

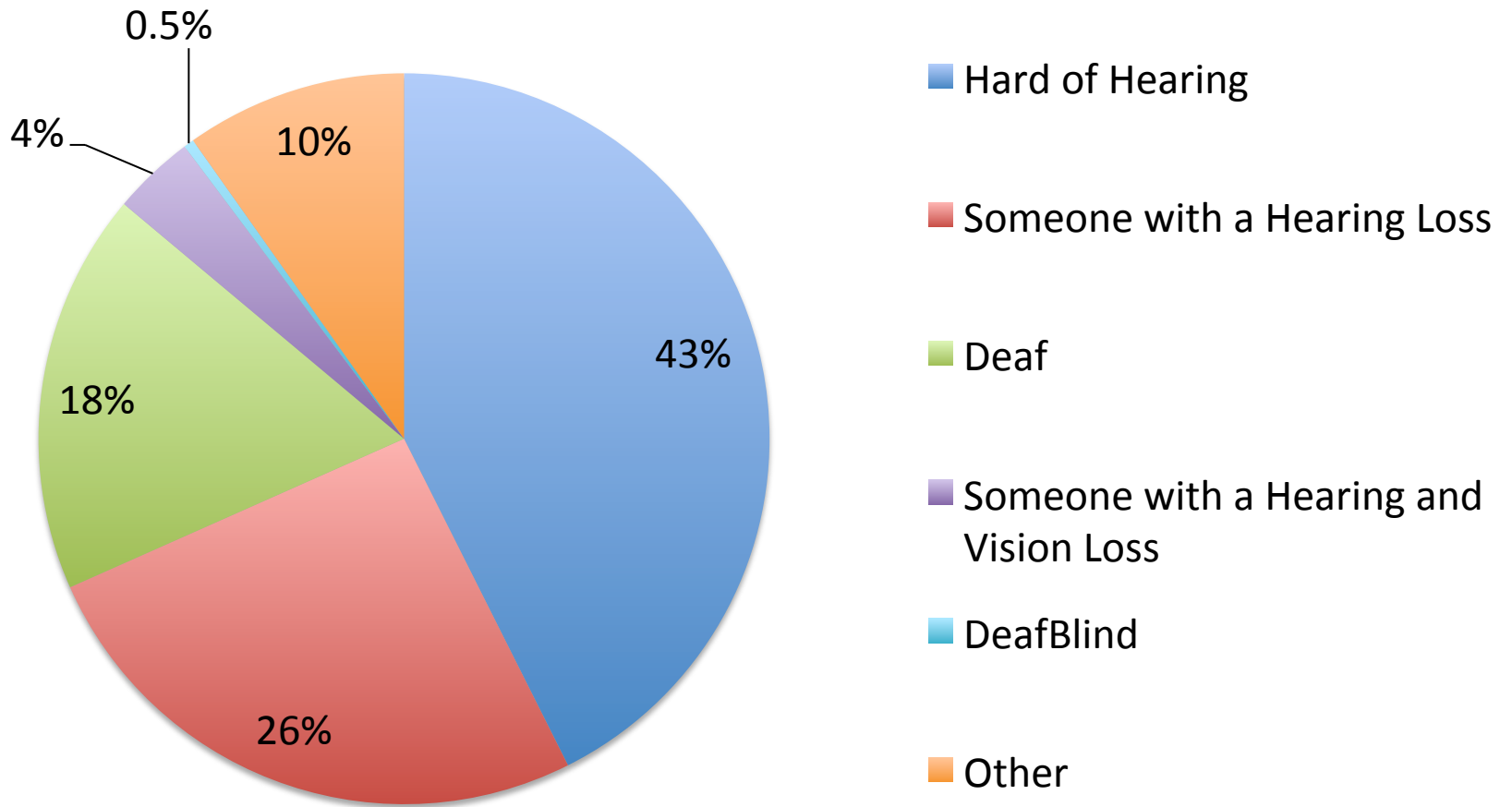
Voice Telecommunications Access Survey

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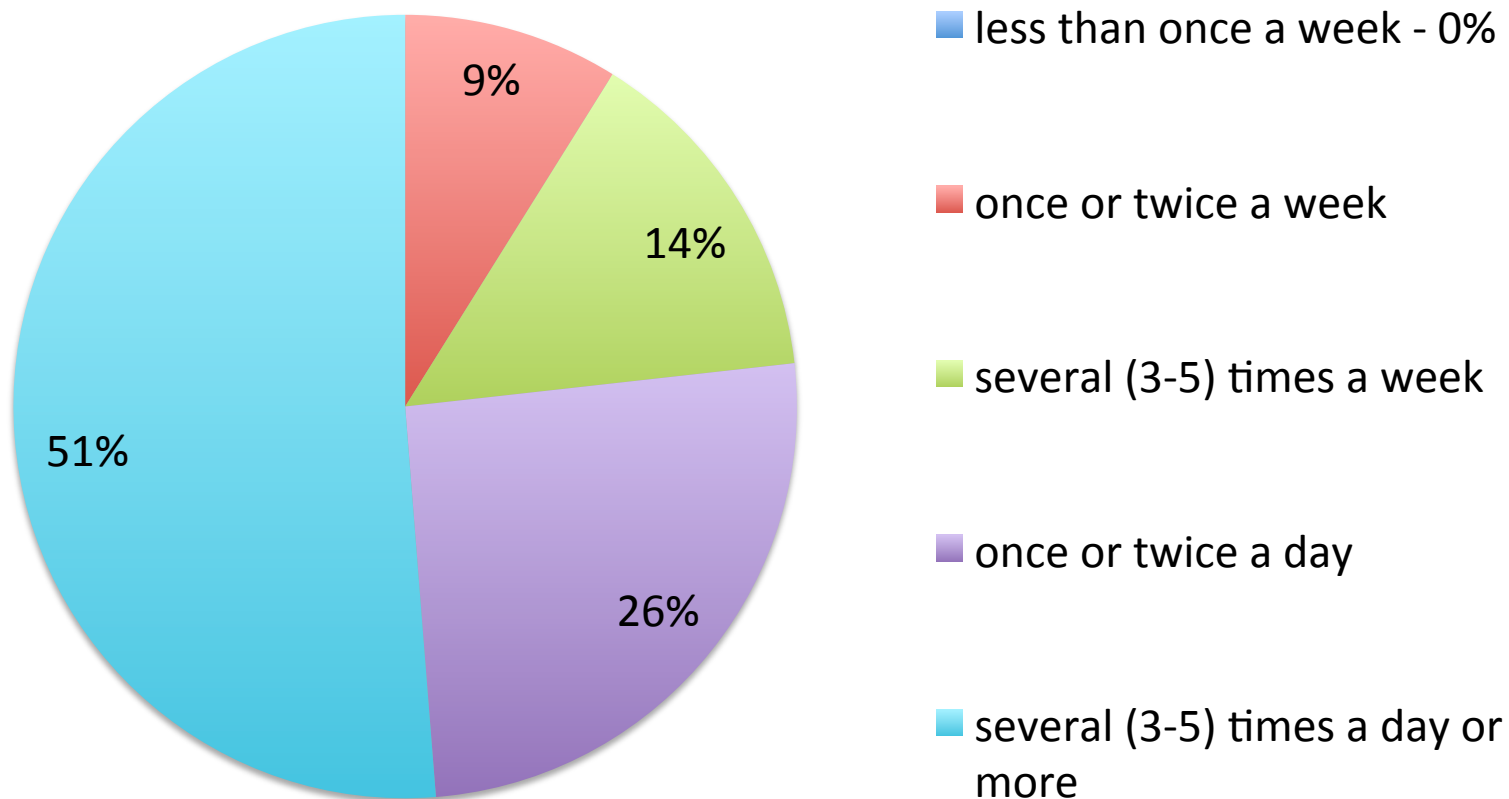
Demographic Information

(n=439)

