

Episode 13: The benefits of Tai Chi for those with neurological injuries, with Dr Giles Yeates, neuropsychologist and Tai Chi instructor

Shabnam 0:05

Welcome to the Psychology of Case Management podcast: the show that helps you use psychological ideas to strengthen your relationship with your catastrophically injured clients and their professional networks, so you can achieve more for your clients and feel more fulfilled in your role.

0:20

Hello, and welcome to today's podcast! My name is Shabnam Berry-Khan and I am talking today about... exercise, I suppose, but not exercise in the running/jogging sense. No, no, that's not for me. That may well be for you, but I'm thinking more around the idea of exercise for the mind, I suppose. You've probably heard of meditation, and if you've listened to our podcast before you will certainly have heard of the term mindfulness. And those kinds of ideas are really linked to cognitive functioning, neurological pathways... and as someone who's had an interest and a background in martial arts before, I'm interested in understanding the science behind it a little bit, and the neuropsychological and wellbeing benefits. So today we have Dr Giles Yeates, clinical neuropsychologist from Rippling Minds, talking to us about Tai Chi, which is an interest of his which he's brought into his professional work. So welcome, Dr Yeates.

Giles 1:33

Thank you, Shabnam. Thank you for having me. I'm really excited to be here today and to discuss quite an unusual approach to supporting survivors of brain injury.

Shabnam 1:45

Yeah, absolutely. Well, that's it. It's something that sounds like a regular idea of exercise, which is something that everyone knows and can do. But this feels like it has a different kind of impact and relevance for our brain injury clients. But before we get into all of that, I'm just curious, as always – as you know – interested in people's journeys to the topic that we're talking about. And I'm just curious: Tai Chi, where does that come from? You're a clinical neuropsychologist... or are you?

Giles 2:22

Well, yeah, it's interesting. So it starts off in a very different part of my life, so doing my professional life I'm a clinical neuropsychologist and my hobbies... like you, I was always interested in martial arts. And in my 20s, I did a lot of taekwondo, I always used to like to kick stuff. And then, in my late 20s, actually, just a couple of years after I qualified as a psychologist, I had a break from working as a psychologist. I took a year off and my wife and I, we went around the world for a year: we wanted to do different bits and bobs and things we never did: very different experiences. So we spent a bit of time in India; we did quite a lot of yoga. And then in China we went to different monasteries, where the monks do Kung Fu, and Tai Chi.

Shabnam 3:27

Oh, wow, very cool!

Giles 3:29

Yeah, and one particular one called Wudang Mountain, and people may have heard of the Wu-Tang Clan. They're called after this monastic order of... the closest you could ever get to the Jedi from Star Wars would be this, where the monks and nuns do kung fu and Tai Chi and wield swords as part of their devotion to something bigger than themselves. They were made famous in the movie *Crouching Tiger, Hidden Dragon*.

Shabnam 4:02

Yes, it's beautiful, actually. It's a very beautiful style, almost ballet-esque.

Giles 4:08

Yes, exactly. It is. And it's really the 'art' aspect of martial arts. So I went there and it just had a profound impact on me, that particular community, and that very particular style of martial arts. And then when I got back, back into work, and then started having a family and things, that particular place didn't go away, and I continued to practise martial arts, get into Kung Fu. And then Tai Chi. But then in 2012, I really luckily had a chance to go back to China. And I actually went and started training with one of the monks there as my master and developed a relationship as his disciple ever since, and also have sought out other teachers of the same style. So I then trained to be a Kung Fu and Tai Chi instructor, which I do with the general population in the evenings. And they've been... that had been completely different and separate to my clinical psychology life, until one day I just came across a research paper on Tai Chi for stroke and brain injury rehabilitation, and I thought "Ooh, I didn't realize there were people looking at that." I started reading it and I thought: these researchers have missed the whole point of what this stuff is supposed to do. Tai Chi is described as a physical, a physiotherapy intervention; the focus is on its improving balance and strength and coordination – which it does. But if you speak to any practitioner of internal martial arts like Tai Chi and related disciplines, there's a core psychological and emotional experience that's *core* to this. And I suppose, for everyone else that would be the idea of kind of 'being in the flow': you or many other people may have might have a hobby or something where you just lose yourself in an activity, and you forget who you are, and you're just immersed in this. And then you kind of come to it from a future point of time. And it's very pleasurable being adrift in this sea of something bigger than yourself. And for Tai Chi and for the Daoist monks and nuns, this is prayer; this is communing with the divine, with the universal; it's bigger than yourself.

