

# STREAMLINE TINNITUS TREATMENT IN YOUR BUSY PRACTICE: TINNITUS CONCERN QUESTIONNAIRE

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- *President of the Hearing, Balance and Speech Center*
- *President of the New England Tinnitus and Hyperacusis Clinic*
- *Chairman and Founder of the Tinnitus Practitioners Association (TPA)*
- *Inventor of the CHaTT (Cognitive Habituation Tinnitus Therapy)*
- *Inventor of the RITE/RIC hearing aid system*
- *National and International Lecturer*




# TO TINNITUS OR NOT TO TINNITUS

- Present audiological practice landscape; the doom and gloom
  - OTC
  - Manage Care
  - Regeneration of hair cell

Diversify, Diversify, Diversify !

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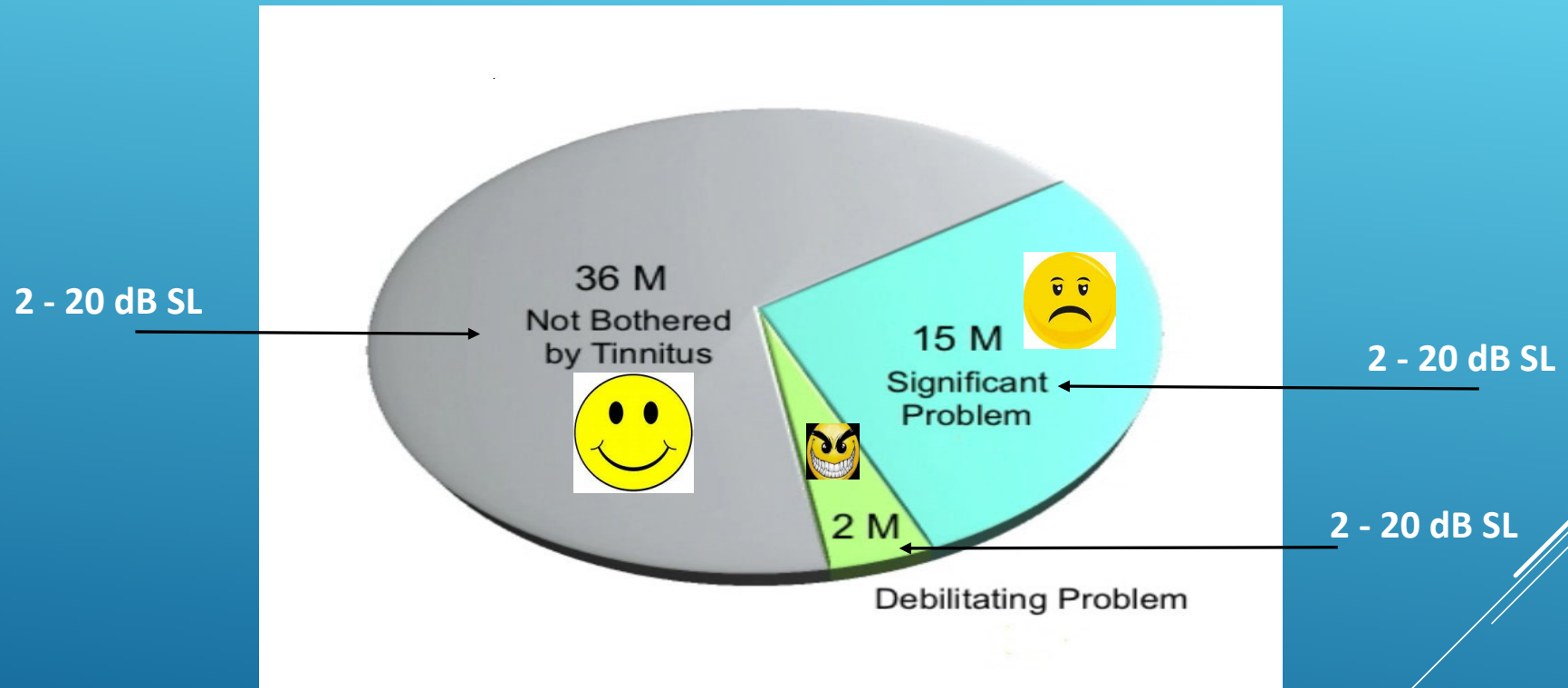
# TINNITUS: A PUZZLING AUDIOLOGICAL/PSYCHOLOGICAL EVENT

- Tinnitus is a very intriguing event
  - Physiological point of view
  - Psychological point of view
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- A decorative graphic consisting of several parallel white lines of varying lengths, slanted diagonally from the bottom right towards the top right, set against the blue background.