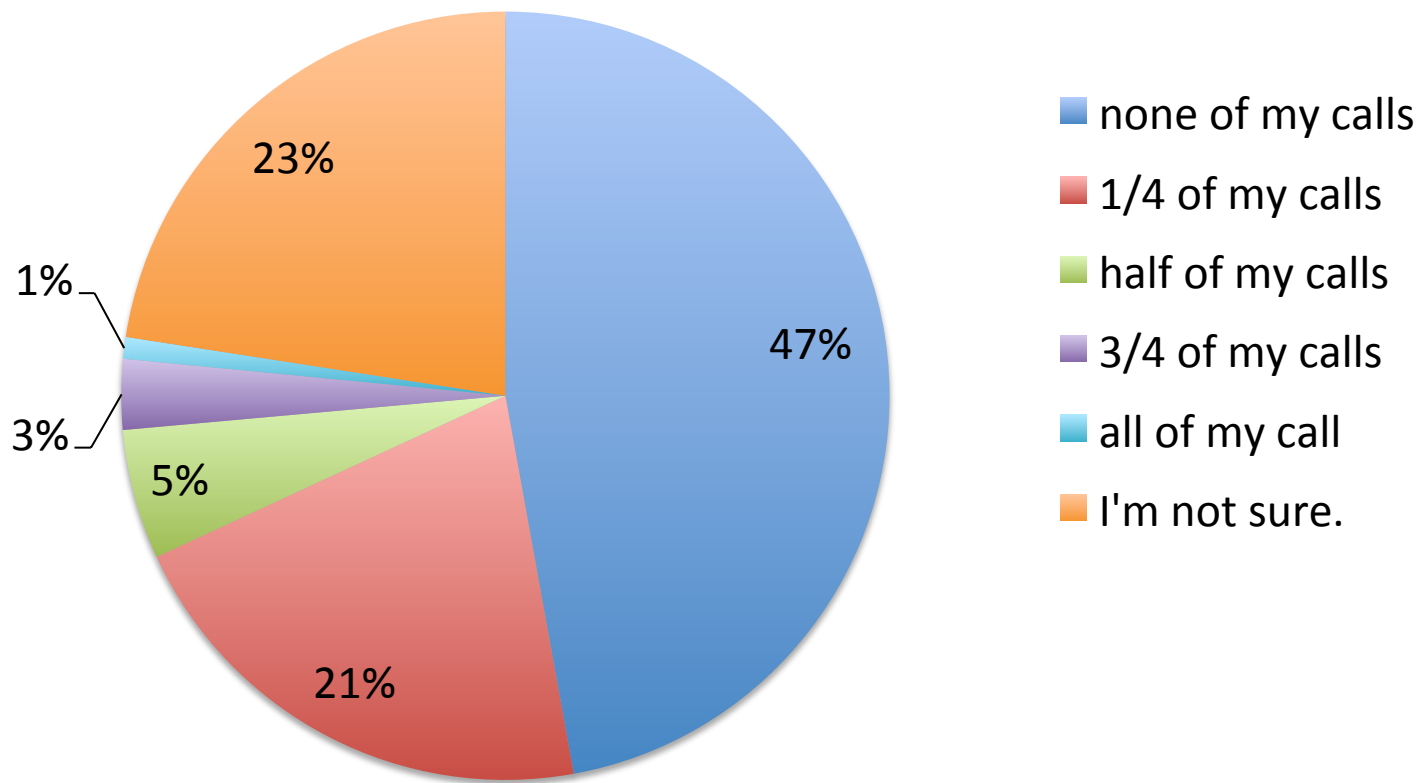
Self-Identity



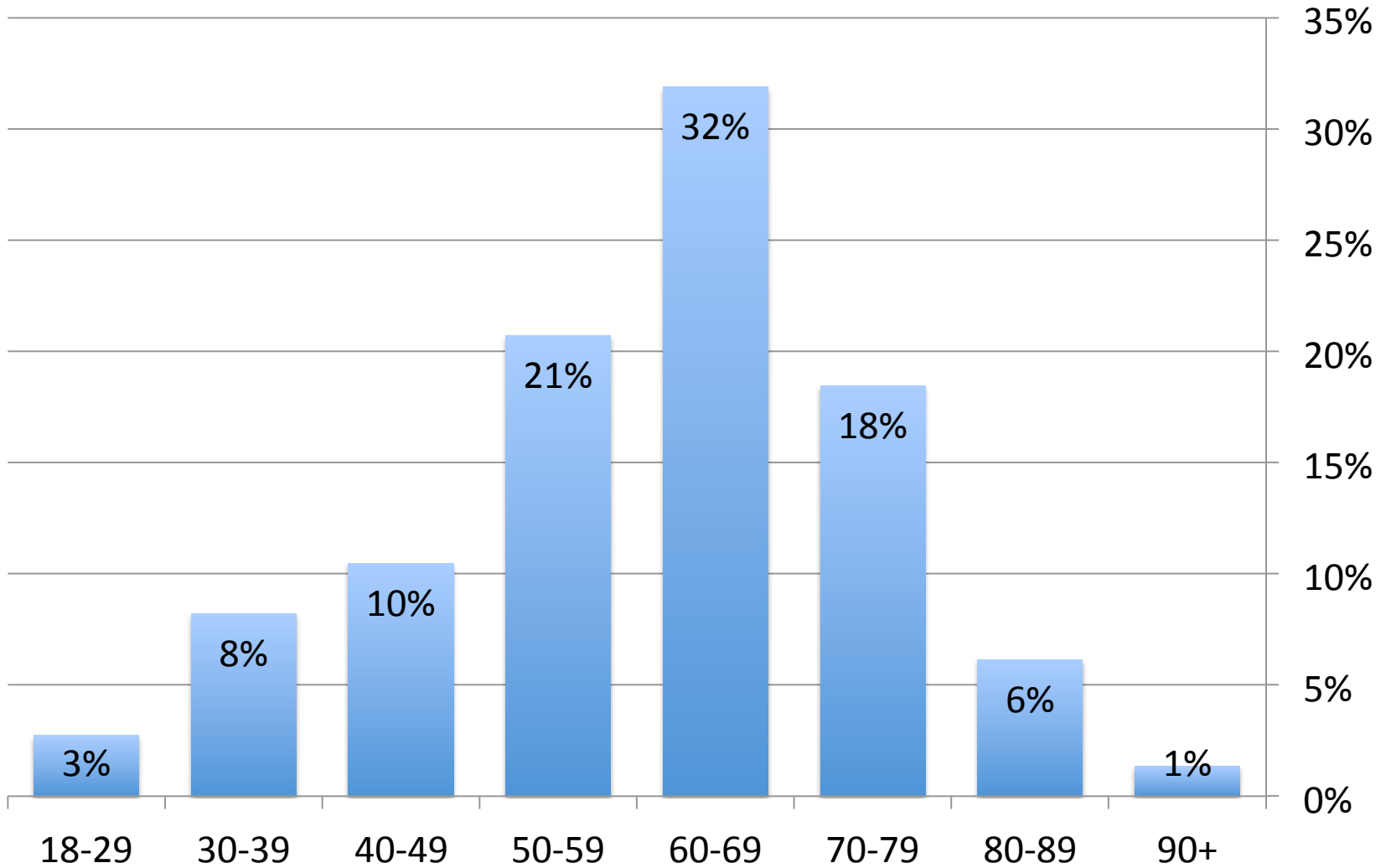
Frequency of Voice Telephone Calls



