

# Train the Brain to Tackle Tinnitus With Cognitive Behavioral Therapy and Mindfulness

By Bruce Hubbard, PhD

**With an abundance of tinnitus** management approaches available, it's hard to know where to begin when considering options. Increasingly, cognitive behavioral therapy (CBT) and mindfulness are recommended. What are these approaches? How can they help with tinnitus? And how can they be accessed? As a board-certified cognitive behavioral psychologist *who also has tinnitus*, I am personally

***“There’s nothing dangerous about hearing tinnitus. It’s how you hear your tinnitus that matters.”***

invested in getting you the best information to decide the right course of action.

## What Is CBT and How Does It Help?

Cognitive behavior therapy, also called cognitive behavioral therapy, or simply *CBT*, is a common treatment for stress-related conditions like anxiety, depression, and insomnia. CBT differs from most forms of therapy in that it is *practical, short term, and evidence based*. Dozens of studies have found that CBT significantly reduces tinnitus distress, as well as the anxiety, insomnia, and depression that often accompany tinnitus. Improvements in overall quality of life have also been shown. The results are so consistent that CBT is the only tinnitus treatment recommended in the U.S. and European clinical guidelines.<sup>1,2</sup>

CBT is based on the premise that it's not your tinnitus — the loudness, pattern, or pitch — but *how you respond to tinnitus* that determines

your emotional course. Resisting, avoiding, and trying to control tinnitus promote distress and burn up precious time, money, and hope. Learning to accept and coexist with tinnitus reduces distress and frees up resources to devote to adapting and moving on. CBT consists of a set of skills — ways to think, act, and pay attention — to help you coexist with tinnitus, improve functioning, and fully rejoin your life.

You won't need to practice CBT skills forever. CBT gets you started on the path toward *habituation*, a form of *neuroplasticity* through which the brain gradually reduces its reaction to tinnitus. Through habituation, tinnitus becomes less important, more in the background, the same way we automatically learn to ignore road sound, a fan, the wind, and so on. At the highest levels of habituation, tinnitus is rarely noticed, if at all, even in quiet settings.

CBT skills consist of cognitive and behavioral strategies. The cognitive part of CBT is based on the age-old

wisdom that *how you think about key events can strongly influence how you feel and behave*. In CBT, you'll take a careful look at your *beliefs and expectations about tinnitus* and your likely future with tinnitus. You'll learn to base your beliefs on facts and guidelines, to correct misinformation that might be fueling fear and complicating recovery. For example, there is *no* evidence that reducing caffeine and alcohol helps, and giving these up, if you enjoy them, while struggling with tinnitus can make a difficult situation even harder.

You'll de-catastrophize tinnitus. It *will not* become increasingly louder until it's all you can hear. And, contrary to the impression that people with tinnitus always suffer, studies show that most people are not bothered, that living with tinnitus gets easier over time, and that how distressed someone is has little or nothing to do with the actual severity of their condition (e.g., volume, pattern, pitch, hyperacusis, hearing loss).

You'll check your beliefs against your own objective observations. For example, you may already notice periods of a few seconds, minutes, or more when you are not aware of your tinnitus. This is evidence that your brain has already begun to habituate.

Cognitive strategies are necessary but not sufficient to break the cycle of tinnitus distress. Changing behavior is the backbone of CBT. Tinnitus distress is characterized by avoidance. We try to avoid hearing tinnitus. We avoid "triggers" we rightly or wrongly suspect may make tinnitus worse. And we avoid settings that remind us of how radically our hearing may have changed. Avoidance may protect us in the short run, but in the long run, it damages lifestyle and starves

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the brain of necessary opportunities to adapt and habituate. To habituate, your brain must be exposed to tinnitus under normal conditions. Only in this way will it learn that tinnitus is not important and stop sounding the alarm. In CBT, you will change your behavior by gradually turning toward avoided areas of life, cheered on by more reasonable, fact-based beliefs and expectations.

A comprehensive CBT program for tinnitus includes these additional components:

- relaxation exercises to reduce anxiety and improve sleep,
- *sound enrichment* (self-guided or with an audiologist) to soften tinnitus perception, and
- mindfulness (see below).

These skills can be applied to aid the return to full functioning.

## **What Is Mindfulness and How Does It Help?**

Mindfulness is an ancient form of meditation introduced to the health sciences in the early 1990s by psychologist Jon Kabat-Zinn. Mindfulness is an acceptance approach used to help people make peace with parts of life that are unwanted but cannot be reduced or removed. Examples include illness, pain, ruminative thinking, fluctuating mood states, and challenging life

circumstances. Hundreds of studies have demonstrated the positive effects of mindfulness on physical and emotional health.

