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Applying World Class Sports Training Tools to the General Public

Presenter: Sheila Thelen

- Ladies and gentlemen, thank you very much for join us today. My name is Anna, and I'm an education manager at Inventis. It brings me immense pleasure on behalf of Inventis Academia to extend a warm welcome to each and every one of you for this inaugural event we have organized after the summer break. Today's webinar is titled, "Applying World Class Sports Vestibular Training Tools to the General Public: Applications for Autism, Athletes, War Fighters, Aging, ADHD, and More." We are truly honored to have Sheila Thelen, president of Vestibular Training Services and master-rated figure skating coach as our distinguished guest. Sheila, thank you very much for accepting my invitation. Thank you so much. I had the privilege of meeting Sheila, it was last year in Liverpool, UK, during an exceptional vestibular summit.

Well, her presentation left a lasting impression on me, showcasing her remarkable ability to engage with the audience and her passion for that work. So I encourage all of you to jot down any questions you may have in the designated space that should be visible on your screen. Remember, that your input is of paramount importance in pushing the boundaries of academia. So after the event, you will receive a survey that I kindly request you to complete. The survey will assist us in better understanding your needs and gathering your insight to ensure the provision of unparalleled educational support. And now I pass the floor to Sheila. Enjoy the webinar, and see you later.

- Oh my goodness. How lovely. So thank you so much for having me, Anna, and everyone at Inventis and Dr. Armato. I'm so honored to be a part of these projects. So I truly am obsessed with my project of bringing world-class sports vestibular training to the general public. I've been doing this for over 28 years, so 28 years of sports, and obviously my specialty is figure skating, yet how we can take those training skills and bring them to the general public with outstanding results. So I have so many videos to share, to the point I have to kind of control myself in how many videos I share. And I'll be honest, I move through this a little bit more like a TED Talk than I do an academic presentation.

So hopefully you're a little bit more entertained today in how I do things, but I have some outstanding videos. And some of them are meant to shock you, and some of them are meant to really realize how you can apply this to your clients. With this also, probably half my sales go into people's homes, which is great. I help the family and some neighbor kids and some of the community, which is great, yet the goal of our company is really to get one unit in the hands of a specialist that can help a thousand people with that one unit. So with that, I really wanna talk about outcomes and how we can really help change people's lives.

So in the chat, I already threw in my LinkedIn contact, so you can connect with me on LinkedIn, and I really look forward to any questions people have. I'll be watching the chat at the same time. So I'm gonna start out with my screen share, and I almost kind of start out with my overwhelming video. So this is one of my athletes. I'm gonna screen share. Here we go. Doo, doo, doo, doo, doo. I have a busy desktop. Sorry about that. You can understand my brain a little bit more as you see that. So I'm gonna start out with this athlete. And this is one of our, I call it one of our shocking videos. You know, it really is a shocking video, 'cause at the end, she's gonna tell us she's not dizzy.

And this is one of the videos that actually NASA used for several of their presentations with their head neuroscientist. So my goodness, this girl is turning 5 1/2 turns per second. She's got a midline cross, so she's using both sides of her brain, axis, balance, proprioception, there's that midline cross. She's creating the balance of horizontal, vertical, and yaw within that vestibular system. And as she comes down, listen to what she has to say. Course, the most amazing part to the whole story, okay, how dizzy are you?

- Mm, I'm not dizzy.

- Not that dizzy. Not dizzy at all. Thanks, have a great day. Which, of course, NASA was like, how'd you do that? How is this girl not dizzy? And the answer is, I trained it out of her, okay? I have trained her vestibular system off the charts. Off the charts, I have trained that vestibular system. So I got one of these really great 3D-printed vestibular systems from Amy Lennox. So thank you, Amy, over in the UK at Liverpool. And really, this little vestibular system can really change people's lives, in your balance, in your proprioception, in how your eyes and ears process back into your brain. The word vestibular comes from vestibule. So the vestibule is the entry to your home.

