Turning Off the Lights in Tinnitus Counseling?

The Candle of Tinnitus Retraining Therapy vs the Dark Spook House of Cognitive Behavioral Therapy

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Tinnitus distress is often explained through perceptual mechanisms, such as reduced contrast between tinnitus and background sound in quiet environments. This article contrasts that perspective with a cognitive interpretation using the "dark spooky house" thought experiment, illustrating how interpretation and expectation can transform a neutral signal into a source of fear and distress.

Tinnitus has been defined in several ways. It is often described as a phantom auditory perception generated by internal neural processes, or more simply as the perception of sound in the absence of an external source, typically experienced as ringing, buzzing, or pulsations. More recently, a broader working definition has been proposed, describing tinnitus as the consciously recognized experience of a non-semantic sound or sound-like event in wakeful consciousness that persists beyond fleeting moments and becomes experientially salient (Aazh, 2026).

For many individuals, tinnitus is only a neutral sensory experience. For others, however, it becomes a source of significant distress, affecting sleep, concentration, and emotional well-being. Because there is currently no universally effective medical cure for most forms of tinnitus, clinical management has largely focused on therapeutic approaches that aim to reduce its impact rather than eliminate the percept itself.

Metaphors play an important role in tinnitus counseling. Many of the mechanisms involved in tinnitus management, such as attention, perception, interpretation, and habituation, are abstract processes that can be difficult to explain in purely technical terms. For this reason, clinicians often use simple analogies to help patients understand why tinnitus becomes distressing and how different therapeutic approaches aim to reduce its impact. Interestingly, two influential metaphors from different therapeutic traditions begin with the same condition: darkness.

In tinnitus retraining therapy (TRT; Jastreboff & Jastreboff, 2000), darkness is illustrated through the image of a candle in a dark room. This metaphor demonstrates how tinnitus can appear louder when background sound is absent. In cognitive behaivoral therapy (CBT; Aazh & Moore, 2022), darkness appears in the "dark spooky house" thought experiment, which illustrates how fear can arise from interpretations rather than from actual danger. Although these metaphors share a common setting, they point toward different explanatory mechanisms for tinnitus distress. One focuses primarily on perception, the other on interpretation.

Examining these metaphors side by side helps clarify the conceptual differences between TRT and CBT in tinnitus counseling.

The Candle in the Dark: Perception in TRT

The candle analogy commonly used in TRT counseling illustrates a fundamental principle of sensory perception. Signals are detected not only by their absolute intensity but also by their contrast with the background environment.

Imagine a candle flame in a completely dark room. The flame appears bright and immediately captures attention. When the lights are turned on, however, the same candle becomes far less noticeable. Its physical intensity has not changed. Only the surrounding context has changed. In the same way, tinnitus often seems louder in silence because there are fewer competing auditory signals.

The neurophysiological model of tinnitus proposes that tinnitus originates from neuronal activity within the auditory system, often triggered by peripheral dysfunction such as cochlear damage (Jastreboff, 1990). This signal is detected and processed within the auditory pathways and subsequently evaluated by higher brain centers (Jastreboff & Jastreboff, 2000). Importantly, the distress associated with tinnitus is not determined solely by the characteristics of the sound itself. Instead, it depends largely on the involvement of non-auditory brain systems, particularly the limbic and autonomic nervous systems, which generate emotional and physiological reactions to the signal (Jastreboff & Jastreboff, 2003).

TRT aims to reduce tinnitus distress by promoting habituation. Habituation occurs when a sensory signal is repeatedly experienced without negative consequences and gradually becomes filtered out by the brain. Sound therapy plays a key role in this process

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by enriching the auditory environment with low-level background sounds. By increasing background neuronal activity, the relative strength of the tinnitus signal decreases, making it less salient and easier for the brain to ignore (Jastreboff & Jastreboff, 2000) (FIGURE 1).