Kabat-Zinn defines mindfulness as *paying attention on purpose to what's happening in the present moment (rather than dwelling on past or future), and without being driven by negative thoughts and judgments*. By paying attention to the present moment, mindfulness goes against the conventional advice "never listen to your tinnitus" and "never be in silence." Avoiding tinnitus may help in the short run, but in the long run avoidance can deepen fear and keep you trapped.

There's nothing dangerous about hearing tinnitus. It's *how* you hear your tinnitus that matters. Hearing tinnitus through the filter of negative thinking, dwelling on what's awful about tinnitus, reinforces distress. In mindfulness, you practice hearing tinnitus in an *objective, emotionally neutral* manner, free of the damaging bias of negative thinking. Instead of fighting and resisting tinnitus, you *allow* it to be present. In this way, the sounds of tinnitus, and any accompanying sensations, distortions, and tone loss, become more familiar, less threatening. And this is exactly what your alarm brain needs to promote habituation. Mindfulness practice also helps you

develop attentional flexibility, the ability to allow tinnitus to remain in the background while you redirect attention to more important aspects of life.

As your skill improves, mindfulness can be applied at times you are most apt to hear your tinnitus, such as when you're trying to sleep, concentrate, or relax. In this way mindfulness can be directly employed to improve functioning and rejoin life.

A mindfulness program designed specifically for tinnitus was developed by psychologists Liz Marks, ClinPsyD, and Larry McKenna, PhD.<sup>3</sup> Adapted from the work of Jon Kabat-Zinn, *Mindfulness-Based Cognitive Therapy for Tinnitus*, or MBCT-t, consists of eight weekly two-hour group sessions and 30 minutes of daily practice. In a study of 182 adults with chronic tinnitus distress, MBCT-t resulted in significant, reliable improvements. These improvements occurred

regardless of tinnitus severity or comorbidity (e.g., hearing loss, hyperacusis). The authors write: "As we become less attached to negative thoughts about tinnitus, the need to fight it lessens too. Over time it will become smaller, less threatening and a less significant part of life. Letting go of attempts to control tinnitus frees one from it."

Another program is Mindfulness-Based Tinnitus Stress Reduction (MBTSR), which was developed by

## Resources for Accessing CBT, iCBT, and Mindfulness for Tinnitus

Given the effectiveness of CBT for tinnitus, it's disheartening to learn that tinnitus is not part of standard CBT training, so most cognitive behavior therapists have never heard of tinnitus. Some audiologists familiar with tinnitus seek CBT training, but audiologists are not trained counselors and may never achieve the depth and breadth of experience necessary to effectively treat moderate to severe tinnitus distress with CBT. MBCT-t is new and not yet available outside the UK. So, what can you do?

**1** CBT is essentially a self-help approach. The therapist teaches you what to do and gets you started. But you can also get started on your own by educating yourself about CBT for tinnitus. My webinar on Cognitive Behavior Therapy for Tinnitus Distress can be found at <https://www.cbtfortinnitus.com/webinar>. My ATA *Conversations in Tinnitus* podcast interview can be heard at <https://www.ata.org/podcasts/episode-11-habituation-tinnitus-using-cognitive-behavioral-therapy>

**2** The online Mindfulness-Based Tinnitus Stress Reduction program, developed by psychologist Jennifer Gans, can be found at <https://mindfultinnitusrelief.com>

**3** Two self-guided online CBT for tinnitus programs are currently in development, one through my website, and the other at [www.tacklingtinnitus.org](http://www.tacklingtinnitus.org)

**4** If you feel the need for a guide, then find a qualified cognitive behavior therapist and have them review the relevant information on CBT for tinnitus. Cognitive behavior therapists who specialize in CBT for pain management may be best suited to help with tinnitus. You can find CBT therapists at [www.ABCT.org](http://www.ABCT.org) and [www.ADAA.org](http://www.ADAA.org)

**5** Acceptance and Commitment Therapy (ACT, pronounced like the word "act") is a form of CBT that emphasizes mindfulness and taking courageous action to reverse avoidance. ACT therapists can be found at: <https://contextualscience.org/>

