



# LSVT Global® Virtual SLP Mini-Conference

**Title: Enhanced Solutions for Voice and Mobility  
Maintenance Classes: Virtual Discoveries in  
PD Care!**

**Presenters: Angela Halpern, MS, CCC-SLP  
Laura Gusé, MPT  
Cynthia Fox, PhD, CCC-SLP**

**Date Presented: November 20, 2020**

**Copyright:**

The content of this presentation is the property of LSVT Global and is for information purposes only. This content should not be reproduced without the permission of LSVT Global.

**Contact Us:**

**Web: [www.lsvtglobal.com](http://www.lsvtglobal.com) Email: [info@lsvtglobal.com](mailto:info@lsvtglobal.com)**

**Phone: 1-888-438-5788 (toll free), 1-520-867-8838 (direct)**

### LSVT Global's Virtual SLP Mini-Conference

Enhanced Solutions for Voice and Mobility Maintenance Classes:  
Virtual Discoveries in PD Care!




**LSVT GLOBAL** Innovation in Science. Integrity in Practice.®

1

### On-Demand Viewing - Information to Self-Report CE Activity


- The On-Demand version of this webinar is **NOT** ASHA or state registered for CEUs for speech, physical or occupational therapy professionals, but it may be used for **self-reported CEU credit as a non-registered/non-preapproved CEU activity**. That is, the credit can count towards your CE maintenance progress if you choose to self-report your activity.
- Request certificate by e-mailing [webinars@lsvtglobal.com](mailto:webinars@lsvtglobal.com) after you have viewed the webinar in full or forward the post-webinar e-mail for your certificate request.
- After your attendance has been verified we will e-mail you a certificate of completion, which will include your name, date of the webinar and the number of hours earned. It may take 1-2 weeks for certificates to be emailed.
- Attendance for the full webinar is required to earn your certificate.



2

### On-Demand Viewing - Information to Self-Report CE Activity

- Licensing requirements for CEUs differ by state. Check with your state licensing board to determine if your state accepts non-ASHA registered or non pre-approved CEU activities.
- For more information on including non-ASHA registered CEUs for certification maintenance, visit ASHA's website: <http://www.asha.org/Certification/Certification-Maintenance-Frequently-Asked-Questions--Earning-Professional-Development-Hours/#earnASHA>
- Completion of the on-demand viewing of this webinar **will not be** reported to the ASHA CE registry by us and cannot be added to the ASHA CE registry by you. It will be your responsibility to retain documentation of completion just as you do with any other non-registered CE activity.




3

### Video and Photography Restrictions

All clients shown in videos during this presentation have given consent for their videos to be used for educational purposes.

Any copying of videos or viewing outside of this webinar, is strictly prohibited.





Thank you for respecting the contribution of these clients for allowing their videos to be shared.

4

### Logistics


- ✓ Handouts are available in control bar
- ✓ Microphones are all muted
- ✓ You can type in questions at any time, we will answer at the end

5

### Polling Question: Who is joining us today?

- LSVT LOUD certified professional or student
- SLP professional or student not LSVT LOUD certified
- LSVT LOUD certified and lead a maintenance group
- PT or OT
- Other



6

**Enhanced Solutions for Voice and Mobility Maintenance Classes:  
Virtual Discoveries in PD Care!**



**LSVT GLOBAL** Innovation in Science. Integrity in Practice.®

7



Angela Halpern  
MS, CCC-SLP

Laura Gusé, MPT

Cynthia Fox  
PhD, CCC-SLP

**Presenters**

8

**Presenter Biographies**

**Angela Halpern, MS, CCC-SLP**  
Ms. Halpern is Chief Clinical Officer of LSVT LOUD and a research associate with Dr. Ramig's research team at the National Center for Voice and Speech in Denver, CO. She received her master's degree in the Department of Communication Science and Disorders at the University of Pittsburgh and has been LSVT LOUD Certified since 1997. Ms. Halpern has worked extensively in the area of neurogenic disorders with a specialty in Parkinson disease. She has presented at national and international conferences and authored and co-authored publications related to voice and speech in Parkinson disease.

