Mindfulness Based Tinnitus Stress Reduction (MBTSR)



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Goals for Today's Talk

- De-Mystify Meditation & Mindfulness
- How Meditation & Mindfulness are tools to change the Tinnitus Brain
- MBTSR Research
- Development of MindfulTinnitusRelief.com
- A look inside MindfulTinnitusRelief.com
- How Audiologists can lead MBTSR courses in their own practice
- Links to learn more about MBTSR, Mindfulness, & MindfulTinnitusRelief.





De-Mystifying Meditation & Mindfulness





Meditation Defined

- An exercise in "Awareness Building"
- Using intentional effort to modify our brain using focused attention and concentration
- With repetition the associated neurons wire, fire, grow, & strengthen (neuroplasticity)
- We use the torque of repetition to build the attention muscle





Meditation as "Attention Training"

- Endogenous Attention
- Exogenous Attention



- Executive Attention
 - How and Where we choose to place attention
 - Meta-Awareness
 - Meditation is the Tool for Building Attention



Mindfulness Defined

- A way of life
- An approach to living in the only moment we ever have to grow, make choices, and change
- Meta-Awareness; Meta-Cognition
- Different from everyday Awareness
- Involves a special kind of Awareness:
 - Curiosity
 - Openness
 - Acceptance
 - Compassion (Loving-Kindness)





Mindfulness: Efficacy with a Range of Illnesses

- Chronic Pain (Grossman et al., 2007)
- Sleep & Dietary Problems (Gross et al., 2011)
- Stress (Shapiro et al., 2005)
- Anxiety (Hofmann et al., 2010)
- **Depression** (Mason & Hargreaves, 2001)
- Attention Deficit Hyperactivity Disorder
- **PTSD** (Smith et al., 2011)
- Fibromyalgia (Grossman et al., 2007)
- Chronic Fatigue (Surawy et al., 2005)
- Multiple Sclerosis (Grossman et al., 2010)
- **Psoriasis** (Kabat-Zinn et al., 2003)



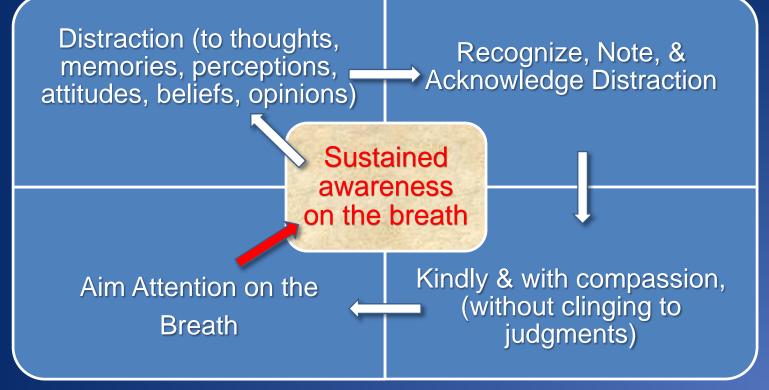
A Brief Lesson in "Awareness Building" (Meditation)

What happens inside the Meditating Mind...





Inside the Meditating Mind





Five-Minute Breathing Exercise

"The breath is the intersection of the body and mind." ~Thich Nhat Hanh



Questions To Ponder

- Is it tinnitus that is the problem or is it the emotions, memories, thoughts, feelings, beliefs, perspectives, stories etc about the tinnitus that is the problem? Both?
- Why are some people with tinnitus "bothered" and others "non-bothered" by tinnitus?
- Is the brain of a person with *bothersome* tinnitus different from the person with *non-bothersome* tinnitus?