**6** There are many excellent courses and apps that teach general mindfulness. These programs offer

mindfulness for anxiety and pain, but they won't teach you how to meditate with tinnitus. You can learn general mindfulness and apply it to your tinnitus through specific focus on mindfulness of sound, a traditional meditation practice that dates back thousands of years. There are numerous smartphone apps that teach mindfulness, including Calm, Headspace, Insight Timer, Ten Percent Happier. Mindfulness teachers can be found at: <https://www.mbct.com/> <https://www.umassmemorialhealthcare.org/umass-memorial-medical-center/services-treatments/center-for-mindfulness/mindfulness-programs/mbct-8-week-online-live>

**7** Helpful articles about MBCT-t can be found at: <https://www.tinnitus.org.uk/Handlers/Download.ashx?IDMF=09151ba3-7a55-4f6f-a9ed-8376d53f771e> <https://www.tinnitus.org.uk/Handlers/Download.ashx?IDMF=2b83f18e-0944-4617-939e-4d02e082969b> <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.00483/full>

psychologist Jennifer Gans. Derived from Kabat-Zinn's Mindfulness-Based Stress Reduction (MBSR) course, MBSTR focuses more on general mindfulness. A significant advantage is that MBSTR is available online.


## Conclusions

When it comes to CBT and mindfulness, there is no need to choose one over the other. Many people find these approaches work well together. Most up-to-date CBT programs include basic mindfulness training, and MBCT-t incorporates basic CBT. One study<sup>4</sup> found that a form of CBT, *Acceptance and Commitment Therapy*, which incorporates elements of both

*“You can think of these approaches as physical therapy for the brain.”*

CBT and mindfulness, significantly reduced tinnitus distress. Personally, I found the combination of CBT and mindfulness to be the solution for my tinnitus.

In practice, CBT and mindfulness are simple but not easy. Both require patience, daily effort, and a healthy

dose of courage. With regular practice and application, the skills become more automatic, the pace of habituation picks up, and your job becomes much easier. You can think of these approaches as *physical therapy for the brain*. You'll learn concepts and exercises that must be applied consistently over months and years for the full benefits to emerge. The role of the cognitive behavior therapist and mindfulness instructor is to train you in what to do and start you on your path to recovery. 



*Bruce Hubbard, PhD, ABPP, is a board certified cognitive-behavioral psychologist who has tinnitus, hyperacusis, and high-frequency hearing loss. In 2005, when his tinnitus*

*started, Dr. Hubbard experienced severe distress, but was unable to locate a qualified cognitive behavioral therapist to help. After coaching himself, he was able to habituate, which led him to found CBT for Tinnitus to help others. His mission is to provide evidence-based information and care to people who are distressed and bothered by tinnitus and related conditions. He has published and presented numerous papers on tinnitus distress, anxiety, and depression. His webinar Cognitive-Behavior Therapy for Tinnitus Distress, sponsored by the Anxiety & Depression Association of America, has garnered more than 160,000 views. Dr. Hubbard is a visiting scholar at Columbia University, Teachers College, in NYC, and a past president of the New York City Cognitive Behavior Therapy Association.*

## Building a CBT and Mindfulness Self-Care Practice

- CBT and mindfulness are essentially self-help approaches. The therapist or teacher shows you what to do and helps you get started. What you do on your own is ultimately more important than what happens in session or in class.
- You can learn what to do and get started on your own by educating yourself about CBT and mindfulness. The resource section on the previous page offers some direction.
- To learn to meditate with tinnitus, practice “mindfulness of sound.” This is a traditional meditation practice of centering nonjudgmental attention on any sound arising in the present moment, including tinnitus. Mindfulness exercises designed for persistent pain may also help.
- Most local CBT therapists and mindfulness teachers will be unfamiliar with tinnitus. You can ask them to learn about tinnitus and direct them to the resources in this article. You can also seek a CBT therapist or mindfulness teacher who specializes in pain management, because many of the same principles apply to tinnitus.
- It's difficult to find a local MBCT-t class, but Mindfulness-Based Stress Reduction (MBSR) courses are much more common. These instructors are generally familiar with chronic pain. Many of the same mindfulness principles apply.

PHYSICAL SYMPTOMS

THOUGHTS

BEHAVIOUR

FEELINGS

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- 3 E. Marks, P. Smith, & L. McKenna. (2020). I wasn't at war with the noise: How mindfulness based cognitive therapy changes patients' experiences of tinnitus. *Frontiers in Psychology*, 11, 483. doi:10.3389/fpsyg.2020.00483
- 4 V.Z. Westin, M. Shulin, H. Hesser, et al. (2011). Acceptance and Commitment Therapy versus Tinnitus Retraining Therapy in the treatment of tinnitus: A randomised controlled trial. *Behaviour Research and Therapy*, 49(11), 737-747.