

How Neurofeedback Can Take Recovery To The Next Level - Louloua Smadi & Dr Lynette Louise

Louloua Smadi is the author of the book from client to clinician a book about neurofeedback and her experience with how neurofeedback improved the lives of all the members in her family.

Socials:

[instagram.com/louloua.seh/](https://www.instagram.com/louloua.seh/)
clienttoclinician.com/

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Transcription:

Bill 0:00

But there's an emotional recovery, there's a mental recovery, and a physical recovery. So you take a little bit of this and a little bit of that. And when I say I'm fully healed, I've done a lot of emotional work.

Bill 0:11

I've recovered in that space, more than the physical space and the space that I've

recovered in more the emotional side is what has allowed me to take my stroke recovery to the point of saying, I'm fully healed even though I'm living with these things.

Bill 0:25

I've come to terms with the possibility that I might die tomorrow, I've come to terms with the possibility that my dad wasn't actually terrible when I was a kid when he stopped me from doing something I shouldn't be doing, that he did the best he could with the resources he had available to him at the time, you know.

Bill 0:42

So I've done a lot of that work, and dealing with the challenges that stroke creates. For me today, I'm not dealing with all the other unresolved challenges that I had in the past as well as my stroke recovery.

Intro 0:58

This is the recovery after stroke podcast, with Bill Gasiamis, helping you navigate recovery after stroke.

Bill 1:11

Hello, and welcome to recovery after stroke, a podcast full of answers, advice, and practical tools for stroke survivors to help you take back your life after a stroke and build a stronger future.

Bill 1:23

I'm your host that three-time stroke survivor Bill Gasiamis. After my own life was turned upside down, and I went from being an active father to being stuck in hospital I knew if I wanted to get back to the life I loved before My recovery was up to me.

Bill 1:39

After years of researching and discovering. I learned how to heal my brain and rebuild a healthier and happier life than I ever dreamed possible. And now I've made it my mission to empower other stroke survivors like you to recover faster, achieve your goals and take back the freedom you deserve.

Bill 1:58

If you enjoyed this episode and want more resources, accessible training and hands-on support, check out my recovery after stroke membership community.

Created for stroke survivors, this is your clear pathway to transform your symptoms, reduce your anxiety and navigate your journey to recovery with confidence.

Introduction



Bill 2:17

Head to recoveryafterstroke.com To find out more after this podcast. But for now, let's dive right into today's episode. This is Episode 147. And my guests today are Louloua Smadi and Dr. Lynette Louise, who are both working to support people that have neurological conditions to thrive and move beyond the diagnosis with neurofeedback.

Bill 2:44

Louloua is also the author of the book *From Client To Clinician*, but for right now let's dive right in to the show. Lynette Louise, aka The Brain Broad and Louloua Smadi. Welcome to the podcast.

Louloua and Lynette 3:02

Thank you for having us.

Bill 3:04

Well, this is a really cool opportunity to connect with some people who have had done a lot of work in the space of neurorehabilitation and supporting people with all sorts of different brain we'll call them disorders.

Bill 3:21

And what I want to understand is the kind of work that you do and how that helps people. Now, I'll give you a context. Before the conversation starts. The context is that I've had a stroke, three brain hemorrhages, brain surgery, I had to learn how to walk again, use my left arm again.

Bill 3:40

And what's interesting is that I think I feel like and I talk about the fact that I've made a full recovery. But what that means for me is different for everybody else. And when I say I've made a full recovery, that means I live every day with left side numbness, sensory neuron issues, and fatigue some days, and overwhelm and all those issues in the head.

Bill 4:06

And a lot of the people that I speak to they can't connect the dots when I say I've made a full recovery and then they hear me talk about my symptoms. They go that's not possible. So Lynette, can I start by speaking with you about the kind of work that you do briefly? And how would you respond to what I said about my recovery?

Lynette 4:30

Well, first thing I would say is you never think in the same brain twice whether you had a stroke or not. You're always changing whether you're degenerating or you're progressing and your brain's healing whether you know, we're always adjusting we have traumas, we have things that happen to us.

Lynette 4:47

We have pandemics we have you know we have stuff and so would someone emerging from this lockdown time then say they're few I'm all way back to where I was, or would they say I'm someone new. And yet, I'm free again and healed again from this sort of locked down state.

Lynette 5:11

That's true inside your brain to. So you can have a stroke, and go through a process of healing, and hit a place where you say, you know what, this is the new me. And this is a healed me. So I had a stroke, and my stroke was on the right side. And it gave me you know, vertigo, and all kinds of symptoms and issues, not as severe as yours, you had more than me, you are the winner.

Bill 5:43

I aim to please, and I aim to outdo everybody else's stroke.

Lynette 5:49

But I don't have those major symptoms anymore. And I'll tell you about, you know, the work I do in a second. But the important piece here is, that doesn't mean I'm not different. I'm different as a result of having had the experience of the learning that I got from it.

Lynette 6:08

I'm different as the neural therapist when I go to someone's home, and they're struggling, and I listen to them. So we're always changed by whatever happens to us. So we're always changed by what happens to us. But I like what you said, you can be fully healed and still have remnants of difference.

Lynette 6:27

Now, on the traditional sense of fully healed, you're not right, you still have symptoms. But I'm sorry, I agree with you. I think that a person has to reach a point in their life where they put behind them whatever's come and take on the new them, and do that with some kind of passion, and move forward and call that done.

Dr. Lynette Louise

Lynette 6:52

So what do I do? As a professional, I'm Dr. Lynette Louise. I'm called the brain broad because we travel all over the world and I'm a little tough sometimes. So I'm abroad. I'm a broad while I'm abroad.

Lynette 7:05

And I work primarily with neurofeedback, I work with families as a general rule, I like to heal whole networks of people as opposed to try to help one person who then is having to interact with others. And I'm gonna let Louloua, because I'm actually at work, and I'm sneaking away on a break to talk to you.

Lynette 7:31

So I'm gonna let Lulu do all the neurofeedback talk to you. She's just written a book. It's really awesome. She'll tell you all about it. But I'm gonna tell you a little about stroke and neurofeedback just from my own experience.

Lynette 7:43

So I could talk about me, but I prefer to talk about a client who is much more impacted by the stroke that he had. And it's a good example. So, stroke has sort of an S curve of healing, when you first have a stroke, you have like this big swooping healing period, first you get hit by it, and then you swoop and heal, it's pretty fast and pretty dramatic.