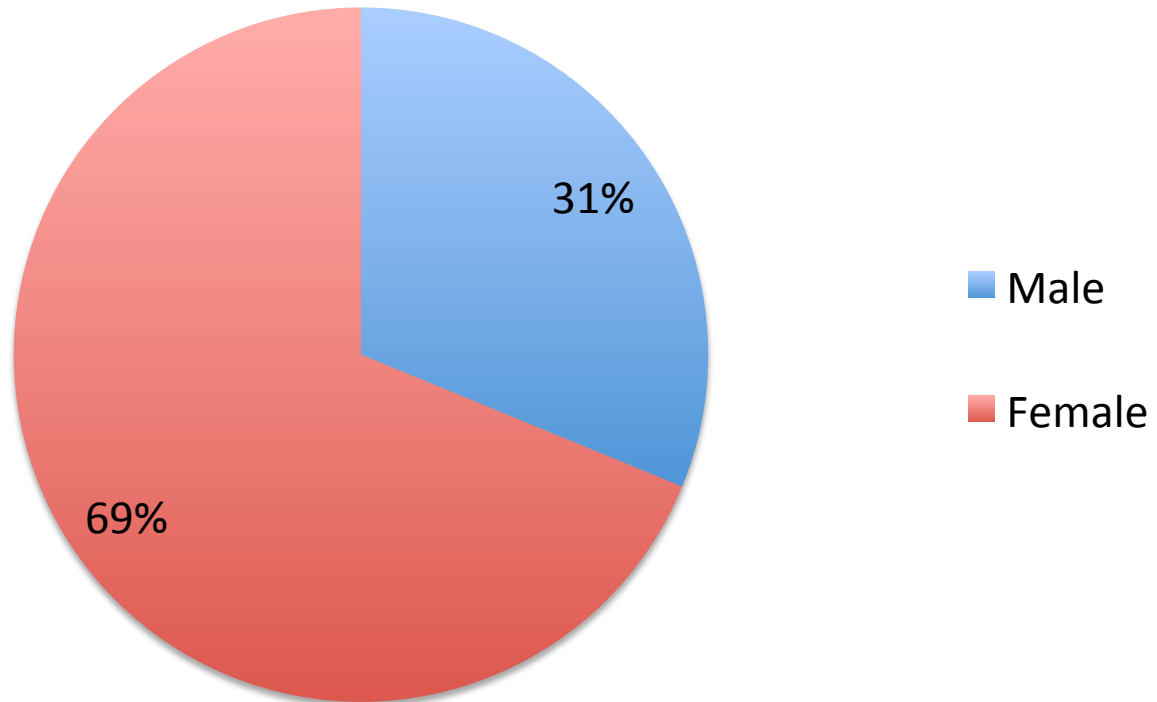
Calls with Others with Hearing Loss



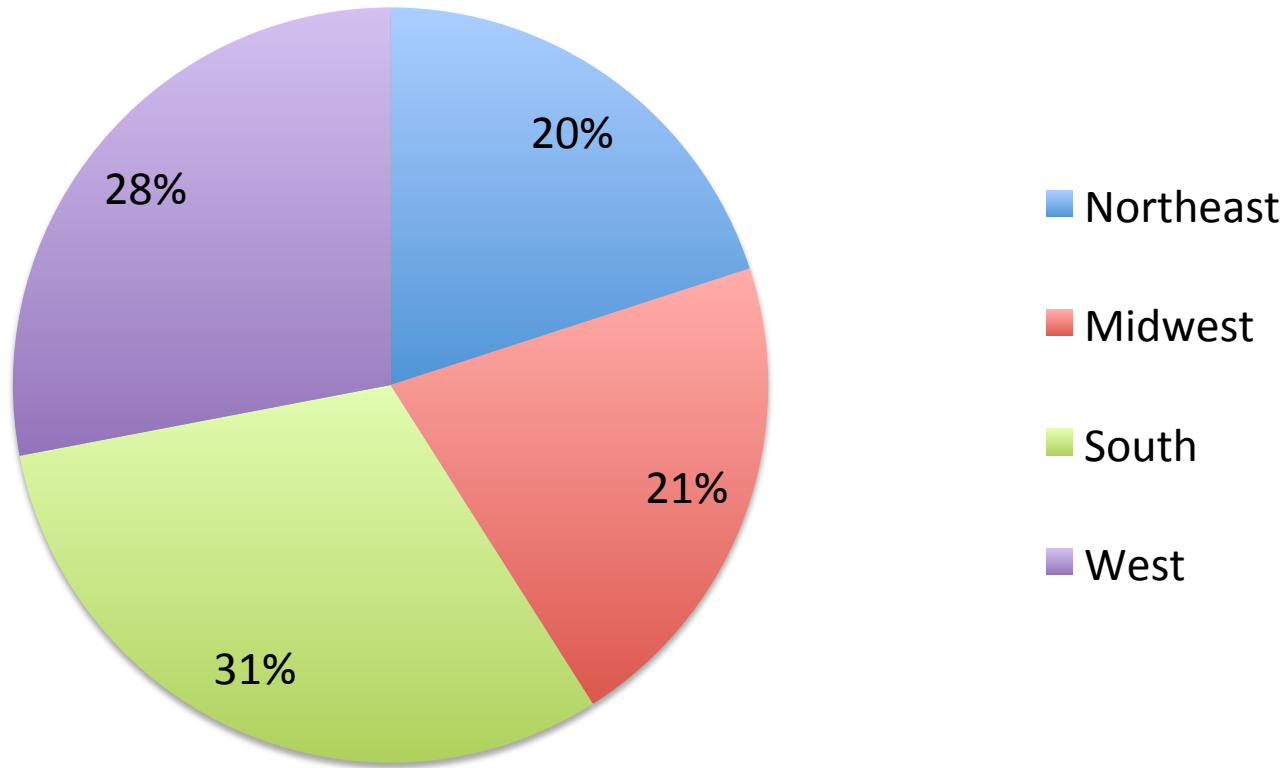
Age (in years)