The vestibular is the entry to your brain. So I get the question all the time, I'm gonna keep screen sharing here, so lots of entertainment for you here today. I get the question of, like, prove that she's not dizzy, which is one of my favorite things to prove to you. So here's another one of my athletes. And I'm gonna say too, she went from an average student to an exceptional student. She went from a average athlete to an elite athlete. And in my armpit here in the background, you can see me there in my training room, I've got, it's what's called a HECO stick. So I'm gonna throw it at her at the end, and it's a three-pronged stick with different colors.

So at the end, she's also gonna have to decision-make the color that I call. So once again, she's got balance, she's got huge vestibular load. And the other thing too, she's finding zen within the chaos. So in the chaos of all this turning as I'm calling out directions, she has to focus and find her brain. All right, ready? Blue. And I'm also a terrible throw. But so not only was she not spatially disoriented, she also had to choose the color that I called out. I called out the color blue, and she had to decision-make that within a half a second of which color to catch. So I talk about all of these applications within vestibular in how it can help your clients.

Now, I show my two shocking videos at the beginning because, you know, obviously, it's a little shock and awe there. But in the same sense, I talk about real-life vestibular. And this is actually one of my neighbors who falls constantly. She's had 50, 60 falls, and she really is afraid because of that. You know, she's 65 years old, and you can see me run the gear here, it's the control box, and I just step on the pedal, I'm holding the rope. She feels really, really safe. And with that, she's just gonna make one turn. But she's learning on her feet. She's standing, she has to use the proprioception, horizontal, vertical, yaw, she can move her head, and she just makes one turn.

Just one turn. And so the protocols for this are really easy. It's just we turn, in her case, we're just gonna do one turn counter-clockwise, rest for 30 seconds or until she's ready to move on, one turn clockwise, which is oddly harder. Okay, that's harder for people to move clockwise. Rest once again for 30 seconds to a minute, and then one final turn counterclockwise. So it's three sets, very easy to run. I have eight-year-olds that can run this gear. So I wanna jump to one of my favorite doctors, Dr. Andy Beltz, who's gonna talk about his experience in using the gear. And at one point, he also pans, he pans to his 8-year-old running the gear, you know, so in the left-hand of the screen, the child is only eight, running the gear for him in the background.

But Andy's gonna talk about how vestibular training can really affect all of your clients

- Hi, LinkedIn friends. It's been great to be with you all this year. I've really enjoyed your posts, got a lot of new connections. Hit it, Liam. Happy New Year to you all. You're probably thinking about possibly starting some New Year's resolutions, and that might include working out. I want to thank Sheila Thelen. She has allowed me to train with her vestibular spinning devices and harness. It's been a very interesting experience. I have been training for two months, and I started at 10 spins, and now I'm up to 30, and I can actually talk while I'm standing on the platform, which is pretty cool. My dizziness that I get at the end is minimal, and we're gonna show that to you.

I'm gonna have you video my eyes at the end. But my point is that our bodies can compensate, and they can adapt. Whether it be you have an inner ear problem or you have muscle weakness or a neurological problem, if we can stimulate our bodies at the right dosage, at the right consistency over a period of time, we will get better. So stick with your New Year's resolutions, and go after it. Second thing I want to tell you that's really cool is that our inner ears move our eyes when we move our bodies. Our inner ears also help us see clearly when we move our heads. And so part of spinning training is trying to train that reflex not to hit quite so hard when we spin.

Sheila's ice skaters have fascinated me because they can spin, and their eyes don't hit hard after spinning like tornadoes, so it's amazing. So come on in and get this video. You can see maybe my nystagmus, I have purposefully tried not to fixate or focus on anything so that it would keep hitting hard. But when my eyes are spinning, like I'm trying not to focus on the camera, I feel spinning. Now my spinning is gone. Point is for all of those of you who are battling dizziness or are a therapist or a doctor, an audiologist who's helping people with dizziness, you know, one thing that I do with my patients that really helps is I have them video their eyes if I can't figure out why they're having their dizzy spells.

So when they're at home, they're having attacks, and nobody can see what's going on, I have them video those spells, and that gives me insight by watching the eyes jerk as to what might be going on, what kind of therapy I should provide or if I should refer them on. So happy New Year, workout, hit the training hard, and if you are helping people get help with dizziness, don't forget to have them video their eyes if you can't capture what's going on with why they're having their dizziness.

