of words to remember and then see how many they can recall, we see if they can recall more of certain types of words than others. With attention, that's often measured in reaction time, so we see how quickly people can maybe search through a cluttered display and find a target, trying to emulate maybe how quickly you can find your car keys, you know, on a messy desk. And we can create conditions that maybe there's an uncluttered search, where there's a target item among a few other items. And then, we can have a cluttered environment and we can look at the difference in reaction time. We look at sort of the cost of that clutter on being able to search quickly and find what we're looking for. So that is generally how attention is measured.

### **Ruth Candler**

You mentioned that you collaborated, or that you collaborate with Dr. Carla Murdock and the technology, health, and cognition lab. What kind of work do you do in the lab?

# **Wythe Whiting**

So our first project was... actually Dr. Murdoch, before I sort of joined forces with her, was looking at behaviors like sleep and activity, and how it relates to mental health. So, we thought, oh, it would be cool to bring in cognitive functioning into that. So not only, How does sleep affect mental health, but also how does it affect our cognitions? How does it affect our attention? You know, is it the case that if you get very little sleep that you have, you know, fewer attentional resources the next day, and you can't pay attention as well? So that was our first project that we looked at. We had students wear activity and sleep trackers for a week. And then we measure them on an attentional

task, saying how quickly they can move their attention around, orient their attention to different objects on a computer screen. And you know, what was the effect of, in essence, sleep deprivation? And as you might expect, like, well, actually, maybe in that you wouldn't expect this. As you imagine students here, get a variety of sleep each night. Some like get regularly seven to eight hours, some of them pull all nighters. Some of them consistently get like four to five hours of sleep. And it was this last group that we found actually had the worst attentional performance, and that it was the students who got about four hours of sleep sort of every single night that had the worst attentional performance.

#### **Ruth Candler**

So, when you're looking at that, Is it is it per night? Or would you look at it, say, over a two-week span, because I remember, as a college student, if I had those, I hate to say that I was one of those all-nighter kinds of students. But if I had that, I would find that on the weekends, I would catch up. And so, are you looking at, you know, the hours in a week that students are sleeping? Or is it just a day to day?

### **Wythe Whiting**

Well, we are looking at the sort of all of those metrics, but we did look at it just over a week. And we did find, like you were saying, that you can recoup, you know your attentional energy. Like, so if you consistently get a couple of hours of sleep, and then you're allowed to sleep like eight to ten hours, like the next day, you're back to normal. But it was the students that were consistently getting four to five hours, every night that your body doesn't have that opportunity to recuperate.

### **Ruth Candler**

So, it strikes me as a college professor, you probably often get the chance to see the effects of sleep deprivation on academic performance in real time. As you were conducting the study or even after, did you find that you are having experiences with students in class that mirror the things that you were discovering in the lab?

### **Wythe Whiting**

Well, they do talk about it quite frequently that and that, you know, oh, only, you know, I only get, you know, I'll bring up the topic of sleep. And it's almost kind of like bragging rights, I can't tell if people are flexing with their, you know, their while they get four to five hours asleep. And clearly there are some students that are able to pull that off. And some that are not. I have one student who she's like, I have to go to bed at 10pm every

night and get eight hours of sleep. And she just did that, like there was nothing stopping her, like that was her priority. That was a very unusual, at W&L, you know. But I think, you know, getting into the social media use: part of that sort of endless scrolling is this phenomenon sleep procrastination, where, you know, you go to bed and you use that sort of as a wind down, but then it can take a little bit long. You're procrastinating a little bit longer on sleep.

#### **Ruth Candler**

Well, and then there are all sorts of other things that are feeding into that too, right? Like blue light, they say affects sleep.

# **Wythe Whiting**

I think students are kind of aware of that. I see students who have the blue light filters on their glasses. And they can do the—what's it called-- night shift on their phones. Yeah, that helps. The age-old wisdom is that you don't do anything in your bed, but sleep. And that trains your body to once you get into bed to go to sleep, so.

#### **Ruth Candler**

currently, I believe the lab is investigating relationships between social media use and health outcomes. Can you tell us more about that research and how you involved students?

# **Wythe Whiting**

Our lab typically consists of about six to eight undergraduate students. They're usually in CBSC, which is cognitive behavioral science (formerly psychology), that major, we have one neuroscience major as well. And to say that we involve students, I think it's more that the students involve us, more so than we're involving them.

#### **Ruth Candler**

That speaks to a W&L student, doesn't it?