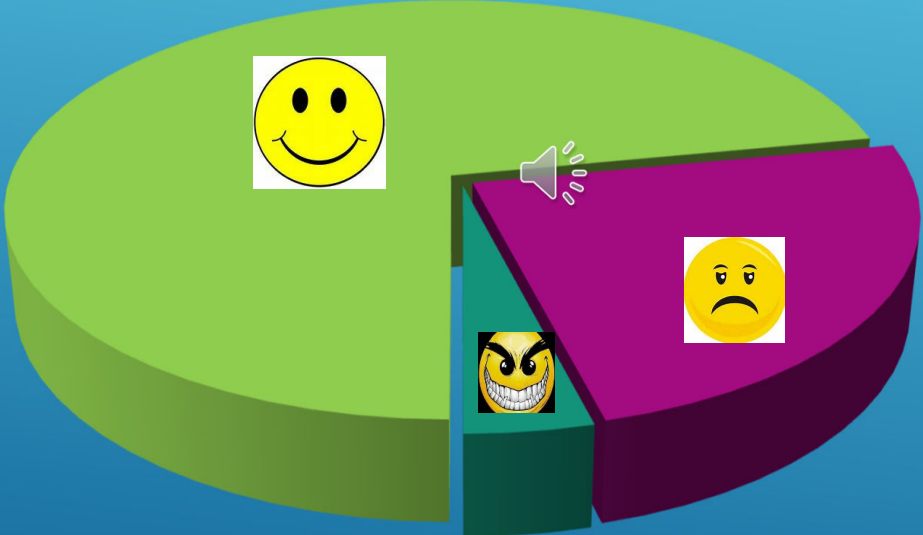


Why do I feel the whole world is against me?

