



**Visit #2**

**1) Mechanistic**

• Laryngeal sensation/behaviors:

“How often do you have these symptoms?”

- Mucus: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often
- Globus: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often
- Burning: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often
- Tension: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often
- Dry: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often
- Itchy: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often
- Pain: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often
- Coughing: \_\_\_ Never \_\_\_ Sometimes (\_\_\_x/day) \_\_\_ Often (\_\_\_x/day)
- Throat clearing: \_\_\_ Never \_\_\_ Sometimes (\_\_\_x/day) \_\_\_ Often (\_\_\_x/day)
- Voice distortion: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often
- Breathing difficulty: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often
- Trouble swallowing: \_\_\_ Never \_\_\_ Sometimes \_\_\_ Often

Suppression/desensitization techniques provided: \_\_\_ Drinking water \_\_\_ Rapid positive pressure breathing \_\_\_ Slow resetting breaths \_\_\_ Humming \_\_\_ Distraction \_\_\_ Yawning \_\_\_ Other: \_\_\_\_\_

• Voice Production: \_\_\_ Normal \_\_\_ Pressed \_\_\_ Rough \_\_\_ Strained \_\_\_ Strangled \_\_\_ Raspy \_\_\_ Glottal fry \_\_\_ Breathy \_\_\_ Hypophonic \_\_\_ Other: \_\_\_\_\_

GRBAS Rating: \_\_\_\_\_ (0=Normal, 1=Mild, 2=Moderate, 3=Severe)

Techniques Taught: \_\_\_ Relaxation \_\_\_ Breath coordination \_\_\_ Flow \_\_\_ Resonance \_\_\_ Effort \_\_\_ Daily conditioning regimen \_\_\_ Other: \_\_\_\_\_

• Breathing: \_\_\_ Normal \_\_\_ Breath holding \_\_\_ Shallow breathing \_\_\_ ILO/PVFM \_\_\_ Laryngospasm

Techniques taught: \_\_\_ Slow pace \_\_\_ Diaphragmatic \_\_\_ Relaxed throat \_\_\_ Relaxed shoulders \_\_\_ Relaxed chest \_\_\_ Positive pressure \_\_\_ Yawning \_\_\_ PVFM/laryngospasm prophylaxis \_\_\_ PVFM/laryngospasm reversal \_\_\_ Other: \_\_\_\_\_

• Swallowing: \_\_\_ Normal \_\_\_ Abnormal: \_\_\_\_\_

Techniques taught: \_\_\_ Eliminate piece-meal \_\_\_ Coordinate breathing and swallowing \_\_\_ Alternating liquids and solids \_\_\_ Relaxation and reset \_\_\_ Bolus hold \_\_\_ Eliminate aerophagia \_\_\_ Suppress supragastric belching \_\_\_ Suppress rumination \_\_\_ Other: \_\_\_\_\_

• Diet/Lifestyle: Adjustments based on guidance from prior session: \_\_\_\_\_

**2) Heart Rate Variability Biofeedback**

*“Tell me about your experience using slow breathing to help settle your throat sensations. Were you able to practice for 10 uninterrupted minutes at least once each day? If not, what made it difficult to stay focused, and did distractions affect how calm or regulated your body felt during the exercise?”*

- Compliance with home program \_\_\_ Yes \_\_\_ No \_\_\_ Partly \_\_\_ Other: \_\_\_\_\_
- Problem solving to promote compliance \_\_\_ Not needed \_\_\_ Completed: \_\_\_\_\_  
Modifications \_\_\_\_\_

*(AppleWatch, set alarm, review daily schedule and find appropriate time to use breathing reset. If symptomatic during meals, exercise or voice use, perform before and after these tasks.)*



- Experience using HRV Training home program \_\_\_Positive \_\_\_Challenging \_\_\_Negative \_\_\_ Other:  
\_\_\_\_\_
- Data review from HRV Elite:
  - Days elapsed since last appointment \_\_\_\_\_
  - # of times HRV training completed since last visit \_\_\_\_\_
  - Highest HRV \_\_\_\_\_
  - Lowest HRV \_\_\_\_\_
  - Average HRV \_\_\_\_\_
- HRVB with Physiocomp GP-8e \_\_\_Completed
- Able to achieve resonant frequency? \_\_\_Yes \_\_\_No \_\_\_Partly
- Prescribed ongoing 10 minute home program \_\_\_Completed