**Laura Gusé, MPT**  
Ms. Gusé has extensive experience treating people with neurodegenerative disorders in various practice settings. She was LSVT BIG certified in 2009 and now serves as Chief Clinical Officer of LSVT BIG. Ms. Gusé oversees the training, curriculum and product development related to LSVT BIG, and has helped to create many of the current LSVT BIG treatment tools, webinars, and courses. She has spoken at many national and international conferences on topics related to LSVT BIG.

**Cynthia Fox, PhD, CCC-SLP**  
Dr. Fox received her doctorate degree in Speech and Hearing Sciences from the University of Arizona, Tucson. Her training included a focus in the areas of neuroscience and motor control. She is an expert on rehabilitation and neuroplasticity and the role of exercise in the improvement of function consequent to neural injury and disease. Dr. Fox is a world leader in administration of LSVT LOUD speech treatment for people with Parkinson disease. She was the first to apply this treatment to disorders other than Parkinson disease (e.g., multiple sclerosis) and pioneered the application to pediatric populations including children with cerebral palsy and Down syndrome. Dr. Fox worked closely on the development of a physical/occupational therapy program, LSVT BIG, that was modeled after the speech treatment protocol. Dr. Fox also serves as faculty for LSVT LOUD and LSVT BIG training and certification courses. She has numerous publications in these areas of research and has presented extensively nationally and internationally. Dr. Fox is a Co-Founder and CEO of LSVT Global.

9

**Disclosures**


- Ms. Halpern, Ms. Guse and Dr. Fox have both financial and non-financial relationships with LSVT Global.
- Non-financial relationships include a preference for LSVT LOUD as a treatment technique.
- Dr. Fox is an employee of LSVT Global, receives lecture honorarium and has ownership interest.
- Ms. Halpern and Ms. Guse are employees of LSVT Global, receive lecture honorarium and travel reimbursement.

10

**Learning Objectives**

Upon conclusion of this presentation, attendees will be able to:

- Define voice and movement maintenance exercise classes for people with Parkinson disease (PD).
- Explain four key logistical components of virtual voice and movement exercise classes including web-conference platforms, verification of LSVT treatments, class structure with exercises and interactive activities, and tracking progress and outcomes.
- Discuss feedback from virtual LOUD for LIFE® and BIG for LIFE® participants and the potential for interprofessional collaboration for facilities that offer both classes.



11

**LSVT LOUD and LSVT BIG**

Intensive amplitude-based exercise/therapy programs for the speech and limb motor systems!  
Re-education of the sensorimotor system.

**Fundamental Treatment Principles**


- ✓ Hypothesis-based/PD-specific
- ✓ Neuroplasticity-based
- ✓ Research-based

12

### Intensity and Repetition are Key to Motor Learning And Neuroplasticity!!

**EACH PROTOCOL:**

- ✓ Treatment delivered 4 consecutive days a week for 4 weeks
- ✓ Daily homework practice (all 30 days of the month)
- ✓ Daily carryover exercises (all 30 days of the month)
- ✓ Life-long habit of practice



13

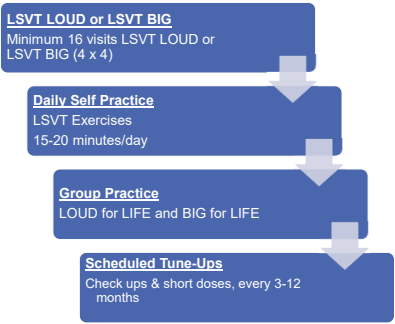
### LSVT BIG and LSVT LOUD

#### Goals for People with PD

People with PD will use their bigger movements and louder voice “automatically” in everyday living – and there is long-term carryover of increased amplitude use!

14

### Lifelong Model of Care



**LSVT LOUD or LSVT BIG**  
Minimum 16 visits LSVT LOUD or LSVT BIG (4 x 4)

**Daily Self Practice**  
LSVT Exercises  
15-20 minutes/day

**Group Practice**  
LOUD for LIFE and BIG for LIFE

**Scheduled Tune-Ups**  
Check ups & short doses, every 3-12 months


15

### Frequently asked questions:

What do I do *after* LSVT?

Will I be able to keep it up?

I already (sing, box, workout, dance, etc.). Is that enough?