# TINNITUS DEMOGRAPHICS



“The Good“ 30-35 mil

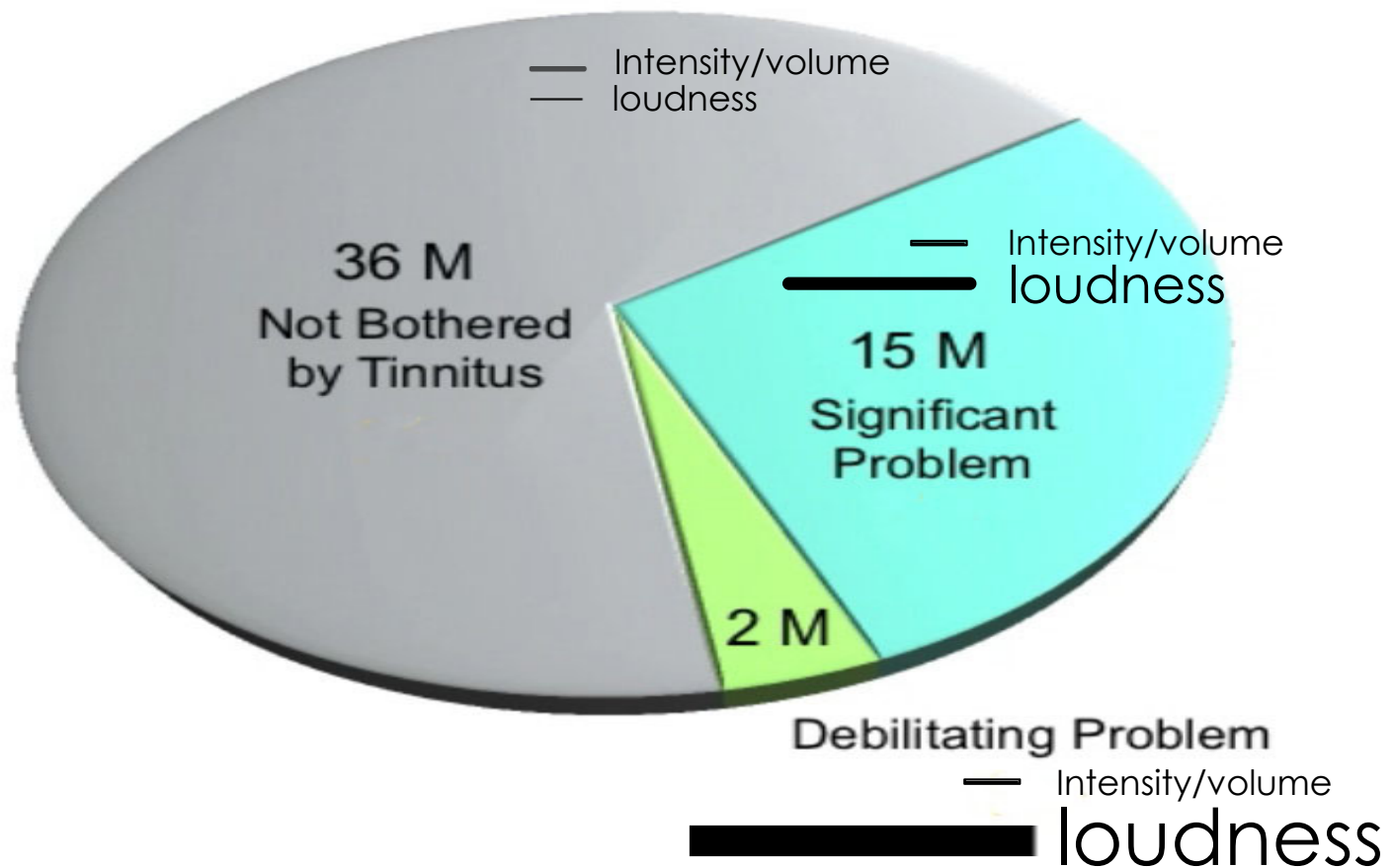


“The Bad” 10 – 15 mil

“The Ugly” 1-2 mil

Bauman's Equation: Loudness = (IP) + (EC)<sup>n</sup>

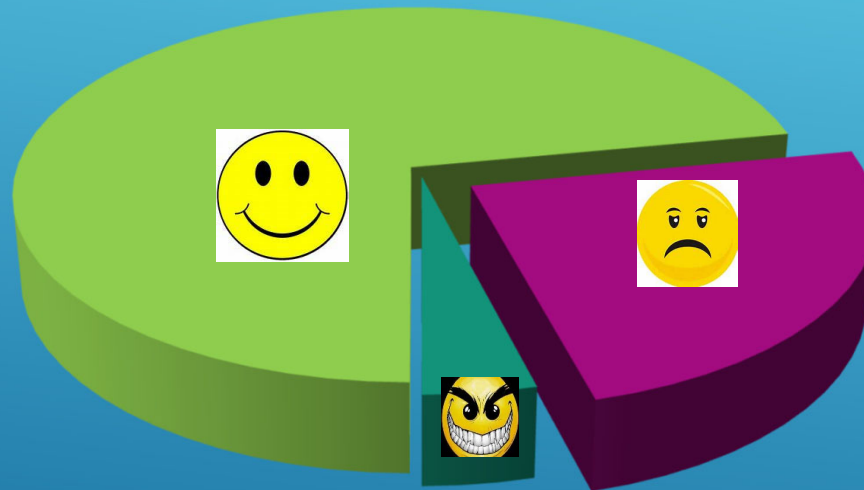
I – intensity, P – pitch, E – emotion, C- cognition





# IMPORTANCE OF COUNSELING

“The Good“ 30-35 mil




“The Bad” 10 – 15 mil

“The Ugly” 1-2 mil

**REACTIVITY**  
**NEGATIVITY**  
**OVER-REACTIVITY**

# MANAGING TINNITUS


- “Live with it”
  - Masking
  - Hearing aids
  - Sound therapy
  - Tinnitus Retraining Therapy (TRT)
  - Counseling only
  - Mindfulness based stress relief
  - Sound therapy and counseling – CHaTT
- 

## QUESTION #1

1. The goal of tinnitus management is to:
  - a. remove the tinnitus source.
  - b. change complaints of bothersome tinnitus non-bothersome tinnitus.
  - c. mask the tinnitus signal.
  - d. help patients learn to live with it.

Answer: b

# CLINICAL EVALUATION

- Tinnitus test battery:
    - Tinnitus pitch matching
    - Loudness pitch matching
    - Minimum Masking Levels (MMLs)
    - Residual inhibition (RI)
    - Loudness discomfort levels (LDLs)
- 