Shabnam 6:45

It's quite spiritual...

Giles 6:48

Oh, completely. So I read the paper, and thought no, this is completely missing it. And I read some more and it's the same thing. Like, there are no... these are researchers seeing Tai Chi from the outside. And it's only from physiotherapy and nursing research backgrounds, and no-one's taking the reader on a journey inwards. And then I thought, well, aside from me just getting a cushy ride to do more Tai Chi in my life, even in work time, would actually there be a value to it? And I got thinking about my own emotional journeys and my training and Wudang Mountain, and they've been very profound emotional moments, there's been some trauma reprocessing, there's been some healing, there's been some corrective experiences, all while being sweaty and working really hard with a master, you know? So I started then, at that point, developing my ideas about what Tai Chi may have to offer, what martial arts may have to offer, what yoga may have to offer survivors of brain injury.

Shabnam 8:02

Hmm, so how does that marry with traditional science and what we know about the brain, and what happens in brain injury, and what happens when we meditate, when we're mindful? Can you tell us a little bit about the connection of all of those?

Giles 8:22

Yeah, I can! Because more recently, what I also do is I'm an academic a day a week, and we're developing, we're just putting together a neuroscience study of Tai Chi. So, as soon as we're able, we're going to go, I'm going to go back out to China (see how I've done this), go back out to China, choose a monk, and I'm going to record their neural activity as they do Tai Chi, using a portable approach called ASMO. So I've been thinking about this. And it's been a big thing in neuroscience since the '90s to look at the brain in deep meditation, and what that looks like and what happens there. And they started doing that with Tibetan monks – Tibetan Buddhist monks and deep meditators, and it's been extended a little bit to other approaches: to yoga, tai chi as well. So to summarize it, briefly, is when you can do one of these practices and you've done it a lot, when it's not new to you, your frontal lobe goes quiet. It shuts down. And so what's shutting down there – this is in the process of the meditative practice itself – what shuts down there is all the self-referential chatter and dialogue and analytical thinking, and anticipatory forward-focusing thinking that fills up our mind. The Chinese call this our 'monkey mind', by the way: this rampaging monkey that's just sending you here and hither and thither and taking away from just being in the moment.

Shabnam 10:17

I can visualize that. That's a good way to think about it. OK!

Giles 10:22

...and not just being immersed in the sensory experience of tasting something, or looking at the intricate details of a flower, or being in the flow of a movement practice, or in the breath, you know? And that's a hard place: that requires practice and effort to get to that. So, nonetheless, this is what seems to happen to people; this is how these brains appear when studied. And a side-effect of that is that when these groups of expert meditators, or Yogis or Tai Chi practitioners, do have superior attentional and executive skills when tested. So there are cognitive gains from it. That's when you compare these groups from past stats, after the fact, but when you actually are able to record people in these states, it's a shutdown. And forgive me for getting kind of too into the spiritual texts of these, but one of the key Daoist texts, the key *Dao De Jing*, where it comes from, has a number of important sayings, and one of them includes the value of the wheel is the space in between the spokes and the rim: the gap in between. And the value of a cup is the *space* in the container. And for me, if the brain shuts down, it lets the universe in: we're unimpeded by our own chatter and thoughts.

Shabnam 12:09

Yeah, distracted, almost.