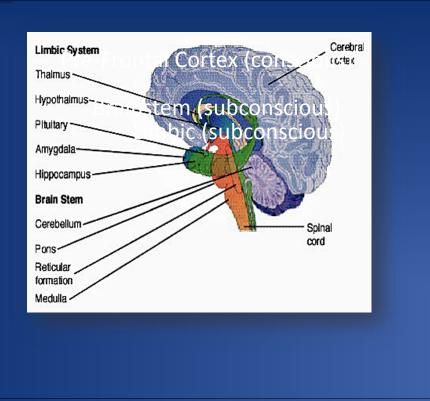


What Might be Happening in the Tinnitus Brain





The Brain in 3 Simple Parts





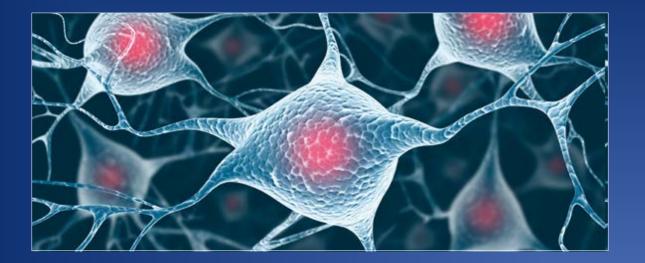
Importance of the Medial Pre-Frontal Cortex

Executive Functions

- Emotional Regulation
- Response Flexibility (think before you act)
- Fear Modulation
- Attention Regulation
- Sustaining Attention
- Impulse Control
- Reasoning
- Planning
- Metacognition (thinking about thinking)
- Empathy (self-other compassion)



What We Know From Other Fields of Science





Cortical Areas Thicker in Meditators

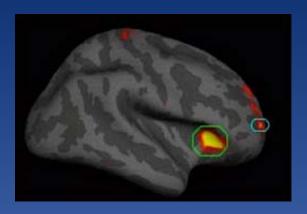
Brain areas (right insula & mPFC) are thicker in practitioners of Insight meditation than control subjects who do not meditate.

Graphs show age and cortical thickness of each individual.

Insula

(Lazar et al., 2005) **Prefrontal**





red = control subjects blue = meditators



MBTSR Course Structure (both in-Groups & Online)



- 8 weeks in length
- 2 Hour Class per week
 - Tinnitus Education
 - Mindfulness Lesson
 - Instructor led meditations, gentle yoga, mindful movement
 - Discussion Questions
 - Skill Building Activities, calendars, and readings
- Home Practice: 30 minutes per day, 6 days/week
- A Day-Long Mindfulness Retreat between the 6th & 7th week



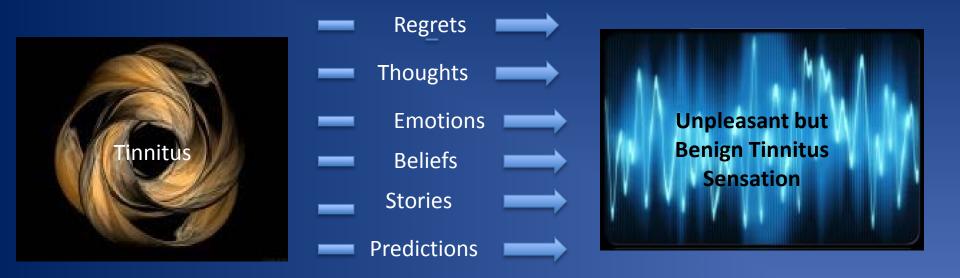
Tinnitus: From Benign Body Sensation to Gordian Knot

Automatic & Habitual





Tinnitus: From Gordian Knot To Benign Body Sensation





Which One of Your Patients is Right for MBTSR ?

- The person who just cannot *ignore* tinnitus (Wegner 1994; 2011)
- The person who is ready to do the hard work of building a mindfulness practice

• The person interested in "healing" rather than "curing" tinnitus



Mindfulness Based Tinnitus Stress Reduction (MBTSR)

What the Research Shows





MBTSR Pilot Study (Gans, et al 2013)



- Participants: 8 tinnitus patients who had previously received Tinnitus Counseling (standard of care) at the UCSF Audiology Clinic
- Pre- & Post- assessment measures administered
- Participants practiced Mindfulness meditation 30 minutes daily as Home Practice
- Post-Intervention Feedback Form (PIFF) administered at the end of the last class
- Tinnitus Handicap Inventory (THI) administered at 12-Month Follow-up