Lynette 8:07

And then it slows and it seems to plateau. And you think that nothing's getting better. And the world's got some pretty good, not the whole world. But you know, US for example, has a lot of really good support systems and responses to stroke. So they're helping you in this part.

Lynette 8:26

And then you kind of plateau. And they're saying, I don't know, maybe you hit that point, but let's give it another try. And, you know, try to keep it going in whatever you're doing, whether it's occupational therapy, or whatever, speech therapy, whatever.

Lynette 8:39

Because I mean, depending on where your stroke is, you can have all kinds of symptoms, right. So now it does another little swoop, and you get this little bump of healing again, I don't come into the picture, usually, till you hit that point till you're finished with those two, because I'm just going to take all the credit for what nature was going to do anyway, and what all of the medical professionals are set up to do for us anyway.

Lynette 9:05

So let them do their job, do the traditional mainstream stuff. And then when you hit this plateau after those two big swoops, as long as you don't have another brain hemorrhage or something else to show off.

Lynette 9:20

Then you go okay, how do I get more out of this? Where can I turn to get a real big change and keep this healing going and not be told that's all you get? And that's where you want to talk about neurofeedback and some other neuro therapies they use but I primarily use neurofeedback for this and behavioral training. And as I said, I'm gonna let Louloua do that I'm talking a little fast

because I'm on limited time. And I wanted to make sure you had a sense of that.

Bill 9:51

That's fine. I'll definitely get a lot out of Louloua about that. So before we do that, I want to ask you about that. bump those bumps that you spoke about those curves, that you spoke about recovery, because a lot of stroke survivors will experience that recovery, they'll get excited.

Bill 10:09

And then they'll get down in the dumps when the supposed plateau happens, or somebody says to them, you're plateaued, or some, well, meaning doctor or nurse says, that's about all you can hope to get, you know, don't set your expectations too high, and all that type of thing.

Bill 10:26

And that's really frustrating to hear that. Doctors still today, say that to people, you know, you're probably never going to walk again. And all that stuff, what do you say to somebody who's listening, and has been told that? And they kind of brushed it off but really, it's affecting their recovery? What would you say?

Lynette 10:47

You know, I think that it really depends, I can't give you a straight up answer. Because a lot of the time, Doctor, I'm going to sound like a politician, and I don't mean to, but a lot of the time doctors give the advice they give, or the response they get from their own life experience, gee, I, you know, I had that patient before, and they were so full of hope.

Lynette 11:06

And they followed, you know, they went all over the world spent all their money they bought, you know, the tale of a serpents, and they stuck it in their eye. And they like they did all these things, right? And, they're trying to save you from that they're trying to say, I want you to get on with your life.

Lynette 11:22

And some of them say it because they're exhausted. And they don't have any other tools. And they're, you know, they're just saying it, just to get rid of you as a patient because your insurance ran out. And some of them say it, because they haven't taken the time to get to know your family, and that you've got a kind of support system that would really help you.

Lynette 11:44

So there isn't an answer to your question. But I would say to the person hearing it, that if you listen to all my answers, just now you can take what they say with a grain of salt. And you can decide what that means for you, in your life experience, what you want to do, if you want to stick the tail of a serpent in your eye, you go ahead, but it's probably not going to make you walk again.

Lynette 12:10

I get why we tell people to stop hoping, because we think that's going to free them from this, sort of passion they have for healing. But what are we leaving them with no passion? What's that for? I mean, the idea is to have a goal in life and a passion for it. So if yours is to get better then you know, that's fine, do that and take it with a grain of salt.

Lynette 12:36

That's what I would say to that and that patient I wanted to tell you about is kind of a good example. So he had a stroke. And his wife is a nurse. And you know, they called me and because she and the way she said it, which is interesting, because she was a psych nurse, right?

Lynette 12:50

And she's like, I just want him to have his confidence back. I just want him to have his confidence back. And I'm like, so he had a left hemispheric stroke, and you're just worried about confidence. It's an interesting thing. What do you mean? Nevermind, wait till I get there.

Lynette 13:05

So I like to not know too much other than some mirror imaging stuff, because then I'll sort of reinforce the problems in the home, I want it to be sort of new to me. So I get there and he's been crying since he had the stroke he can't stop crying.

Lynette 13:21

This is something that happens to stroke victims not all depends on where the stroke is. And it doesn't always happen the whole time. Sometimes it gets in that moment that you're talking about.

Lynette 13:30

And then he just cry and cry. But he could not stop. He just cried and cried and

cried. And to her. She's thinking psychologically he just needs his confidence back. I'm like, Well, no, it's a little more than that.

Lynette 13:44

So I get out my equipment. And he's crying and crying. He's gone through all these hoops have been told. That's all they can do. They're offering all these psych meds and everything and I come in, I swoop in with my equipment.

Lynette 13:56

I stick the sensor on his head. I say, I'm not going to ask any questions. I got to get you to stop crying first. And he's like (sobbing) and 10 minutes later he's no longer crying ever again.

Lynette 14:11

Unless somebody's grief for normal crying. And now we can do some work. Well, that looks pretty magical, doesn't it? You know, somebody's sitting there and they've watched their husband go through all these things. He lost his math ability was a math genius that was his job.

Lynette 14:29

He was he's lost some ability of one arm. He's like he's got issues, right? But he's the thing that's tearing her up is he's crying and crying and crying. And in 10 minutes, I fixed that. And I literally could have packed up and flown away and they would have still thought of me as an angel of mercy.

Lynette 14:49

But there was much more that could be done. So it kind of goes to what you said you know you're on this journey when the you get off. When do you say that's enough? Feeling for me time to get back to my no longer the same life. But the life that's presenting itself to me.

Lynette 15:10

I don't know that you even ever have to do that, to be honest, you know, I mean, you're also going to age, you're also going to be degenerating and, and having life happen to you while you're healing. So it's a moving target at all times, kind of like the wave that's coming in while the other ones going out.

Lynette 15:30

So I think you can just say, this is what happened to me, whether it's a physical

trauma or, you know, a stroke, or emotional trauma. And what am I gonna do with that? And how am I going to live today?