16

...Clinically one of the challenges many people with PD face following therapy is how to maintain treatment effects over time and *keep exercising*.

- No longer regularly attending therapy
- Disease progression
- Other medical complications
- The feeling of “I’m doing well, I don’t need to do this anymore.”
- Lack of motivation
- Sensory impairment impacting quality of practice

17



Costello, et al 2011; Gallagher, 2016; Ene et al 2011; Obrien et al., 2008; Schootemeijera et al., 2020

18

**While regular intensive exercise is very important, it does NOT replace a “daily dose” of LSVT BIG or LSVT LOUD. Both are needed!**

*The best combination for success!*

19

**WHY???**

**TARGET:**

- Not all exercise focuses on AMPLITUDE
- Amplitude focused exercise needed EVERY day due to hypokinesia and bradykinesia

**MODE:**

- Not all intensive exercise is intensive across the “spectrum”. Consider intensity of training in terms of amplitude, balance, endurance, strength, complexity, etc.

**CALIBRATION:**

- Kinesthetic awareness problems, difficulties with internal cuing and neuropsychological changes persist. People with PD need that daily reminder of how it FEELS to move BIG/talk LOUD. And, it MUST be salient to them!! Functional skill/task specific practice is crucial!

20

**LOUD for LIFE® and BIG for LIFE®**

Group exercise maintenance classes specifically for people who have completed the **FULL LSVT LOUD or LSVT BIG Protocol!**

**Learning Objective One:**  
Define voice and movement maintenance exercise classes for people with Parkinson disease (PD).

21

**Community Based**

**Led by LSVT BIG/LSVT LOUD Certified Therapists “acting as” fitness professionals**

**Cash Based**

22

**LOUD for LIFE & BIG for LIFE Goals**

**PRIMARY GOALS**

- Support regular practice of LSVT LOUD & LSVT BIG Exercises and BIG movements/LOUD voice to help maintain treatment gains over time!
- Enhance motivation to exercise in a fun way!

**SECONDARY GOALS**

- Provide social interaction
- Reduce care partner burden
- Promote general wellness and reduce overall healthcare costs
- Provide opportunities for peer interactions to reinforce calibration

23

**LOUD for LIFE & BIG for LIFE are NOT:**

---

Skilled therapy

---

Billed as group therapy

---

For people who have not yet received LSVT LOUD or LSVT BIG

---

A replacement for LSVT LOUD or LSVT BIG treatment, DAILY home practice of Tune-Ups!

24

### LOUD for LIFE Class: What Happens?


Check in, discuss home practice from previous week and assign new home practice.

**Daily Exercises:**

1. Maximum Duration of Sustained Vowel Phonation (**Long Ahs**) – 6+ reps
2. Maximum Fundamental Frequency Range (**High/Low Ahs**) – 6+reps each
3. Maximum Functional Speech Loudness (**Functional Phrases**) – 1 rep of 10 phrases.
  - Choral, Mixed Order, Alternate sides of the room.

**Goal for all Exercises: LOUD with Good Quality!**

**Catch Phrases: Choral Reading**



**Challenge:** Add Salient Motor and Cognitive Tasks while doing Daily Exercises

**Motor:** Mimic functional movement for upper body and hands while seated; walking around.

**Cognitive:** Generate words by category or letter (topic of the day); Memory Tasks

25

### Remind Class of Purpose:

#### Goal of Daily Exercises: Louder Voice in Conversation




26

### LOUD for LIFE Class: What Happens?

**Communication/Cognitive Activities**

**Activities are:**


**Salient:** Focused on communication/cognitive goals of the class

**Intensive:** Keep everyone talking, no downtime!

**Focused on Calibration:** Reinforce effort and loudness needed in everyday life!

**Home and Daily Life**  
Gold Level Competitions!





Plays: Murder Mystery Parties; Coffee House; Impromptu Speeches; Solve Picture Puzzles; Conversation Activities in a fun and motivating environment!