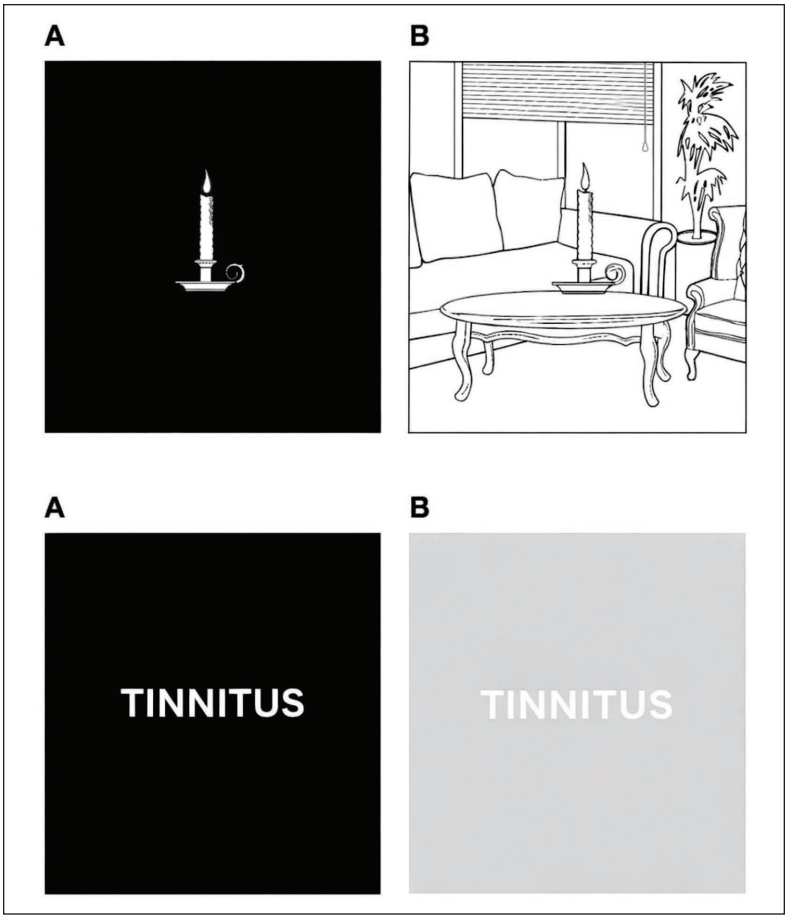
This principle is frequently emphasized in TRT counseling. Patients are advised to avoid silence and maintain some level of background sound, particularly in quiet environments such as bedrooms. Within the TRT framework, tinnitus may appear louder in silence because its neural signal becomes stronger relative to the surrounding auditory background. Maintaining environmental sound can therefore reduce the perceived strength of tinnitus and facilitate habituation (Henry, 2024).

Within this framework, the central issue is signal contrast. Darkness increases the perceptual prominence of the candle, just as silence increases the perceptual prominence of tinnitus.

The Dark Spooky House: Interpretation in CBT

The CBT metaphor of the dark spooky house illustrates a psychological principle known as emotional reasoning. This thought experiment was developed within the context of audiologist-delivered CBT for tinnitus in the United Kingdom as part of clinical work aimed at helping patients understand how distress can arise from interpretations of tinnitus rather

FIGURE 1. Perceptual contrast between tinnitus and the background environment. (A) A candle in a dark environment appears highly prominent because it contrasts strongly with the surrounding background. (B) The same candle in a well-lit room is less noticeable because the surrounding visual environment reduces this contrast. The lower panels illustrate the same principle using the word TINNITUS. When the background is dark (A), the signal stands out clearly; when the background is lighter (B), the contrast is reduced, and the signal becomes less noticeable. The signal itself remains unchanged, but its perceived prominence depends on the contrast between the signal and the background environment. This principle helps to explain why tinnitus often seems louder in quiet environments and less noticeable when background sound is present (Henry et al., 2007).



than from the auditory signal itself (Aazh & Moore, 2022).

Imagine entering a dark and unfamiliar house. Because visibility is limited, ordinary sounds or shadows may be interpreted as signs of danger. Fear increases. Bodily sensations such as tension and a rapid heartbeat appear, and the situation may begin to feel threatening. Yet the feeling of fear does not necessarily mean that danger is present. The scenario may become even more frightening if the individual has recently watched a horror film about haunted houses. Past experiences and expectations may shape how ambiguous sensory information is interpreted. However, the objective reality of the situation remains unchanged.

The key message of this thought experiment is that emotions do not necessarily reflect reality. Fear arises not from the environment itself but from the interpretation of the environment.