Fully Recovered

Bill 15:47

Yeah, love it. That's fair enough. I mean, most people that struggle with that concept that we've spoken about briefly, that whole plateauing situation is they think that the whole recovery has to be the stroke recovery, but there's an emotional recovery, there's a mental recovery and the physical recovery.

Bill 16:05

So you take a little bit of this and a little bit of that. And when I say I'm fully healed, I've done a lot of emotional work, I've recovered in that space, more than the physical space. And the space that I've recovered in more. The emotional side is what has allowed me to take my stroke recovery to the point of saying, I'm fully healed, even though I'm living with these things.

Bill 16:26

Because I've come to terms with the possibility that I might die tomorrow, I've come to terms with the possibility that my dad wasn't actually terrible. When I was a kid, when he stopped me from doing something I shouldn't be doing, that he did the best he could with the resources he had available to him at the time, you know.

Bill 16:44

So I've done a lot of that work. And I've dealing with the challenges that stroke creates. For me today, I'm not dealing with all the other and resolve challenges that I had in the past as well as my stroke recovery. So I can ask you a question. Yeah. Are you better today than you were before? I'm better than I've ever been. And I've got that ever had?

Lynette 17:09

Yeah. That's why you're calling it fully recovered. Because just because you had to take some different pathways, right? I used to say to my, I adopted a bunch of children that were mostly handicapped. So one of my sons, I said a lot, very often, too. I said, Look, yes, you have all this against, you have tourettes, you have technical retardation, you have (inaudible) syndrome, you have autism.

Lynette 17:34

But everyone else is going to hit about 18. And they're going to start going to the bar, and they're going to stop thinking too much. And they're going to stagnate. And if you don't do that, you can be like the tortoise and the hare. You can just keep on keeping on.

Lynette 17:50

So he's 30 32 now Oh, gosh. And he did that he followed that advice. They didn't all. But he did. And it's really played out to be exactly that. And it kind of reminds me of your story. You so yeah, you trade it in maybe some some numbness for some emotional maturity.

Lynette 18:12

You trade it into, you know, so in the end, are you a better cocktail, human? Yes. And that was what I could say about that man that I worked with in the end. And there was some really dire things that were going on in his life. And he would never have addressed them. Had I not shown up and had I would never have shown up. Have you not had this?

Bill 18:33

Yeah. Lovely. Well, it was meant to be and it seems like I think we've come to that time where you need to scoot off. I want you to pass the baton to Louloua.

Lynette 18:44

Okay, so I apologize for not wearing makeup and doing all that right stuff. But here I am taking my break, and I gotta go. I'm Dr. Lynette Louise. And Louloua is going to tell you all about me because her are book's about me too see you later bye!

Bill 18:59

I'm not wearing makeup either.

Louloua 19:01

Yeah, me neither it's 1am here so.

Bill 19:05

Wow, thank you for being here. I really appreciate it.

Louloua and Lynette 19:08

I love doing this.

Louloua Smadi



Bill 19:10

You're the author of the book *From Client To Clinician*. So at one point you were a client of some sort. Tell me a little bit about what led you to be a client of Dr. Louise Is that right?

Louloua 19:24

Exactly. So we were first a client of Lynette because of my brother who has autism. So that's how we met her and that's how we got introduced to neurofeedback therapy. And she has a way of working with the whole family. So I got to do neurofeedback as well and my primary issues when I was young, I was 15 were depressive tendencies and attention issues.

Louloua 19:50

I was failing at school, I was a typical, you know, ADD team, who was sad all the time. And that's how I started as a client. And then what happened is that I saw really good changes not only within me but with my brother. And she also helped my younger brother and my younger sister.

Louloua 20:12

And I just got so fascinated by this that I decided to pursue it professionally. And then I became a clinician. And I work primarily with children with disabilities, autism, and cerebral palsy special needs. So that's what I do now. And I trained under the supervision of Lynette and she has tremendous experience she has eight children and has adopted four multiple handicapped.

Louloua 20:46

And my book is kind of my way of learning with limits. And so it has interviews with her. And it really is just about her specific approach that is very holistic and loving, in a way and full of, you know, she's full of knowledge, and she knows her neuroanatomy really well.

Bill 21:08

Firstly, how does somebody have 12 children and still able to get on to a podcast? That's amazing.

Louloua 21:14

Sorry, 8 not 12.

Bill 21:18

Even so, well, how does she managed to still do that work and do all these things? I'm gonna have to ask her about that on another interview, I think but for right now, I'm curious to know about your 15 year old self. So what were you like, and how was that impacting your life?

Bill 21:36

And then, a little bit later, what we'll do is we'll talk about what neurofeedback is, and how it supports, altering the way that the brain works. So, what kind of person were you like it 15? What impact was your condition, causing to you?

Louloua 21:55

And the main issue I was having really is I wasn't able to focus in study. And I had when it came to communication. So it's very ironic that I wrote a book, I had horrible writing skills. You know, my teachers were not nice to me at all these, you laugh on my face and say that I couldn't write anything, and that I would basically be a failure in my future.

Louloua 22:23

That is a very French way of teaching. And obviously, the whole environment feedback that you're getting doesn't help. And it kind of encourages that, which I'm sure is the same when you're dealing with stroke. If you don't have the right environment next to you, you just end up believing what people are telling you.

Louloua 22:42

And what was fascinating to me is when I learned about the brain, and that it wasn't my fault that I was feeling that way, or that I had, you know that I was

lacking certain abilities and skills. I was mind blown, and I felt so good to know that there was something in my brain that was causing this.

Louloua 23:04

And in my case, it was a lot of slow brainwave activity that was just making everything more difficult for me to do so even socially, it was difficult for me to be in a large group of people and friends, I just got very overwhelmed. And I usually just prefer to stay home. And I usually just had a couple of close friends. And that was it.

Bill 23:29

What you just said sounds like what strikes survivors say. So, you got overwhelmed, and you prefer to be at home. Not a lot of people and not a lot of stimulation at the same time so that's very interesting.

Bill 23:43

So it sounds like what you're describing is what I've described about my own brain in the past, and what other people are describing about their brains. But until the age of 15, this was normal for you. You didn't know any different. Explain to me what the slow, What was it that you said about the neurons? Was it that they were working slowly? So explain that. What does that mean?

