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Professionals

SLP HEALTH CARE 2021 SURVEY

Survey Methodology, Respondent Demographics, and Glossary

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Executive Summary

The American Speech-Language-Hearing Association (ASHA) conducted a survey of speech-language pathologists (SLPs) in the spring of 2021. We designed the survey to provide information about health care–based service delivery and to update and expand information gathered during previous *SLP Health Care Surveys*. We have presented the results in a series of reports.

We drew samples from six types of health care facilities: general medical, Veterans Affairs (VA), military, long-term acute care (LTAC), or university hospitals; home health agencies or clients' homes; outpatient clinics or offices; pediatric hospitals; rehabilitation (rehab) hospitals; and skilled nursing facilities (SNFs).

Highlights

- The survey was conducted electronically, using Survey Monkey.
- The response rate was 17.5%.
- 41% of SLPs in the experimental group said that they provided telepractice.
- 72% of the respondents were employed full time.
- Regarding years of experience, the median was 14; the mean was 17.
- 2% had received a doctoral degree.
- 87% were primarily clinical service providers.
- 54% received an hourly wage.
- 40% worked in the South.
- 43% were employed in suburban areas.

Survey Methodology

We fielded the ASHA 2021 SLP Health Care Survey to a stratified, random sample of 10,000 ASHA-certified SLPs who were employed full time or part time in health care settings in the United States. We stratified the sample by type of facility, drawing disproportional random samples from each facility and oversampling small groups like pediatric hospitals (see Table 1).

Stratified Random Sample

Facility	Population	Sample
General medical, Veterans Affairs, military, long-term acute care, university hospital	10,663	1,750
Home health agency or client's home	8,369	1,625
Outpatient clinic or office	17,286	2,250
Pediatric hospital	2,324	1,125
Rehabilitation (rehab) hospital	4,488	1,250
Skilled nursing facility (SNF)	13,061	2,000
Total	56,191	10,000

The biennial Health Care Survey has been a paper-and-pencil survey since 2005. Because the 2021 edition was scheduled during the COVID-19 pandemic, we used Survey Monkey to field it electronically. Fielding dates were May 20, May 27, and June 3. As sample members responded, they were removed from subsequent contacts.

As an incentive, ASHA provided a 1-year subscription to the ASHA Learning Pass (valued at approximately \$144) for one participant who was randomly selected from the 1,213 SLPs who asked to be included in the drawing.

Experimental Design

ASHA considers terms such as *schools, universities, hospitals, clinics, and SNFs* to be facility types, whereas terms such as *private practice, early intervention, and telepractice* are arrangements. Members may have both a facility type and an arrangement, but “facility type” and “arrangement” are not combined into one descriptor. We find, however, that many ASHA members do not make that distinction and include arrangements as facility types, going so far as to write in *private practice* as their facility instead of selecting the correct facility from a provided list.

This lack of distinction can result in misclassification of a member when analyses are conducted. For example, when crosstabs are run on salaries by facility, it is necessary that respondents be classified as a member of the correct facility type.

We designed an experiment to test whether asking SLPs about their employment arrangement *immediately before* asking about their facility type would decrease the likelihood of their keying in one of the arrangements in response to a question about facility. Therefore, we randomly assigned half of each of the sample members from each of the facilities (see Table 1) to an experimental group. They received an extra question that the control group did not receive. The question is as follows:

Identify whether any of your current work includes the three employment arrangements, below.