Gender

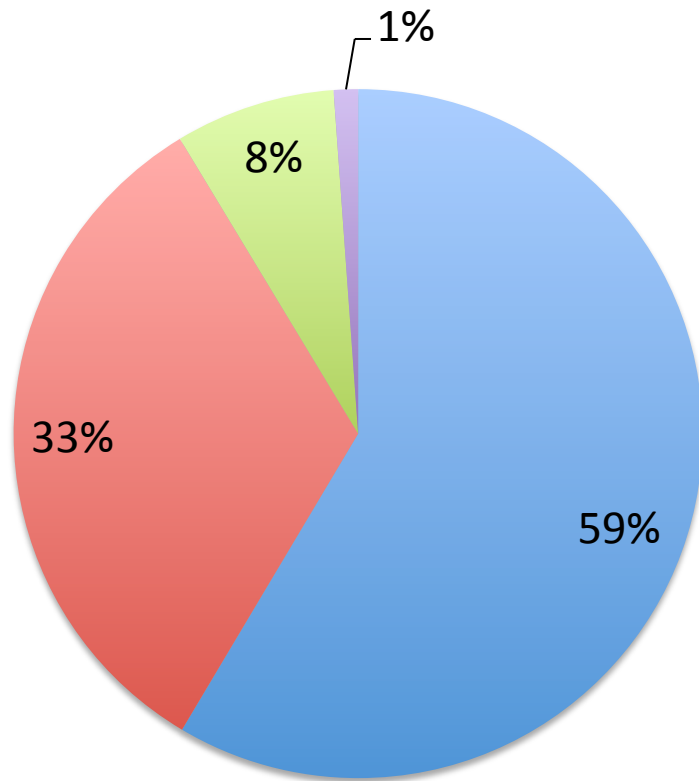


Geographic Area



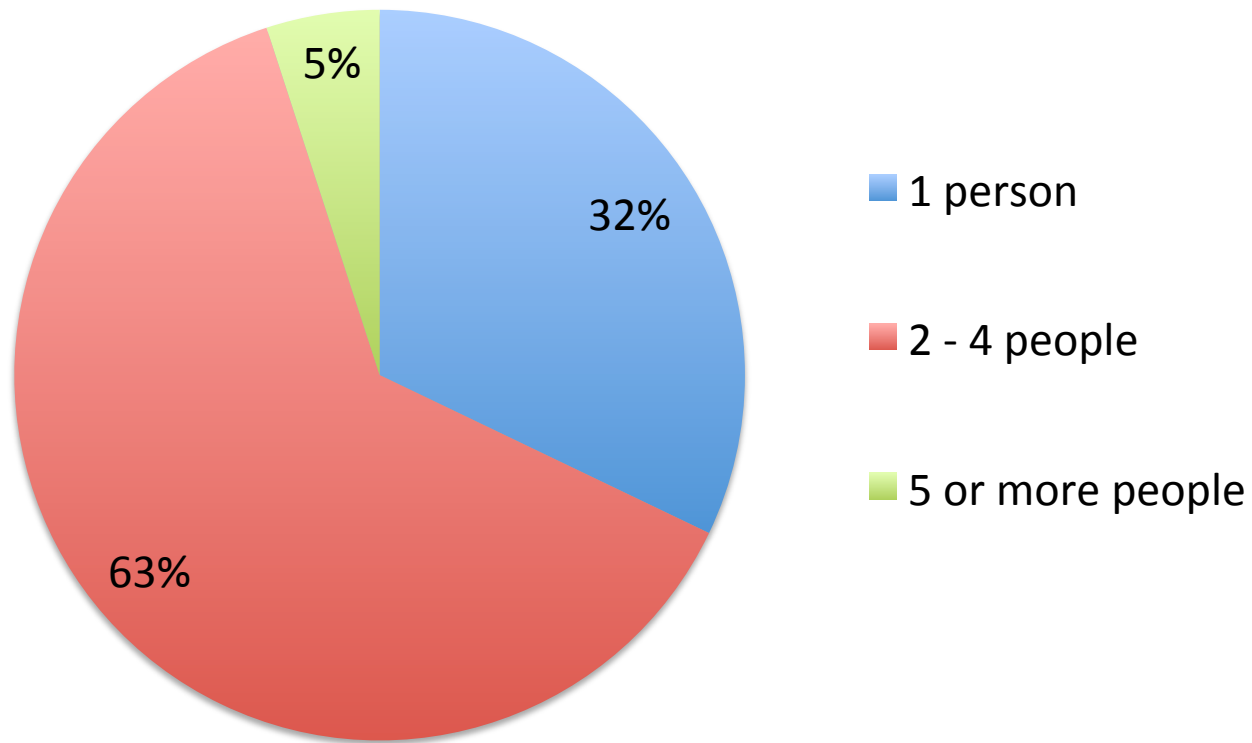
**43 states are represented; 8 respondents did not provide state info; 1 respondent was from Puerto Rico

Locale: urban vs rural

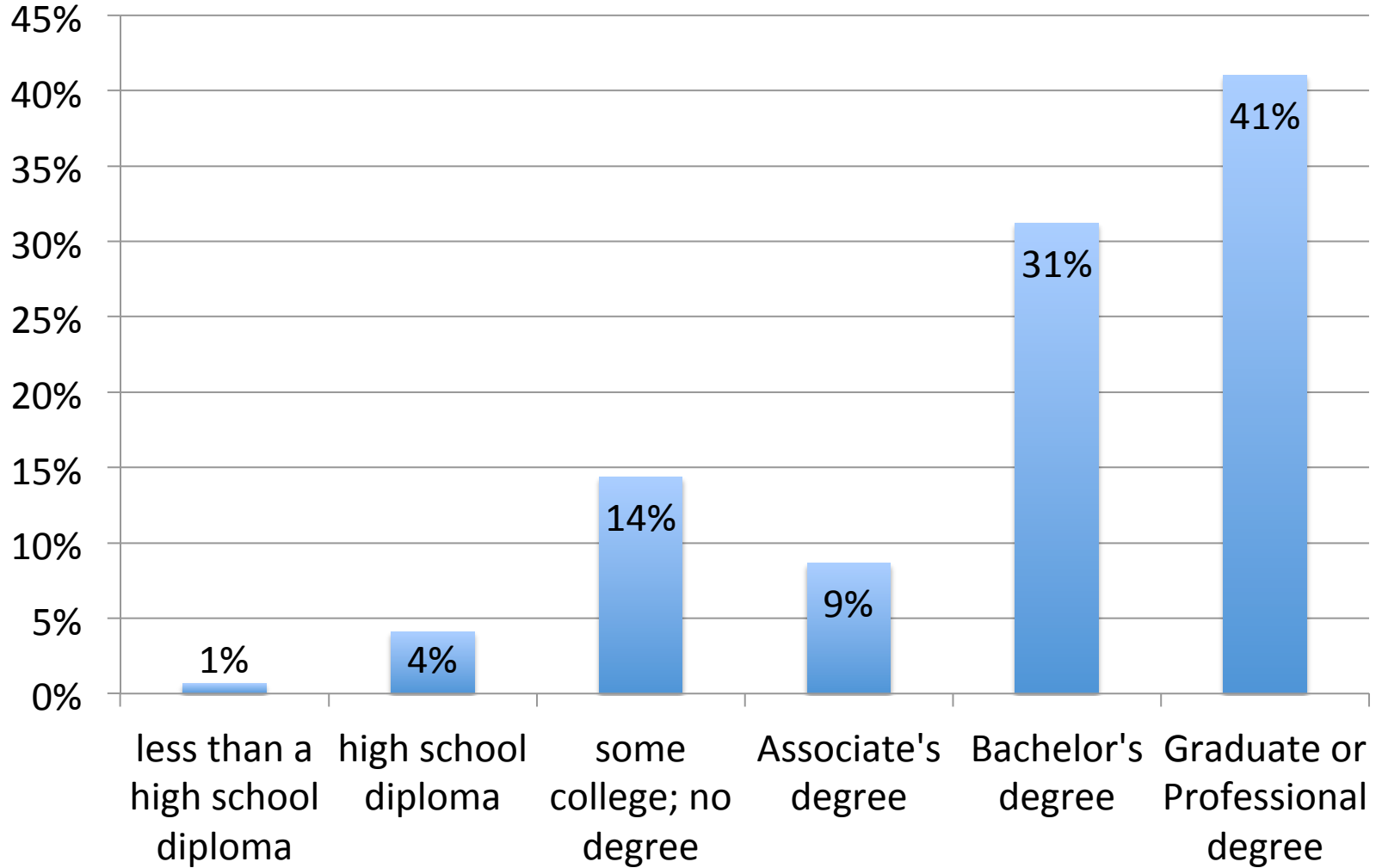


- in a city or metropolitan area with a population of 50,000 or more people
- in a city or town with a population of at least 2,500 people, but less than 50,000 people
- in a place with fewer than 2,500 people that is located outside a city or town
- I don't know.