Different Brain States

Louloua 24:10

So your brain has chemical and electrical energy and that's how neurons communicate. And your brain states, your states when you're asleep, or when you're very nervous, or when you're focused on an exam or you're doing a surgery on brain surgery. Your mind and body and brain need to go through several states and that's your states are reflected in your brainwave activity.

Louloua 24:38

So if you put sensors on your brain, same way you can shake your your heart with an ECG, we do the same with an EEG. And by measuring the brainwave activity, we can see what's actually going on. So when you're asleep, you have very low brainwave activity so it's slow.

Louloua 24:58

So your brainwaves are just slow when it comes to each second. And then

typically, and I'm really simplifying this, the more tense you are, or the more active you are, let's say, the quicker your brainwave activity will be. And your brain needs specific amounts of those frequency groups. Depending on where you are looking in the brain, depending on what state you're in, depending on your environmental factors, so many things.

Louloua 25:32

And a lot of disorders and psychological issues. And any brain challenge really will, you'll be able to see what's happening in your cortical activity. So really, when you're looking at EEG, if it's not, invasive, you're only looking at the cortical, but you could also put electrodes on the actual brain. And that's much more you can actually see what's happening.

Louloua 25:58

When you're just cortical, it's on the scalp anyway so very effective. So let's say someone with depression would usually what has been shown is usually if you're depressed, you will have a lot of slow brainwave, if you have lots of anxiety, you'll have a lot of high brainwaves fast.

Louloua 26:20

So what happened with what was happening with me, that's true, I had no idea it got worse when I was in high school, because there were more challenges thrown at me so and I started seeing the lag I had with my classmates. And that is something that also happens with stroke, you basically have a slowing of your brain activity after it.

Louloua 26:46

Especially in certain areas, maybe where the stroke happens, or maybe ends up being a compensation, depending on the case. And so actually that slowing of the activity of the brain ends up creating so many symptoms because of it. So if you just think about your energy, in general, if your brain is running at a very slow pace, but the world around you is going faster than you are.

Louloua 27:18

Then you end up not being able to do anything. And you end up being the one who you know, you get those labels of you don't want to try, you're not motivated. You're just slow, or you're kind of an idiot, you don't get it. And it actually happens you also have the reverse effect.

Louloua 27:37

So if you have someone who's running at too fast frequency in their brain, things outside are slower. And actually, they get the opposite, which is usually you don't care because you're maybe too hyper, or you don't care because things are going so slow around you in your head, you just cannot stop thinking of everything that's happening, then you end up not wanting to do anything either, because you're just overstimulated, but in a different way.

Louloua 28:09

So that's an important way of also understanding Okay, am I and the way we call and I talked about it in the book, it's you can use the word of arousal, how aroused you are. And you can be under aroused or over aroused? Or are you both? Or do you compensate?

Louloua 28:25

Are you under aroused, and so you have to compensate. And then you end up looking like you're over aroused. So maybe you're this hyper person who's running around, but you're really just doing that to compensate for how you're actually feeling which is low.

Bill 28:38

Right. Interesting. You mentioned anxiety, and you mentioned depression. But very often, when you speak to people who have anxiety, or depression, or have one, they seem to be looped together, they seem to be combined a lot by a lot of people.

Bill 28:54

So you hear about people talking about after the stroke, they have anxiety and depression, they might have depression about certain issues. And they might have anxiety about certain issues. So typically, stroke survivors will say they're anxious about the possibility of another stroke, they're anxious about the possibility of what their life is going to look like in the future.

Bill 29:12

And they're also depressed about what the stroke has done to them. And they're also depressed about what the future might look like. So how can you be both things at the same time? Is it possible?

Intro 29:22

Yes, of course, of course you can. And it can be from two different things. First of all, your brain can have different states. So you know, my frontal lobes can be low, so maybe I can feel more depressed when I use my frontal lobes. But my parietal lobes could be running on a faster pace.

Louloua 29:42

So maybe when it comes to using as you know, spatial orientation, I'm going to get all revved up because I just can't use those skills. And so then I get anxious about that. So you have the brain side, but you also have like, I was just saying explaining about your arousal, a lot of the time, anxiety possibly comes from depression.

Intro 30:08

If you've had a stroke, and during recovery, you'll know what a scary and confusing time it can be, you're likely to have a lot of questions going through your mind. Like, how long will it take to recover? Will I actually recover? What things should I avoid? In case I make matters worse, doctors will explain things but obviously, because you've never had a stroke before, you probably don't know what questions to ask.

Intro 30:33

If this is you, you may be missing out on doing things that could help speed up your recovery. If you're finding yourself in that situation, stop worrying, and head to recoveryafterstroke.com, where you can download a guide that will help you it's called seven questions to ask your doctor about your stroke.

Intro 30:52

These seven questions are the ones Bill wished he'd asked when he was recovering from a stroke, they'll not only help you better understand your condition, they'll help you take a more active role in your recovery, head to the website. Now, [recovery after stroke.com](http://recoveryafterstroke.com) and download the guide. It's free.

Depression And Anxiety

Intro 31:21

As a way of compensating in a way. So if I'm very depressed, and it's very hard for me to put on my clothes and start my day, I want to, I'm very sad about my life. I want to but I'm very sad. But when I think of putting on my clothes, it gets

me anxious. So you're sometimes anxiety comes from depression.

Louloua 31:48

And that's why it's important and it also happens the other way around, you could be anxious, and then you get depressed because of that anxiety. But most of the time, it's the latter. And that's why it's so important to actually figure out which one has the bigger presence.

Louloua 32:06

And maybe a quick way of understanding that is, if you had to pick between the two things that happened to you the most you get mostly sad-depressed or angry-mad. And usually you're so your body tension and your arousal state. You usually have one that happens the most. And that's what you'll usually work on the first because you really like she was never mind sorry I was gonna mentioned Lynette but we'll talk later about her.

Louloua 32:40

It was an example. That if you're crying, and you can't figure out if you're crying because of your depression, or because of how anxious you are. Maybe you can take a step back and figure out okay, is it crying? Because you're not able to do the things that you want to do? Or is it because you're trying to do those things and just thinking about it is making you anxious?