MBTSR Pilot Study: Measures

Primary outcome measure:

• Tinnitus Handicap Inventory (THI)

Secondary outcome measures:

- Tinnitus Visual Analogue Scale (VAS) (a measure of tinnitus annoyance)
- Tinnitus Percent Awareness Scale
- Hospital Anxiety and Depression Scale (HADS)
- SF-36 Symptom Checklist-90-Revised (SCL-90-R)
- Five Facet Mindfulness Questionnaire (FFMQ)



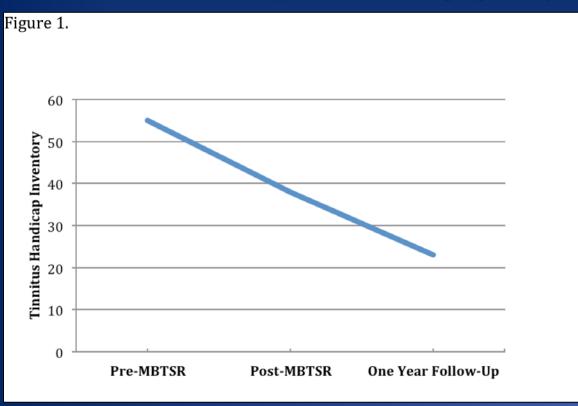
Pre-, Post, and 12-Month Follow-Up

Intervention Score Differences with Effect Sizes

* Effect Size (ES)					
rather than levels					
of significance					
were reported due					
to a small sample					
size.					

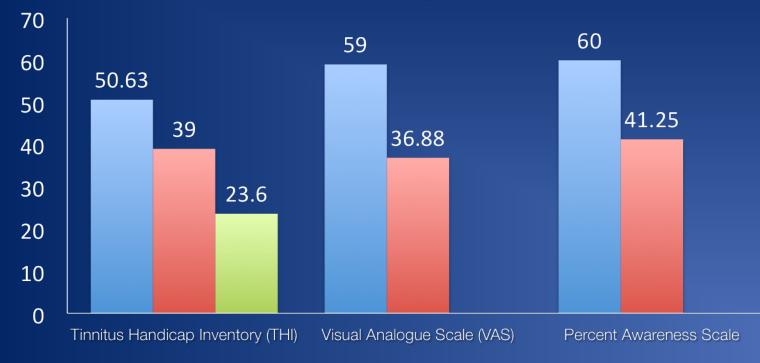
Measure	Pre-MBTSR Mean (SD)	Post-MBTSR Mean (SD)	12-Month FU Mean (SD)	Effect Size (Cohen's d)*
тні	50.63 (15.22)	39 (21.8)	23.6 (16.8)	.69
VAS	59 (24.87)	36.88 (24.26)		.99
Tinnitus Awareness	60 (33.7)	41.25 (32.49)		.64
FFMQ Non-Judge Observing Non-Reactivity Describe Acting with Awareness 	28 (5.09 30.13 (5.64) 20.38 (4.81) 29.75 (5.78) 28 (6.57)	32.25 (6.94) 31.75 (3.92) 23 (9.44) 32.38 (5.53) 27.75 (4.4)		-1.29 46 52 57 05
SF-36 • Social Functioning • Mental Health • Vitality	39.5 (10.35) 44.78 (11.21) 50.83 (9.1)	49 (46.3) 49.33 (9.32) 53.78 (6.94)		70 62 46
HADS	15.5 (6.46)	13.38 (7.23)		.30
SCL-90-R Depression Pohobic Anxiety Somatization Anxiety 	66.5 (12.3) 65.38 (13.31) 60.13 (14.75) 63.38 (12.57)	56.38 (24.44) 50.39 (21.77) 49.89 (23.5) 54.88 (23.95)		.52 .62 .58 .41

Tinnitus Handicap Inventory (THI)





Tinnitus Symptom Severity & Awareness Pre-, Post-, and 12-Month Follow-Up Mean Scores