Giles 12:11

Exactly. And that's the kind of idea the Daoists use: that suffering comes from... you're like a surfer, you want to be on that wave. And we're our own worst enemies of missing that wave and getting on things... of not being on that wave of the universe proceeding from itself. And clinically, it's amazing: I say with survivors of brain injury, you know, around them, the mind is... they say things like "I'm not as fast as I once was; everything is coming at me too much; I need to speed up." And I said: "I don't know how to help you with that, but I can help you slow down even more, to engage with things more deeply." So I'm a slowing-

down consultant: I slow things down. It's like when you press 'pause' on a movie, or slow things down, you can see all the details of that screenshot. That's what this stuff does, I think.

Shabnam 13:09

Yeah. And how is that, then, for someone who has experienced a brain injury? How would that apply to them, in terms of their everyday... in terms of the rehabilitation package, if you like?

Giles 13:20

Well, people come in to us through different routes. Some people refer survivors to me, or the Tai Chi-informed work, because someone thinks that someone needs to see a psychologist, but they don't want to see a psychologist. They don't want to sit down and talk about their feelings in a classic therapy setup. What they want to do is have more physio, or work on the physical restrictions. They also need to have that work on adjustment and acceptance and identity change and all of that. So we go OK, let's play! Let's go and work on your arm or your leg. But from a Tai Chi approach, you're using movements to get into a state of mind rather than focusing on the outcome. And by doing so, and reflecting on what comes up, you end up in a psychotherapy conversation anyway. And that's where I've found, for me, the most profound moments of my life have been training in martial arts. And so that's one aspect: that kind of getting into a process of psychological change, through working on things physically. Not in a goal-orientated way, but for the sake of the movement, getting into a pleasurable state of wellbeing themselves. And then physios often say they're trying to work on phys intervention, and there's some kind of psychological barrier to that, or there's something getting in the way of phys intervention. So it might be about bringing a psychological aspect to inform bodily-based Mind/Body work: that's another aspect. And then there's the social aspect, which is really key. And we've done some research and evaluating of Tai Chi, and people who do martial arts, you have a community of whatever it is – the Kung Fu, karate, whatever – you all get put in this space, and do this really difficult challenging stuff together. And you create a bond with your fellow martial artist brothers and sisters in doing that. And, again, that kind of social isolation that many survivors struggle with, the fact that people don't participate in leisure and adventure in the community, even though it's been shown... a group of researchers have shown that post-injury identity reconstruction really benefits from re-engaging with social group leisure activities, and there's a huge barrier to that. So if you get into a kind of Tai Chi group with other people, that state of *flow* is something that can be experienced for everyone. I think there's different levels. First, it's if you're kind of fragmented and in pieces as a brain injury survivor, a core image would be: OK, you can't stick those pieces back together, but if there were like individual leaves floating on the stream, they would all be moved in the same way by the eddies and currents of the stream. So they'd be in pieces, but held together by something bigger than themselves. So that could be the breath and the sequence of movements could hold you together during that practice. And even more, doing that practice with other people, you're then moving like a shoal of fish, or a murmuration of starlings. You're all moving in something bigger than yourself. And finally, for those who have faith or views that are of a spiritual nature, there is an invitation to transcendence here and to really be part of something bigger than yourself, if that's congruent with how you think. There's an invitation there to a kind of spirituality in supporting someone in their post-injury journey as well.

Shabnam 17:16

Yeah, no, I can see that. God, there's so much application for it. Do you really get funding for this, from a litigation perspective? Or is this something that kind of comes out in different ways, or is available to clients in different ways?