- So Dr. Beltz has been so great, but it's really fun to see how fast he snaps out of that. And he really, actually, he came to me because he wanted to ride roller coasters with

his children and not throw up. So he came to me to train for that, and he was able to have no problem. And he talked about he could even do the spinning teacups at Disney World, so he was so excited to look great with his kids and still be able to participate with that. So special thanks to Dr. Andy Beltz for that. I wanna move on to, 'cause I have a new product that I kind of like to feature because it really is great at showing how, we've got another brand of product, and that's our new Rail System.

And we came to it, 'cause originally we have that fly option, but a lot of people, especially my aging population or Parkinson's or brain injuries, really didn't want that fly option. So we came up with this new product, we're calling it our Rail System. Let me quick screen share here. And we're so excited to show you this. So I have my favorite actress, which is my mom, on the gear. And so I'm just gonna just show her just stepping on. So really it's really easy gear to run, 'cause this now, she can hold on to something, you know, she can turn. It's got that wide base so that, you know, it won't tip while she if she does fall.

But with the hip harness, you feel really safe in our harnesses. They're nice and tight, and they feel very comfortable. And then with the nice part of this, it's just a plugin, so there's no ceiling mount, it is portable, the base does come off so you can move it easily in and out of different rooms. And I slide it on a yoga mat just back and forth, just to make it convenient for me. But our new Rail System is truly lovely, and I really like it for my older population and people that are fearful. So here is a sample of it moving. Hi, this is Sheila Thelen, Vestibular Training Services. So we're going counterclockwise, last try.

Here we go. So I'm just gonna start it up, speed it up. She can hold on until she feels comfortable, and then from there, she can crisscross her hands and cross that hand. So nice and balanced, nothing scary, no Tilt-A-Whirl. This is just a great system for my aging population. So much easier to, easy for me to run but feels really safe and not

overwhelming, like some of our other systems with the fly. So this is just a great new product that we came out with that makes it even easier for therapists and trainers and healthcare professionals to really be able to work this vestibular system in a really safe, gentle manner, nothing scary.

Great. Give me one more turn.

- [Sheila's Mother] Sure.

- Okay, I'll say 1 1/2. Here we go. So we'll do one more time around. Come back to me, and that's good. So really this whole project takes less than five minutes. So slowing down and stopping. Great, so feel your brain, feel your brain center. On top of that axis, balance, proprioception, we had that nice midline cross. All of this is gonna come together, and when we check her balance on the balance mat, we'll see how much she improved her balance. Great, so what I'm gonna do is I'm going to, in the background here, I'm gonna do two things at once. So we use a product, a balance mat from a company called BodiTraks. And so I'm gonna pull up her file.

Obviously, I have permission to share this, and I just wanna show you what happened to her balance as we did this. So I'm gonna screen share, and this is where we talk about our pre and post-test. So we do a pre and post-test of 10 seconds eyes open and 10 seconds eyes closed, which is gonna lead into my next section after this about ADHD and concussions. But I'm just gonna still focus still on this aging population and the changes we can see in her balance. So I'm gonna describe this balance mat and all of the work that they've done. It really is a nice way to show your clients, and it is part of the buy-in for them really understanding how this vestibular system really affects their daily lives and their reactionary time.

So once again, really looking at balance and cognitive in their reactionary time on the balance mat. So here comes the good old screen share, and here comes her results. So we're gonna start off with this is her pre-test. 10 seconds eyes open, and this is just her 10 seconds eyes open pre-test. So she starts out with a small head sway with only a 0.01 head sway. She's got 2.24 inches of foot movement in those 10 seconds. And her head is sitting back and to the right just a little bit. But I'm always worrisome when their balance is sitting backwards. I always think that's a horrible fall for my aging population. I'd really like their head, if it's gonna be moving, that it's forward, not backwards.

So like, but she sits backwards with her head, and the blue line is her balance kind of moving backwards. But the interesting part of the software too is it also shows reactionary time. So the red line is her heels-to-toes balance, and then the blue line is her left to right within her feet. So what it's really showing is her reactionary time to any of the movement. Now, she didn't have a lot of movement, so really, I feel like this is what I can see. So if you had a gait specialist looking at her, she'd look okay. You know what I mean? Like, these numbers are great. She looks quiet and balanced. Her head sits a little bit back, so when you looked at her, you'd notice that.