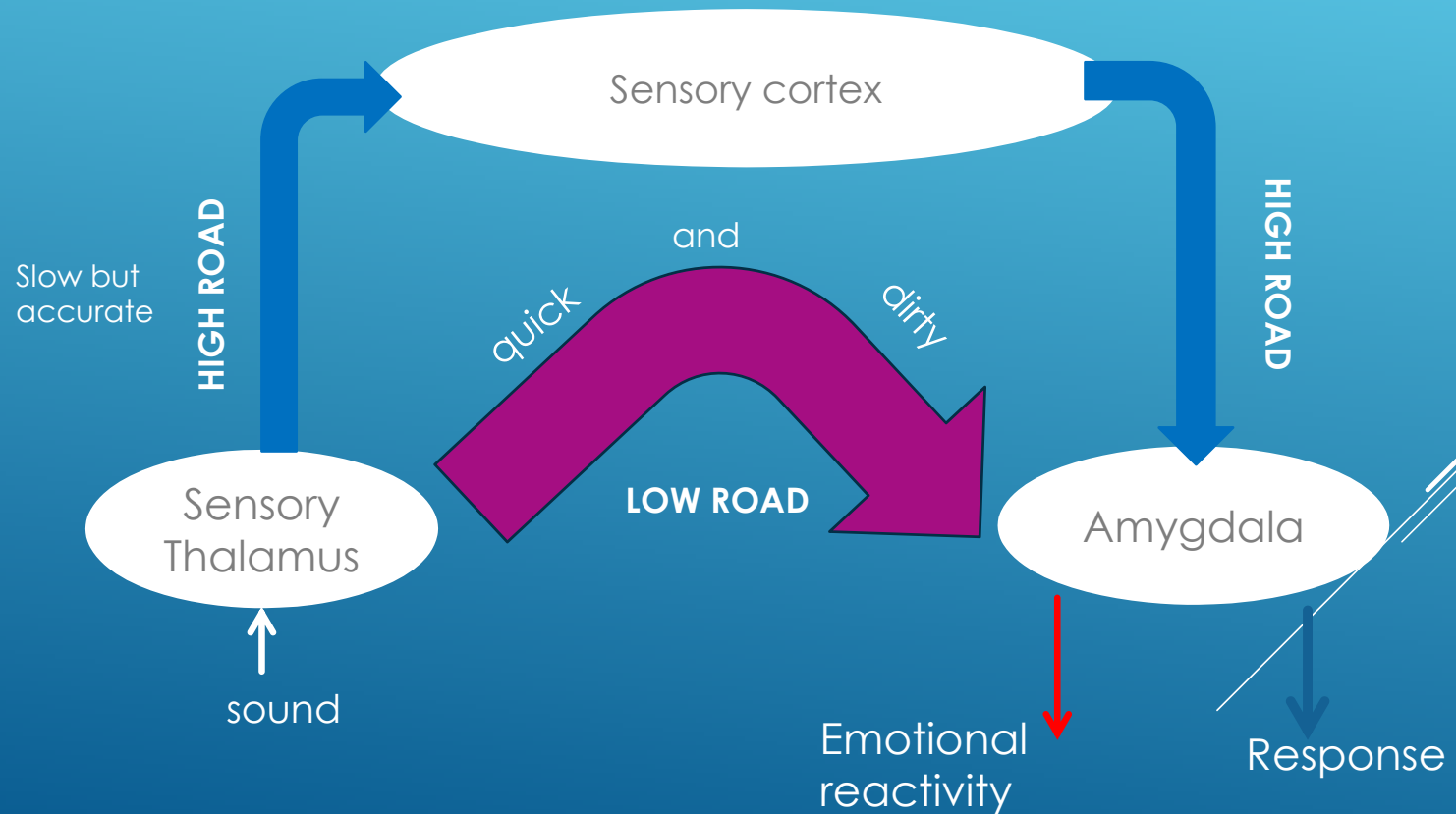
## QUESTION #2

2. The most relevant audiological test in the tinnitus evaluation is:

- a. tinnitus loudness matching.
- b. loudness discomfort levels.
- c. otoacoustic emissions.
- d. acoustic reflexes.

Answer b

# WHY SOME ARE OVERREACTIVE AND SOME DON'T?



## QUESTION #3

3. One of the most useful tools in management is to help the patient:

- a. adjust their life to live with tinnitus.
- b. react differently to their tinnitus.
- c. respond rather than react to tinnitus.
- d. change their environment and remove triggers.


Answer c

WHAT EXACTLY ARE WE TREATING?


The image features a blue gradient background. In the center, the text "WHAT EXACTLY ARE WE TREATING?" is displayed in white, uppercase letters. In the bottom right corner, there are several white, parallel diagonal lines of varying lengths, creating a sense of motion or a graphic element.



## WIDE SPECTRUM OF REACTIVITY

- Each tinnitus patient may have a very specific reason for their reaction to tinnitus which may explain why tinnitus becomes a debilitating problem to some and a benign event to others.
  - Chronic and unacceptable tinnitus is a result of an abnormal reaction/**concern** to a relatively benign auditory event.
- 

# TINNITUS INVENTORIES

- Developed in order to help to assess the tinnitus handicapping index. Helpful in monitoring the progress of the tinnitus treatment.
  - However, there is a need to be able to identify specific factors which are directly responsible for different degrees of the handicap inventories test results.
- 

# IDENTIFYING TINNITUS CONCERNS IN PURSUIT OF THE MOST FOCUSED TREATMENT

- TRT, CBT, TAT, PATM, CHaTT or any other acronym for tinnitus treatment- all use some form of counseling in our efforts to help our tinnitus patient.
- We address the tinnitus with a very “global” tinnitus treatment protocol.
- It would, therefore, make sense to find out why the tinnitus patient suffers so much when hearing a soft intensity, but yet so intrusive sound.
- Only then we would be armed with best possible tools to address each tinnitus patient’s individual CONCERN/S about his or hers tinnitus.

# IT'S ALL ABOUT WHAT AND WHY?

- ▶ As early as in 1988 Hallam at al. and later Wilson at al. in 1991 considered various factors which may affect person's reactivity to the tinnitus. Reaction or over-reaction can create in some catastrophic response to tinnitus.
- ▶ David Allen in his book "*Getting Things Done*" talks about the beneficial factor of the knowledge of the "offender" in overcoming issues of anxiety and fear.
- ▶ Daniel Kahneman in his 2011 book "*Thinking, Fast and Slow*" states "an accurate diagnosis may suggest an intervention to limit the damage that bad judgments and choices often cause".