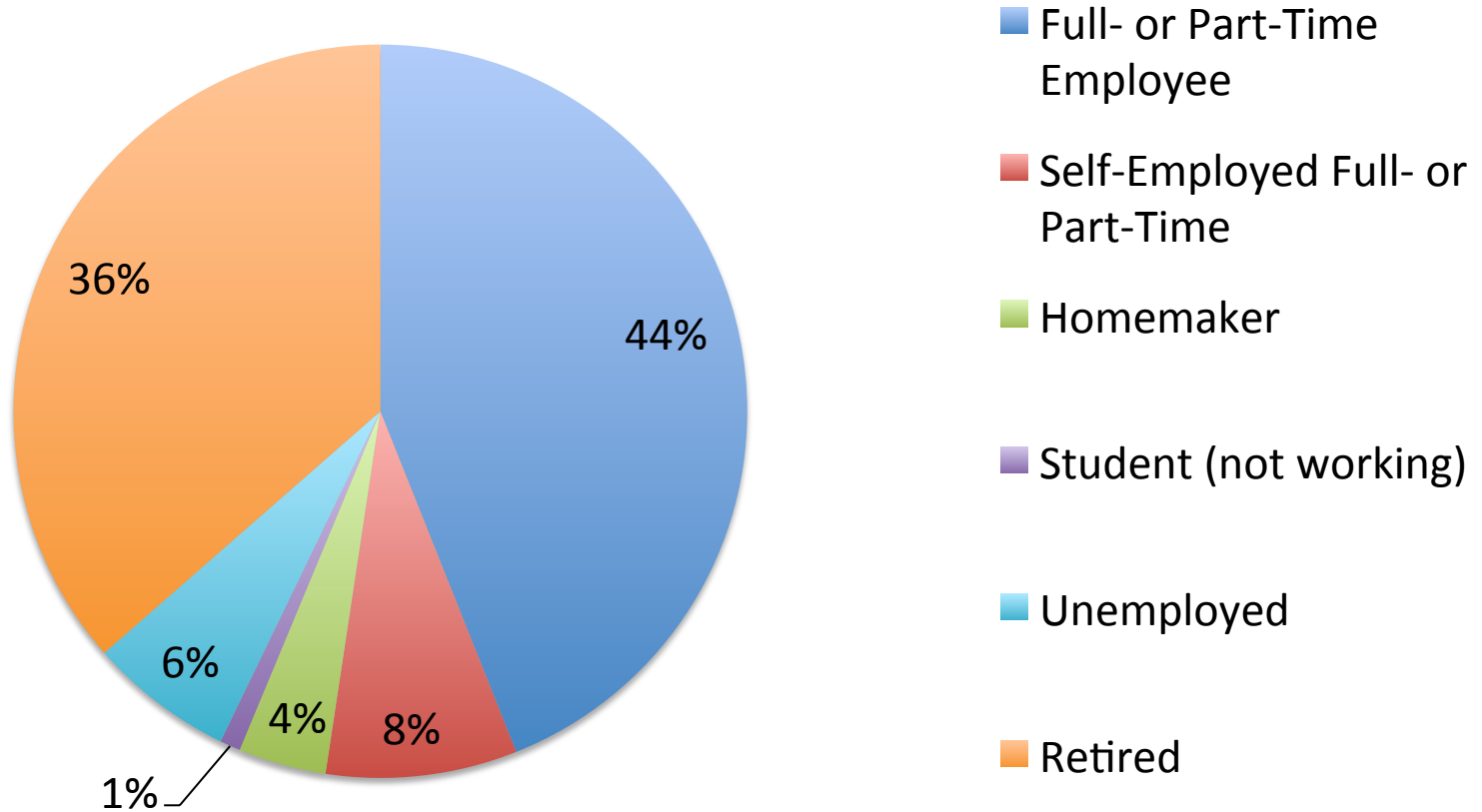
Household #s



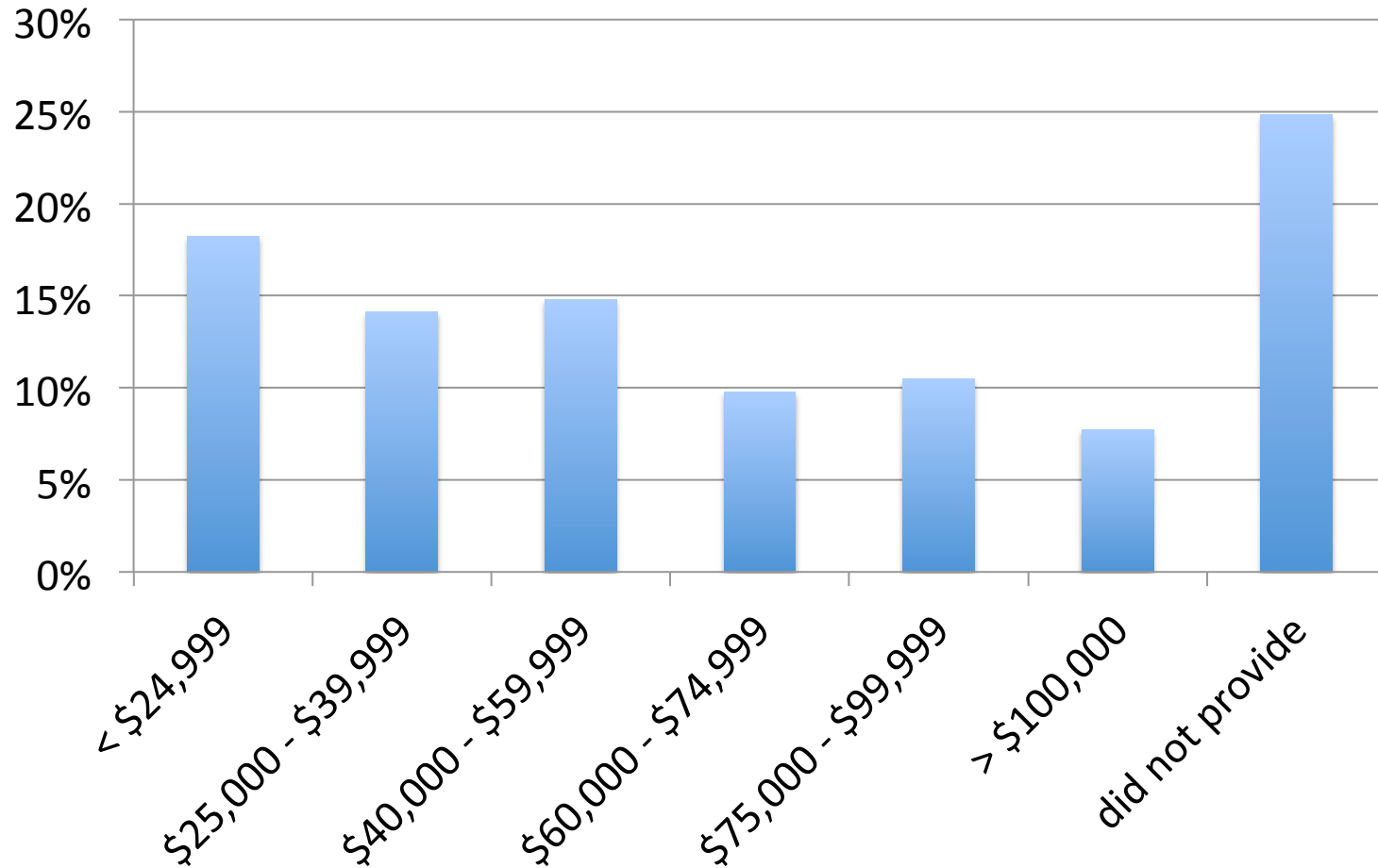
Educational Level



Employment



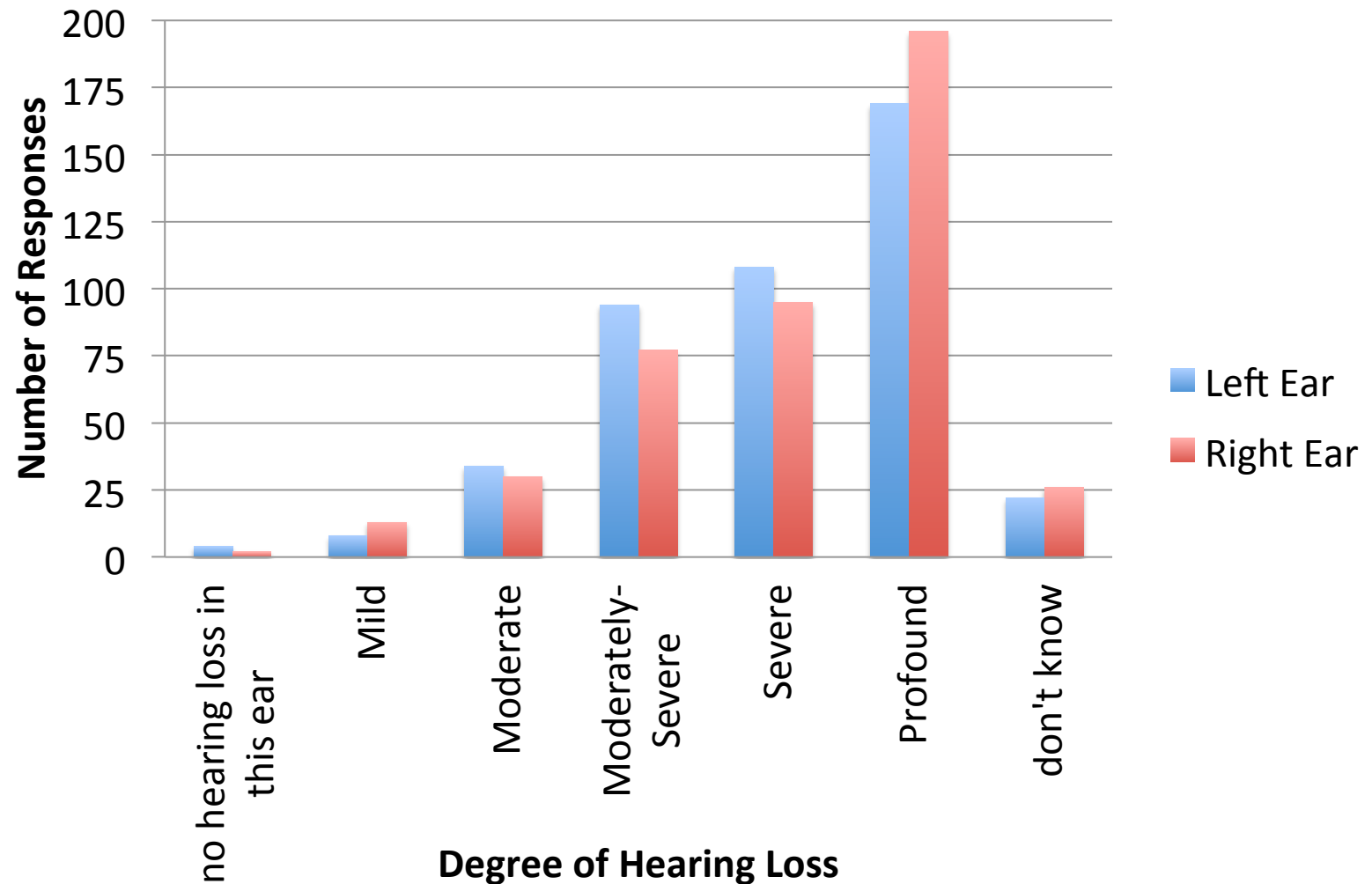
Earned Income (2014)