I feel like a good gait specialist would see that or a good PT. But what it's hard to see is their reactionary time, and she is 77 years old. So like, hopefully we can get this better. And a better score here would be these lines touching more. So the more these lines touch, the faster the reactionary time. So ultimately, I'm hoping to see these touch more post-test. So this is her pre-test, 10 second eyes open. She spun with me for a little less than five minutes, three sets of vestibular on the rail harness, and here comes her post-test. And it's significantly better. So in just five minutes of training, we dropped to that zero head sway, so her head's not moving.

So it wasn't moving much to begin with, but we now have a great score of zero. You can't do better than zero. Way less foot movement at only 1.36 inches. Her head is still back a little, but I guess we're just gonna have to keep practicing. I'd really like to see that come to center, and to come slightly forward would be better. And here's her reactionary time. So with her eyes open, you can see that she had a really, really great score here for, like, the first two seconds. But it's almost like she was so good, she felt like she didn't have to concentrate as hard. So she aces it the first two seconds, but she still does have a great score for the remaining 10 seconds, but the first two seconds are where I'm most excited.

So this is her pre-test and post-test eyes open. Here comes her pre-test eyes closed. Now, this is more of what I was expecting. So with her eyes closed, she's got a lot of head sway. So you can see the difference between eyes open and eyes closed. So pre-test eyes closed, 1.32 inches of foot movement, excuse me, 1.32 inches of head sway, 7.44 inches of foot movement, and you can see she's all over the place. But same thing, her head is way back. And I'll also note too, she's got one, two, three, four circles of this bullseye, you know, with her head way back. And here's the slower reactionary time. So she had a big sway there in the middle, but she didn't really react to that sway.

So where we'd want those to connect, she's got a space here. So this is the pre-test, eyes closed 10 seconds. Once again, she spins with me for five minutes, and here's the post-test. So a significant change, a huge drop in the head sway, a huge drop in the foot movement and her head is almost come to center. Like, she's, like, a centimeter off. Her balance still wants to sit back a little bit, but her head is far better placed, and she's dropped two circles for an exponential improvement of the bullseye. So we dropped two circles, we're down to only two instead of her original four, and her reactionary times changed dramatically. So we're thrilled with these results and a 77-year-old female in just five minutes of vestibular training.

So, so woo-hoo. So excited about that. So what I want a quick jump to is an example, and I'm the only person right now talking about, I'm gonna pull up a whole 'nother client here, with examples of, this is really interesting work, and I feel like I'm the only person talking about this. I wanna talk about concussion and ADHD, which sounds like they don't belong together because really, I feel like I'm the only person talking about this. So on the balance mat, how you should score is great, 10 seconds eyes open. And then from there, if you close your eyes, that should be a lesser score. And everyone's agreement on this with me, with all the PTs and OTs out there, that eyes open, 10 seconds, you score great, and with your eyes closed, it's a lesser score.

But my concussion people and my ADHD people score the same in an opposite score. They score terrible with their eyes open, and they score great with their eyes closed. And so the discussion really needs to be is that really there's getting too much information through their eyes, that they're overwhelmed by that and exhausted by it to the point that they don't process well through their eyes. So I wanna use this next example, oh my goodness, I'm seeing some questions and answers. Hold on, the question is, "Do you need MHRA approval?" And I don't know that I really know the answer on that, other than we do have gear in the UK. I have several units in the UK, and I don't believe any of the government approval was necessary 'cause they're using it all over the UK.

Especially in Manchester, England, I can connect you to one of our full units that's there. So connect me on LinkedIn, and I'll tell you where that is in Manchester, England. So they're using it already. And really, we do have sales worldwide, which is really exciting. So I'm gonna jump once more back to my screen share here, and I'm going to show you this client, okay? And at the very end, I'll tell you what he does for a living, which is fascinating. So of course, I have permission to share this. So here we go. So let's talk about ADHD and balance, which doesn't sound like something that

belongs together. So concussion and ADHD look the same. So he's gonna start out with a zero head sway, 10 seconds eyes open.