### **Wythe Whiting**

Yeah, they do like 95% of the work. And we're just there sort of to guide, so we come up with the research ideas, and it's their job to implement the study, collect all the data, to

do, you know, all the heavy lifting, and I think that it's a rewarding experience for them and lets them know, you know, what the scientific process is all about. You know, it's not as glamorous as just being able to like look at data. And just some of the difficulties of collecting data.

#### **Ruth Candler**

I'm going to ask you to elaborate a little bit on your recent research and how technologies, particularly cell phone notifications, affect student's attention during tasks.

# **Wythe Whiting**

Yeah, so that was a research project that we published a couple of years ago, where this was sort of the beginning of our sort of interest in cell phones and distraction. We all know that students are constantly getting notifications, you know. They're on group chats where literally their phone is buzzing every, you know, minute or more. One of our questions was to look at, what are the distracting effects of those notifications that students get? And we're interested in looking at the cognitive effects of that distraction, so how does it take you off task of whatever you're doing? And does it delay your ability to get back on task?

The other element we use to measure distraction was physiological. So, we also looked at their heart rate variability. Does it trigger an emotional or physiological response just receiving a notification? I think we've all had that experience where the phone vibrates or goes off, and you just feel this jolt inside of you, maybe not so much anymore, we're all getting used to it. So we did want to try and catalogue those effects. And so, we had students wired up with EKG sensors. And we had them do a simple arithmetic task in which an iPhone buzz notification that is, sounded identical to the vibrating phone notification will come on randomly during simple math problems. And since we were measuring reaction time in 1000s of a second, we were able to sort of precisely see, what are the effects of distraction? You know, how long did it take you off task just by hearing that notification? And they didn't have to respond to the notification at all. It was just there, trying to emulate what students are experiencing when they're doing their homework. And of course, we found that it was most distracting for high school students, and, to a little bit lesser degree, college students. And we also measure parents that we had, a group of midlife adults as well. And it was distracting for everyone, but mostly for adolescents.

#### **Ruth Candler**

So, the older you got, the less distracting it was, but still distracting.

Yeah, still, the college students and the adults were about the same. So, it's not like you ever are able to escape it by aging. The other thing was that the adolescents showed a much stronger Heart Rate Variability response to the notifications, and that was not present in either the college students or the adults, the midlife adults.

#### **Ruth Candler**

Why do you think that is?

# **Wythe Whiting**

We kind of don't know, we speculated that it might be because high school students placed a greater emotional importance on those notifications that are coming in, and adults less so. It could also be something due to the fact that their nervous systems are just more tightly, or more sensitive, than adults.

### **Ruth Candler**

Interesting. So what implications do your findings have for not only academic performance, but for well-being outside of a classroom setting?

### **Wythe Whiting**

I think that we, they highlight that there are effects. Like it, you know, you see your phone, buzz or notification come up and you just look over at it, and you don't really think anything of it, you don't feel like that it's having an effect on you. But, it is like a microscopic kind of aggravation, maybe, or triggering effect. And so, one question would be, how much do those add up over time? And I think that is what's leading into our second research project, which is looking at social media use, and mental health and well-being.

#### **Ruth Candler**

So how does social media, particularly platforms like Tiktok and Instagram, influence mental health of users?

### **Wythe Whiting**

Yeah, so we are just looking at that data now. So, we just completed a fairly large study where we tested over 300 W&L students. And we gave them a number of assessments on mental health, like depression, anxiety. And because there's that new screen time app, we were able to have students pull up their phones and enter in the data and how many hours across the past week that they've been using Tiktok, Instagram, Snapchat, and a number of social media apps. So, we're just looking at that data. I will say that there are effects there, that some apps are likely to have more of an effect on mental health and well-being than others.

### **Ruth Candler**

Are you able to share any, pull back the curtain a little bit? Too early to share? Okay.

# **Wythe Whiting**

I won't name any names, but like, I think part of it is the apps that trigger a lot of social comparisons. They may, for some people, have some negative effects on well-being. If you're comparing yourselves to others: oh, look at their family vacation or look how much fun they're having over spring break. And then you're comparing yourself to that.

### **Ruth Candler**

Well, it's not like anybody ever post pictures of cleaning the bathrooms, right? So.

### **Wythe Whiting**

I know, yeah. And I mean, I will say, there's like a reaction to that as well. People are creating apps. And I don't follow them that well, but there's like the BeReal. Yeah, trying to encourage people to post.

