# Yoga & Communication

(Voice, Speech, Cognition, Swallowing)

### A bit ABOUT ME

#### Speech-Language Pathologist (SLP) for nearly 10 years

-SLPs address impairments in speech, language, voice, cognition, swallowing -Hospitals, clients' homes, and schools. Individuals of all ages



Yoga practitioner about 13 years. Completed 200hr Yoga Teacher Training in 2017

-Have taught yoga to adults, children, individuals with autism

-Yoga has helped me gain confidence, reduce anxiety, become more in touch with my body and my emotions.

Personal interests in movement/dance, live music, surfing, travel

-I have been looking for more ways to incorporate my passions for yoga and movement into my professional practice as an SLP and am grateful for the opportunity to share this information with the group!

#### FACTS RELATED TO MOVEMENT for people living with Parkinson's (PwP)

Parkinson's disease affects the way a person moves.

PD movement-related symptoms may include the following:

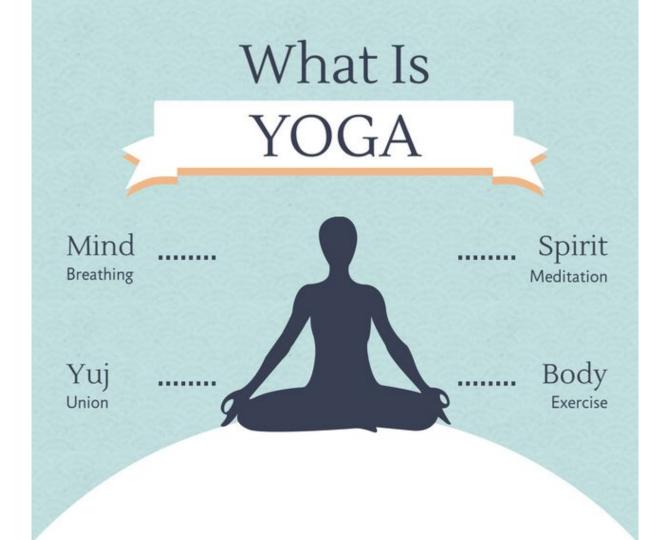
- · A tremor, or shaking
- · Slowness in the execution of movement (bradykinesia)
- Rigid muscles (including facial muscles)
- Impaired posture and balance
- Loss of automatic movements (reflexes)
- Speech changes



#### Other (non-movement) symptoms may include but are not limited to:

- Mental health changes (anxiety, depression)
- Cognitive changes (memory, focus, planning, decision making)
- · Sleep disorders, fatigue
- · Constipation, incontinence
- Nausea, dizziness, vertigo
- · Pain
- Changes in senses (smell, taste, vision)





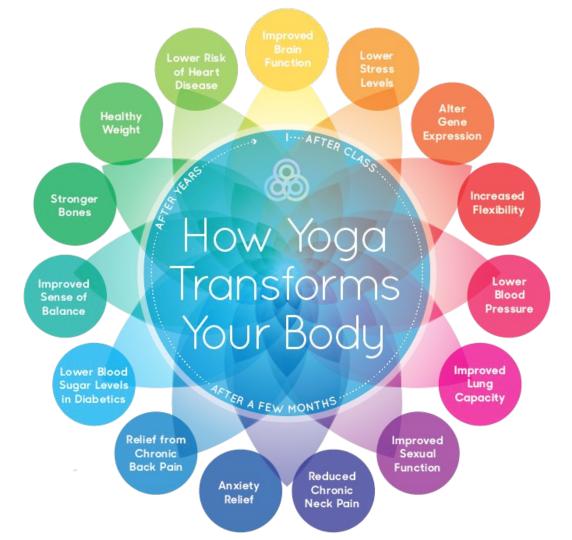


#### Benefits of Yoga for PwP

-Reduce stiffness in the body
-Balance
-Coordination
-Overall body awareness
-Improve mood
-Better quality of life

Improve flexibility
Strength
Range of motion
Mind/body connection
Increase confidence

-Awareness of your **BREATH\*** -control your breath -focus on your breath -presence, slowing down – for safety with moving but also necessary for speech & voice work, overall communication skills



#### FACTS RELATED TO SPEECH/COMMUNICATION FOR PwP

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-Up to **90% of people with PD** experience speech and voice changes at some point in their disease process. The term professionals use to describe these changes is Dysarthria.

-Dysarthria associated with PD is called "Hypokinetic Dysarthria" (hypo= reduced, kinetic= pertaining to motion/movement)

So, **reduced strength**, **speed**, **range**, **steadiness**, **tone** or **accuracy** of movements required for respiratory, phonatory, articulatory, or prosodic (rhythmic) aspects of speech production (Duffy, 2020).

### Systems of speech, how it impacts the features of speech & WHY?

#### 1. **Respiration**: Lung capacity & strength.

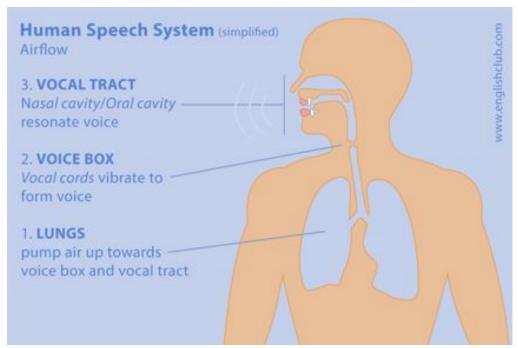
Reduced lung expansion and strength

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less capacity and control

less air to use

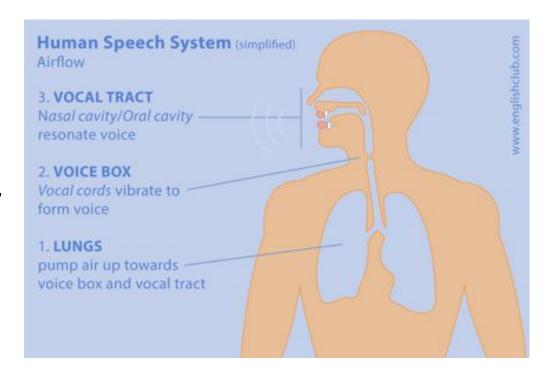
less force to project voice



2. Phonation: Producing sound.

Voice can be harsh or breathy,

low pitch



Vocal fold bowing, commonly seen in people with PD,

results in a breathy voice with reduced intensity (i.e., soft/quiet voice).