Bill 33:09

I love it. It sounds like what you're saying is you're trying to identify the root cause of the main imbalance in your emotional state or mental state. Right? So you're getting to the root cause if we go to the root cause and we address that we might intervene better and quicker, than if we were trying to intervene from the other angle, because we hadn't stopped to think about it or the clinician, that we're seeing the counselor, the psychologist or whomever hasn't been able to ask more in depth questions to get you to that point to really understand what is the root cause.

Bill 33:48

Now I can understand how depression might be the symptom of a root cause that comes from somewhere else. And that makes complete sense to me in that I'm depressed. But then trying to fix the depression without addressing what made that person feel depressed, is not going to really do anything other than mask

symptoms, for example, it's the way that I feel sometimes, antidepressants are prescribed the prescribed to deal with the symptom.

Bill 34:21

And very rarely does the person who's taking the antidepressants get the opportunity to address the actual root cause of that issue. So I think it's a key thing that sometimes is missed when people are prescribed antidepressants, and I'm okay with people getting prescribed with any depressants for a period of time to help get through some rough stages to help intervene in a very critical moment in life.

Bill 34:52

But there needs to be a discussion around Okay, what's the root cause of that and let's address that and see if the depression then goes away because the root cause was dealt with. So I think that's a valuable conversation that we just had the people who are watching and listening and going to really, perhaps take their treatment of depressive symptoms to another level, they're going to have the opportunity to ask more questions.

Intro 35:21

And maybe just to, wrap that up, when when I was younger, and I genuinely did feel like I had, I don't say I had depression, it wasn't clinical at all. But I did have tendencies and, and it's important to also know you're right 100% of what you just said, but also if your brain is creating activity in certain areas that are going to make you feel depressed, it's also going to be very hard to figure out what it is that is bothering you, if you can't just change that thing that is happening.

Louloua 35:58

So and the problem that usually happens with antidepressants, and that's where it's different from neurofeedback, is that it with neurofeedback, you're actually teaching your brain to change versus medication where you could also be adding other, let's say maybe numbing effects or side effects that would be coming with it. And then you don't actually know what's actually going on anymore.

Louloua 35:58

So you could with antidepressants also add some sort of anxiety. With neurofeedback, where I feel like I got lucky is that from the get go, we dealt with those brainwaves. And that was it. And then I got to understand how my world

was and I got to understand you know, as a young teenager, you want to understand who you are and who you want to be and, and how are people accepting you and viewing you?

Louloua 36:55

And so then I was able to work through all this and no, I'm great. And now I do sessions on myself whenever I feel like I'm in a little slump and I need a little boost of motivation or I feel very foggy or I can't focus I'll do a session.

Bill 37:14

Brilliant. So were you a curious kid at 15 say before your experience with neurofeedback, were you a curious kid? Did you always want to know more? How did you get started with the neurofeedback?

Bill 37:32

So, first again, we'll talk about how you got started. And in a minute, we'll talk in a little while we'll talk about what neurofeedback is. Lynette came over to chat with your brother and the family about your brother's condition. But then some way you got involved, how did you get involved?

Intro 37:51

So that's her way of of treating. She believes that healing happens within a family. And I love that I thought it was, you know, you can't single out one person who has a disability and not think that it affects everyone else and not even think that maybe our brains were also affected, you know, we don't know is some of my slowing, because also my brother has autism, we will never know, we still don't know even how autism comes about.

Louloua 38:23

So it was also important for the family to know that they had work to do on ourselves too. And that's one of the biggest lessons that we had to learn is you can't fix others, but you can fix yourself. And if I hadn't done that work on myself and same for my parents and my siblings, my brother would have forever been the boy who does those therapies.

Louloua 38:53

So even me speaking right now to your audience. neurofeedback is also good for all of the carers, you know, it's difficult for everyone around as well. And it's, you know, if you're going through something and it's just difficult to do all this

neurofeedback is a great tool for everyone.

Louloua 39:11

And so that's how we got started really all together. And the way that we did it was we got our own system at home. And so then Lynette trained my mom, and she gave her protocols. She looked at all of our brains told her what to do, she taught her how, and then it was my mom who did most of the sessions when I was still in high school. And then Lynette would come back home and check on us and train us again.

Bill 39:44

Right follow up. So what you said sounds exactly like a stroke survivor at home. That impacts well, let's just assume it's, you know, two children and a spouse, and, you know, in two partners in a partner relationship there. And there, I came home, I'll talk about myself, actually, that's much easier.

Bill 40:12

I came home and my stroke had impacted my head, my body, my emotional state, my mental state, my physical state impacted everything. And it did exactly the same thing to my two kids and my wife. And they were thrown into this world of stroke. My kids were children, they were 15 and 12, or 11, or something like that.

Bill 40:36

And my wife was not a nurse, she was not a doctor. And all of a sudden, we're dealing with this whole complex situation of stroke. And they've got no idea how a brain that is impacted by stroke, how that looks outside. Because inside, they can see that there's a blood clot there and it's causing interference with the brain, they see a picture of that on the screen, but outside they don't understand how that manifests in the world, for the person who's going through it.

Recovery With The Family



Bill 41:10

And then they also don't understand how they're supposed to respond. When they go through this. And they struggle, they struggle just as much as I struggle. So what you're saying is this whole beautiful thing about the recovery involves everybody, everybody's got something to learn about that.

Bill 41:30

And it's just as important to address the issues of the caregiver, the other people that are in the house that are affected be children or other adults, because giving them the tools to deal with that enables them to calm themselves a little bit and get better at dealing with this situation that they've been thrown into.

Bill 41:53

Which then makes it easier for the stroke survivor, to also have to just worry about dealing with themselves rather than like I was at the beginning, I was worried about myself, but I was also worried about my wife and my kids, and how I was going to keep them calm and keep them feeling okay about this whole situation, even though it was difficult.

Bill 42:20

So I think you've touched on a beautiful thing there. And, now that we've got to that point, I want to fast forward a little bit. Because you were 15. Today you are how old if you don't mind me asking 28, 29.

Bill 42:38

Thank you. So, moving forward 13 years, you've written a book, From Client To Clinician. Tell me about what neurofeedback is, let's understand what that is and

how that impacts the brain.

Neurofeedback



Louloua 43:00

So neurofeedback is a brain therapy that improves brain functioning, by training individuals to control their own brainwave. And very simply, but the way we do that, it's technically done with EEG you can also do it in an FMRI machine. But let's not get into that. So with EEG you would need either people use, you know, the full cap things, I'm sure you've seen them before, or just.