Giles 17:31

It's difficult to... so, some of the one-to-one work I do with survivors is funded, and case managers have sought me out because they've heard about this weird psychologist that does martial arts sort of work, and

they know that their client will not sit down and talk. But often I've worked with survivors who've been either dancers or boxers in their lives before their injury, and want to get back into working on a body-led approach, but need the psychology input. So that would be one common referral to me, for that. But then, alongside that I do a lot of publicly-funded, charity-based funded work for people who aren't in receipt of medico-legal compensation: I do a lot of work with [Different Strokes](#). And they had COVID-led funding to run an online Tai Chi session for stroke survivors. So I do that from the [Different Strokes Facebook](#) and [YouTube](#) pages: every Monday there's a half-an-hour Tai Chi session. We've done 36 sessions so far. They're all recorded, they're all free. And it's for stroke survivors, but it applies to brain injury survivors. And we do Tai Chi movements that are adapted for hemiplegia or wheelchair use, and people can just check it out and flow along, and see which option works for them, and it's all free to access. And we're evaluating that as a research study as well. I've had previous grants, and I've just done this pilot of these groups in the NHS as well.

Shabnam 19:23

Yeah, amazing. Blimey! I'm very impressed, I really am. And, yeah, just what a great way to marry up a personal development tool – a passion, almost – with your clinical work! I mean, to me, that is the ultimate definition, almost, of self-care: thinking about the different kind of purposes and needs and meanings in our lives and trying to bring them together. But that brings me actually on to the very important topic of self-care. And of course we often focus on things that our clients need, ideas that are going to be very beneficial for them, but this has real application in self-care! It's not necessarily something that we need to be thinking about, potentially, for our clients only: we should maybe think a little bit about ourselves in this? There's a role for personal injury professionals – anyone really – to take advantage of the benefits of meditation-type approaches, possibly Tai Chi and similar, for our own sense of 'peace', I suppose, for want of a better word.

Giles 20:35

Yeah, I agree, totally. I think a lot of clinicians and helping professions are skewed towards self-neglectors, right? I think we do amazing, daily self-sacrifices to support people in need, and we neglect ourselves. And we're hypocrites, in a way, aren't we, for doing that? Because really the conversations that we have with our clients apply to ourselves. And if we neglect ourselves too much, then we will stop being able to help other people as well. And I think also we are in our heads too much, and that's not balanced: we need to get into our bodies. When I was working full-time in the NHS, I just would have the most horrendous weeks and be totally exhausted. I made sure that I would always go to my yoga class. It was always Thursdays: I did a yoga class as a punter, and then I would teach the martial arts, after. As soon as I got to that yoga class after work, I literally would get there, put my mat out, lie down and just breathe out. And it's like being in a hug. And I'm getting emotional thinking about it now, actually. It's like being held after you could have done that for everyone else. And then you're good. You're good to go. And you can do it again. And what I've done, I've been lucky enough in the last year, is to bring more of that into my life and do more of that. And I feel in turn that I have more energy and capacity to do that for other people as a result. I think, yeah, definitely... Last year, I did do an online Tai Chi session – for a case management company, actually, for their staff. Right at the outbreak of COVID when everyone was isolating. So about this time last year... We did that, and I know that some of those people continued to access the stroke sessions that I've been talking about, so they can keep doing the work. And some people sought out local Tai Chi or yoga classes, just to get that in their life so that they have that care and compassion and resilience to carry on doing their jobs day after day.

Shabnam 23:03

I think you said it before, but it's all about trying to – and I say this often as well – it's all about trying to play the long game, really. Because ultimately, that's good for us but it's also good for our clients: we're not going to experience burnout quite as quickly, or perhaps not at all, even, if we just looked after ourselves a

little bit. And that means that we can tend to our clients' needs in the way that our clients need them as well, without neglecting ourselves, and tending to ourselves in the way that we need it without neglecting our clients' and professional needs. And it's a real win-win. But it's such a massive, massive mindset shift that is required, I think, because I think we *are* in our heads an awful lot. And it's – I mean, obviously at the moment with COVID, etc. – I can see that it's very hard. But I can also see how much more beneficial it would be, as well, to just – as you say – slow down and be able to attend to what is needed, because actually, weirdly enough, you can attend to so much more when you do that. And what did you say earlier... calming down the chattering monkeys? I really like that. That really works for me.