So if I just looked at his balance and his body, once again, as a gait specialist, he looks fine. He is only got 1.46 inches of foot movement. This looks great. But look at his head, like, completely heading outside the circle. My goodness, I joke that it's like he was completely tipped on his left side, an unusual score. So this is a terrible score, and this is a pretty okay score just in his balance. But look at his slow, slow reactionary time. So once again, his heels-to-toes on the red line, his left-to-right on the blue line, but it's very, very slow, and it's not interacting in his balance and in his reactionary time.

So here's where he starts, with his eyes open. And I wanna add too, I'm gonna quick show his pre-test eyes closed, and look at how great this is. So he scores significantly better with his eyes closed versus his eyes open. So once again, it's just too much processing. So he has a zero head sway, only a 1.09 foot movement. His head's in this center circle, he's dropped, like, five circles, you know, an exponential improvement, but look, he's got that faster reactionary time, compared to his eyes open. So I'm gonna jump back to, going back to his pre-test, eyes open. You can see this. Once again, slow reactionary time. He's gonna spin with me for less than five minutes, and here's his post-test.

We can correct this, and look at this phenomenal eyes open post-test. Once again, dropping five circles. He's about a centimeter off dead-center. Zero head sway, very little foot movement. And look at the difference in his reactionary time. Phenomenal, quick reaction. And we talk about, he paid pretty good attention. But at the four-second mark, he paid really good attention. And at the seven-second mark, he paid extraordinary attention and really reacted to the movement within his body, connecting his feet to his brain. So phenomenal score there. Same thing going back to

his pre-test with his eyes. Oh, excuse me, eyes closed, eyes closed, this is where we started. Looks great, okay. But post-test eyes closed, a significant change again, and look at this reactionary time.

So I'm even gonna argue, cognitively, he left with better balance with his eyes closed than when he arrived that day with his eyes open. And this is the extraordinary part of our entire project is I'm gonna tell you, for a living, this gentleman, he is a police officer here in the United States. So when we talk about real-life vestibular and how that vestibular system affects our lives, it's a great example of how we can train it. We can help people in a very easy, non-invasive way of using sports training tools. This is how we train a figure skater. But this is how we can train the general public too. I see a couple more questions here in the question.

"Is the changes temporary," okay, "and how long do they last?" It's an excellent question. Thank you so much. The results last about three days. So a lot of my clients come in two, three times a week. And I do have to say, it's enjoyable. There's a nice dopamine load, people enjoy doing it. In addition, it's the best night's sleep of their lives after having worked with me. And the results last about three days. The magic is, though, at the six to eight-week mark, it really sticks. And this is where I also hear from other people from other industries talk about that six to eight week window is really true for the PTs and the OTs.

And then from there, most people are then just given the option of, like, once a week, every other week, 'cause they are doing well with their vestibular. Although, I'll be honest, my clients still like coming in two, three times a week. They'll zip in, do their five minutes, and they'll zip out, and they really enjoy it. The biggest trick and the hardest part of the training is actually that the person running the gear is sensitive and really communicating with them. So really this is where I have clients that'll just do one turn, and that's where their abilities start, and then it's a slow buildup from there. You

can gamify it a little bit, which my clients all enjoy, that they do feel the improvement of they do get to speed up as they get better.

Although, I was recently at an event with Pro Motocross, and they had all the gear installed. And I walk in, and I'm like, "Show me how you're using it." And they had that dial cranked to 100, and people were flying off the gear everywhere. And I'm like, "What are you doing? No, no, no." So really, the hardest part of the training is teaching the trainer that they really have to be able to balance and hold it before they move up in speed. So really, it's a slow process of moving up. And I do have clients that do this seven days a week, but once again, five minutes, seven days a week. I'm also told that the Russian kids are doing this three times a day.