- | | | | |
|---|--------------------|-----|----|
| 1 | Private practice | Yes | No |
| 2 | Early intervention | Yes | No |
| 3 | Telepractice | Yes | No |

The next question asked for their facility type, using this wording for the experimental group: **You were selected for this survey because you are employed in one of the first six facilities, below, according to the ASHA member database. Regardless of how you responded to the previous question, select the type of building that best reflects where you work most of the time, recognizing that—for the purpose of this question—*private practice*, *early intervention*, and *telepractice* are not types of facilities.**

The wording for the control group excluded the phrase, *regardless of how you responded to the previous question*. The response options for both groups were identical:

- 1 General medical, Veterans Affairs (VA), military, long-term acute care (LTAC), or university hospital
- 2 Home health agency or client's home
- 3 Outpatient clinic or office
- 4 Pediatric hospital
- 5 Rehabilitation hospital
- 6 Skilled nursing facility (SNF)
- 7 I no longer work in a health care facility
- 8 I still work in a health care facility but have changed from a facility, above, to another type (other, specified _____)

Responses

Overall, the number of sample members who responded varied, depending on the criteria used for accepting a returned survey. A total of 1,867 surveys were returned, but 123 were eliminated from analysis of the experiment because respondents were on leave of absence (26), retired (46), or otherwise not employed (51), leaving 1,744 returned surveys. An additional 73 surveys were excluded from analyses of the substantive questions because respondents worked in schools, universities, or other non-health care facilities (see Table 2).

Disposition	Total	Control	Experimental
Fielded	10,000	5,000	5,000
Raw data	1,867	932	935
For experiment only	1,744	876	868
Final, cleaned data	1,671	836	835
Prize drawing entries	1,213	603	610

Respondents in the experimental group—regardless of whether they were primarily clinical service providers and regardless of their employment status—were more likely to say that their work included telepractice than that their work included either of the other two arrangements (41%; see Table 3).

Arrangements	%	Total <i>n</i>
Private practice	24	825
Early intervention	29	820
Telepractice	41	845

Research Question

The question of interest is this: Will having the opportunity to identify private practice, early intervention, and telepractice before answering a question about their employment facility have an effect on the likelihood that SLPs will key in an arrangement when asked for a facility type?

Of the 197 SLPs in the experimental group who said *Yes* to the question about whether their current work included private practice as an arrangement, 9 also keyed in “private practice” as their primary employment facility compared with 10 from the control group (see Table 4).

Table 4: Keyed-in Responses (unweighted)				
Condition	Number who keyed in <i>Private Practice</i>	Number who keyed in <i>Early Intervention</i>	Number who keyed in <i>Telepractice</i>	Total number of responses keyed in
Experimental: Yes to private practice	9	1	2	31
Experimental: No to private practice	0	4	2	33
Experimental: No response to private practice	0	0	4	8
Experimental: Yes to early intervention	3	5	2	26
Experimental: No to early intervention	3	0	2	33
Experimental: No response to early intervention	0	0	4	7
Experimental: Yes to telepractice	5	5	6	47
Experimental: No to telepractice	0	0	0	22
Experimental: No response to telepractice	0	0	0	3
Experimental group—total	9	5	6	72
Control group—total	10	7	4	58

Of the 240 SLPs in the experimental group who said Yes to the question about whether their current work included early intervention as an arrangement, five individuals also keyed in “private practice” as their primary employment facility compared with seven individuals from the control group.

Of the 347 SLPs in the experimental group who said Yes to the question about whether their current work included telepractice as an arrangement, six also keyed in telepractice as their primary employment facility compared with four from the control group.

Seventy-two of the 868 SLPs in the experimental group keyed in a response to primary employment facility, 20 responses of which were *private practice*, *early intervention*, or *telepractice*. Fifty-eight of the 876 SLPs in the control group keyed in a response, 21 responses of which were *private practice*, *early intervention*, or *telepractice*.

Conclusion: The likelihood of keying in *private practice*, *early intervention*, or *telepractice* as a primary employment facility is no different for health care-based SLPs who had the opportunity to select those arrangements prior to selecting their facility type than it is for those without that option.

Response Rates

Members of the original sample who (a) had undeliverable mailing addresses, (b) had opted out of Survey Monkey surveys, or (c) were not currently employed in a health care facility were deleted from the calculation of the response rate. The net sample size was reduced from 10,000 to 9,544, resulting in a response rate of 17.5% (see Table 5).

