

Adult Dysphagia Rehabilitation Survey

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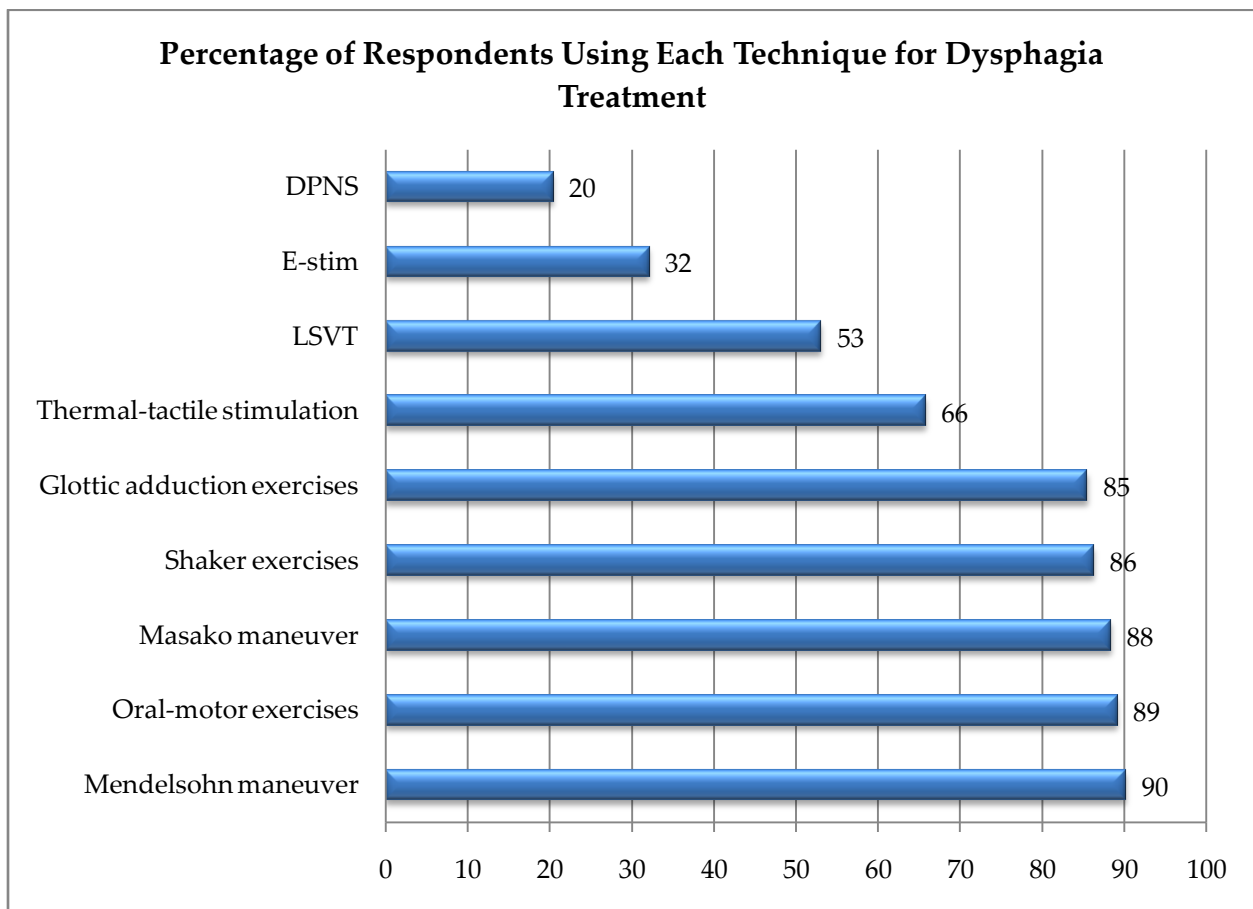
Members of the ASHA Special Interest Division 13-Swallowing and Swallowing Disorders (Dysphagia) who participate in an online list-serve were contacted through that list-serve and asked to participate in an online dysphagia survey. Two hundred and fifteen speech pathologists responded.

Background: The median number of years of practice was 16 years (M = 17.02 years, range 2-42 years). The majority of survey participants (53.3%) worked in an inpatient setting, 27.6% in an outpatient setting, 19.1% in a residential setting, and 4.9% listed their setting as “other”. Respondents came from 41 states around the U.S. and there were 2 participants from outside the U.S. The most commonly represented states were Texas (7.0%), New York (6.5%), Ohio (6.5%), Florida (6.1%), Illinois (5.6%), and Pennsylvania (5.1%). From outside the U.S., there was one participant from Canada and one from Germany.