#### **Ruth Candler**

Yeah, and then you get dinged negatively if you take too long, like you're posing. So that that does look like it's more on the positive mental health aspect. I've heard of the addictive nature of Tiktok, and Instagram, how does that affect users' dopamine levels and emotional responses.?

### **Wythe Whiting**

So, I guess I would say that, we're pretty confident that a lot of these apps are triggering the dopamine system. And so that encourages viewers to continue to swipe with the idea that they're looking for that next hit that something is going to be funny, or entertaining, or rewarding in some way, because there's a lot of trash in there, that students you know, are scrolling through. But because the reward is only given like, after, I don't know, 15 swipes, then they get a reward. And then now they're swiping again for another 15. If it was a reward, reward, every single swipe that was high, they would just do it for three minutes, and then they'd be done. So, it's literally like a slot machine that only rewards every now and then. And that's what makes it most addictive.

#### **Ruth Candler**

You hear about the platforms like Tiktok and Instagram, creating their algorithms to enhance the addictive nature. Do you can you speak to that at all?

# **Wythe Whiting**

Only that I believe it's absolutely true.

### **Ruth Candler**

Yeah. I'm surprised that there isn't some sort of government regulation on that, especially for platforms that are appealing to younger children,

### Wythe Whiting

I'm going to take it a little different direction. We've seen some pushback on that, where the algorithm seems to not be as intelligent as people are looking, for these days. And so people are getting tired with the what the algorithm is giving them. Although we're rewarded for new and exciting things, we also get bored when it becomes too predictable. So already, there's apps that are designed to throw you a left curve, because people are just now getting bored with at some point, you know, you start seeing the same memes over and over again. So, kind of the interesting question is, what's next?

#### **Ruth Candler**

Yeah, that's kind of exciting and frightening at the same time, right?

Yeah, it's like that, once you've scrolled through 56 million, you know, short clips, that then you become bored. And now you need to move on to the next thing.

#### **Ruth Candler**

So tying into that social media is the role of gossip and social bonding. I'm wondering if you're able to help us understand that just a little bit more.

### **Wythe Whiting**

There is research showing that something like two thirds of all communication between humans is just purely gossip. You know, what your neighbor is doing, who's cheated on whom, what transgressions have occurred. Which probably when you start thinking about it isn't too surprising, because we use language a lot, and that seems to be something that we enjoy talking about. The worrisome part, of course, for teens is when, and this is no surprise to any parent, when that starts getting cataloged on social media. And things are said about another person and they won't go away because it can just be continuously replayed over and over again. It seems like we're constantly chasing a moving target on that. And I forget even the apps that students are using on campus, but typically, they're ones where you know, the posts come up and go away and it's anonymous. And that's been a struggle here at W&L and all college campuses.

#### **Ruth Candler**

So if I understand that your future research will involve the role of physical activity and mental health outcomes, can you tell us what you're interested in finding out and how that study will be conducted?

# **Wythe Whiting**

Yes, I can't give too much away because we don't want to contaminate our research pool, but so we've looked at the influence of social media on mental health. And I think the logical next extension is to examine like, what are the protective factors? If we acknowledge that social media use is here to stay, and students aren't going to be giving up their phones anytime soon, what are some of the things that they can do outside of their phone that would protect them from some of the harmful effects on mental health? We haven't designed our study yet, but we are looking into ideas like physical activity.

There's been research showing, particularly female athletes, that engaging in a sport is a protective factor against the negative effects of social media use on well-being. So, I don't, we don't really know exactly why, if it's because there's built in social support and camaraderie there. And physical activity, physical activity, and literally just engaging in it-- you cannot play soccer and use your phone at the same time. So part of the question in this is sort of circling back to with my own kids, you know, we experimented with just trying to displace phone use with other activities, like just getting kids engaged in something that they you know, canoeing or whatever, where they're just not going to be on their phones, as a way to limit phone use. So, if we can find other things that are potentially more rewarding than social media on cell phones, then that would be nice.

#### **Ruth Candler**

This is bringing back memories of the podcast that I did with Carla Murdoch, right, kind of to the end of the pandemic, and, and the effects of happiness. And so that's going to be fun, fun to see.

### **Wythe Whiting**

Because we are fighting with this reward system, and we know that doing certain things, like with our hands, like some people are really into knitting, obviously, they do it for hours on end. Like that is a rewarding activity, and you actually have something that you can hold in your hand when you're done. So, I think, it's tangible. Yeah, it'd be fascinating to look at more creative arts.