Disposition	Total	Control	Experimental
Original (gross sample size)	10,000	5,000	5,000
Undeliverable mailing address	83	40	43
Opt-out of Survey Monkey	157	80	77
Ineligible: Retired, not employed	123	56	67
Ineligible: Other reasons	93	49	44
Net sample size	9,544	4,775	4,769
Number of respondents	1,671	836	835
Response rate	17.5%	17.5%	17.5%

Data Entry

Data entry was completed automatically by the Survey Monkey application. The ASHA staff member with primary responsibility for the survey corrected or deleted erroneous responses.

Demo-graphics

Not only is it typically the case that some individuals who receive a survey do not complete it (unit nonresponse), but it is likewise true that some who return their surveys do not answer every question (item nonresponse) and, thus, do not qualify for inclusion in portions of a report. The survey originator may exclude these individuals from analyses because they did not answer a question at all or because their answer disqualified them (e.g., stating that they were employed part time when a particular analysis was limited to full-time employees). For example, 1,671 SLPs who were employed part time or full time in a health care facility responded to the survey, but we reported the way in which they were paid (i.e., annually, hourly, or per visit) for only 1,578 of them because 93 SLPs did not answer the question.

Respondents Versus Population

The closer the match between survey respondents and the population of ASHA health care-based SLPs from which they were drawn, the more validity there is in generalizing from the sample to the population—that is, the more truth there is in saying that the people who answered the survey questions represent the broader group from which they were selected. Demographic variables that are present in both the membership database and the survey include primary employment function, highest earned degree, and region of the country. Primary employment facility also appears in both databases but is not included in the comparison because the survey sample was stratified by oversampling and undersampling that variable (see Table 1). Table 6 shows the comparison for the three remaining characteristics that were available from both the membership database and the survey.

Characteristic	ASHA's Population	Survey Respondents
Clinical service provider	86%	87%
Doctoral degree	2%	2%
Region of the country:		
Northeast	18%	19%
Midwest	22%	24%
South	43%	40%
West	17%	17%

Primary Employment Facility

More respondents worked in outpatient clinics or offices than in any other type of facility (see Table 7). Because a disproportional random sample was drawn from each facility, this distribution does not reflect the distribution of SLPs within the Association.

Facility	Unweighted	Weighted
General medical, Veterans Affairs, military, long-term acute care, university hospital	22%	18%
Home health agency or client's home	16%	17%
Outpatient clinic or office	26%	32%
Pediatric hospital	8%	4%
Rehabilitation hospital	10%	7%
Skilled nursing facility	18%	21%
Other health care facility	1%	1%

Note. *n* = 1,671.

Excluding *Other*

We have included the 14 (weighted value) individuals who reported working in an *other* facility in the *ASHA 2021 Health Care Survey Reports* only as part of the total, not as a separate category of facility, because of the ambiguous nature of this small group of individuals.

Employment Status

All of the SLPs whose responses were included in the analyses worked either full time (72%) or part time (28%). SLPs who worked in home health agencies or clients' homes were more likely than those in other types of facilities to work part time (39%), and SLPs in SNFs were more likely than SLPs in other types of facilities to work full time (83%; *p* = .000).

Years of Experience

The median number of years of experience was 14, and the mean was 17. The median number of years ranged from 11 in rehab hospitals to 18 in home health agencies or clients' homes. The mean number of years ranged from 15 years in rehab hospitals to 20 years in home health agencies or clients' homes (*p* = .000).

Highest Degree

Only 2% ($n = 28$) of the SLPs reported having received a doctoral degree. Too little data are available in some facility categories to test whether responses vary by facility type.

