**Supplementary material:**

Supplementary material 1: Structure of the Tinnibot Program that was proposed to participants via the mobile app over 8 weeks.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Delivery | Topic | Description |
| Week 1 | Tinnibot | Knowledge is power | Chatbot conversation - what is tinnitus and common tinnitus facts. |
| Intro to CBT | Chatbot conversation explaining what is CBT, an introduction to linking thoughts and feelings, and exercise in challenging negative thoughts.  |
| Relaxation | Direct to relaxation exercise. |
| Sleep hygiene | Chatbot conversation about how to prepare surroundings for good sleep. |
| Week 2 | Tinnibot | Causes and triggers of tinnitus | Chatbot conversation about causes of tinnitus and tracking tinnitus triggers (e.g., sound exposure, stress, caffeine, alcohol, sugar etc). |
| Challenging negative thoughts about tinnitus | Chatbot conversation about challenging thoughts linked to tinnitus and reframing them to be more realistic. |
| Sleep - sound enrichment | Chatbot conversation about how soundscapes can help to mask tinnitus noise and link to soundscapes within the app. |
| Relaxation | Direct to breathing awareness exercise. |
| Psychologist | First session | Check in with how they have been finding Tinnibot and how much they have been using/interacting. Review tinnitus goals Discuss challenging thoughts- what negative thoughts have they been having? Have they been able to reframe? Some clients will need more assistance and examples of how to do this.Discuss triggers identifiedEncourage to practice the exercises, try soundscapes, and regularly practice relaxation if they have not used these functions. |
| Week 3 | Tinnibot | Habituation and building resilience | Chatbot conversation about the process of habituation and building resilience over time. |
| Introduction to mindfulness and behavioural activation | Chatbot conversation about the benefits of mindfulness and tinnitus and participating and scheduling in enjoyable/pleasant activities. |
| Sleep - worry list | Chatbot conversation to help create a worry list to let worries go. |
| Mindfulness practice | Direct to body scan exercise. |
| Week 4 | Tinnibot | Hearing and tinnitus | Chatbot conversation about hearing loss and tinnitus, finding the frequency of tinnitus sound. |
| Mindfulness of tinnitus and practicing gratitude | Chatbot conversation about how to practice mindfulness of tinnitus sound, and introduction to gratitude journaling. |
| Sleep - imagery | Chatbot conversation about using visualization to help relax and reduce stress to help with sleep. |
| Mindfulness practice | Direct to mindfulness exercise. |
| Psychologist | Second session | Review of goal progress.Discuss how they have been tracking with mindfulness practice and engaging in pleasant activities.Discuss any current negative thoughts/emotions (tinnitus or non-tinnitus related) and assist in going through check/reframe thoughts if needed. |
| Week 5 | Tinnibot | Hearing protection | Chatbot conversation about how to protect your hearing. |
|  |  | Stress management and gratitude journaling | Chatbot conversation about stress management techniquesDirect to gratitude journal. |
|  |  | Mindfulness exercise | Direct to weeks mindfulness exercise. |
| Week 6 | Tinnibot | Sound sensitivity | Chatbot conversation about hyperacusis. |
|  |  | Finding your strengths and setting goals | Chatbot conversation about how to identify your strengths, and setting SMART goals. |
|  |  | Sleep hygiene | Chatbot conversation reminding about different sleep hygiene strategies. |
|  |  | Mindfulness exercise | Direct to weeks mindfulness exercise. |
|  | Psychologist | Third Session | Review of goal progressCheck in around the practice of mindfulness and gratitude. What have they noticed?Did they create a SMART goal? If not, help to create one with them. |
| Week 7 | Tinnibot | Tinnitus in the brain | Chatbot conversation about tinnitus response in the brain, and how hypervigilance can reduce the chance of habituation. |
|  |  | Balanced lifestyle | Chatbot conversation about a balanced healthy lifestyle - diet, physical activity relationships. |
|  |  | Mindfulness exercise | Direct to weeks mindfulness exercise. |
| Week 8 | Tinnibot | There is hope | Chatbot conversation to wrap up the course. Asks what strategies they now use to manage tinnitus. Chance to refresh strategies/past chats. Link to a recovery story on tinnitus. |
|  |  | Acceptance of tinnitus and values exploration | Chatbot conversation about practicing acceptance of tinnitusIdentifying values and taking steps to live by values. |
|  |  | Meditation | Direct to weeks’ meditation exercise. |
|  | Psychologist | Final session | Review of goals and progress over courseChance to get some feedback on how they found the process - what they found useful/not usefulWhere to go from here? For E.g. continue to use meditation/soundscapes on the app, and monitor thoughts. If still high level of stress may need more intense therapy (if so some guidance about referrals). How can they continue to progress towards goals (tinnitus related or other)? |