### 3. Articulation: Shaping sound with the mouth.

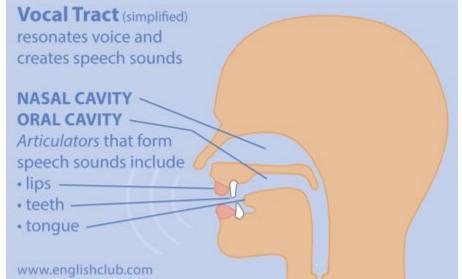
Smaller jaw and tongue movements correlate to a reduced in speech

intelligibility (i.e., people can't hear/understand you)

Consonants can be imprecise.

Sounds can be repeated.

Short rushes of speech.



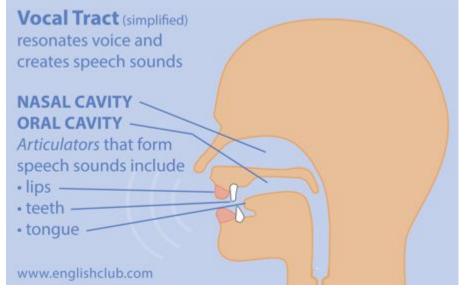
4. **Prosody**: Natural variation in sound while speaking.

In PD, speech can be monopitch or monoloudness,

fast rate of speech,

with inappropriate silences,

reduced stress



In addition, impaired somatosensory function: imprecise processing of own movements, volume, etc.

PwP may feel as if they are shouting, or exerting more significant effort to speak at normal volume, thus reducing their awareness of the severity of the speech impairment



### **Types of Cognitive Processes**





### **Cognitive changes**

Distraction

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- Disorganization
- Difficulty planning and completing tasks · Difficulty making the right choice
- Processing delay, slowness in memory
- Visuo-spatial processing changes
- Difficulty focusing in situations that divide your attention, such as a group conversation

These can contribute to **fatigue**, **sleep issues**, **anxiety** and **depression**.

### Main goals of Speech Therapy:

- 1. Emphasize vocal intensity and clarity
- 2. Recalibrate your perception of how loud or soft you are speaking
- 3. Strategies you and others can do to optimize communication

### Benefits of Speech Therapy for PwP

- -Learn strategies to be more effective in your communication
- -Improve confidence in communicating
- -Enhance quality of communication, which in turn supports quality connection/relationships
- -Improve cognitive skills like memory, focus, learning
- -Learn strategies for safer swallowing



### LET'S PRACTICE! --- KEY POINTS

-Yoga = union – unifying breath and movement, unifying mind/body

-Not just physical postures. Teachings on awareness, consciousness, presence, lifestyle

-Yoga is a practice, not a perfect. Try not to focus on how it looks, rather, how it feels.

-Everything I teach is an invitation. Do what you want, don't do what you don't want to do.

## **KEY POINTS TO REMEMBER**

-Listen to your body. You know your body best.

-If something causes pain, **stop**. I want you to be in a state of relaxation and pleasure, with a little bit of challenge, but not pain.

-If you do stop, try to do something similar with less force/range

of motion. Or simply return to focus on your breathing.



### **VOCAL EXERCISES**

This simple vocal warm-up can help you control your voice so you can use it more effectively. Complete daily for best results. Stay hydrated!

o Humming: Bring the voice up from your chest to the tips of your face o "MMMMM + vowels (E, AY, Y, O, U)"

o Sustained phonation: Hold the vowel sound "AH" for as long as possible with a strong voice (3-5x)

o Pitch glide: Say "EE" from low note to high note; and from high note to low note (3-5x)

### **CLEAR SPEECH STRATEGIES**

Speak with INTENT!

- o Speak loudly. Speak deliberately.
- o Speak slowly. Pace yourself. Take a breath as needed.
- o Overexaggerate the movements of the mouth: lips, tongue, jaw
- o Focu<u>s</u> on the las<u>t</u> soun<u>d</u> of ea<u>ch</u> wor<u>d</u>
- o <u>Stress</u> the important parts of your message

### WAYS TO SUPPORT COGNITION

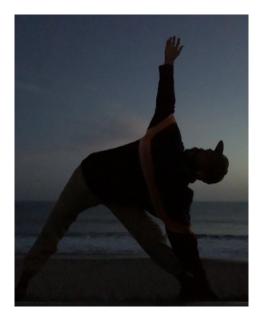
Memory, focus, decision making, judgment, emotional regulation

- Participate in recreational activities. Join a class, choir, book club.
- $\circ$  Stay organized with a calendar and/or notebook. Set reminders.
- Games / puzzles (e.g., Sudoku, crossword, jigsaw, playing cards)
- $\,\circ\,$  Nutrition and daily exercise
- $\,\circ\,$  Quality sleep and mental health

#### **TIPS FOR A SAFER SWALLOW**

Ensure a clean mouth after meals. Oral hygiene is important!

- $\,\circ\,$  Sit upright while eating and drinking
- $\odot$  Take small bites of food / small sips of liquids
- Chew thoroughly
- $\,\circ\,$  Avoid talking while eating / drinking
- Take a break if coughing



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