Bill 43:28

Like a silicon cap.

Louloua 43:30

Yeah.

Bill 43:30

It has electrodes on it and wires attached to it.

Intro 43:33

Yes, but you don't need that necessarily, you can also just use three to four electrodes. So you know, it's not that invasive, if that's something that they're not comfortable with. Because I know my brother wouldn't have been able to do that.

Louloua 43:49

So you put the sensors wherever you want them to be depending on the case, usually you'll start in the middle of the of the brain. And the sensors are connected to a computer. It's very simple. It's just one or two laptops.

Louloua 44:03

And we are seeing and measuring the EEG as we're measuring the EEG you as a patient are getting feedback about your brainwave activity, and you're getting feedback based on how we want it to perform. So every time your brain performs the way we want it to and that desirable direction, you'll get a reward.

Louloua 44:26

So this is not an intrusive therapy where you get electricity in the brain. That is something else. Here. It's pure feedback. It's pure information. It's a binary code. It's reward punishment. It's operant conditioning, it's classical conditioning, where you're basically just asking the brain to go in a certain direction.

Louloua 44:48

And whenever it does that, you get an audio reward. So a beep and you also get a visual reward. It would it could be a pac man that's you know, eating the dots. It could be a puzzle piece. So every time it beeps, every time you do the right thing, you get a puzzle piece popping up needs to be very simple.

Louloua 45:10

And it's really just asking the brain to change and simply put, you have the EEG, you know, the normal ad that you would see, and then we filter it. And we asked to look at that in more detail.

Louloua 45:24

So we look at the slow brainwaves, the maybe the middle ones, the fast ones. And we ask, okay, we want more brainwaves that are faster here. We want less brainwaves that are slower here. And each time that your brain does that, simultaneously, you get a reward.

Bill 45:43

So it sounds like it's actually taking advantage of neuroplasticity?

Intro 45:48

Yeah, that's what it is. It's self regulation is neuroplasticity at its best.

Bill 45:54

And there's a visual aspect to it. So for once, what you can do to the person is, instead of trying to get them to imagine what neuroplasticity looks like, you're almost demonstrating neuroplasticity on the screen. Because they're getting this instant feedback, your brain is doing this right now, when it does that, and it feels

better, and it does better.

Bill 46:16

This is what it looks like, and now you have a visualized way to bring your brain over from this pattern to this pattern. And when you do that you're getting a reward. And as you do that the neuroplasticity into that space, that new space, that supportive space increases the neurons fire more often they connect more often.

Bill 46:39

And when they connect more often, you start to decrease the other neurons that are not supportive, just as a matter of they get filtered out and the new ones come on. And then as a result of that, you also able to practice that, which is like practicing anything. The more you do it the better it gets is that right?

Louloua 46:59

Yeah, I don't even need to be here. You got it.

Bill 47:04

It's lovely. I'm glad that I got it because it's really important for me to get it. Because we can have multiple conversations like this down the track to the people who are listening and watching so that we can truly get people to understand what neuroplasticity is because I know what it is I interviewed Dr. Michael Merzenich about neuroplasticity, but it's very difficult to explain it to somebody.

Bill 47:29

And when you can visualize it, and you can show them an image on the screen, it makes it much better. So how soon do you start seeing now we'll talk about how quickly it can work? How soon do you start seeing spikes of the new neuronal patterns and the new response in the brain waves? How soon does it happen?

Intro 47:53

So technically, so it's the temporal resolution of EEGs don't know how many milliseconds it's very, very fast. So if you're actually looking at the EEG data, you can see changes happening instantly. Now, you have brainwave change, and then you have behavioral change, right?

Louloua 48:17

So behavioral change, if you got a good assessment, and hopefully a good

therapist, you should feel a difference after one session. A session typically lasts between 20 to 30 minutes. And it really depends on what you're after. So and the best way to really explain the neuroplasticity here is your your brain is constantly changing.

Louloua 48:42

And it has to do with all of the factors that are happening around you, you're getting constant feedback from your world. You know, if you're entering a room that is dark, and there's no lights, you're getting feedback that okay, it's a silent room, maybe you're not supposed to be very active here.

Louloua 49:02

And maybe people are about to go to, I don't know, I'm making this up. If you go to a supermarket and you see something traumatizing, these are all sorts of feedback that are changing your brain as you go. And this is a form of neuroplasticity, it's really just the art of changing the brain.

Louloua 49:23

And in our case, we're using very simple communication tools, which are just the beeps and visualization to say yes, yes, yes, yes. Keep going. We want you to go over there, this way, this way. And the more you go that way, you start feeling things. You start actually feeling differently.

Louloua 49:47

You have people who maybe are you know if whether you're trying to go after communication language or memory or you know, motor functions, maybe the first thing you're feeling when you You're sitting on that chair doing a session, maybe you're feeling anxious.

Louloua 50:04

Hopefully, throughout the session, you start feeling a bit more comfortable, okay, and I'm okay, it's not so bad. And then what you're really first after the first few sessions is really making sure that you have everything kind of stabilized cognitively, that you're okay that maybe you're not anxious about the session and that you have trust in the process.

Louloua 50:27

And that is really neuroplasticity. You want to trust your ability to heal at the end of the day. Because if we try too hard, we're also going to counteract, you know,

we have to believe that we were made a certain way, and that we can recover and that we can heal in a certain way and sometimes doing it too much and not believing in that ability of neuroplasticity, and being too nitty gritty about what's going to happen, you actually end up doing the opposite.

Bill 51:06

Yeah, I love it. And that kind of reminds me of negative neuroplasticity, everyone talks about neuroplasticity is this amazing thing. It's always a positive discussion. But neuroplasticity can happen in the negative way. When people take behaviors that are not supportive and repeat those behaviors, then they use neuroplasticity for evil instead of good.

Intro 51:29

Yeah. And even you can minimize neuroplasticity and say, I'm going to do those. Not minimizing It's okay. But if you do like those apps, and you're trying to train your brain and your mind performance, those are good, they're fine. But you know, it's so easy as a marketer to say this is good, you know, neuroplasticity.

Louloua 51:52

No neuroplasticity is also much more than that. And neurofeedback is a great example of being able to be site-specific. So knowing where you want to target what areas of knowing what you're actually after. And it's non-invasive, and you can do it in a comfortable environment. And it's effective.