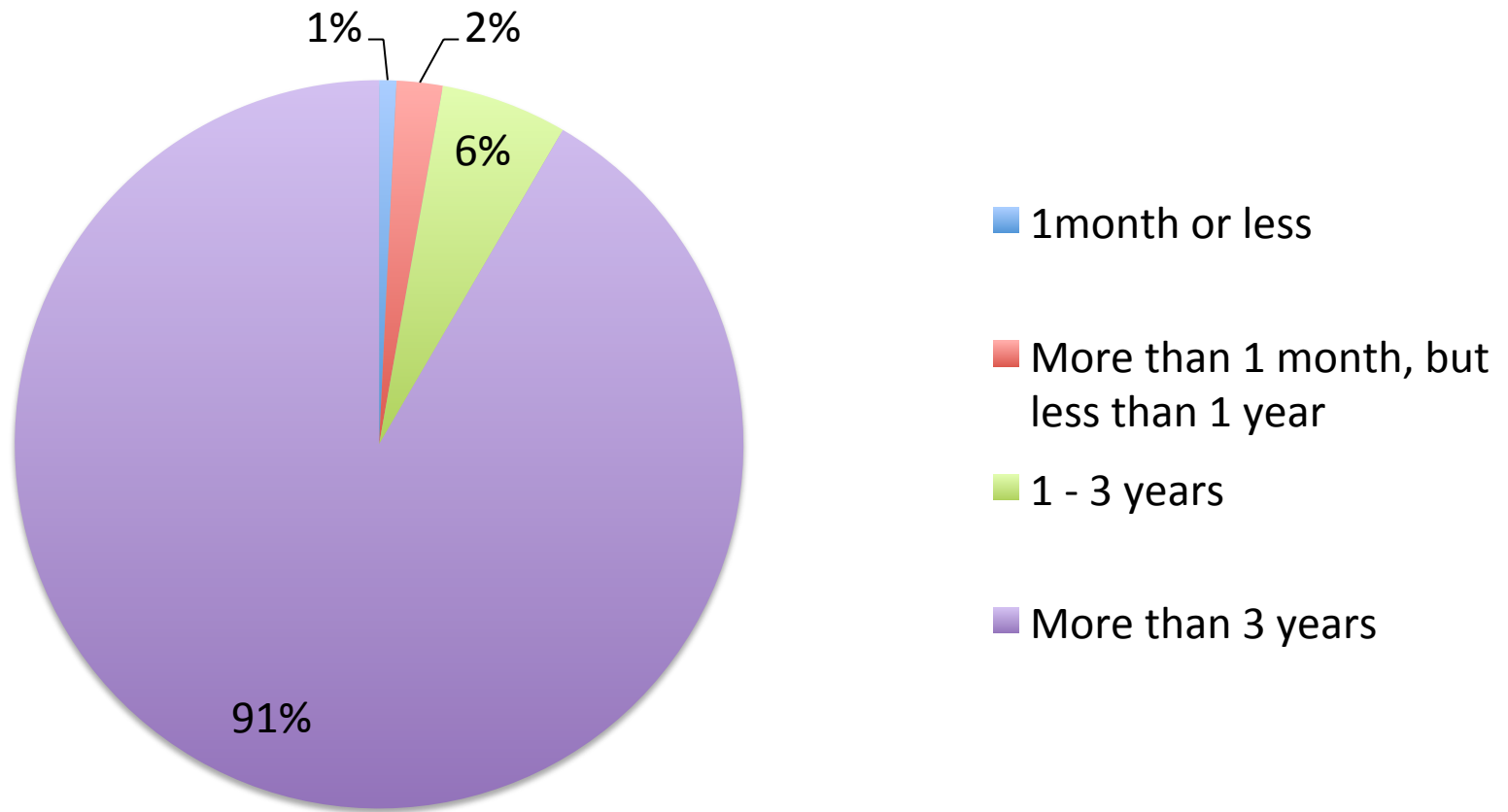
Hearing Loss and Hearing Device Use Information

Self-Reported Degree of Hearing Loss

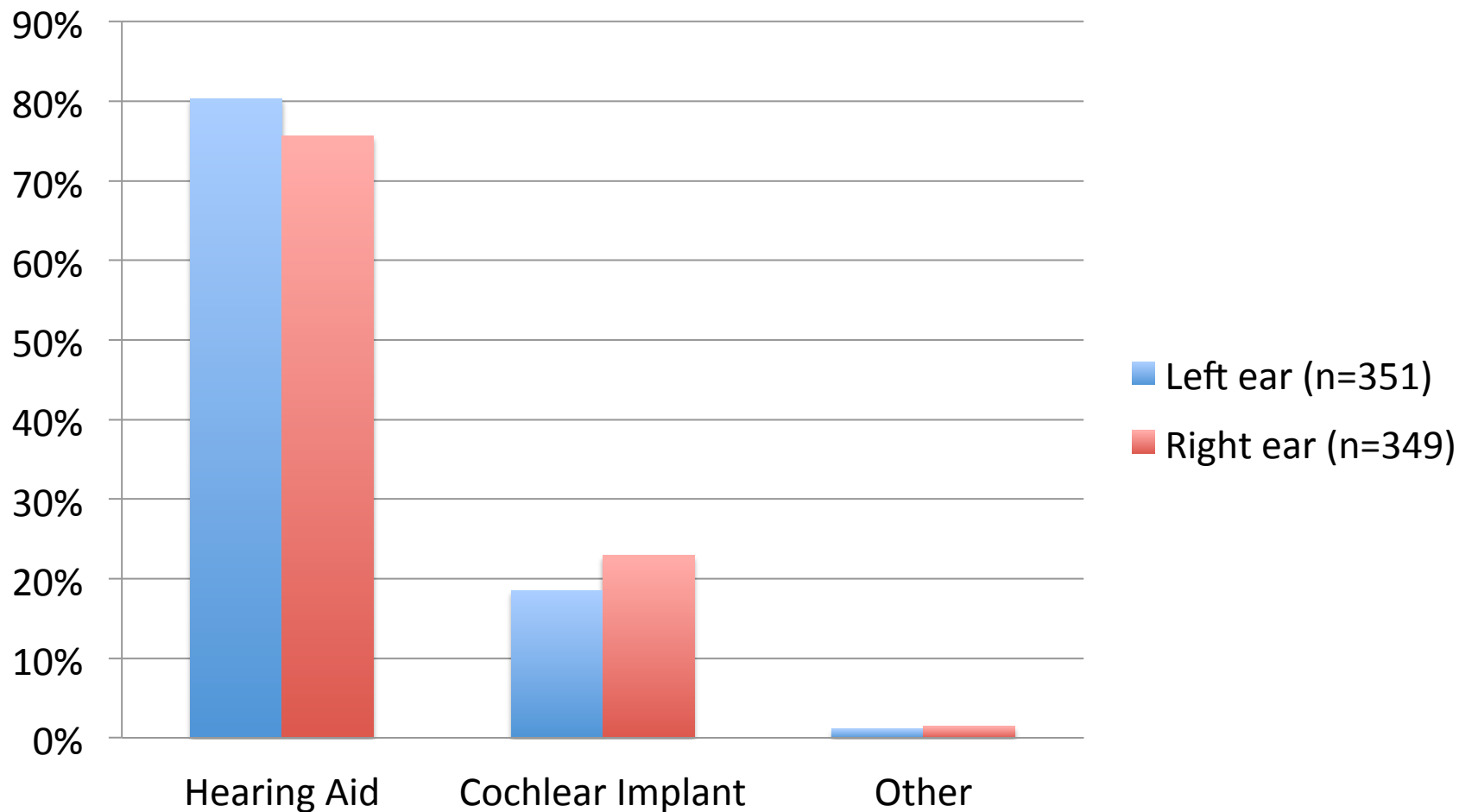
(n=439 total respondents; 393 currently use a hearing device; 46 do not)