So the Russian sports training industry is really working those kids' vestibular systems, and they are doing it three times a day. My clients are just doing it once a day, and that's more at the athlete range. We are working with, here in the United States, our national football league, I have several athletes from the National Football League, the National Hockey League, Pro Motocross, PRO Rugby. It's been fascinating to follow that too. So I have been, I'm gonna quick jump, 'cause I'm also really, really close. I've worked with several military people here in the States, and I'm gonna just quick jump to one of my favorite clients who now flies Black Hawk helicopters. And when she talks about non-spatial disorientation and she talks about aviation, of course, I'm also thinking about my mom driving, sports, you know, football, soccer, you know, just really knowing where you're at and where your body is in the sports world, but also in addition to just daily living and curbs and things and cobblestones and not tripping, 'cause once again, that aging population, the big concern, of course, is falling.

So I'm gonna quick jump to, whoopie, we get out of that screen, here we go. Here comes, she flies Black Hawk helicopters, and she's one of our top aviation people here in the United States.

- So being a figure skater, it completely changed my life with aviation. The training I received through years of skating made me basically immune to spatial disorientation. They've put me through every test, every Barany chair, every spinny apparatus, the spatial disorientation pods, and I cannot get disoriented. I always know where my body is. I always have a sense of where the ground is, how to right myself, and also the mental clarity on how to stay calm, and that all came through skating. It all came through the years of spinning and coming out of a certain position, spinning with my head in different ways, and it's literally gonna save my life as a army aviator. And I feel like vestibular training could save the lives of all aviators because you can train spatial disorientation out of you.

You can learn to not get spatially disorientated. It is a learned, practiced skill that is possible.

- Which I find just fantastic, but she talks about this Barany chair, and I have to just show this video a couple of times 'cause I'm so entertained by it. We've had millions of hits on this video, and I just find it so entertaining. So here's this Barany chair that the military uses, and this boy, oh my goodness, he's has a terrible vestibular system. This boy's going to kill us all. I don't think he'll even fly cargo. And really, he's gonna get kicked out of the flight program. Where here is Megan, my same speaker earlier video, and this is slow for her. You've seen my fast videos. This is slow. This is nothing to her. She could go five times the speed.

And when they stop her, she has perfect balance, perfect vestibular. And this is what, I do a whole thing, I do, you wanna fly with Megan? Yes. Do you wanna fly with this young man? No. I am so entertained by this. Like, oh my goodness, this kid is terrible. And in the States, we had that movie "Top Gun," which I'm sure was international, but Tom Cruise Top Gun, that boy is never gonna be a top pilot. But, of course, Megan is,

and you can just see that she's just extraordinary with that vestibular system, to the point, everyone will appreciate this, she's actually, I was told, number one in the US military to the point she scored so high that the US military accused her of cheating, which we thought was great because, of course, women that score that high must have cheated.

So that's totally not true. So I see a couple more questions here. "The website looks like we can find pricing and order. How much do you charge? Is it a private pay? Any insurance pays?" Excellent question. You can order online, although do please contact us in advance. In short, in US dollars, basically, it's, like, \$13,000 for the rotating spinner with all of the harnesses and the fly option. And our Rail System is running basically 16,995 for the Rail System, and we can figure out shipping. And your other question about is it insurance billable, of course, I'm not sure in all of Europe, but in the States there is, I'm told, a vestibular training or a vestibular rehabilitation code that is usable within our insurance codes for physical therapists.

But my big news is we are actually connecting here in the United States with a huge physical workout company. So they're gonna be putting in a neuro lab with basically our product, NeuroTracker with the moving balls that you keep track of that is a fantastic product, highly, highly, highly recommend NeuroTracker, another company called Maverick, which is kinda like a dome with a bunch of BlazePods in it that you have to move around in front and in back of you to hit the different BlazePods, phenomenal product also, called the Maverick, I can connect you to also, and then the balance mat that we use all the time through BodiTraks. And the goal of this huge workout company is they're gonna put in, like, a neuro unit in their old racketball courts.

So the goal is that you can work out your body and your brain in the same location, and it's very exciting for us. So we'll be in 200 locations in the next six months, just

here in the United States through the physical workout company. Can't tell you yet, but watch LinkedIn when we announce the big question. Oh, and there's always so somebody cute. So hi, Hailey, thanks for tying in. It's so nice to see everybody. I do wanna add into just for the fun of it, for the math, 'cause they always, everybody, of course, needs an ROI, a return on investment. And I'm just gonna quick show what I charge here in the United States here. Oh, there we go.