Primary Employment Function

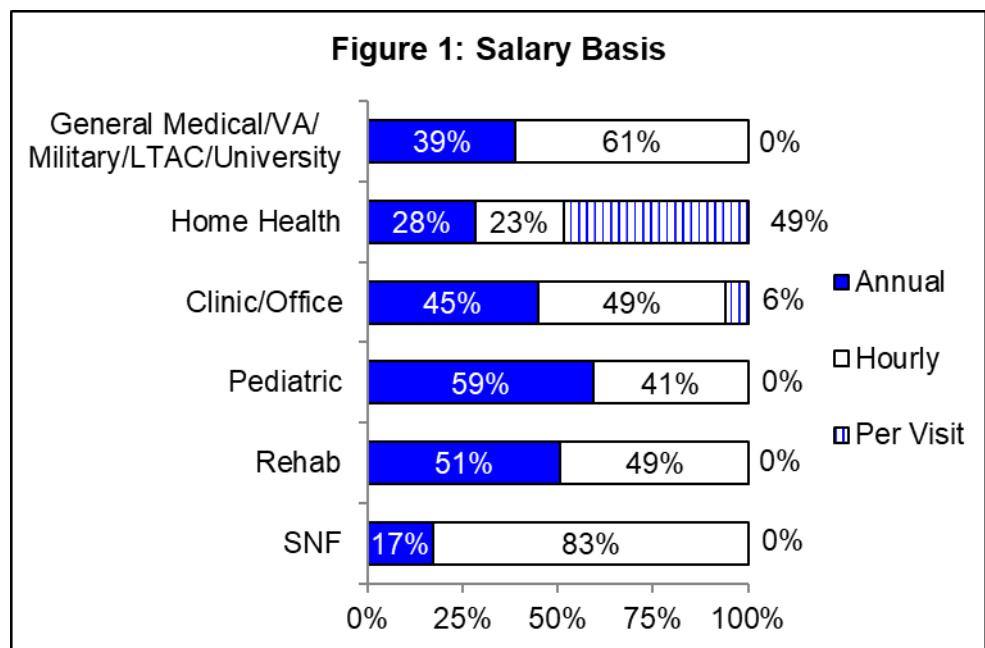
In previous iterations of the *ASHA Health Care Survey*, respondents were asked to identify whether they were clinical service providers or administrators/supervisors. The *2021 Health Care Survey* was the first one that expanded the function question from two response options to three.

- 87% of SLPs who were employed full- or part time were primarily clinical service providers.
- 10% were primarily administrators or supervisors who saw some patients.
- 3% were exclusively administrators or supervisors.

Salary Basis

As a group, 54% of the SLPs received an hourly wage; 36%, an annual salary; and 10%, a per-home-visit payment.

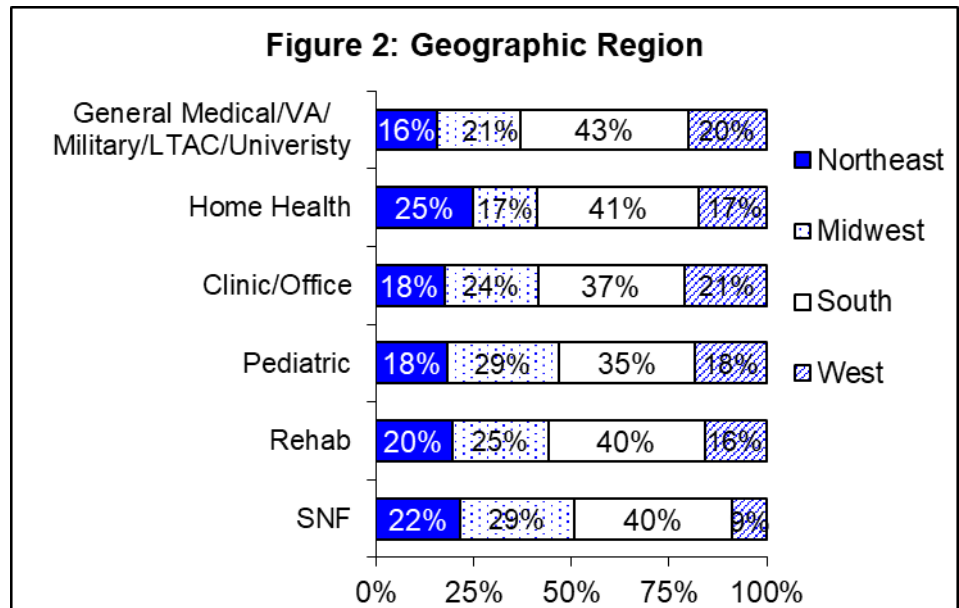
Individuals in pediatric hospitals were the most likely group to be paid an annual wage. More than half of the SLPs in general medical, VA, military, and LTAC hospitals and in SNFs received an hourly wage. Nearly half of the SLPs in home health agencies or in clients' homes received a per-home-visit wage ($p = .000$; see Figure 1).