27

### BIG for LIFE – What happens in Class?

**Maximal Daily Exercises**

1. Floor to Ceiling –8 reps
2. Side to Side – 8 each side
3. Forward step – 8 each side
4. Sideways step – 8 each side
5. Backward step – 8 each side
6. Forward Rock and Reach – 10+ each side
7. Sideways Rock and Reach – 10+ each side

Some people stand and other sit

**Function Focused Exercise**

- Sit to Stand- 5 reps
- 1 to 4 “Other” Functional Component Task practice
- Complex task practice

**BIG Walking**  
Distance/time may vary

**(Cool Down)**

28

### Remind Class of Purpose:

#### Goal of Daily Exercises- Bigger Movements in Function





29

- Exercises are meant to be FUN and FUNctional!
- Music can be used – ask your group to vote each week
- Reinforcing the WHY of what the exercises are helping you with
- Functional tasks can be chosen by group members
- Walking can be together or separate
- Challenges include brain games or adding extra tasks while keeping movements BIG






30

**This is all great, but what about?**

- COVID-19 Limitations
- People who live in a rural area
- People who do not have access to a LOUD for LIFE or BIG for LIFE class where they live?
- These classes can be offered virtually, VERY EFFECTIVELY!!



31

**Objective Two:**  
Explain four key logistical components of virtual voice and movement exercise classes

- Web-conference platforms
- Verification of LSVT treatments
- Class structure with exercises and interactive activities
- Tracking progress and outcomes

32

**Virtual LOUD for LIFE and BIG for LIFE**



**Same Class Structure as In Person Classes**



33

**Rationale for Virtual LOUD for LIFE and BIG for LIFE**

- Increase** Accessibility to FOR LIFE Classes
- Enhance** Feasibility of more frequent attendance
- Boost** Saliency: Practice in home environment; Using internet for interaction with family
- Diminish** Physical/mental burden/fatigue of getting ready to go to, and travel to clinics

34




**The vision for Virtual LSVT FOR LIFE classes: Not a substitute, just as good or for some may be better**

- With decreased travel time, the virtual classes can more easily fit into busy schedules.
- People might be able to participate with increased effort and attentiveness because they are not tired from travel.
- Decreased distractions of live environment
- More time spent on exercises (don't have to spend time getting seated, moving seats when breaking into groups)
- More salient environment, access to salient objects

35

**Platform Considerations**

- Ease of Use
- No Cost for Participants
- Ability for Breakout rooms
- Ability to control participants' Mic/Video
- HIPAA Compliant (no ability for other members to record the session)



36

## Verification of LSVT Treatment and Consent

Can be done electronically through a secure portal


- Could include:
  - Confirmation of previous LSVT Treatment
  - Consent to class participation
  - Acknowledgement of privacy policy and class conduct
  - Liability Waiver

37

## Privacy and Security: Provider Considerations

**LSVT for LIFE Group Leader must protect privacy of participants' personal health information**

- **Secure Platform**
- **Privacy Code of Conduct** reviewed at the beginning of each session, auditorily and visually.
- Hold a paper up with the same points as you talk. For example:
  - In order to protect the privacy of fellow participants:
  - *Please do not video record, audio record, take photos or computer screenshots of the session.*
  - *Identify anyone else who is in the room with you, especially those that other people cannot see.*
  - *Do not share information about other people in the session.*
  - *Agree to not engage in inappropriate behavior or language*



38



## Technical Support

Ask people to log in 5 minutes early to problem solve tech issues.

Have someone else run the session as admin. Duties:

- Help people offline if issues with log in, audio, video, so it doesn't disrupt the whole class
- Rename people as needed for privacy
- Handle the chat room
- Put people into breakout rooms and pop into the rooms to make sure no tech issues
- Mute/unmute participants
- Spotlight class leader when leading daily exercises

39

## Safety Considerations

- **LOUD for LIFE:** Since you cannot assist as needed, have people do motor multi-tasks seated.
- **BIG for LIFE:**
  - A helper, caregiver or responsible person should be nearby
  - Encourage exercise in a safe position with adequate support
  - Clients can opt in/out of activities as they see fit
  - Consider separate groups for each level of function
  - Consider activities that are safest and most feasible for virtual environment
  - Have on file a policy and plan for how to handle falls. E.g., do you know their address in case you need to activate 911 for them? Do you have on file an emergency contact person?