### **Ruth Candler**

Well, and you, you mentioned activity and exercise. And this would be another area where technology use comes into play, right? Where many people track activity in the forms of Fitbit or other products. What role does current research suggest activity trackers play and motivation and reward? And how does that, or does that tie in to some of the research we've discussed today?

### **Wythe Whiting**

Yeah, I mean, I think that's a sort of a new area, we have these smartwatches that give us rewards for doing our stairs or steps.

#### **Ruth Candler**

This closing rings is a big thing.

### **Wythe Whiting**

Yeah, yeah. And so you know, the question is, is it helpful? Or do people feel depressed if they don't close their ring? Did they, you know, sort of create a goal that's manageable, and so that they can always achieve it, and therefore doesn't have as much of an effect, as, you know, a more difficult challenge? I know that, that would be a very interesting stat, and certainly something that we'd probably want to look at.

#### **Ruth Candler**

So, going back to happiness, we hear often about how Denmark consistently gets ranked as one of the happiest countries on earth, if not the happiest? What are some of the key factors contributing to happiness in countries like Denmark? And how can we apply these insights to our daily lives?

### Wythe Whiting

There is that effect of the sort of happy Scandinavian countries or in Northern Europe, they tend to have the monopoly on happiness. I think the US isn't too far behind. I think we're rated as number 16. But we're certainly not probably as happy as we fancy ourselves or would like to be. I think one of the main things that's, that's often mentioned, is the trust, sort of community trust, that is in these Norwegian countries, where everyone sort of buys into a social system. For Denmark, for example, kind of strikes this balance between a socialized country, but that also has some capitalism baked into it, maybe unlike their neighbor, Sweden, that tends to be a little more socialist. And I hate to say it, there are many times where I feel like this country, I'm less trustworthy of other people. If I bring my car in to get repaired, I feel like I'm just going to be taken.

#### **Ruth Candler**

I always thought that was human nature. But now, I mean, you've got a good point that, you know, do people in Denmark think that you know, have that same sort of first gut reaction?

### **Wythe Whiting**

Yeah. So, we are doing a course on happiness, the spring term in Copenhagen. Dr. Murdock and I went and scouted out over the summer, and we bought a train ticket

from Copenhagen to Sweden. We bought the ticket at a kiosk, and at no point did anyone check our passport or our ticket, there or back. So, it is, it is a different control. Yeah.

#### **Ruth Candler**

So we've talked about your research with younger adults. And I'd like to move on to what you've done regarding older adults. Some of your earlier work examined an older adult's susceptibility to noise. Would you share that research in your findings?

# **Wythe Whiting**

I did used to do a good bit of research on looking at the effects of attention and aging. So, as we get older, what types of changes do older adults experience? Especially about 20 years ago, this was a very hot topic, I think as the baby boomers were venturing into retirement age. There were a number of studies, I'm just going to back up for a little bit, because I'm sure the audience is going to want to know like, okay, what can we do to forestall any, any decline whatsoever? So, there were a number of studies looking at crosswords, if you do more crosswords, or sudoku, you're gonna save your memory. And I'm sorry to say that you will not. You will become a better crossword user. So you're just gonna have to be satisfied with that achievement. There have been some interesting studies, though, looking at engaging in new hobbies that have resulted in findings that show memory declines less in these individuals. So they've, Denise Park has done some research showing that they had participants I think, join a quilting club, and a digital camera club, photography club. And, and then some control conditions. And it turned out that it was the photography club had, and again they were randomly assigned, so it's not like people could choose necessarily.

### **Ruth Candler**

But it was all, it was new to each person?

# **Wythe Whiting**

New to each person. And I think that it's probably you need to engage in a hobby that is just difficult, you're really working your neurons.

### **Ruth Candler**

Which doesn't sound as appealing, it doesn't sound as appealing. It's more fun.

We want the quick fix here. We don't, we don't want anything hard. But that is good news for people to think about. I'm sure the audience here that's listening. They're interested in lifelong learning, and they want to be challenged. So, doing really mentally challenging activities, might be a way to help forestall some of that decline.

#### **Ruth Candler**

So, you're suggesting that everyone listens to every episode of this podcast?

# **Wythe Whiting**

And do something in response to it? Yeah.

#### **Ruth Candler**

So, going back to susceptibility to noise, though, what did you find there?