### 3) **Cognitive Alignment**

Target: *Cognitive Behavioral Therapy; Values-Based*

Rationale: *Identify, challenge, and replace distorted or negative thoughts with objective alternatives. Foster awareness of cognitive distortions, building on improved cognitive flexibility.*

Literature:

1. Martineau S, Gartner-Schmidt J, Helou LB. **Quantification of Meta-Therapy in Conversation Training Therapy.** *Am J Speech Lang Pathol.* 2025 Sep 4;34(5):2649-2665. doi: 10.1044/2025\_AJSLP-24-00308. Epub 2025 Jul 3. PMID: 40609528.
2. Sharma A, Rushton K, Lin I, Wadden D, Lucas KG, Miner AS, Nguyen T, Althoff T. **Cognitive Reframing of Negative Thoughts through Human-Language Model Interaction.** *Proc Assoc Comput Linguist.* 2023 Jul;61:1523–1541. doi: 10.18653/v1/2023.acl-long.84. Epub 2023 May 4. arXiv:2305.02466.
3. Van Stan JH, Whyte J, Duffy JR, Barkmeier-Kraemer J, Doyle P, Gherson S, Kelchner L, Muise J, Petty B, Roy N, Stemple J, Thibeault S, Tolejano CJ. **Voice Therapy According to the Rehabilitation Treatment Specification System: Expert Consensus Ingredients and Targets.** *Am J Speech Lang Pathol.* 2021 Sep 23;30(5):2169-2201. doi: 10.1044/2021\_AJSLP-21-00076. Epub 2021 Aug 31. PMID: 34464550; PMCID: PMC8702840.
4. Fordham, B., Sugavanam, T., Edwards, K., Stallard, P., Howard, R., das Nair, R., Copsey, B., Lee, H., Howick, J., Hemming, K., & Lamb, S. E. (2021). **The evidence for cognitive behavioural therapy in any condition, population or context: A meta-review of systematic reviews and panoramic meta-analysis.** *Psychological Medicine*, 51(1), 21–29.
5. Helou, L. B., Welch, B., Hoch, S., & Gartner-Schmidt, J. (2019). **Self-reported stress, trauma, and prevalence of laryngoresponders in the general population.** *Journal of Voice*, 33(5), 789–795. <https://doi.org/10.1016/j.jvoice.2018.03.015>

Therapy:

“Hypervigilance develops when the nervous system receives unclear or ambiguous signals from the throat or airway and responds by prioritizing safety. The vocal folds frequently react by closing or increasing tension, a completely normal protective mechanism. Because the potential consequences of missing a real problem—such as aspiration—are serious, the brain lowers its threshold for attention and repeatedly flags these sensations as important, bringing conscious awareness into ongoing monitoring. Over time, this heightened focus can increase awareness of normal throat sensations, prompt repetitive checking behaviors like swallowing or throat clearing, and create a persistent sense that something is wrong even in the absence of actual danger. While this response is adaptive and protective at first, it can become maladaptive when the signal does not resolve, leaving the nervous



system stuck in a cycle of monitoring and alarm that continues without a clear threat. What begins as a protective reflex can, over time, shift into an ongoing cycle of vigilance and alarm that continues even when no true danger is present.”

“If I were to scare you right now, we know via animal and human studies that three things would happen: you would blink, your heart rate would go up, and you would hold your breath. All NORMAL physiological responses to fear. Think of the last time you almost got cut off by a car... The vocal folds' number one job is not to talk; it is to protect the airway. This is overextended to protection when scared or fearful. That's why you have probably heard the saying “I couldn't scream when I was scared” or “I get all choked up” when emotional. These are normal responses. About 27% of the general population are “laryngoresponders”, which means that some people are predisposed, by either personality or physical makeup, to house emotional distress in their throat. For others, stress emerges in the form of headaches, IBS or back pain to name a few.

“Naming emotions regulates the nervous system. The adage is ‘Name it to tame it.’ Putting words to how you feel helps calm your body down. When emotions stay unnamed, your nervous system stays on high alert, as if something is wrong and needs immediate attention. “Neurons that fire together, wire together”. When you name the feeling—like saying “I'm anxious” or “I'm frustrated”—you help your brain and body slow down. It creates a small pause between what you're feeling and how you react. That pause helps the emotion dull so you can manage it. Naming emotions also helps you feel more in control. You may still feel the emotion, but it doesn't take over everything. Over time, practicing this helps your nervous system learn that feelings are uncomfortable—but not dangerous—and that they will pass.”