Giles 24:15

Actually it is very topical because there have been RCTs of Tai Chi and Qi Gong which is a related practice, like a Chinese kind of yoga practice, for sufferers of long COVID, and the very first cohort of COVID patients in Wuhan were rehabilitated through the use of these practices. So those, you know, from a long COVID perspective that there are a lot of fatigued, depleted people out there, more than ever. And, COVID aside, in brain injury and other neurologic conditions, fatigue management is obviously a central dimension of need and focus, and the approach to that up to now has only been reducing and conserving energy through reduced activity, and/or trying pharmacological approaches that have lots of nasty side-effects. And there hasn't been a third option of: How do you put more energy in the pot to use it? But these approaches – in China it's called Qi, in India it's called prana – these are energy technologies. And when you look at the RCTs of mindfulness, meditation, of yoga, of Tai Chi, the key outcome that is consistent across these studies is reduction in fatigue. And so there is a real kind of potential where there's something about regulated breathing, linked with a focused attention and stretching, does seem to put energy back in the pot for many people and I think we need that, as professionals too, you know?

Shabnam 26:05

Definitely. Oh, gosh, yes, absolutely. I'm right there with you. So this is quite a new idea... I mean, in many ways, it's really *not* a new idea! But let's go with the original idea, that it's something that is new to our audience who are listening, and they're thinking, gosh, this could actually potentially be quite relevant and useful for a client I have with a brain injury. What would you say to them to go with that, what's the first couple of steps perhaps, that you would recommend them to do to introduce this idea of neuroflow to their clients?

Giles 26:51

It's an interesting one, because I think the challenge here is that any kind of new activity for physical activity, as traditionally offered in a class, out in the community, has been something that has lots of barriers for survivor of brain injury to access: in terms of getting there, in terms of learning from unadapted forms of teaching and tuition, or dealing with the physical environment, the social environment... everything was often stacked up against them. So people might try a Tai Chi class in the community, and find out it just doesn't work for them. And equally, you might have a Tai Chi or a yoga instructor who doesn't know enough about brain injury to know how to think about adapting. So it might be common for a Tai Chi or Yoga instructor to say, "Oh, if I just demonstrate, they can just watch me and do it," without knowing anything about something like dyspraxia, for example, where you can't match what you see to your own body movements. So it's not a quick process. But I have worked with people where people have found a good partnership between, say, someone's package, a physiotherapist and/or an OT, and they've brought in a Tai Chi instructor, a yoga instructor, and started doing sessions together and work it up, and get a kind of bespoke approach to things. So I think forming connections with people, and – with anything, for any of us, actually – we might go to three different instructors and really like one and not the others, and you have a bit of trial and error to find the right person. But actually try to see... have an interest, you know, have an interest in bringing us in. I'm working with someone right now, where movement is really difficult for them. And they've got really jaded with their kind of physio, but their physio is bringing in a

kickboxer trainer, just to spice it up. And this person will be doing kicks on their back, because they can't mobilize, but they're going to be work... they're going to get into a full-on kickboxing training, and they're really excited about it. And that continues that journey around functional movement, and the psychological gains of exercise. And so I think, just thinking creatively about... some of these Mind/Body approaches, martial arts practices have something to offer, but they need to be in dialogue with the newer rehab angle, that's one thing. But actually then, because of COVID: COVID has often closed down lots of opportunities, but a lot of things have sprung up online, and so you can access, for free, videos of people like me doing a Tai Chi lesson. And people can bung it on and see what it's like for them. Now that often has additional challenges. So watching me on a video recording may do nothing for someone, but it would really work for them face-to-face. But it might give them enough of a taster to say I want to see if I can get that face-to-face in the future. So it's more accessible, but has its own challenges whether you're doing it virtually, or face-to-face, but I think it always benefits from a rehab brain injury, specialist angle in dialogue with an instructor of a mind/body practice, and working up something, and being flexible and creative. Because the research has shown that you do need to adapt how this stuff is taught and practised. And to get into that optimal state of flow that we've been talking about.