# **Wythe Whiting**

So, there is this strong finding, it's not going to surprise anybody to learn that attention and memory declines as we get older. So, one question is trying to figure out what the mechanism is for that decline, what is happening in the brain. The technology is not such that we can drill down and look at individual neurons. But one of our theories was that a lot of connections may be getting broken, just due to advancing age. And so, the pathways just aren't as strong as they once were. It's kind of like thinking about an electrical wire that's losing its insulation. And there's just kind of more noise, or, you know, in the old days, when you listen to an FM radio station, and you start at it, you start leaving the area, that there's some static that's going on. So, we did manipulations where we actually added noise, visually, and looked at its effects on attention, and not surprisingly, it affects older adults more. So that was sort of a facsimile, for modeling noise in the brain and speculating that, one, it's likely that we're losing connections and also that we're just not filtering, maybe as well as we could.

### **Ruth Candler**

Alright, so other than learning something new that makes our brain work very hard, are there any other suggestions that you might have?

Yes, the, the other one is to be physically active. That is one of the strong effects that we see on cognition is just getting out and exercising. Getting more blood flowing into your brain is just essential. So, so, there's no there's no easy fix, but there getting down and doing a walk in the woods is also rewarding as well so you get.

#### **Ruth Candler**

Checking a couple boxes there, right? So, you also studied older adults' difficulties in perceiving basic emotions in facial expressions. And I have to say that that's the first time I've ever heard of that. Would you tell us a little bit about that?

# **Wythe Whiting**

Yeah. So, we were looking at older adults' ability to detect subtle emotional expressions. Part of this, I guess, came out of just sort of a perceptual, getting back to okay, if older adults have difficulty with attention and memory, do they also have difficulty with just perception as well? And specifically detecting very subtle emotions? Because nobody's walking around, well, not nobody, but very few of us are walking around smiling wildly, or, you know, have a big frown or disgust sign on her face. We deal with a lot of micro emotions. And these are just subtle tells that let another person know how we're doing without completely exposing ourselves. So, our research question centered around okay, like, do older adults detect these quite as well as, do they misinterpret a neutral face as maybe a smile? Yeah, there is this research that shows that there's this positivity effect, this is a good thing. Yeah, we had talked about some good things that older adults, as they get older, tend to perceive more positivity in their life. So, they have this positivity bias, which can be good but can also maybe lead them to be taken advantage of, in certain situations. You know, whether it be someone you know, trying to extort you for repaying your driveway, like, do you over interpret how honest they are? Based on their emotional expressions?

#### **Ruth Candler**

Can you promise that was gonna be a good thing?

### **Wythe Whiting**

Right, yeah. I think it probably generally is. But we did find that older adults did tend to interpret more neutral faces as more positive compared to younger adults, which is maybe better than interpreting neutral faces as more negative.

#### **Ruth Candler**

So, before we wrap up, I always reserved the last few minutes of our podcast to talk a little more about a professor's life outside of the classroom. So, I have to ask, I know you're a parent. And given your research areas of interest, I can't imagine that you haven't drawn some parallels between things you have seen in a research setting, and things you see playing out in real life.

# **Wythe Whiting**

In terms of, I guess, the intersection of both of those things, like being a parent, and I will say that I'm almost an empty nester. So, I have one child, one child in it, who's a junior in college, and another who's a senior in high school, and sort of paralleling our research, like one thing that I find really valuable is just getting outside. Like, I feel like I'm in a job where I teach in a classroom, when I'm not in my classroom, I'm in my office answering emails, and you just don't realize how much getting outside getting in the sunshine. There's one researcher that says, there are all these smells, that decomposing plant matter gives off that are invigorating to us somehow.

### **Ruth Candler**

I've never heard that.

# **Wythe Whiting**

Yeah, I never heard that, that was the first time I just heard that. But it does, it does seem invigorating and energizing just to get outside. And so I try and do that by mountain biking and also walking our dogs with our my wife, and occasionally one of our kids.

### **Ruth Candler**

Have you found that your research has changed the way you've parent?

# **Wythe Whiting**

I think every parent would like their kid to be less on screen-time than they actually are. So, it's, it's hard because you don't--and every parent struggles with this-- you don't want to be the parent that's just constantly nagging your kids. Because you don't want to be that parent, you want to have a healthy positive relationship with them. So, trying to figure out, okay, what are our boundaries going to be? And it's especially difficult there

I think during middle school, when all that arises and you realize how much kids are diving into it, you know, full force.

# **Ruth Candler**

Since you're on the other side of that, though, do you have any words of wisdom for our listeners?

# **Wythe Whiting**

I mean, if you can put it off as long as you can.

#### **Ruth Candler**

You putting off getting a cell phone type thing, or?