There's my calculator. So in the United States, I only charge \$10 a time. It's five minutes, it's just 10 bucks. And I really do move through 50 athletes a day, so there's my \$500 a day. And in the States, 10 bucks is nothing. It's like 10 US dollars is like a hamburger and french fries and a pop. You know, so it's very inexpensive. But I pull in an extra \$500 a day just by adding this to the training programs. And even timesing it by six days a week is \$3,000 a week. Times a month is \$12,000. And once again, at only \$10, it's very, very inexpensive and really, a para can run the gear. I have eight-year-olds that run the gear. It's really is easy gear to run.

So really, in one month, much less two months, it's more than paid for itself. And that's really important in return on investment. In the same sense too, our goal is really just to talk about outcomes. And we're so excited about these outcomes because this is what we care about. And to the point, those of you that have met me, I'm obsessed. This is all I wanna talk about. My family is so sick of me because this is all I care about and all I wanna talk about. So we are doing so many projects, and I talk all the time about we move so easily through the sports world, although I still wanna work with Chelsea and Manchester United.

If anyone can connect me to those, I'd be very interested. But we also, the importance of this into the general public, especially for PTs and OTs, and once again, that one unit can help a thousand people, and that's what we care about. Our other projects here in the United States are really going into, even we're talking about some retail locations,

just to have a neuro opportunity for the general public that's really assessable. So this is a project, and I'm so excited to have got to be a part of this today. And I see there's more questions. "Would PTs and OTs be completing this when not audiologists?" I have a lot of people that are not audiologists doing this.

And the question from Lee is, "Does this help with concussion rehab?" And that is really exciting. I have so many videos on concussion. Okay, like, I think I have time. I'm just gonna quick jump to some of my concussion ones because you're asking this question. Okay, so, ooh, let me quick screen share this. So you're asking the question about concussions, and here is one of my favorite videos. This gentleman was hit by a postal truck on his motorcycle. And this is a 12-year old brain injury. He'd done two sets of just platter turns, but he'd seen the kids fly. So he wanted to do the fly option, just like the children. So here he is post-concussion, 12 years, and his right side has at least a 50% paralysis.

So he talks about it's the most fun he'd had in 12 years. His mom's crying in the background. It was just a lovely day in the training room, but here's the big move. He's gonna come down on his paralyzed side and not realize it. So it's the right side that's bad. Watch him come down on this right foot and he doesn't realize it 'cause I've centered his brain. So he's on his right foot, right foot, right foot, shifts to his left foot. And he doesn't even realize he's come down on that right foot. So let me just quick show his pre and post-test scores here. Same thing, only five minutes with me of vestibular training, post-concussion.

And this is really the work we're doing with the US military that's so exciting. He's gonna start out with the 0.02 head sway and drop down to zero. He's gonna start with a 5.72 inches of foot movement, drop down to 3.85. Three circles of the bullseye with his head moving outside the circle, and remember, the right side is the side with paralysis, so that score makes sense. But look at him coming back to center, bringing

this back into this inner center of the bullseye and dropping, once again, an entire circle. But I just wanna quick show his eyes closed post-concussion. So here's his pre-test, here's his post-test, here we go. Okay, so pre-test with his eyes closed 10 seconds, starts out with a 0.

12 head sway, and he drops to 0.01. Goes from 10 inches of foot movement down to 4.32. Goes from a zigzag, oh my goodness, I actually spotted him. I was so concerned he was gonna fall, even in the testing of his pre-test, and his post-test, look at that quiet down. But when we really looked at the data for post-concussion, huh, look at this, he actually scored better with his eyes closed post-test than, once, again when he showed up with his eyes open. And he talks about it was the most fun he'd had in years. So five minutes of vestibular really, really played a key role in even an old injury post-concussion. Recently, I've been contacted by several trauma specialists and also addiction specialists that are still also very interested in how this vestibular system plays into their clients.