“Below is a diagram of the human body divided into regions. Psychological stress often produces physical sensations, which varies from person to person. Please indicate any areas where you have noticed physical responses to stress in the past year ”



Below is a figure of the human body divided into sections.

The diagram shows a front and back view of a human figure with horizontal lines indicating body sections. The sections are labeled as follows:

- Face, head
- Head
- Throat, neck
- Neck, shoulders
- Chest, respiratory system
- Upper back
- Abdomen, Digestive system
- Lower back
- Pelvis
- Lower limbs

Checklist:

- Face
- Head
- Throat and front of neck
- Back of neck and shoulders
- Chest and respiratory system
- Upper back
- Abdomen and digestive system
- Lower back
- Pelvis
- Forearms and hands
- Legs and lower limbs
- Skin
- Emotional
- Other
- I don't experience or feel stress in my body

“How do you describe yourself?” Introvert | Extrovert

“How is your stressed expressed?”

|                          |                   |                |            |                 |
|--------------------------|-------------------|----------------|------------|-----------------|
| Crying                   | Anger             | Fatigue        | Overeating | Undereating     |
| Substance use            | Social withdrawal | Teeth grinding | Fidgeting  | Procrastination |
| Difficulty concentrating | Insomnia          | Voice Change   | Other      |                 |

On the scale provided, please mark how you perceive the following:

Weekly frustration

Not \_\_\_\_\_ A lot

Weekly anger

Not \_\_\_\_\_ A lot

How often do you audibly sigh

Not \_\_\_\_\_ A lot

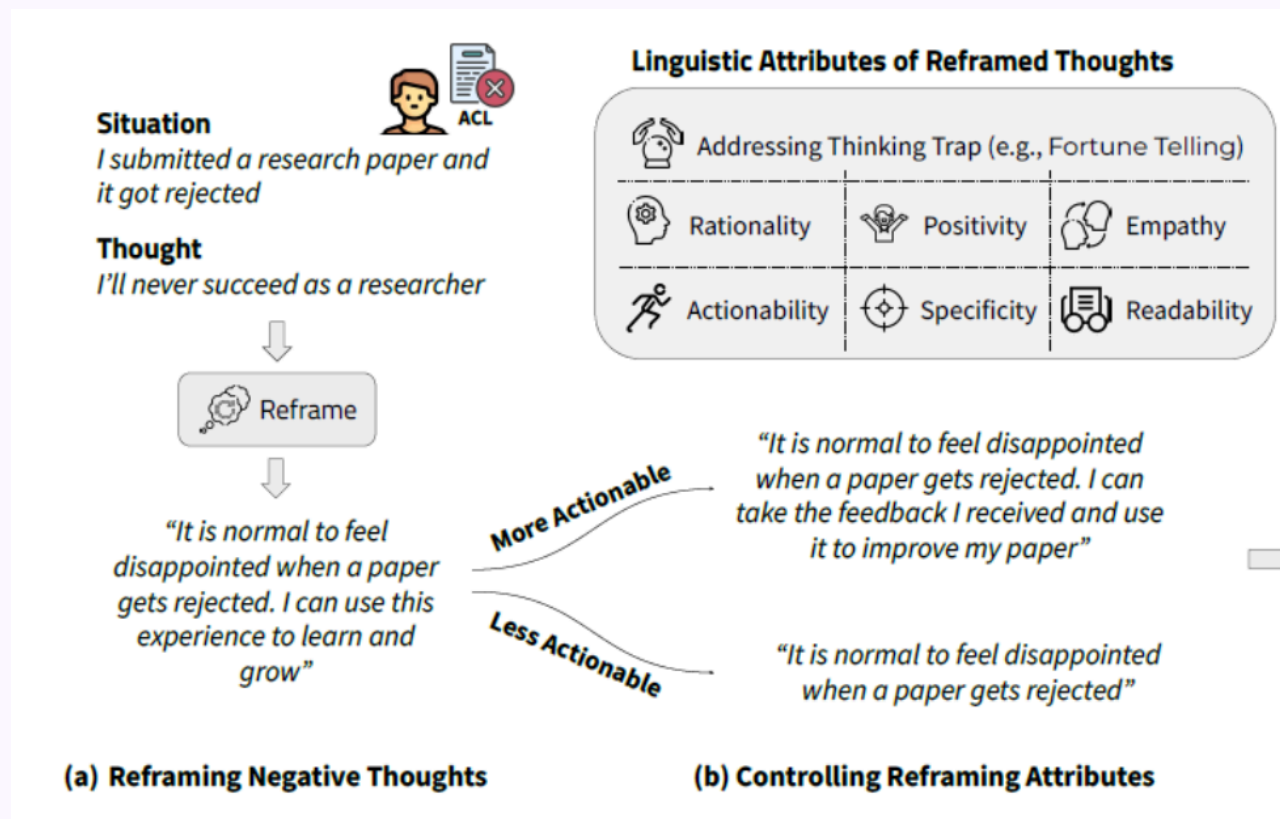


# LRT™

Laryngeal Recalibration Therapy

“Negative thoughts are a normal part of being human. Sometimes they come up automatically and cause strong feelings, which can make them hard to interrupt in the moment. A helpful skill for dealing with these thoughts is called reframing. Reframing means gently looking at a thought in a more balanced and realistic way instead of forcing yourself to ‘think positive.’ For example, if you are invited to a social event and think, “I’m going to feel awkward and say the wrong thing,” a reframed thought might be, ‘I might feel a little nervous at first, but I’ve handled situations like this before, and it could turn out okay.’ Research shows that reframed thoughts are most helpful when they are believable, lower your stress, and are simple enough to remember the next time the thought comes up.”

“Negative thinking often falls into common patterns called ‘thinking traps’ and cognitive distortions. Here are examples you may find relatable.”





| Thinking Traps              | Description   | Example  |
|-----------------------------|---|--|
| All-or-Nothing Thinking     | Thinking in extremes.   | If it isn't perfect, I failed. There's no such thing as "good enough".         |
| Overgeneralizing            | Jumping to conclusions based on one experience.   | They didn't text me back. Nobody ever texts me back.                           |
| Labeling                    | Defining a person based on one action or characteristic.  | I said something embarrassing. I'm such a loser.                               |
| Fortune Telling             | Trying to predict the future. Focusing on one possibility and ignoring other, more likely outcomes. | I'm late for the meeting. I'll make a fool of myself.                          |
| Mind Reading                | Assuming you know what someone else is thinking.  | She didn't say hello. She must be mad at me.                                   |
| Emotional Reasoning         | Treating your feelings like facts.  | I woke up feeling anxious. I just know something bad is going to happen today. |
| Should Statements           | Setting unrealistic expectations for yourself.  | I shouldn't need to ask for help. I should be independent.                     |
| Personalizing               | Taking things personally or making them about you.  | He's quiet today. I wonder what I did wrong.                                   |
| Disqualifying the Positive  | When something good happens, you ignore it or think it doesn't count.                               | I only won because I got lucky.  |
| Catastrophizing             | Focusing on the worst-case scenario.  | My boss asked if I had a few minutes to talk. I'm going to get fired!          |
| Comparing and Despairing    | Comparing your worst to someone else's best.  | My niece's birthday party had twice the amount of people                       |
| Blaming                     | Giving away your own power to other people.   | It's not my fault I yelled. You made me angry!                                 |
| Negative Feeling or Emotion | Getting "stuck" on a distressing thought, emotion, or belief.                                       | I am feeling lonely.   |

"Take a moment to reflect on a thinking trap you've experienced. You don't need to share it, but if you'd like, we can work through one together."

Here are 4 techniques you can use to reframe:

1. **Rationality**

Look at the evidence for and against your automatic thought. For example, a paper rejection might trigger the thought, "I'll never succeed as a researcher." A more rational reframe would be, "One paper rejection does not define my ability or my future success."

2. **Positivity**

Shift toward a balanced and hopeful outlook without ignoring reality. For example, "I may or may not succeed right away, but I can keep learning and trying."

3. **Empathy**

Acknowledge your emotional response with kindness. For example, "It's understandable to feel disappointed when a paper is rejected. Anyone in my position would feel this way."

4. **Actionability**

Focus on what you can do next. For example, "I can use the feedback I received to revise my paper and strengthen it for the next submission."