# **Wythe Whiting**

A cell phone, or even the video games. It's just hard, like I remember we took a pretty hard line on video games with our son who really wanted video games. And he would be like, all of my other friends, you know, are allowed to play as much as they want, you know. And we had timer, you know, eventually we let him have video games and then we had timers on them anything you know, then it was negotiating extra time. It's just a whole other world.

#### **Ruth Candler**

That, that's kind of comforting hearing you say that, that you've got those same challenges, those same challenges. So I'm curious what changes, having just said that, that you believe that should be incorporated into our current public education system to promote better mental health for adolescents?

# **Wythe Whiting**

I mean, that's a big, that's a big.

#### **Ruth Candler**

That's a big question.

I don't even think I can fully answer that question. Because that is what all the schools are struggling with, you know, and going through COVID, you know, they came up with having cubbies outside where students would drop their phones, that was popular. Sometimes, you know, some schools have just decided it's impossible to police.

I think we just have to realize that the cell phones and smartphones are here to stay for kids and helping them just be mindful of how much it's taking up their time. And I think they do it, we have some even first year students coming into W&L that are trying to be very mindful about how much screen time they use. I think now with the screen time app that just came out really, as a default just a couple of years ago. You know, students talk about how much screen time they're using, and they realize that it's never a good thing.

#### **Ruth Candler**

So, yeah, a blessing and a curse.

# **Wythe Whiting**

So, in short, like, I don't know how to answer that question.

# **Ruth Candler**

That's fair, that's fair.

# **Wythe Whiting**

There's also just the need to belong and socialize is, as you know, just very strong with teens. And there's that fear of missing out.

#### **Ruth Candler**

Yeah, and we have it as adults. Right. And so, my next question to you with is how has your own relationship with technology and social media changed? And what advice would you give our listeners?

# **Wythe Whiting**

Yeah, I think for, and I think it's different, of course, for every person, everyone's, you know, an individual and responds differently. For me, I find that I'm just more aware of which apps tend to draw my time away. So the Tik Tok style, whether it's YouTube shorts, or Tik Tok or these other ones where it's continuous scroll, yeah, it's great to unwind your mind. But you realize that you have to stay on top of it, or an hour has gone, an hour will drip away. So that's for me, I've been just trying to be more aware. I have put certain apps like Instagram way hidden in the back of my phone. But I don't use Facebook anymore, mainly because for me, I felt like there's just a lot of negativity out there. It's very political, and our political environment is just designed to activate and annoy, to aggravate us into action. And so, I've hidden all those, and I feel happier as a result.

#### **Ruth Candler**

So, you mentioned that you were mountain biking. Can you share any insights or reflections on how parallels between mountain biking and navigating life's challenges?

# **Wythe Whiting**

Well, it's certainly anytime you learn something new that where you could fall and hurt yourself, it's a humbling experience. That's for sure.

#### **Ruth Candler**

Take it that's from experience.

### **Wythe Whiting**

Yes, yeah, you know, you're gonna fall. And it does sort of teach you to not do certain things that are, you know, that don't build that skill. It's also taught me that when you're starting to engage in some activity, like it's just not going to be as rewarding. And I think that's, we always look for the quick fix. So, I learned to play guitar about a dozen years ago. And that was also painful, literally painful at the beginning, but also not that rewarding. But sticking with something and persevering through it, I think, brings a lot of joy, and we have to teach ourselves to be patient. And that's also hard to do, right, given the given the short attention spans that everyone has.

#### **Ruth Candler**

That's a great way to end the podcast for today. Thanks for joining us, Wythe, and for highlighting crucial links between technology, health, and cognition. I think we've all learned a lot of valuable things today.

It was a total pleasure.

#### **Ruth Candler**

So, before we wrap up today's episode, don't forget to visit our website, wlu.edu/lifelong for today's show notes and also a treasure trove of other lifelong learning opportunities for you. While you're there, you can also meet the incredible folks making the podcast shine. Jim Goodwin is our technical maestro and works his wizardry behind the scenes. Kudos to Kelsey Goodwin for bringing our scripts to life and tip of the hat to W&L alumni Eric Owsley, jury socket, and Kelly Melbourne, our strategic advisors. And those infectious beats and our catchy new theme music are all thanks to the talented Cleveland Candler. For those of you who are joining us for the first time, we have 33 episodes and fabulous conversations for you to catch up on. So that you don't miss one more, make sure you follow us on Apple Podcast, Spotify or your favorite podcast platform. Until next time, let's remain together, not unmindful of the future.

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