Frequency of Use of Dysphagia Techniques: Individuals were asked how often they use nine different therapy techniques using a 4-point scale from “never” to “very often.” Percentages for each response are listed below with frequencies in parentheses and with the modal response in bold.

	Never	Occasionally	Often	Very often
Oral-motor exercises	10.9% (23)	31.3% (66)	33.2% (70)	24.6% (52)
Mendelsohn maneuver	9.9% (21)	45.5% (97)	29.6% (63)	15.0% (32)
Masako maneuver	11.7% (25)	26.6% (57)	32.7% (70)	29.0% (62)
Shaker (head-lift) exercises	13.7% (29)	45.5% (96)	27.0% (57)	13.7% (29)
Glottic adduction exercises	14.6% (31)	42.7% (91)	30.5% (65)	12.2% (26)
Lee Silverman Voice Treatment	46.9% (100)	38.5% (82)	11.7% (25)	2.8% (6)
Thermal-tactile stimulation	34.3% (73)	43.7% (93)	17.4% (37)	4.7% (10)
Deep pharyngeal neuromuscular stimulation (DPNS)	79.6% (168)	10.4% (22)	6.2% (13)	3.8% (8)
Electrical stimulation (e-stim/Vitalstim)	67.9% (144)	13.2% (28)	13.2% (28)	5.7% (12)

Two techniques were consistently rated as being used “often,” namely oral-motor exercises and the Masako maneuver. The remainder was most commonly rated as being used “occasionally,” with the exception of LSVT, DPNS and e-stim, all of which were “never” used by the largest category of respondents. The same data are presented in a different form below. The percentage of respondents using each technique was calculated¹. As can be seen, glottic adduction exercises, Shaker exercises, the Masako maneuver, oral-motor exercises, and the Mendelsohn maneuver were all used by the majority (85%-90%). Interestingly, thermal-tactile stimulation was used only by two-thirds of respondents (66%). Lee Silverman Voice Treatment was used by slightly more than half of the sample (53%), but electrical stimulation and DPNS were each used by a minority (32% and 20% respectively).



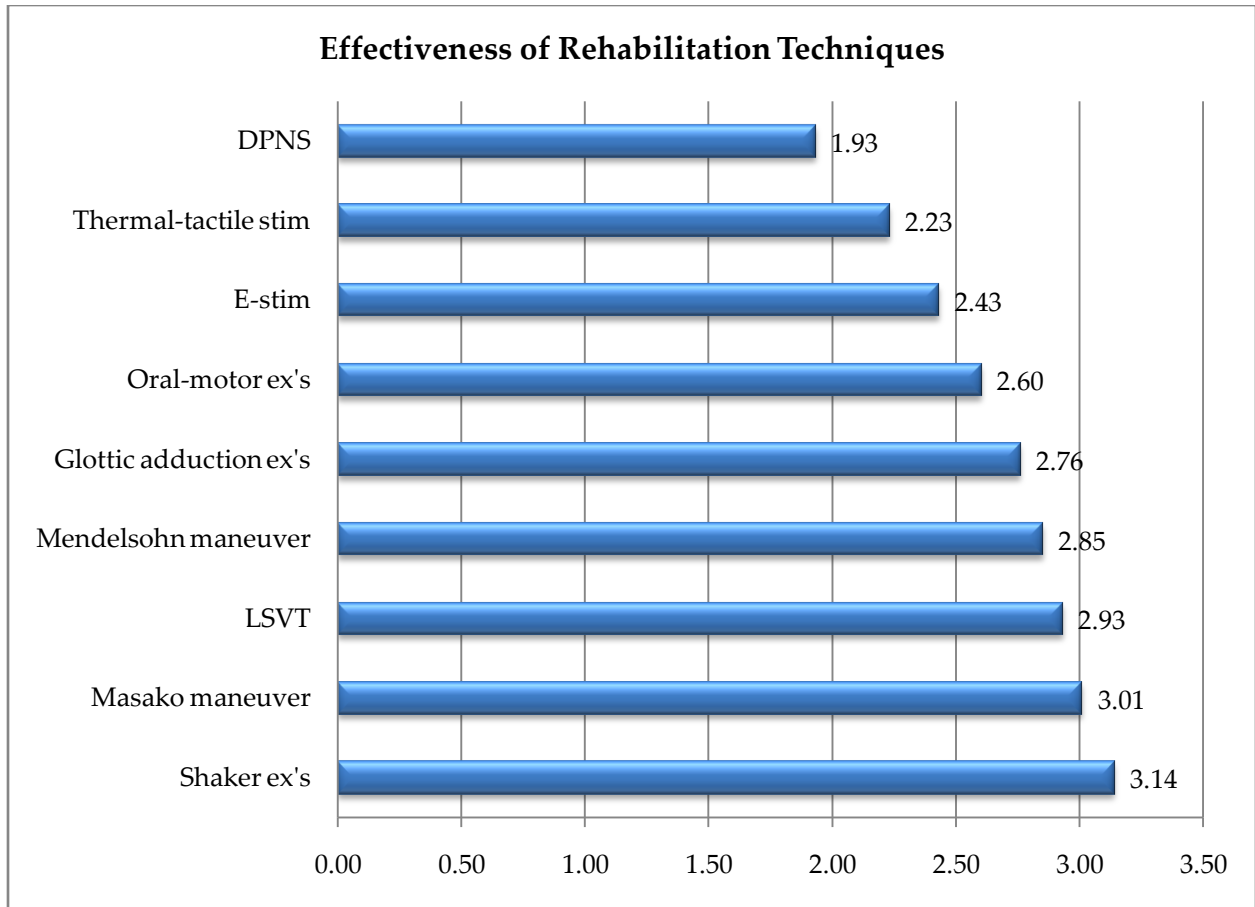
In addition to the techniques on the survey, 36 respondents listed “other” treatment techniques. Those most commonly listed were: the effortful swallow (n=11), the supraglottic swallow or a variant (n=6), resistance exercises (n=4), lingual strengthening exercises and the IOPI (n=4), and tongue base retraction maneuvers (n=4).