Shabnam 30:58

Yeah, that's brilliant. Because I think sometimes getting started is the hard bit. And you're right, it does need to be adapted, even at the point of introducing an idea, and being able to understand how that's going to be received, and whether it is going to be well received, by nature of just how it's been introduced. So yeah, that's really helpful stuff. To bring this discussion to a close: *main themes*, would you say, for our audience to take away with them, in terms of the science and the exercise elements of it: mind, practice and impact. What would you want our audience to take home with them, having heard today's session?

Giles 31:47

I think that may be in supporting someone's development going forward and in their psychological/mental wellbeing, maybe something that you haven't considered is the value of slowing down even more, and quieting the mind. And linking the body and mind in a way that's not focused on the goal, but for the sake of getting into that state. And when you look at it, and when it's been researched, the evidence backs up that both physical functioning gains, psychological gains, reduction in anxiety and depression... There's been big RCTs on Tai Chi for certain neurological groups and meta-analyses of it for stroke and Parkinson's, and smaller studies in TBI (traumatic brain injury) as well. But it is showing that you get these gains in balance, mobility, reduction in falls, strength, reduction in anxiety and depression, quality of life... but I think this elusive fatigue is a really interesting story: that it might be an additional option for fatigue management and energy proliferation. I look at this and see if it could be an additional element in the toolkit for managing fatigue for people with neurological conditions. And potentially a social opportunity, potentially an avenue of spiritual support for those who would want that, as well.

Shabnam 33:29

Yeah, amazing. And the self-care element, of course, from a professional perspective! I'll just bang on about that a bit more.

Giles 33:39

Ineed. Exactly. All the people listening: why are you listening to us now, on a podcast? Stop what you're doing, get into your body! Go and do a Tai Chi or a yoga session online, stop listening to us!

Shabnam 33:51

Well, after the episode, of course! But no, exactly. And it's okay to want to do that, really. And this is an excellent way to... you know what I like about it? It's almost disguised: it's like I'm doing physical exercise, but if I can allow my mind to move into that more meditative state and to see the benefits that way, it's the ultimate self-care, isn't it, really?

Giles 34:21

I won't argue with that.

Shabnam

Well, Dr Giles 'Slowing Down Doctor' Yeates, as I'm now going to call you, thank you so much for your time, yet again, and for joining us on the *Psychology of Case Management* podcast, and sharing your wisdom and your – I suppose, for want of a better word – diverse background, and how it's coming together in what is effectively a very neat little package. So I appreciate that. Before we go, though, remind me: I know I introduced you as Rippling Minds, but technically that's separate, is it not, to the work we talked about?

Giles 34:58

That's my conventional psychology...

Shabnam 35:02

That's your mainstream psychology name!

Giles 35:04

Yeah, if you're interested in the Tai Chi work specifically, it's neuro-flowgroup.com. But if you put in 'Giles Yeates Tai Chi' you'll find it all on search engines of your choice.

Shabnam 35:19

Well, I'll put all the details, as always, in our shownotes for our audience to peruse at their leisure, and to think about for their clients, potentially, and of course themselves. Thank you so much. And thank you everyone for listening in on yet another interesting episode. We'll see you next time. Take care for now.

35:44

Before you go: if you enjoyed the episode today, I'd really appreciate it if you could rate it on whatever platform you're listening on, and share and like on your social media profiles. Word of mouth is the best way for us to grow and to be a continuous resource for all. And if there's any topic you wish for us to cover, please drop us a line on our website. Thank you so much for all your support.

Guest: [Dr Giles Yeates](#), neuropsychologist/Tai Chi instructor at [NeuroFlow Group](#)

Presenter: [Dr Shabnam Berry-Khan](#), Director of PsychWorks Associates

Editor: [Emily Crosby Media](#)

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