Note. $n = 1,560$.

Geographic Region

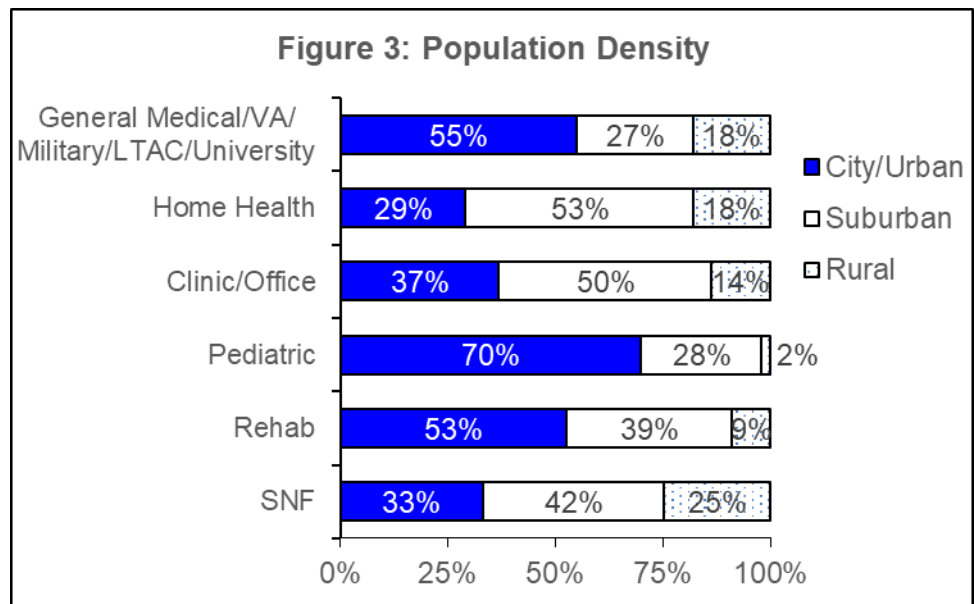
More than one third (40%) of the SLPs worked in the South. The rest were fairly evenly distributed, with 17% working in the West, 20% in the Northeast, and 24% in the Midwest (not shown in any table). The region where SLPs worked varied by facility type ($p = .001$; see Figure 2). See the state-by-state listings for each geographic region on page 14.



Note. $n = 1,469$.

Population Density

Few SLPs worked in rural areas (17%); most worked in either city or urban areas (40%) or suburban areas (43%). Facility type was significantly related to population density ($p = .000$; see Figure 3).



Note. $n = 1,480$.

Glossary

In this section, we include a glossary of terms used in the *ASHA 2021 SLP Health Care Survey Reports*. Respondents self-identified for each of the variables, below.

