

Themes Emerging from Qualitative Interviews Following Thematic Analysis

Theme 1: Reduction in Seizures

Five out of the seven participants interviewed reported a significant reduction in seizures following NH-CBT treatment. Participant 1 indicated their seizures had "*majorly, majorly cut back...so I've had one since we stopped*", while Participant 4 reported that "*I don't have seizures any longer*". Similarly, Participant 5 described feeling "*sort of 99% cured*" and that they had "*been in loads of situations over these past 12 weeks where I would have definitely had full blown seizures and, um, they never eventuated*". Participant 6 also reported having fewer episodes and increased control over their occurrence stating they were "*able to control them...a lot better*". Participant 7 described experiencing mixed results, noting that the seizures had "*died down for a wee bit and then they started coming back again*". However, they also reported feeling "*like I had a wee bit of control of them when I was in the treatment*". Participant 3 reported no reduction in symptoms explaining that they "*still had seizures and that after [treatment]*", "*and it didn't really get better*". While Participant 2 did not explicitly mention reduced symptoms, this was implied through their report that they "*had a better outcome than I could have ever hoped for*" and reinforced in the recounting of a discussion with the therapist: "*[being brought] to the brink of [having a seizure] and then back again...was probably enough of what settled in my mind to believe yeah, I don't need to have them anymore*".

Theme 2: The Nocebo Effect and Belief Change

Six of the seven participants expressed a change in their beliefs as to what was causing their seizures. Two of those participants indicated that their causal beliefs about their symptoms being physical in origin had changed (Participant 1 and Participant 4). Participant 1 originally thought "*there might have been quite a physical problem, not so as much anymore*" and now recognised their seizures as harmless: "*I also know that it's definitely not something that could kill me or do anything bad at all*". Participant 4 "*figured it had something to do with my brain tumour. I was unsure what was causing my seizures previous to that*". Participant 1 felt that the nocebo effect was a contributing factor: "*there's obviously more to it than just nocebo but I definitely think it's one of the key underlying problems*". Similarly, Participant 4 acknowledged the nocebo effect as contributing to their symptoms - "*I agree that they were a nocebo effect because once I'd started applying those strategies, they eventually became nothing*", and now understood a significant reason for the development of her seizures as "*trauma that had happened to my brain when I was a child*". Both Participant 2 and Participant 5

expressed a new understanding of how impactful the nocebo effect is and how that relates to their symptoms: *"I don't think I realised how strong it could be I guess. I didn't realise it could impact you that much"* (Participant 2); *"I just didn't know how much that was affecting me and my condition"* (Participant 5). Participant 2 indicated that their beliefs about the level of control they had over their seizures had changed, stating *"I don't need to have them anymore"* while Participant 5 noted that reinforcing their beliefs about having control over their seizures was integral to *"[changing] those ingrained patterns so that the previous triggers weren't triggering those symptoms anymore"*. While Participant 3 still experienced seizures following treatment, they indicated that treatment had changed their beliefs about their seizures stating *"I understand them a lot better...they're not harmful to the system"*. Participant 7 indicated they had not understood the nocebo effect stating it was a *"big fancy word to me that...I don't understand"*.

Theme 3: Improved Lives

Four of the seven participants reported significant, positive impact on their daily lives as a result of experiencing a reduction in symptoms. They reported improved social functioning, increased independence and self-confidence with Participant 1 noting, *"Before I had treatment, I could never go out...now I've been able to like go and hang out with my friends multiple times a week...like I'm actually the one messaging all my mates like "Yo can we catch up?"*. Improved social life was echoed by Participant 2, who stated, *"I can go to the supermarket now and actually not order in Uber Eats every day", "[I'm] interacting with people more. Seeing friends more"*. This increased sense of connectedness was also reported by Participant 4 for whom symptom reduction had enabled them to *"maintain my relationships with my children and everything better"*. An increased independence and self-confidence emerged in accounts with Participant 1 experiencing dispositional shifts (*"I thought I was quite introverted and I come out of treatment and I'm suddenly like fiery and super energetic"*), and Participant 5 describing experiencing a sense of independence and dignity post-treatment. Further, Participant 5 described a sense of independence from no longer being reliant on medication to reduce symptoms: *"I don't feel like I had to stay on...my medication for the rest of my life...being so dependent on it, on medication is no way to live for the rest of your life"*. Increased confidence was experienced through a sense of control by *"either not having seizures or being able to feel like perhaps a seizure could happen and then having the tools to stop it before it comes on"* in contrast to past experiences where there were *"definitely been times in my life in, in the past where it's been really horribly embarrassing for me getting them in awkward situations"*. While Participant 3 had noted no improvement in symptoms, they did describe that a positive aspect of the treatment

was that through an increase in confidence that their seizures would not affect their work, they now had a part-time job.