# TINNITUS CONCERN QUESTIONNAIRE (TCQ): IDENTIFYING TINNITUS CONCERNS

- ▶ Clinical observation for over 25 years of treating tinnitus patients helped to identify what are some of the main concerns responsible for how strong the dislike and aversion to tinnitus becomes.
- ▶ In other words, I tried to recognize what are the factors which categorize the tinnitus patient on the spectrum from acceptable tinnitus to the tinnitus becoming a catastrophic event.
- ▶ The Tinnitus Concern Questionnaire (TCQ) was developed to help to recognize the main concern/s tinnitus patients identify as their primary reason for over-reacting to this “evil” sound event . Such approach should help to facilitate and optimize the tinnitus treatment process.

# TINNITUS CONCERN QUESTIONNAIRE (TCQ)

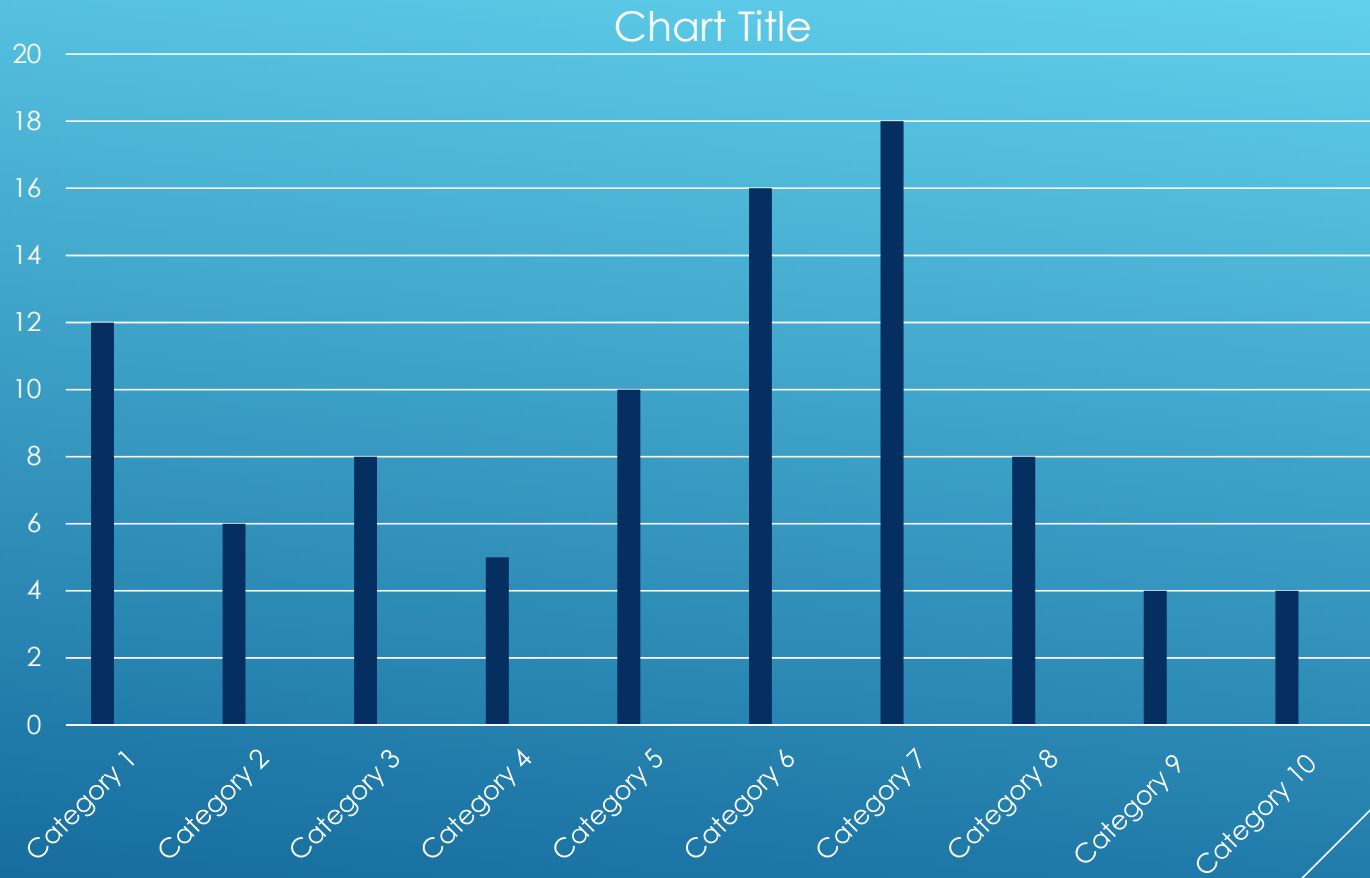
Please rank the following from 1 to 10 in the order of concern regarding your tinnitus.  
1 being the Most Concerned and 10 being the Least Concerned