The Seven Questions

Bill 52:19

That's beautiful. So this is one of the reasons why I have a PDF, download on my website, people can go to recoveryafterstroke.com and download a document that is called Seven Questions To Ask Your Doctor About Your Stroke. And one of those questions on there is where in my brain did the stroke impact? And what does that do? Because often people don't know where in the brain and impact is.

Bill 52:51

And often they don't know as a result of that. What does that do? And what therefore do they need to work on? And at what you're saying is that if they do know, those two things, and then they allocate the neurofeedback to that part of the brain, we can go really, we can very much get a narrow view of what's

happening in the specific place where their stroke happened, and then deal with that specifically.

Intro 53:17

Yeah, yeah, sometimes, it's also possible that sometimes going on that actual spot is too much for the brain. So we actually go next to it. Or if you know, if there was lots of damage, sometimes we'll work with the opposite side just to see how things are going. But yes, it's the fact that you can have that flexibility of picking and choosing and doing your trial and error and figuring out who you want to be also recovering.

Louloua 53:50

You know, you could also pick if you feel like recovering in a way that is making you feel a certain way. It's also about the emotional side and the psychological side of it. We all want to heal happily. We don't want to heal, feeling like we're miserable either. And having that flexibility of choice is important.

Bill 54:13

Wow what a concept healing happily. Man that would be such an amazing thing to add on to recovery, healing happily, instead of begrudgingly and angrily is such an amazing concept. That would be fabulous. If you could add that to any recovery. I love that.

Bill 54:34

So let's talk about how easy is it for people to access neurofeedback services, like the ones that you provide? If people can't get in contact with you directly? Is there a network around the world which enables people to access this service?

Intro 54:51

There are several networks. I know there is the BCIA the board certification Have neurofeedback and they usually have providers. But really, you could also just do a Google search of neurofeedback therapists around you, I would recommend, strongly recommend that you look for people who have a board certification.

Louloua 55:15

Or who, at least are using clinical systems because there are lots of systems that are, you know, the whole brain computer interface are very popular right now to do things with the brain. So you just want to make sure it's something clinical, especially when it comes to stroke patients.

Louloua 55:33

You don't want to be playing around with something that you can't, you know, reverse, because at the end, you could do a session and then it could also turn out that you didn't like how it made you feel. So you want to be able to reverse it as well.

Louloua 55:49

So yeah, just to know just looking for neurofeedback therapists and some sort of board certification. You're in Australia, right? Yeah. And Australia has great, great resources over there. So I wouldn't be concerned. I'm sure it will be easy to find.

Bill 56:10

Yeah. Where are you located?

Louloua 56:13

I'm in France.

Bill 56:15

Okay.

Intro 56:16

So a Dr. Lynette Louise my mentor is in the US. And we're right now working on creating a online platform that is about, you know, everything we're talking about and kind of our approach and but in the meantime, we work, you know, locally and but really what I'm hearing is just to really spread awareness about neurofeedback.

Louloua 56:41

I want it to be part of any all recovery programs, you know, the brain is a brain. Yeah, that's what Lynette always says, and I always love it, whether you were diagnosed with whatever disorder or whatever trauma we had, a brain is a brain and most of the healing principles apply, you know, with me with my brother with autism, I'm able to speak that way with you, because of my clients, but really to be very honest, it's because of my personal experience.

Louloua 57:13

Where we go through something personally, it just hits you differently than just, you know, working with clients, because at the end of the day, you're not home

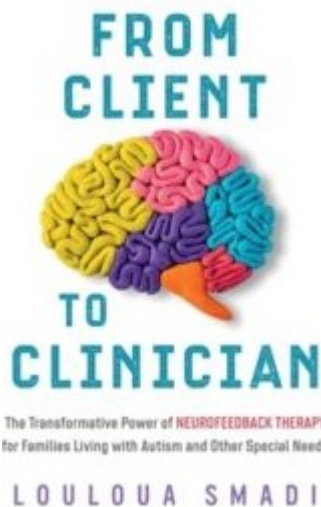
with them. And Home is where things happen. And Home is where the healing truly happens.

Louloua 57:30

You could be going to all the best therapists in the world. But if you don't come home and feel strong and balanced and supported. It won't help that much. And you want to have the most impact you can as possible.

From Client To Clinician

Interviews with Dr Lynette Louise, The Brain Brood



Bill 57:48

Yeah, I agree. So you were inspired to write a book, from client to clinician Tell me a little bit about what the book is about.

Intro 58:00

So it's essentially about my story from client to clinician, and it goes through also the story of my brother with autism, and how we believe he's, you know, fully I don't like to use the word recovered for autism, but he's made so much progress and has grown so much.

Louloua 58:20

Some people may look at him and say, no, he hasn't. He's very autistic. What are you talking about? But considering where he was and where he started and what he's doing with his life right now, he's earning a certificate to become a chef pastry and he is doing so many beautiful activities.

Louloua 58:42

He just grows and grows year by year. And he's amazing. And so it's a lot about his story. And really, it goes into detail about what it's like to live with neurofeedback because if you look up what neurofeedback is it's very technical, and it's kind of scary to read about it.

Louloua 59:01

And I wanted to offer a personal story of neurofeedback. And so it's our stories along with an explanation of neurofeedback kind of goes into the field. And you can get so what I didn't talk about, for instance, is you can get a brain map of your activity and see actually what's going on.

Louloua 59:25

There's so many ways of doing neurofeedback at the end of the day, even if we have a certain way of doing it. Just starting it and doing neurofeedback as long as you're happy with your provider and with how your healing is going. It's just good for your brain. So that's what the book is about. It's made to be very simple and friendly to anyone who's interested in neurofeedback.

Bill 59:52

Beautiful, and it's easy to get? Can people buy it online? Where can they get it?

Louloua 59:57

It's on Amazon. So Just Amazon order.

Bill 1:00:03

Fabulous, I'll have all the links there. If somebody wanted to reach out to you directly after this podcast, what's the best way to find you online? Where would they go and best way to reach out?