Pre- Post- 12 mo Follow-Up



Tinnitus Handicap Inventory (THI)

Table 212-Month Follow-Up Tinnitus Handicap Inventory (THI) scores observed across all subjects (n=7)



Participant



Summary of Findings (Gans et al., 2013)

- Decreased Tinnitus Handicap & Bother
- Decreased Depression
- Decreased Anxiety
- Increased Mindfulness/
- Increased Quality of Life/



What Participants Are Saying: Qualitative Findings Overall Perception Shift:

- "Tinnitus doesn't seem like a terrible curse anymore. It's sometimes annoying now but not insurmountable."
- "I have come to see it (tinnitus) now as just another sensation, typically unpleasant, rarely neutral, never pleasant but I try to be aware without judging."



What Participants Are Saying: Qualitative Findings Changes in Sleep:

• "I am sleeping in a more regular pattern now. When I take medication to sleep, I'm taking half instead of the full dose."



What Participants Are Saying: Qualitative Findings Changes in Symptoms of Depression:

• "I can go into the ringing without going towards depression."



What Participants Are Saying: Qualitative Findings Improved General Functioning:

 "I am adapting the mindfulness process into my daily life. It has greatly helped me, not only to cope with the tinnitus but also with my relationships, communication, patience and anger-management. Yes, it has been a big commitment time-wise, but so worth it."



MindfulTinnitusRelief.com



Mindfulness Based Tinnitus Stress Reduction Part II

MindfulTinnitusRelief.com



The first-ever selfadministered online skillbuilding course of its kind for learning how to live comfortably with tinnitus



MindfulTinnitusRelief.com: What Is Included

- Eight 2-Hour Weekly Online Instructional Classes
- Daily (30-minute) Guided Home-Practice Mindfulness Skill Building Exercises
- A 7-Hour All-Day Online Mindfulness Retreat
- Advanced and Up-to-Date Tinnitus Information and Education
- Mindful Movement and Yoga Video Instruction
- More than 7 hours of downloadable mindfulness "awareness building" (meditation) exercises
- Weekly Discussion Questions to stimulate class forum communication & community
- Downloadable activities, calendars, and readings with links to additional resources about tinnitus and mindfulness
- Online Discussion Board Forum to connect and share experiences with
 other participants
 MindfulTinnitusRelief.com



Let's take a look inside the course . . .







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A Welcome	
About Dr. Gans	壹 The Course
Perspective	Pre-Assessments
Free Introduction	Week 1
The Program	Week 2
Register	Week 3
主 Login	Week 4
Resources	Week 5
The Science	Week 6
	DOM Introduction
FAQ	Day of Mindfulness
Donations	Week 7
Contact	Week 8

Post-Assessments

Meditations

Mindfulness Based **Tinnitus Stress Reduction**

Week 3: Non-Clinging to Judgments



Before we begin Week 3, please have your yoga mat available for practicing gentle and easy yoga postures later in this class.

MindfulTinnitusRelief.com:

Links to Resources

The mindfulness-based stress reduction (MBSR) program used in medical centers worldwide

Tinnitus Education



Down-Loadable Audio Links



FULL CATASTROPHE LIVING



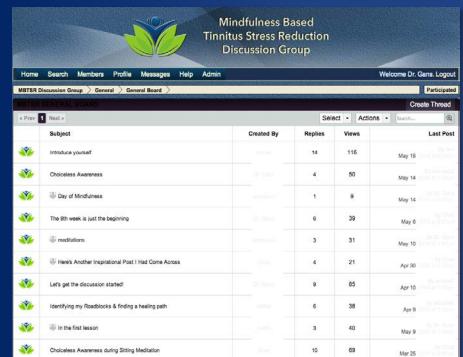
Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness



Ion Kabat-Zinn, Ph.D.