- ▶ (1)\_\_\_ I am concerned about my tinnitus because it robbed me of my quietness
- ▶ (2)\_\_\_ I am concerned about my tinnitus because it interferes with my hearing
- ▶ (3)\_\_\_ I am concerned about my tinnitus because I am afraid it will cause damage to my hearing
- ▶ (4)\_\_\_ I am concerned about my tinnitus because I do not know what is causing it
- ▶ (5)\_\_\_ I am concerned about my tinnitus because I am afraid that it will lead to other medical problems
- ▶ (6)\_\_\_ I am concerned about my tinnitus because I have no control over its presence
- ▶ (7)\_\_\_ I am concerned about my tinnitus because it interferes with my life
- ▶ (8)\_\_\_ I am concerned about my tinnitus because it interferes with my sleep
- ▶ (9)\_\_\_ *I am concerned about my tinnitus because it interferes with my concentration*
- ▶ (10)\_\_\_ *I am concerned about my tinnitus because it makes me tired/exhausted*
  
- ▶ I am concerned about my tinnitus for reasons other than above.... please describe:

## EXAMPLE :

- ▶ (1)\_1\_ I am concerned about my tinnitus because it robbed me of my quietness
- ▶ (2)\_3\_ I am concerned about my tinnitus because it interferes with my hearing
- ▶ (3)\_2\_ I am concerned about my tinnitus because I am afraid it will cause damage to my hearing
- ▶ (4)\_7\_ I am concerned about my tinnitus because I do not know what is causing it
- ▶ (5)\_6\_ I am concerned about my tinnitus because I am afraid that it will lead to other medical problems
- ▶ (6)\_5\_ I am concerned about my tinnitus because I have no control over its presence
- ▶ (7)\_4\_ I am concerned about my tinnitus because it interferes with my life
- ▶ (8)\_8\_ I am concerned about my tinnitus because it interferes with my sleep
- ▶ (9)\_10\_ I am concerned about my tinnitus because it interferes with my concentration
- ▶ (10)\_9\_ I am concerned about my tinnitus because it makes me tired

N = 89  
THI = 45 to 93  
Age = 32 to 78  
M = 54  
F = 35





Concern 1	Concern 2	Concern 3	Concern 4	Concern 5	Concern 6	Concern 7	Concern 8	Concern 9	Concern 10
12	6	8	5	10	16	18	6	4	4

1. I am concerned about my tinnitus because it robbed me of my quietness
2. I am concerned about my tinnitus because it interferes with my hearing
3. I am concerned about my tinnitus because I am afraid it will cause damage to my hearing
4. I am concerned about my tinnitus because I do not know what is causing it
5. I am concerned about my tinnitus because I am afraid that it will lead to other medical problems
6. I am concerned about my tinnitus because I have no control over its presence
7. I am concerned about my tinnitus because it interferes with my life
8. I am concerned about my tinnitus because it interferes with my sleep
9. I am concerned about my tinnitus because it interfering with my concentration
10. I am concerned about my tinnitus because it makes me tired/exhausted


# 5 PATIENTS PRE AND POST

(LENGTH OF TREATMENT < 6 MONTHS AND 6 MONTHS LATER)

- CHaTT Reaction Score = CRS
- Pt 1 Pre; Concern #6 THI = 56, CRS = 68 (AC Exercises)  
Pt 1 Post; THI = 28, CRS = 32
- Pt 2 Pre; Concern #8 THI = 68, CRS = 74 (Sleep addressed with devices and sleep)  
Pt 2 Post; THI = 26, CRS = 30
- Pt 3 Pre; Concern # 7 THI = 48, CRS = 56 (Interference with life, Devices and Mindfulness)  
Pt 3 Post; THI = 18, CRS = 24
- Pt 4 Pre; Concern #5 THI = 62, CRS = 70 (Lead to medical; Devices and demystification)  
Pt 4 Post; THI = 18, CRS = 22
- Pt 5 Pre; Concern #1 THI = 54, CRS = 66 (Rob of my quiet; devices and general CBT)  
Pt 5 Post; THI = 14, CRS = 18

<u>Subjects</u>	<u>N</u>	<u>Average THI</u>	<u>% success</u>	<u>length of treatment</u>
TRT(T)	127	64 (0-100)	89	16 months
CHaTT(T)	221	72 (0-114)	94	12 months
CHaTT + TCQ	89	68	100	< 6 months

# TINNITUS CONCERN QUESTIONNAIRE: CONCLUSION

- ▶ The intention of this TCQ was not to look at correlations among the various variables but to assess if there could be additional help in planning our tinnitus treatment program.
  - ▶ Preliminary results suggest that TCQ helps to address treatment in a more direct and effective way,
- 

# TINNITUS CONCERN QUESTIONNAIRE

- ▶ TCQ helps to recognize the primary “foe” in the patient’s tinnitus conflict. By identifying “your enemy” one can directly address the main culprit which is responsible for maintaining the subconscious and conscious factors in the “tinnitus physiological and psychological” networks.
- ▶ Know your foe, identify it, give it a name. Only then you have a chance to win your battle with a known opponent. You cannot fight windmills like Don Quixote, tilting at windmills, fighting imaginary enemies.