Theme 4: Acceptability of the Treatment

Out of the seven participants, four described the treatment as challenging (Participants 1, 3, 5, and 7), while the remaining three (Participants 2, 4, and 6) experienced benefits without reporting the treatment as challenging in their interviews. Two participants who did not experience a reduction in symptoms noted significant challenges related to the treatment which likely impacted adherence (Participants 3 and 7). Both of these participants highlighted the exposure component while Participant 7 also found the nocebo education component a barrier. Describing why the treatment was unhelpful, Participant 7 reported that *“trying to bring my seizures on...I just didn’t quite understand it because it made me feel worse”*. Participant 7 also described feeling victim-blamed where *“some of the time I was happy about the treatment and then the other time I went home and cried because it was practically like someone telling me I was crazy”*. Participant 7 however, felt this was a personal challenge stating *“it will be the right treatment for the right person. Just I don’t think it was the right treatment for me”*. Participant 3 noted that triggering seizures caused them stress without the experience of benefits: *“I found it quite stressful and I didn’t find a lot of difference in the seizures”, “I’m scared of the bloody things as it is. But when you’re trying to bring them on...”*. The two other participants (Participants 1 and 5) who described the treatment as challenging found it was acceptable given the benefits they experienced. Participant 1 noted *“it was quite daunting, but at the time it helped immediately...I hated it in the moment”* but understood the discomfort as necessary noting exposure as an important part of the treatment: *“a lot of the exposure, so actually having to just put myself in a position where there is a possibility I could have had one, but just kinda trying to keep myself from having one”*. For Participant 5 it was a *“big achievement”* to be exposed to their seizure triggers (*“being sleep deprived”, during “extreme exercise”*) without being medicated. The *“milestones...and victories”* were necessary to *“build on the belief system, so you can keep getting better and change, change those ingrained patterns”*. Participant 5 expressed gratitude for the *“tools to be able to lead a better life”* and the *“huge, lasting impact”* of the treatment. Notably, Participant 5 described the delicate balance required to prevent recipients interpreting the treatment as victim-blaming: *“It’s very sensitive and it, um, could definitely impact people emotionally that are going through this, and if they take it the wrong way, um, then, then it won’t work - the triggers”*. Participant 5 expressed the importance of delivering this information in a way in which people felt heard and that the uncontrollable aspect of their symptoms was acknowledged. In negotiating this, Participant 5 stated they were *“grateful to have, um,*

a couple of really good in depth conversations with [the therapist] to, um, fully comprehend what he was trying to put across”.

Theme 5: Therapist Communication

Six of the seven participants commented on the way in which information had been relayed to them by the therapist. Three of those participants described being given confidence to believe treatment would be effective by the clear and direct style of the therapist (Participant 2, 4, and 5). For Participant 2, the therapist was “*good at getting his point across, and making you feel comfortable and it really made you believe that this was going to work*” while Participant 4 similarly appreciated the “*straight-shooting*” communication and how “*his confidence...in what he believed was causing it...helped my confidence*”. Likewise, Participant 5 also noted the therapist's direct style of communication but how this was done with sensitivity:

“[the therapist was] direct and clear with the delivery...but also sensitive. I think it would have been harder to accept what he was trying to say if he wasn't being sensitive to the fact that we've been experiencing things that we've got no control over our bodies and they're having physical symptoms, so, so to hear you and other doctors say, um, it's all in your head or something would have been, um, yeah, would have would have been awful. So, um, he handled that really delicately”.

Two participants who did not experience sustained reduction in symptoms nevertheless described an increase in understanding due to the therapist's explanation: “*he explained it well*” (Participant 3); “*he did talk through quite a lot of stuff that I didn't know about, like my brain and the way it thinks...so that was helpful*”. For Participant 6, they found the therapist's communication helpful during treatment: “*just kind of talking, helping me to stay on track sort of thing*”.