MindfulTinnitusRelief.com: Community Building

 Online Discussion Board Forum to connect and share your experiences with other participants



Community Building



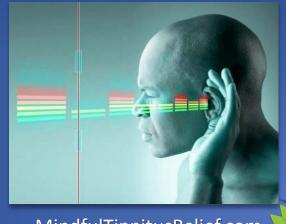
MindfulTinnitusRelief.com Online Version Benefits

- MBTSR World-Wide with Online Access (Desktop, laptop, Tablet, smartphone)
- Weekly classes at participant's convenience
- Evidence-based: Based on MBTSR
- Cost Effective & Affordable \$425
- Accessible & Time-Saving
- Fully Supported
- Created & Moderated by a Qualified & Experienced Psychologist ad Tinnitus Specialist
- Private, Secure, & Confidential
- Tracking of Progress
- Adjunct to Good Audiologist Tinnitus Care



Education Partnership Program (EPP):

How YOU, the Audiologist, Can Get Involved





Educational Partnership Program (EPP)



The Mindfulness Based Tinnitus Stress Reduction Education Partnership Program

We are very pleased to announce the launch of the MBTSR Education Partnership Program, administered in conjunction with our eight-week MindfulTinnitusRelief.com online course.



This initiative assists those with tinnitus to achieve a better quality of life, with a focus on community.

Qualified audiologist and therapist run local group sessions designed to provide a "missing link" that will augment and deepen the MindfulTinnitusRelief.com experience, while helping connect fellow tinnitus patients/clients in ways the online program cannot.

MBTSR's Education Partnership Program brings an ever-growing opportunity to empower those with tinnitus to attain, maintain, and increase their quality of life.



We warmly invite you to join this burgeoning community. Visit **mbtsr.com** for more information and to register. Audiologist-Run In-Person MBTSR Groups in Your Clinic

Go to: MBTSR.com



The MBTSR Education Partnership Program (EPP)

- Online Handbook for Practitioners
- Instruction on How to Run MBTSR Courses in Your Clinic
- You run In-Person Local Group Sessions
- You Augment, Complement, Personalize the Online Experience
- Build a Tinnitus Community
- Educational Incentives for Practitioner Refer

Go to: MBTSR.com







Why Mindfulness Based Tinnitus Stress Reduction (MBTSR) Benefits Not Only the Patient But Also the Audiologist

"A Mentally Healthier Tinnitus Patient is a Better Device User; A Better Device User is a Mentally Healthier Patient" MindfulTinnitusRelief.com

MindfulTinnitusRelief.com: Staying in Touch

- jg@MindfulTinnitusRelief.com
- Tympana White Paper Series
- The MBTSR Blog (MBTSRBlog.com)
- YouTube Channe
- Linkedlrin
 GooglePlus
 Facebook
 Twitter





Mindfulness Based Tinnitus Stress Reductio

The White Papers of



July 2014

More Firing, More Wiring: Conditioning the Brain to Better Handle Stimulus Response

In the human brain lies the **limble system**, composed of an exceedingly complex set of structures that supports many of our functions, including the landscape of our emotional lives.



Within the limbic system is the amygdala, a collection of almond-shaped nuclei, whose function includes being the first part of brain to evaluate incoming stimuli and determine I that stimuli 1) is a danger and needs our full attention, or 22 poses no danger and can be safely ignored.

This decision is made unconsciously before we have the chance to reasion and decide II, in fact, the stinul forby pose a danger, to a large degree, this part of the brain is informed by the saying. These rais polyament is made before we even have the chance to give the stimul any conscious throught.

And so it is with auditory information: we take in sounds that then travel to the anygdala to be evaluated and other monitored further as a possible threat or pushed to the notestee.

MindfulTinnitusRelief.com

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Links to additional MBTSR resources:

MBTSR YouTube Videos <u>The MBTSR Blog</u> <u>The Tympana White Paper Archive</u> <u>PBS NewsHour Profile on Tinnitus</u> <u>Mindfulness Based Tinnitus Stress Reduction Pilot Study</u>

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MindfulTinnitusRelief.com



Simply log on to MindfulTinnitusRelief.com and teach your patients how to heal today . . .

Thank You jg@MindfulTinnitusRelief.com