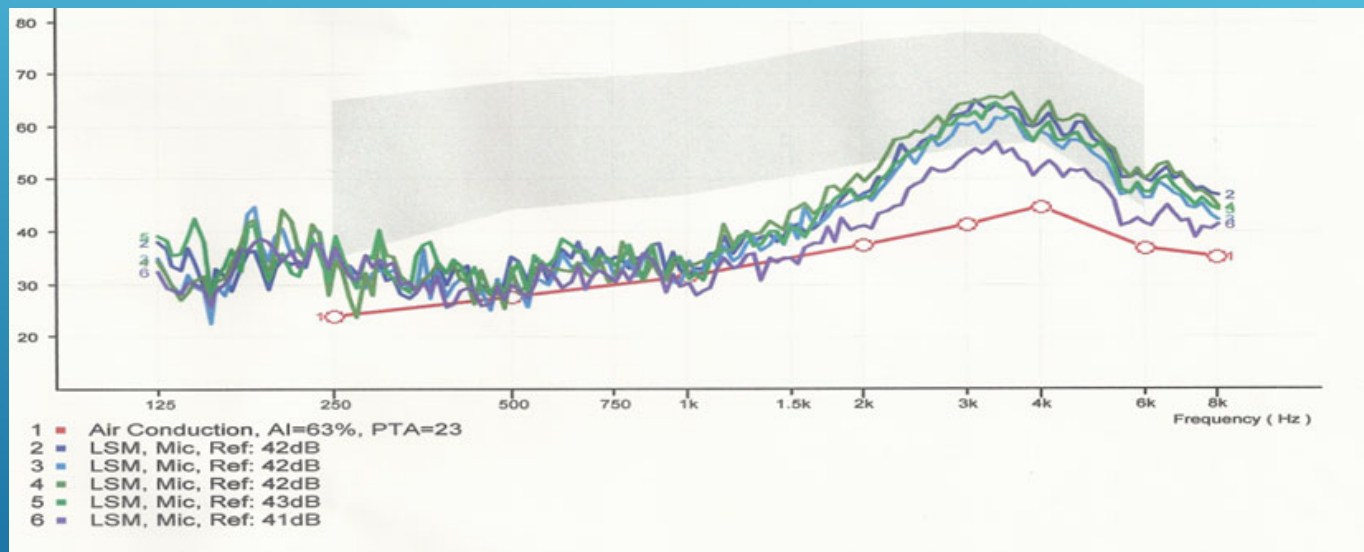
## QUESTION #4

4. Tinnitus management can be streamlined by:

- a. determining the patients main concern regarding how tinnitus affects his/her life.
- b. allowing the patient to determine the type of sound therapy.
- c. completing a full battery of audiological testing and tinnitus evaluation.
- d. determining the correct pitch of the tinnitus.