Employment Facility

Facility Type:

- General medical, Veterans Affairs (VA), military, long-term acute care (LTAC), or university hospital
- Rehabilitation (rehab) hospital
- Pediatric hospital
- Skilled nursing facility (SNF)
- Home health agency or client's home
- Outpatient clinic or office
- Other

Employment Function

Function:

- Primarily clinical services provider
- Primarily administrative or supervisory but with some patients
- Exclusively administrative or supervisory

Employment Status

Employment status:

- Employed full time
- Employed part time
- On leave of absence
- Not employed but actively seeking employment
- Not employed and not seeking employment
- Retired

Population Density

Population density:

- City or urban area
- Suburban area
- Rural area

Regions of the Country

Northeast

- ◆ Middle Atlantic
 - New Jersey
 - New York
 - Pennsylvania
- ◆ New England
 - Connecticut
 - Maine
 - Massachusetts
 - New Hampshire
 - Rhode Island
 - Vermont

South

- ◆ East South Central
 - Alabama
 - Kentucky
 - Mississippi
 - Tennessee
- ◆ South Atlantic
 - Delaware
 - District of Columbia
 - Florida
 - Georgia
 - Maryland
 - North Carolina
 - South Carolina
 - Virginia
 - West Virginia
- ◆ West South Central
 - Arkansas
 - Louisiana
 - Oklahoma
 - Texas

Midwest

- ◆ East North Central
 - Illinois
 - Indiana
 - Michigan
 - Ohio
 - Wisconsin
- ◆ West North Central
 - Iowa
 - Kansas
 - Minnesota
 - Missouri
 - Nebraska
 - North Dakota
 - South Dakota

West

- ◆ Mountain
 - Arizona
 - Colorado
 - Idaho
 - Montana
 - Nevada
 - New Mexico
 - Utah
 - Wyoming
- ◆ Pacific
 - Alaska
 - California
 - Hawaii
 - Oregon
 - Washington

Response Rate

The response rate was calculated using the following equation:

$$RR = \frac{(C + P)}{S - (Ret + I)}$$

where

- RR = Response rate
- C = Number of completed surveys
- P = Number of partial surveys
- S = Sample size
- Ret = Ineligible because of retirement
- I = Ineligible for other reasons (e.g., does not work in health care, no longer in the field, on leave of absence)

$$RR = \frac{(1,671)}{10,000 - (123 + 333)} = 17.5\%$$

n The number of items in a set

Measures of Central Tendency

Mean: Add the total of all values and divide by n .

Median: Arrange the values in order, from lowest to highest. Select the value in the middle position.

Mode: The value that occurs more often than any other.

Example: Sample data set

1, 1, 7, 34, 88

Mean: $(1 + 1 + 7 + 34 + 88) / 5 = 26.2$

Median: 7

Mode: 1

Because medians are more stable and less sensitive to extreme values than are means, we use medians as the most commonly presented statistic in the *ASHA 2021 SLP Health Care Survey Reports*.

Survey Reports

We present results from the *ASHA 2021 SLP Health Care Survey* in a series of reports at www.asha.org:

- Survey Summary Report: Number and Type of Responses
- Caseload Characteristics
- Workforce
- Practice Issues
- Annual Salaries
- Hourly and Per-Home-Visit Wages
- Survey Methodology, Respondent Demographics, and Glossary

Suggested Citation

American Speech-Language-Hearing Association. (2021). *ASHA 2021 SLP Health Care Survey: Survey methodology, respondent demographics, and glossary*. www.asha.org.

Resources

Agresti, A., & Finlay, B. (2008). *Statistical methods for the social sciences* (4th ed.). Pearson.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). Wiley.

Additional Information

For additional information regarding the *ASHA 2021 SLP Health Care Survey*, please contact Monica Sampson, director, Health Care Services in Speech-Language Pathology, 800-498-2071, ext. 5686, msampson@asha.org.

Thank You

ASHA would like to thank the SLPs who completed the *ASHA 2021 SLP Health Care Survey*. Reports like this one are possible only because people like *you* participate.

Is this information valuable to you? If so, please accept invitations to participate in other ASHA-sponsored surveys and focus groups. You are the experts, and we rely on you to provide data to share with your fellow members. ASHA surveys benefit *you*.