And it's very exciting to see how they would want to apply it in their professions, so it's very exciting. So if you spin some, and I'm moving back to questions here. "If you spin someone to the left, it seems to be more common in your videos. Have you tested those patients that are right or left after the course treatment?" Okay, it's really interested you ask that, Simon. So most people present with a right-ear dominance. So we talk about testing your eyes, so, like, when you center the picture and you close your eyes and which eye dominant are you? But we talk about ear dominance. And how you test it is you just lean in, I have a secret, lean in, and which ear do you lean in with?

So for me it's right. And the fascinating part is a lot of my children that I work with, I do work with children with autism, and I do work with a lot of four, five, six, seven, eight-year-olds. And of those children, especially my ones that are in reading

programs, ADHD, dyslexic, you know, kids that are really already struggling academic, most of them will lean in with their left ear. So I find that really interesting. So what we did with those kids, and to be honest, almost all my kids is sport-specific, in figure skating, we want them to rotate counterclockwise, which is really putting that right ear as their dominant balance in the flight of the rotation.

So as a test, we tested all these kids, we threw everybody counterclockwise to see if we could get them to balance better and to improve their academic scores in getting that right ear balance. And I really have some really fascinating data on that. I would say 80% of my children that we moved the dominance to their right ear are now no longer in reading programs. I have several that were struggling students that are now number one in their class within a year and a half of really working with us. So really exciting data at looking at this counterclockwise. And the question's exactly, "What is it called in the name of the website?" Thank you, Tanya. I'm gonna put it right here in the chat.

The easiest one is spinyourbrain.com. And I'm gonna say too, I put my LinkedIn in the chat, and I really, really do a lot on LinkedIn. I really have connected a lot on LinkedIn, and I really invite people to connect with me on LinkedIn. And if I talk any faster, I might sound like a squirrel. So I'm gonna try and cut myself off here because I can still show you another a hundred videos and control myself here. But this has been an amazing opportunity, and I can't thank Anna and Dr. Armato and Dr. Dasgupta who's been so good to me over the years and really supportive of these projects. In addition, we also have our own chief medical officer, Dr.

Daniel O'Brien, available to people. And we also, through the University of Minnesota here in the United States, we also have Dr. Erica Olson, who is handling all of our academic research. So we have multiple, multiple projects in process right now, but I also invite you, and our project should be publishing in the next six months, year, we

got a ton of papers out there. But I also invite you to look at the 49,000 other papers that have already been published on vestibular. Just go to pubmed.gov. 49,000 papers have already been published on vestibular and all of the processes within vestibular. So I invite you to go read those papers. We feel like with 49,000 papers written on the vestibular system, we're just moving forward.

But we do invite you, if you wanna write some academic papers with us, we would enjoy that also. We are in the process of also teaming up with the US military in multiple academic research projects. So it's tough, it's chaos. It's chaos within our company working with the US military, and we're so honored to do it. So I've got the website in there. I think I've answered everyone's questions, but I also invite you to still connect with me on LinkedIn, to ask more questions. I'm happy to do Zoom meetings and conferences and events. We do love to travel, and we have an entire staff available to you also. But this is an easy way for you to really apply an intervention that is enjoyable and not difficult for people.

You know, like, it really is enjoyable, and it's not scary, and it's not a Tilt-A-Whirl, although for those that want to Tilt-A-Whirl, we got you too. So I wanna thank Anna again, and if there's any more questions, please contact me. And Inventis, thank you so much. These are just amazing opportunities, and thank you all for joining me.

- I'm here again, so. Thank you so much, Sheila. Thank you very much. And I sincerely hope that all of you enjoyed this fantastic learning opportunity. In my opinion, Sheila's work is so fascinating, and I would say almost unique. Sheila is always full of energy and enthusiasm, and it's always a pleasure to listen to her. Thank you, Sheila, one more time. So you will receive a survey that I kindly ask to complete. Your insights and suggestions are very important. Additionally, we hope that Sheila might consider joining us for our upcoming events. And it would be an honor for Inventis to once again

host Sheila Thelen as a speaker. So the session has concluded, but Inventis Academia's journey continues.

Mark on your calendar for October 24th when we'll have Dr. Vishal Pawar leading the seminar "Navigating Vertigo: Insights from Dubai." So please keep a close watch on Inventis social media channels and register for the future events organized by Inventis Academia. Thank you, and bye for now. Bye, Sheila.