40

## Virtual LOUD for LIFE

**Model behaviors just as you do in person**  
Overexaggerated  
Even more visual cues

**Push – no down time**, keep everyone phonating and stimulated

**Add SALIENT motor or cognitive tasks**

- **Cognitive:**
  - Tasks that are salient to location, current events, your group.
  - Motor and Cognitive tasks related to "National Day" e.g. National Pie Day.
- **Motor**
  - Big movements as if reaching for coat or something on a high shelf
  - Screwing and unscrewing water bottle cap

**3 Daily Exercises:**

1. Long AH,
2. High/Low AH,
3. Functional Phrases

41

## Conversation/Cognitive Activities


Book Review	Open Mic	Family Game Night
Tour Guide	Share a Treasure	Share a Recipe
Dinner Party Guests	I spy	Conversation Starters

42



### Communication/Cognitive Activities: Considerations for Small Group Breakout Rooms

- Before going into break out rooms instruct people to:
  - Take turns talking; everyone needs to share.
  - Help each other; you have logged in to work on your voice. If someone is not loud enough, tell them, if they sound good, tell them.
- Consider the levels of functioning of people that are in the rooms together
  - Advantages of similar levels
  - Advantages of mixed levels
  - Personal preference



43

### Virtual BIG for LIFE- Exercises

20-30 minutes for full set of LSVT BIG exercises.

**Instructor models, driving amplitude and effort.**

**Add salient motor or cognitive tasks to the seven Maximal Daily Exercises.**

Motor:

- Hand or arm flicks with exercises
- Resistance
- Balance challenges

Cognitive:

- Tasks that are salient to location, current events, holidays, etc.
- Cognitive tasks related to upcoming holiday. Example: "Reach for the \_\_\_\_\_ (turkey, dressing, gravy, pie, etc.)"

44

### Functional Practice Examples

Eating a Meal	Cleaning the kitchen	Thanksgiving
Car transfers	Going to the movies	Gardening
Doing laundry	Freezing strategies	Sports Events

45

### Virtual BIG for LIFE- "BIG Walking"

- Short distances forward, backwards, sidestepping, turning, all focused on amplitude
- Starts/stops and change of direction on command
- Walking in place- sustained amplitude
- Add motor and/or cognitive challenges when safe to do so
  - Recitation
  - Naming tasks
  - Carrying objects
  - Holding a phone
  - Stepping over or around real or imaginary objects
  - "Chair to chair" adding in BIG sit to stand

46

### Tracking progress and outcomes for BIG for LIFE & LOUD for LIFE

- Home Practice Tracking Forms for Competition
- Practice Videos
- Surveys

47

### Objective 3:

Discuss feedback from Virtual LOUD for LIFE and Virtual BIG for LIFE participants and the potential for interprofessional collaboration for facilities that offer both classes

48

**Have your habits of practicing your LSVT exercises on your own changed since joining the LOUD for LIFE or BIG for LIFE classes?**

- Consistent/no change: 4
- Better: 3
- Worse: 0

*"I have always been pretty good at doing my practicing, but now I very rarely miss a day."*

49

**What motivates you to come to the class(es)?**

- **Participating with a group** and a challenge to improve my performance. It beats being alone as the group gives inspiration.
- **What motivates me? My health** and desire to stay ahead of Parkinson's! Also the joy of participating with such an incredible group of individuals who are sharing this journey with me. We help **encourage** each other to maintain these practices. Also they just make me smile and I look forward to being together. It's like we've developed an international family. And of course the **therapist** who are also so positive, encouraging and challenging us and keeping the classes fun.

50

**What would you like LSVT Graduates who have not joined to know about the classes?**

*"As a motivated person who faithfully did my LSVT BIG exercises daily for years by myself, I thought that I was doing fine. However, the 'energy' of the class, and the **camaraderie** of the participants makes the exercises much more fun. Furthermore, I am continually learning from the **expert instructors**, thereby significantly improving the quality and energy of my daily exercises."*

51

**What is the most "unexpected" outcome from being a part of LOUD or BIG for LIFE classes?**

*"I am surprised at how much I enjoy, in this virtual format, the **camaraderie** with the class and instructors. In addition to the many Parkinson's specific exercise benefits of the class, I really enjoy being a part of this group of people from all over the country, exercising together and sharing thoughts, insights and experiences."*