Answer: a

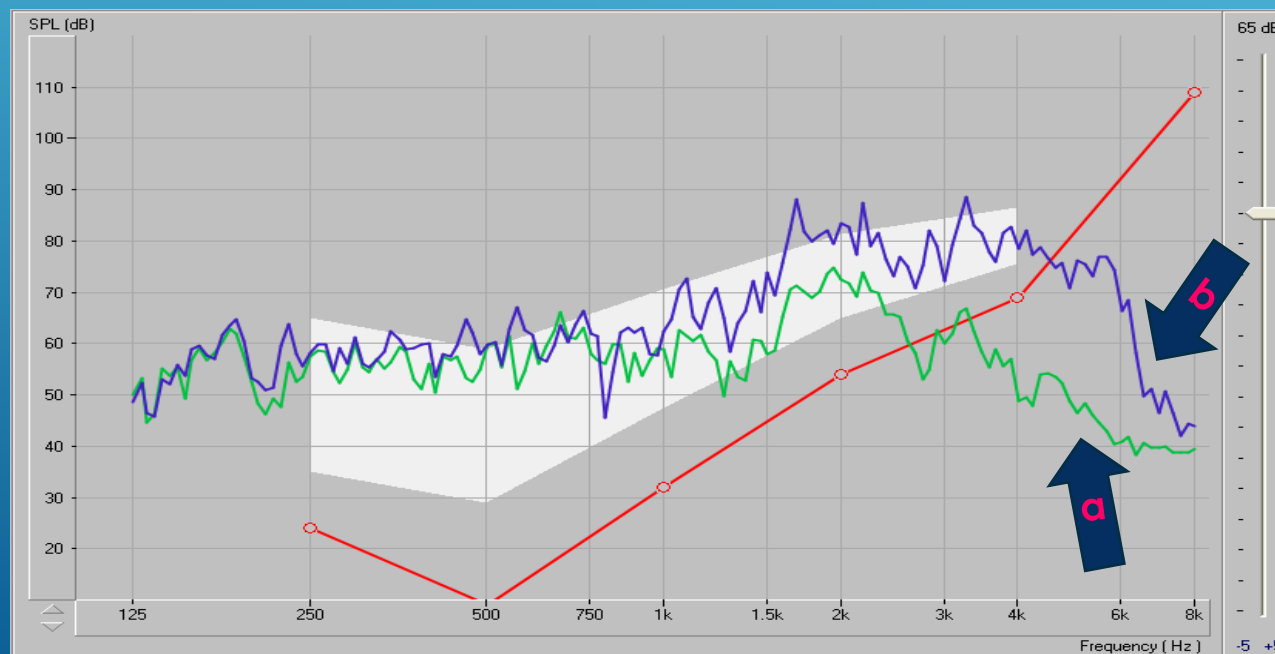
# VALIDATING SOUND THERAPY



Observe a receiver placement in the EAM

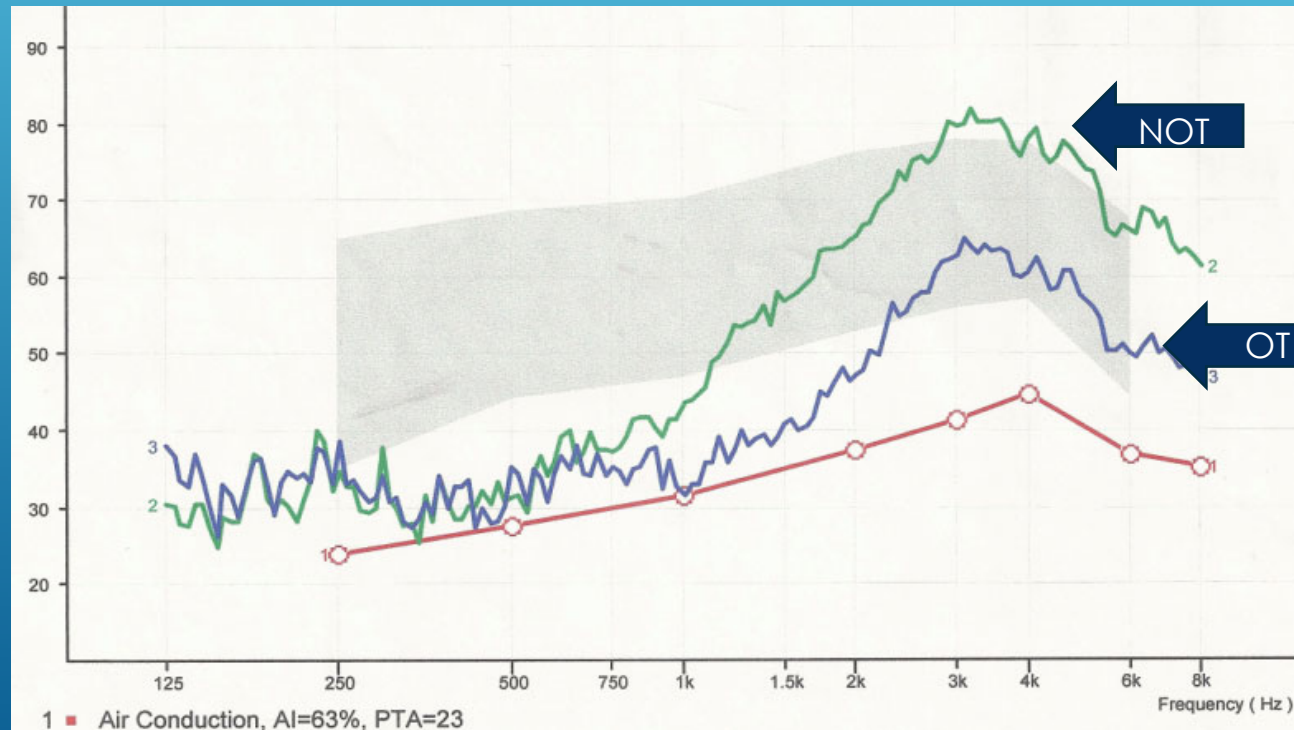
a) in the “a” example the receiver is “jammed” into the wall

b) in the “b” example receiver is placed properly in the center of the EAM





# NON-ORGANIC TINNITUS (NOT) VS ORGANIC TINNITUS (OT)



## QUESTION #5

5. Save time fitting and validating sound therapy by:

- a. matching the frequency response of sound to the pitch of the tinnitus.
- b. using real ear measurements.
- c. performing minimum masking levels.
- d. offering multiple devices in your office.

Answer: b

- Presented for your concern and consideration
  - Take home message:
  - Consider tinnitus patient's concern/s about tinnitus before attempting treatment
- 
- A decorative graphic consisting of several parallel white lines of varying lengths, slanted upwards from left to right, located in the bottom right corner of the slide.

# QUESTIONS

Natan Bauman, M.S. Eng., Ed.D., FAAA

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Streamline tinnitus treatment in your busy practice  
Natan Bauman, Ed.D.

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*Answer key*

*1. b 2. b 3. c 4. a 5. b*