# 99 BREATHWORK

# THE SCIENCE OF 9D BREATHWORK

Understanding the Research Behind Multi-Dimensional Transformation



# **SUMMARY**

9D Breathwork combines nine complementary elements into one guided experience—breath, sound, and coaching tools—so that participants can access receptive, restorative states more quickly and reliably. Each component is supported by scientific evidence to varying degrees: some (like slow, controlled breathing, therapeutic music approaches, and nature-based soundscapes) are well-studied; others (like binaural beats, Solfeggio frequencies, isochronic tones, subliminal messages, and NLP-style language) have promising but mixed or preliminary evidence. We integrate these elements thoughtfully, and our growing community reports outcomes that often surpass single-modality work.

# What this means for you:

The fundamentals behind 9D are solid and familiar (breathing and sound), while other layers act as supportive amplifiers. We're transparent about what's well-established, what's promising, and what we're still learning.





# **WHAT IS 9D BREATHWORK?**

9D is a structured, hour-ish guided session that blends:

- Somatic breathwork (conscious, rhythmic breathing),
- Immersive spatial sound design (3D audio landscapes),
- Brainwave-targeted audio (binaural/isochronic tones),
- Supportive sound layers (nature/bioacoustic effects, carefully chosen frequencies),
- Transformational language (subliminal messages, guided vocal coaching, and gentle NLP-style patterns).

#### The aim is simple:

Create a safe, receptive state where the body can regulate and the mind can process—so insights, release, and integration become easier.

# WHY BREATH IS THE GATEWAY

Breath is the only part of your autonomic nervous system you can control directly. Deliberate breath control—ranging from gentle pacing to short, active bouts of connected breathing—shifts autonomic and cerebrovascular state within minutes, creating a receptive runway for sound and coaching.



# THE NINE DIMENSIONS

(in Plain Language)



### 1. Active Somatic Breathwork

Fast, connected breathing deliberately lowers CO<sub>2</sub>, shifts brain blood flow, and unlocks deeper states for release and integration.

#### Science says:

Hypocapnia (low CO<sub>2</sub>) constricts cerebral blood vessels, reducing prefrontal oxygenation and blood flow—a fast, reversible state shift, consistent with transient hypofrontality.



# 2. Multi-Dimensional (Spatial) Sound Design

3D audio that "moves" around you to deepen immersion and focus.

#### Science says:

Spatial hearing engages brain networks that help us orient in space and sustain attention; immersive audio can enhance engagement and emotional impact.



#### 3. Binaural Beats

Two slightly different tones (one in each ear) create a perceived rhythm that may nudge brain activity.

#### Science says:

Meta-analyses show small-to-moderate, protocol-dependent effects for anxiety and cognition. Helpful as a support layer, not a silver bullet.

# THE NINE DIMENSIONS

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# 4. Solfeggio Frequencies

Specific tones popularized for relaxation and well-being.

#### Science says:

Early human studies suggest short-term hormonal and stress-marker changes at certain frequencies (e.g., 528 Hz), but evidence is preliminary and needs larger trials.



#### 5. Isochronic Tones

Clearly pulsed sounds used to encourage steady brain rhythms.

#### Science says:

The brain can "lock" onto rhythmic stimulation (auditory steady-state responses). Clinical benefits remain mixed/inconclusive, so we use them modestly.



# 6. Bioacoustic (Nature) Sound Effects

Ocean, rain, forest—sounds our nervous systems recognize as safe.

#### Science says:

Natural soundscapes reduce stress, support parasympathetic activity, and can quiet mind-wandering/rumination.

# THE NINE DIMENSIONS

(in Plain Language)

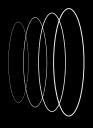


# 7. Subliminal Suggestions

Positive statements delivered just below conscious audibility.

#### Science says:

Subliminal stimuli can bias perception and choice under specific conditions; therapeutic impact is modest and debated. We use them as an adjunct during receptive states.



# 8. Guided Vocal Coaching

Calm, present guidance that frames the journey and offers supportive cues.

#### Science says:

Tone, cadence, and relational safety (co-regulation) influence nervous-system state and help keep attention gently engaged.



# 9. NLP-Style Language Patterns

Gentle phrasing that reduces resistance and invites possibility.

#### Science says:

Evidence for NLP as a clinical treatment is limited/controversial. We treat these as helpful coaching tools inside a broader, evidence-aligned protocol.

# **HOW A 9D SESSION FLOWS**

0-15 min

#### Phase 1 — Activation:

Gentle breath, natural soundscapes, and spacious guidance signal safety. Brain-directed audio may begin easing the mind into slower, more receptive rhythms.

15-45 min

#### Phase 2 — Transcendence:

Breathing deepens into connected rhythmic cycles; spatial sound, supportive frequencies, and language cues work together while you remain present. Many people experience emotional release, insight, or a shift in perspective.

45-60 min

# Phase 3 — Integration:

The nervous system settles. Gentle music and nature sounds help consolidate the experience so benefits last beyond the session.



# SELECTED RESEARCH

(for the curious)

#### **Breathwork, CO2 & Altered States**

Havenith MN, et al., 2025 — Communications Psychology (Nature)

<u>Decreased CO<sub>2</sub> saturation during circular breathwork supports emergence of altered states of consciousness</u>

#### **Breath, Pain & Mood**

Busch et al., 2012 — Pain Medicine

<u>The Effect of Deep and Slow Breathing on Pain Perception, Autonomic Activity, and Mood Processing—An Experimental Study</u>

# **Voluntary Immune Modulation with Training**

Kox et al., 2014 — PNAS

Voluntary activation of the sympathetic nervous system and attenuation of the innate immune response in humans

# **Binaural Beats — Meta-analysis**

García-Argibay et al., 2019 — Psychological Research

<u>Efficacy of binaural auditory beats in cognition, anxiety, and pain perception: a meta-analysis</u>

# Spatial Hearing (mechanism relevant to 3D/spatial audio)

Ahveninen et al., 2006 - PNAS

<u>Task-modulated "what" and "where" pathways in human auditory cortex</u> (Open-access copy; DOI: <u>Brain correlates of music-evoked emotions</u>)

#### **Nature Soundscapes & Restoration**

Gould van Praag et al., 2017 – Scientific Reports

Mind-wandering and alterations to default mode network connectivity when listening to naturalistic versus artificial sounds

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(for the curious)

#### **Music & Emotion**

Koelsch, 2014 — Nature Reviews Neuroscience Brain correlates of music-evoked emotions

## Music & Dopamine (two complementary papers)

- Salimpoor et al., 2011 Nature Neuroscience
   <u>Anatomically distinct dopamine release during anticipation and experience of peak emotion to music</u>
- Salimpoor et al., 2013 Science
   Interactions Between the Nucleus Accumbens and Auditory Cortices

   Predict Music Reward Value

# Solfeggio / 528Hz (preliminary human pilot)

Akimoto et al., 2018 — Health

Effect of 528 Hz Music on the Endocrine System and Autonomic Nervous System

(DOI: Brain correlates of music-evoked emotions)

# Why Multimodal Can Help (mechanisms/mediators)

Kazdin, 2007 — Annual Review of Clinical Psychology <u>Mediators and Mechanisms of Change in Psychotherapy Research</u>