Intro 1:00:14

So the my website, my book website is clienttoclinician.com. And you can find me on Instagram, it's [Louloua.seh](https://www.instagram.com/Louloua.seh). And that's also my email if anyone wants to email me, Louloua.seh@gmail.com. And yeah, and my book is on Amazon, and I just hope it reaches the hands of the people who are in need and just want to learn.

Bill 1:00:44

Yeah fabulous, I think it will. And it's a great way to do a case study. It's your own case study, it's about you, it's about your family, your experience your brother, and you're sharing a picture. And this is what I love to hear about these stories

that have been in the process for 13 years is that you've gone from things were different and not so good, potentially, they were bad for the family, for your brother, for you for everybody.

Bill 1:01:15

And now we are down into the future. And we're looking at how things have evolved and shifted for the better, even though we're not completely free of the thing that happened to us. And that's one of my greatest challenges as a podcaster as somebody who coaches, other stroke survivors, and as somebody who's been around stroke now for nine years or more.

Bill 1:01:40

People see me, and they compare themselves to me, and they want to be where I am. But they don't realize that it's taken some time to get there. And that's what's possible in the future. But for right now you have to go through the stage you're at now. And then next week, you're gonna have to go through that stage.

Bill 1:02:00

And that could be a bump in the road, and there could be.

Louloua 1:02:03

So many ups and downs.

Bill 1:02:04

Yeah, a little bit of a down and either way, you have to go through it. And then at some point, the ups will be more than the downs. And if you can continue getting more ups than downs, then you're making progress doesn't matter how long it takes. So that's what I love about the fact that you've written a book.

Intro 1:02:23

Yeah and it's very honest, it's exactly what you just said, This isn't a miracle story.

Bill 1:02:30

Yeah, it just is what it is right. And you're talking about it from both perspectives. You're talking about it from a family perspective, your own experience. And then you're also talking about it from a clinical perspective, where you've actually had lots of years to practice and see the results for yourself.

Bill 1:02:47

So you know, it's not just a one off, it didn't just happen to your family. It's happening to multiple people out in the world, all over the world, from different backgrounds, from different experiences and different issues, different challenges, but uniquely being supported in the same way.

Bill 1:03:04

And this is what I love. I love that, that story of hope, because that's what I think doctors who deal with us in our recovery fail to do is they fail to give us the long term view because they just want to get us home, their job is to get you to keep you alive, and then send you home.

Bill 1:03:25

That's what their job is. So don't take anything that they say to heart, other than the fact that they're doing the best they can do to get you home alive, and well. And the rest is up to you. And at some point, we have to take a little bit of responsibility for our own recovery. And it sounds like your entire family took responsibility for their entire recovery as a unit. Is that a good way to describe how they approach the issue?

Intro 1:03:56

Yeah, of course. And my parents learned an important lesson, which is to surround themselves with the right people. And you seem to be one of those people for many of your most of your audience. I believe you're you know, that's what Lynette was to us. But, you know, a lot of doctors and teachers, you know, we're not nice to my brother.

Louloua 1:04:24

And but to block this out and to understand that they're just doing their job and they don't know the future because that's not their future. We can't expect them to give us hope about a future that they've never lived or even seen. You know, how many of their patients do they even see again?

Louloua 1:04:42

We've never seen the doctors of my brother again. They probably don't know who my brother is right now. But they learn that okay, you need to just have a really good team and to focus on building on healing and on creating new experiences. And you seem to be doing just that for your audience and that's just great just being with the right team. And that's how you handle your, your recovery.

Bill 1:05:15

I have a similar outlook to you. And that's why I think I got excited when I received the email to connect. And I love what you do. I love how you go about it. I think, it's in the most caring way to taking everybody into consideration. And you're part of my team.

Bill 1:05:34

And that's the beauty of we've created our own teams. And here we are, our team has just come together so that we can share knowledge across our own communities. And here we go. This is how it's done. So I want to thank you so much for coming on to the podcast sharing story.

Louloua 1:05:53

Thank you.

Bill 1:05:54

My pleasure. And I know it's very late in France right now. So I'm going to let you go to bed. So thank you for being on the podcast.

Louloua 1:06:01

Thank you so much Bill. I really appreciate it.

Bill 1:06:05

Thank you so much for joining me on today's recovery after stroke podcast. Do you ever wish there was just one place to go to full resources, advice and support in your stroke recovery? Whether you've been navigating your journey for weeks, months or years, I know firsthand how difficult it can be to get the answers you need. This road is both physically and mentally challenging.

Bill 1:06:28

From reclaiming your independence to getting back to work to rebuilding your confidence and more. Your symptoms don't follow a rulebook and as soon as you leave the hospital you no longer have the medical professionals on tap. I know for me It felt as if I was teaching myself a new language from scratch with no native speaker insight.

Bill 1:06:51

If this sounds like you, I'm here to tell you that you're not alone, and that there is a better way to navigate your recovery and rebuild a fulfilling life that you love.

I've created an inclusive, supportive and accessible membership community called recovery after stroke.

Bill 1:07:07

This is an all in one support and resource program. And it is designed to help you take your health into your own hands. This is your guidebook through every step in your journey from reducing fatigue to strengthening your brain health to overcoming anxiety and more. To find out more and to join the community. Head to recoveryafterstroke.com See you next time.

Intro 1:07:33

Importantly, we present many podcast designed to give you an insight and understanding into the experiences of other individual's opinions and treatment protocols discussed during any podcast or the individual's own experience and we do not necessarily share the same opinion nor do we recommend any treatment protocol discussed.

Intro 1:07:50

All content on this website at any linked blog, podcast or video material controlled this website or content is created and produced for informational purposes only and is largely based on the personal experience of Bill Gasiamis the content is intended to complement your medical treatment and support healing.

Intro 1:08:07

It is not intended to be a substitute for professional medical advice and should not be relied on as health advice the information is general and may not be suitable for your personal injuries, circumstances or health objectives. Do not use our content as a standalone resource to diagnose treat, cure or prevent any disease for therapeutic purposes or as a substitute for the advice of a health professional.

Intro 1:08:27

Never delay seeking advice or disregard the advice of a medical professional, your doctor or your rehabilitation program based on our content if you have any questions or concerns about your health or medical condition, please seek guidance from a doctor or other medical professional if you are experiencing a health emergency or things you might be call 000 if in Australia or your local emergency number immediately for emergency assistance or go to the nearest hospital emergency department.

Intro 1:08:52

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