¹ Percentages were calculated by adding the number of individuals using a technique “occasionally,” “often,” or “very often,” and dividing that number by the total number of respondents for that item.

Effectiveness of Treatment: Respondents were asked how effective they would consider each of the therapy techniques on a 4-point scale from “not effective” to “very effective.” As previously, percentages for each response are listed below with frequencies in parentheses, with the modal response in bold.

	Not effective	Mildly effective	Moderately effective	Very effective
Oral-motor exercises	12.3% (26)	31.3% (66)	40.8% (86)	15.6% (33)
Mendelsohn maneuver	5.1% (10)	31.0% (61)	37.6% (74)	26.4% (52)
Masako maneuver	6.7% (13)	18.7% (36)	42.0% (81)	32.6% (63)
Shaker (head-lift) exercises	4.8% (9)	14.5% (27)	42.5% (79)	38.2% (71)
Glottic adduction exercises	9.3% (18)	28.4% (55)	39.2% (76)	23.2% (45)
Lee Silverman Voice Treatment	10.2% (13)	18.8% (24)	39.1% (50)	32.0% (41)
Thermal-tactile stimulation	25.4% (45)	36.2% (64)	28.2% (50)	10.2% (18)
Deep pharyngeal neuromuscular stimulation (DPNS)	51.0% (49)	15.6% (15)	22.9% (22)	10.4% (10)
Electrical stimulation (e-stim/Vitalstim)	32.7% (36)	19.1% (21)	20.9% (23)	27.3% (30)

It is notable that the majority of techniques were most commonly considered “moderately effective,” with three exceptions. Thermal-tactile stimulation was most commonly rated “mildly effective,” and DPNS and e-stim were predominantly rated as “not effective.” No method was predominantly rated as “very effective.” By scoring each of the answer categories as a value from 1 (“never”) to 4 (“very often”), an average score for each technique could be calculated allowing the techniques to be ranked in order of relative efficacy, as depicted below.



Use of biofeedback techniques: The majority of individuals did not use biofeedback methods with their patients. The most commonly used methods were endoscopy (19.5%), sEMG (16.5%) and ultrasound (1.5%). In addition nine respondents gave “other” comments. Four had a desire to use biofeedback but did not have access to the necessary equipment, two individuals had used biofeedback previously in other facilities, two others reported reviewing the tape from videofluoroscopy, and one reported using digital palpation of the larynx during use of the Masako and Mendelsohn maneuvers.

Summary: This survey represents the opinions of SLP’s with an acknowledged specialty interest in dysphagia, as demonstrated by their membership in ASHA’s SID-13 and participation in an online dysphagia list-serve. Participants came from diverse geographical background and had been practicing speech pathologists for a number of years. In their responses, one pattern that emerges is a preference for techniques which use physical exercise for dysphagia rehabilitation as compared to those which are based on sensory stimulation. The former were consistently used more often and rated as being more effective than the latter. While more traditional techniques were preferred over newer ones, one relatively recent

treatment technique (the Shaker exercise) was used by the majority of respondents and was rated as the most effective technique overall.