52

**Do you feel you are likely to attend a virtual class with the same frequency or with more or less frequency than a live class?**

- *"I think it's a toss up for me although the virtual class is a little more **convenient** whereas the live class is a little more motivation because of the personal touch. I would attend both at the same frequency."*
- *"I am more likely to attend virtual classes due to the **ease of attendance**, the evolution of technology in facilitating the class experience, the safety aspects during the pandemic and driving not being a necessity any longer. It also provides and **opportunity to meet and interact** with people outside of my current geographical boundaries."*
- *"Now that I am comfortable with the virtual format, I would probably attend the virtual class more frequently than a live class. Previously, I might have underestimated the personal feel of the virtual class. With the virtual format, there is **no travel time** to/from class, allowing me to fit it into a smaller time window. Also, things like **weather**, car-in-shop, repairman at the house or delivery expected are not concerns."*

53

**Interprofessional Collaboration**

- Shared themes
- Shared clients who encourage each other
- Through word of mouth, clients promote holistic therapy for those who have only received LSVT BIG or LSVT LOUD, but not both
- Cross refer for tune-ups
- Increase opportunities for use of voice and movement in class
- **FUTURE:** Combined LOUD for LIFE and BIG for LIFE classes!

54

## In Summary We Have....

- Defined voice and movement maintenance exercise classes for people with Parkinson disease (PD).
- Explained four key logistical components of virtual voice and movement exercise classes including web-conference platforms, verification of LSVT treatments, class structure with exercises and interactive activities, and tracking progress and outcomes.
- Discuss feedback from virtual LOUD for LIFE® and BIG for LIFE® participants and the potential for interprofessional collaboration for facilities that offer both classes.

55

### Join us for our virtual SLP mini-conference November 18-21, 2020

Date	Time (EST)	Title	Presenters
11/18 Wed	8:00-8:00 PM EST	<b>Telepractice in Private Practice and University Clinics for Adults with Neurological Disorders</b> Register: <a href="https://attendee.gotowebinar.com/register/681663054883117965">https://attendee.gotowebinar.com/register/681663054883117965</a>	Lori Ramgo, PhD Jessica Galgino, PhD Gerwyn Schube, PhD Deborah Theodore, PhD
11/19 Thurs	6:00-7:00 PM EST	<b>LSVT LOUD® Applied to Adults with Cerebral Palsy: Two Single-Subject Studies</b> Register: <a href="https://attendee.gotowebinar.com/register/6754091432977000420">https://attendee.gotowebinar.com/register/6754091432977000420</a>	Gemma Moya-Galé, PhD
11/19 Thurs	7:30-8:30 PM EST	<b>Beyond Parkinson's: Use of Evidence-based LSVT LOUD for Other Movement Disorders, Aging and Children</b> Register: <a href="https://attendee.gotowebinar.com/register/1015729911052631182">https://attendee.gotowebinar.com/register/1015729911052631182</a>	Cynthia Fox, PhD Angela Halpern, MS
11/20 Fri	12:00-1:00 PM EST	<b>Enhanced Solutions for Voice and Mobility Maintenance Classes: Virtual Discoveries in PD Care!</b> Register: <a href="https://attendee.gotowebinar.com/register/7907244394526674831">https://attendee.gotowebinar.com/register/7907244394526674831</a>	Angela Halpern, MS Laura Gustá, MPT Cynthia Fox, PhD
11/21 Sat	10:00-11:00 AM EST	<b>Improved Verb Use Following Intensive Voice Treatment in Individuals with Parkinson's Disease</b> Register: <a href="https://attendee.gotowebinar.com/register/6130532406537268411">https://attendee.gotowebinar.com/register/6130532406537268411</a>	Amy Ramago, PhD
11/21 Sat	11:30-12:30 PM EST	<b>Building a data base for automatic speech recognition in Parkinson's disease</b> Register: <a href="https://attendee.gotowebinar.com/register/7851338601702833839">https://attendee.gotowebinar.com/register/7851338601702833839</a>	Lori Ramgo, PhD Bob McDonald, PhD

56

## Thank you!!



**Questions?**

- [Info@lsvtglobal.com](mailto:Info@lsvtglobal.com)
- [www.lsvtglobal.com](http://www.lsvtglobal.com)



57