A similar process can occur in tinnitus. Tinnitus signal itself may be neutral, but negative interpretations, such as believing that it indicates serious damage or that it will inevitably worsen can trigger anxiety, increased monitoring of the sound, and avoidance strategies. These reactions heighten awareness of tinnitus and amplify distress (FIGURE 2).

Rather than focusing primarily on changing the auditory environment, CBT for tinnitus targets the psychological processes that maintain this distress. In the audiologist-delivered CBT approach, patients learn a structured set of skills designed to test their fears and modify their responses to tinnitus. Central to this approach are two practical exercises called SEL (Stop–Expose–Learn) and KKIS (Know,

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Keep on, Identify, Substitute) (Aazh, 2025).

SEL addresses the avoidance and ritualistic behaviors that patients often develop in response to tinnitus. During SEL, patients stop their avoidance strategies, expose themselves to tinnitus without relying on distractions or rituals, and learn from the outcome of the experience. The aim is not to reduce tinnitus directly but to discover whether the feared consequences of hearing tinnitus are as severe as predicted and to increase tolerance for the uncomfortable emotions that tinnitus may produce.

Following this exposure-based learning, the CBT process continues with KKIS. When tinnitus becomes bothersome, patients first recognize that it is time to apply CBT skills. Then they allow the uncomfortable emotion to be present briefly without resisting it, identify the negative thoughts associated with tinnitus, and substitute these thoughts with balanced counter statements. Through repeated use of this process, patients learn that tinnitus-related thoughts often exaggerate the impact of the sound and that the feared outcomes are frequently less severe than anticipated.

In this model, the aim is not to eliminate tinnitus but

FIGURE 2. The "dark spooky house" thought experiment. A person in a dark, unfamiliar house may experience fear and bodily sensations such as tension or a racing heart, even though the house is completely safe. Prior exposure to a horror movie could intensify this fear despite no change in the environment. This illustrates that emotions can feel convincing but do not always reflect objective facts. Similarly, emotional reactions to tinnitus may create the impression that the sound is overwhelming or life-ruining, even though these reactions arise from interpretation rather than the auditory signal itself (Aazh & Moore, 2022).

to break the vicious cycle in which negative thoughts, emotional reactions, and avoidance behaviors amplify distress. When these processes change, tinnitus gradually loses its emotional significance and becomes more likely to fade into the background of awareness.

In the dark spooky house metaphor, darkness represents uncertainty rather than silence. It is this uncertainty that allows fear-based interpretations to emerge.

Perception vs Interpretation

Although both metaphors begin in the dark, they address different mechanisms of tinnitus distress. The candle metaphor illustrates how perceptual contrast influences the detection of tinnitus. Silence increases the relative strength of the tinnitus signal, making it more noticeable. The clinical response within TRT is therefore to increase background sound and promote habituation. The dark spooky house metaphor illustrates how interpretation and emotional reasoning influence distress. Ambiguous sensations may be interpreted as threatening even when they are harmless. The clinical response within CBT is to challenge these interpretations and reduce fear-based reactions.

Both frameworks acknowledge the importance of emotional systems in tinnitus distress. The neurophysiological model underlying TRT recognizes that tinnitus becomes problematic when the auditory signal activates the limbic and autonomic nervous systems (Jastreboff & Jastreboff, 2003). However, CBT emphasizes that these reactions are strongly shaped by beliefs, expectations, and patterns of thinking.

Clinical Implications and Conclusion

Understanding these two perspectives can enrich tinnitus counselling. The candle analogy helps patients appreciate why

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tinnitus often seems louder at night or in quiet environments, while the dark spooky house thought experiment illustrates how fear and catastrophic interpretations can amplify distress.

Rather than competing explanations, these metaphors highlight different aspects of the same experience. Perception and interpretation interact continuously in the brain: sensory signals influence thoughts and emotions, while beliefs and expectations shape how those signals are perceived. Recognizing this interaction may help clinicians provide more comprehensive counseling that draws on both perceptual and cognitive perspectives.

Both TRT and CBT invite patients to imagine what happens when the lights go out. In TRT, darkness reveals the candle by increasing perceptual contrast. In CBT, the same darkness allows uncertainty to be shaped into fear through interpretation.

This shared setting highlights two complementary perspectives on tinnitus distress. One reflects a change in perception, where the signal becomes more prominent against a quieter background. The other reflects a change in interpretation, where the absence of clarity gives rise to threat.

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