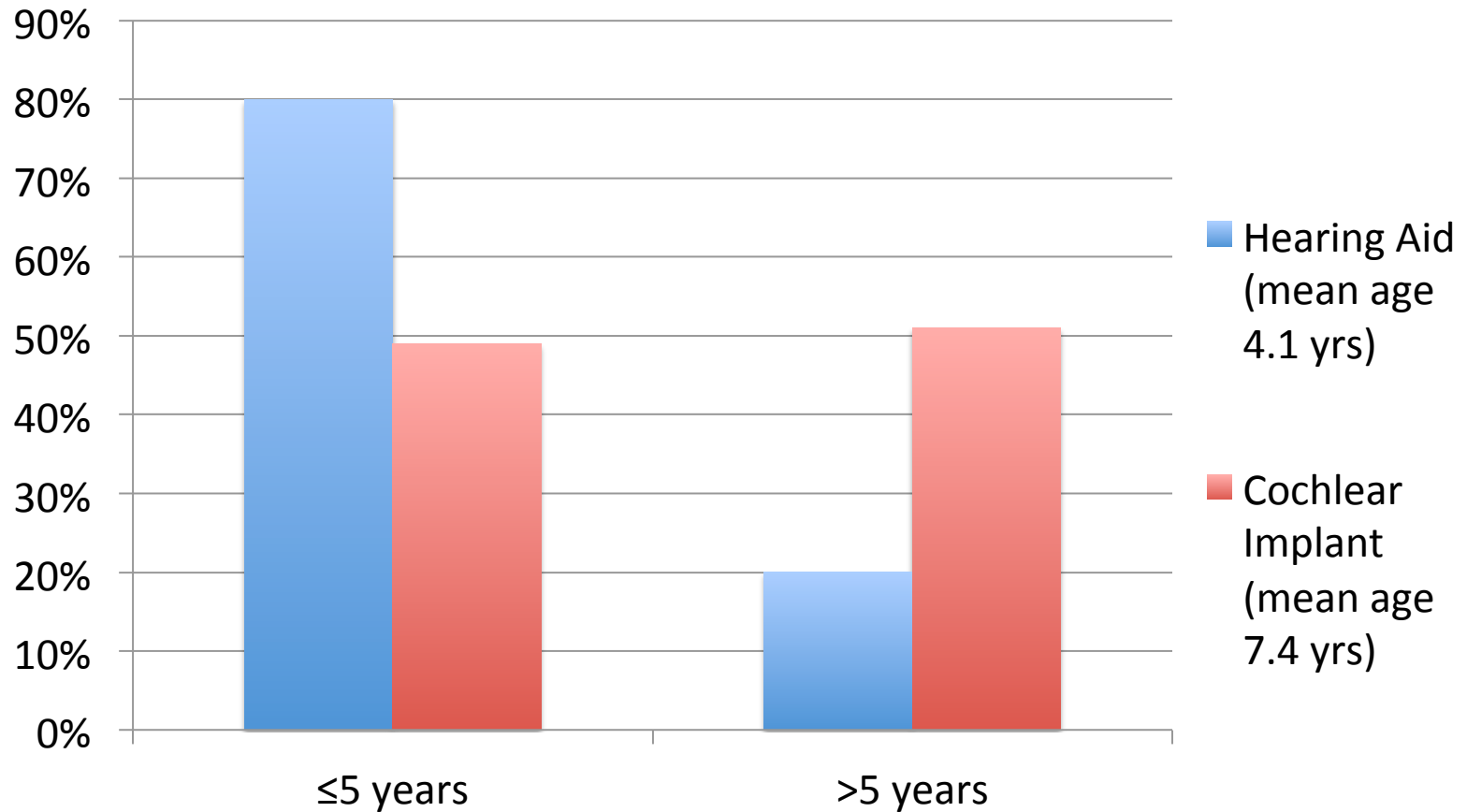
Length of Hearing Device Use



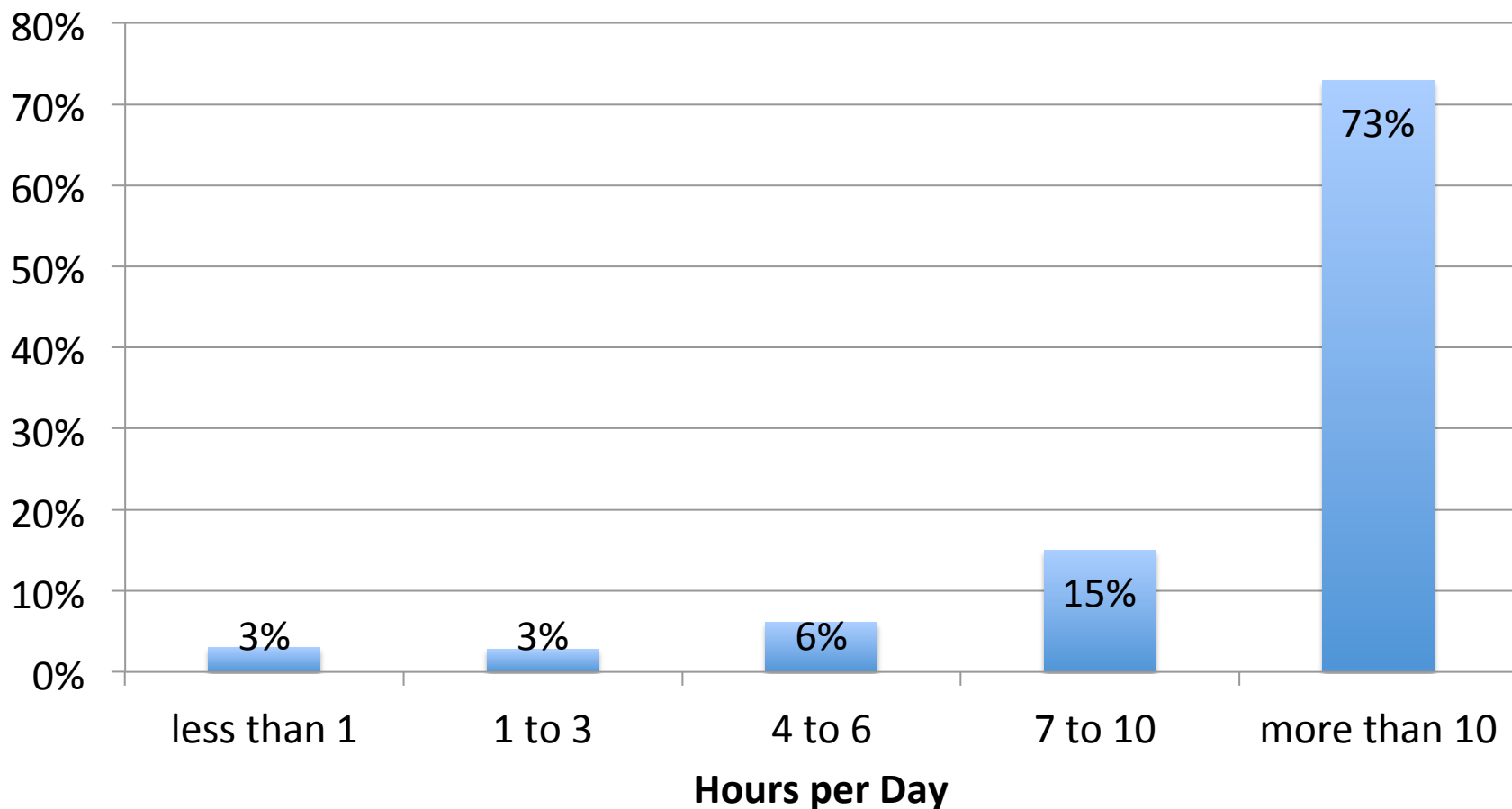
Current Hearing Device Used



Current Hearing Device Age

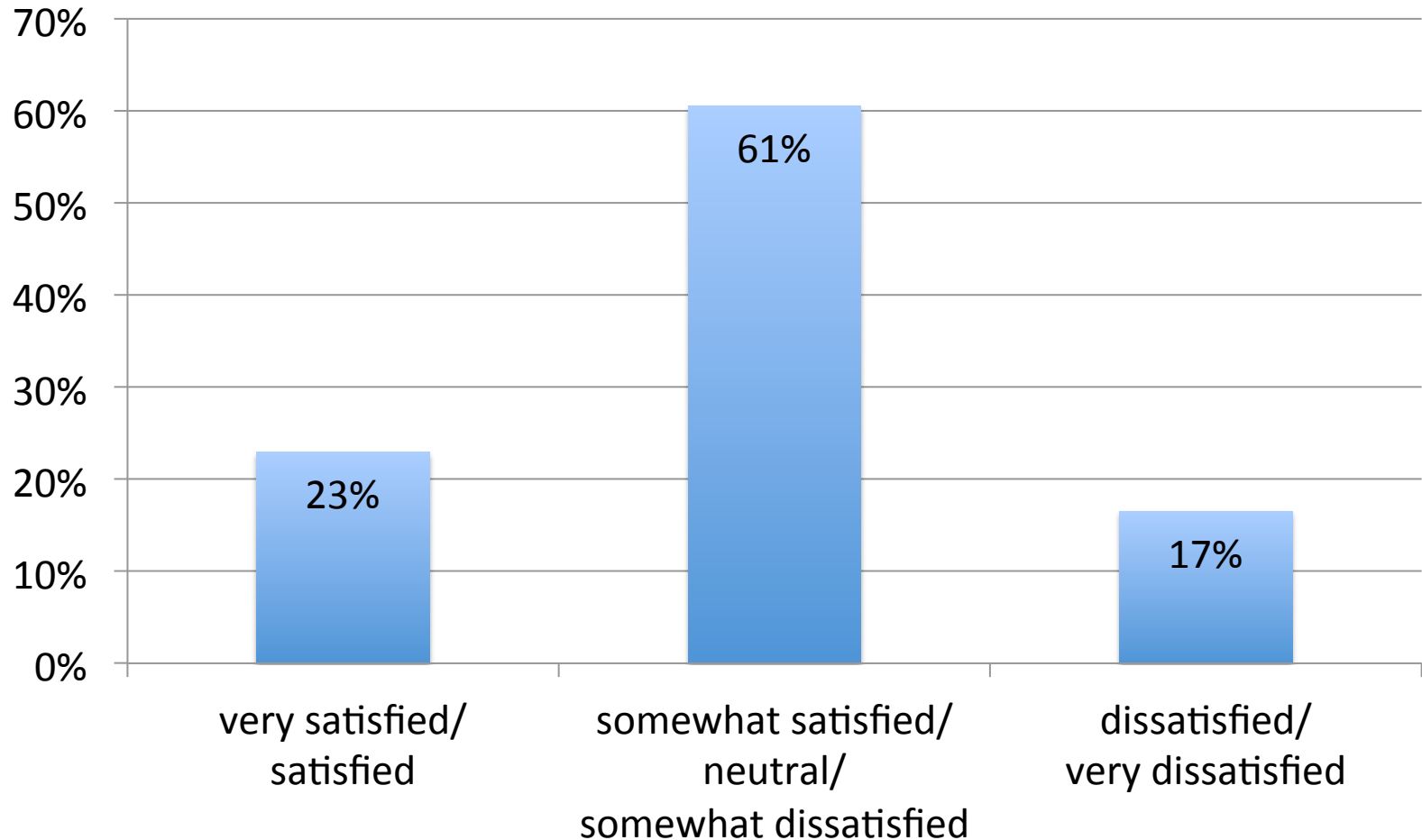


Number of Hours Current Hearing Device(s) Worn Each Day

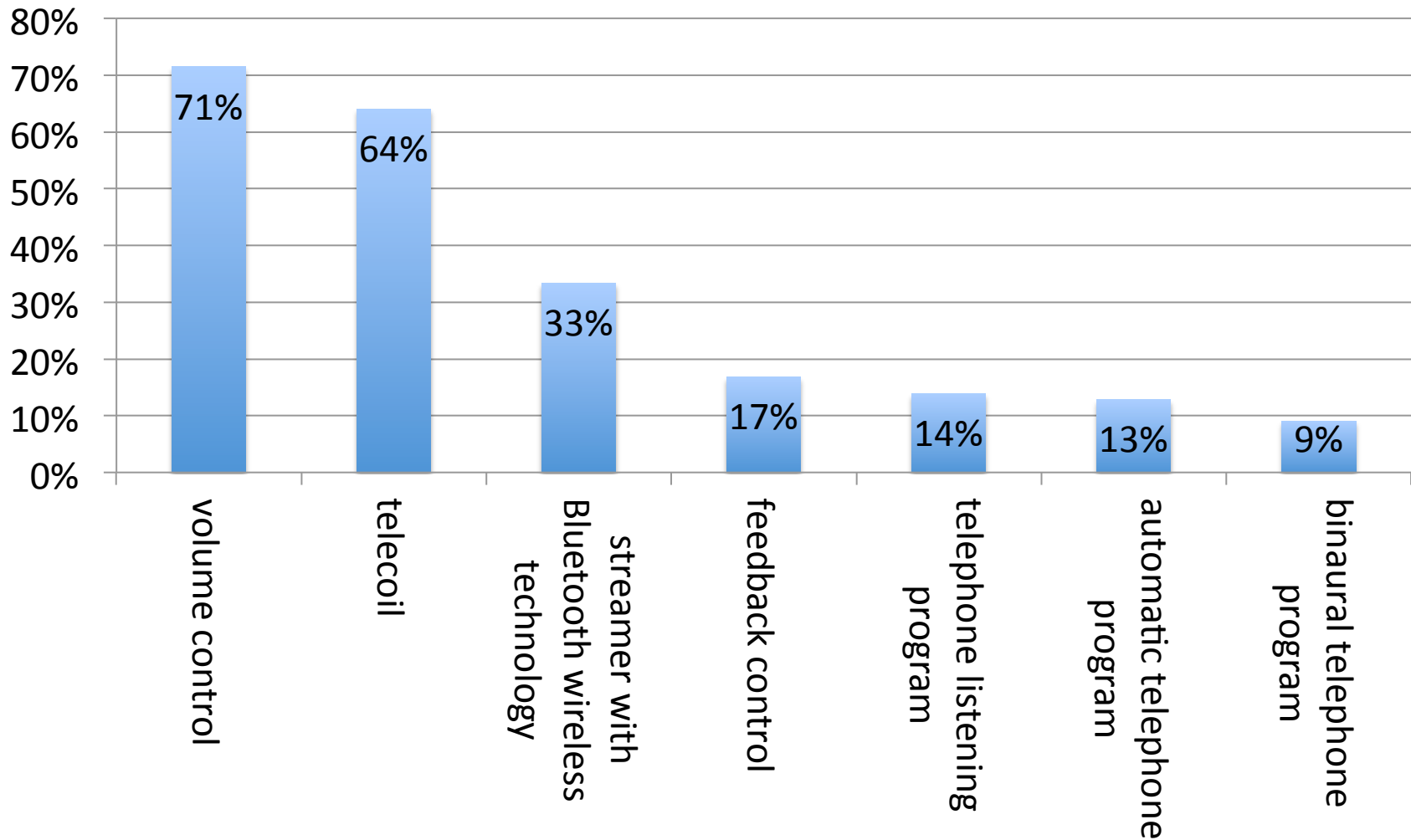


Personal Telecommunications Use

Q: Overall, how satisfied or dissatisfied are you with the performance of your hearing device when you use it for telephone listening?



Q: Which of the following features does your hearing device have that may be useful for telephone listening?



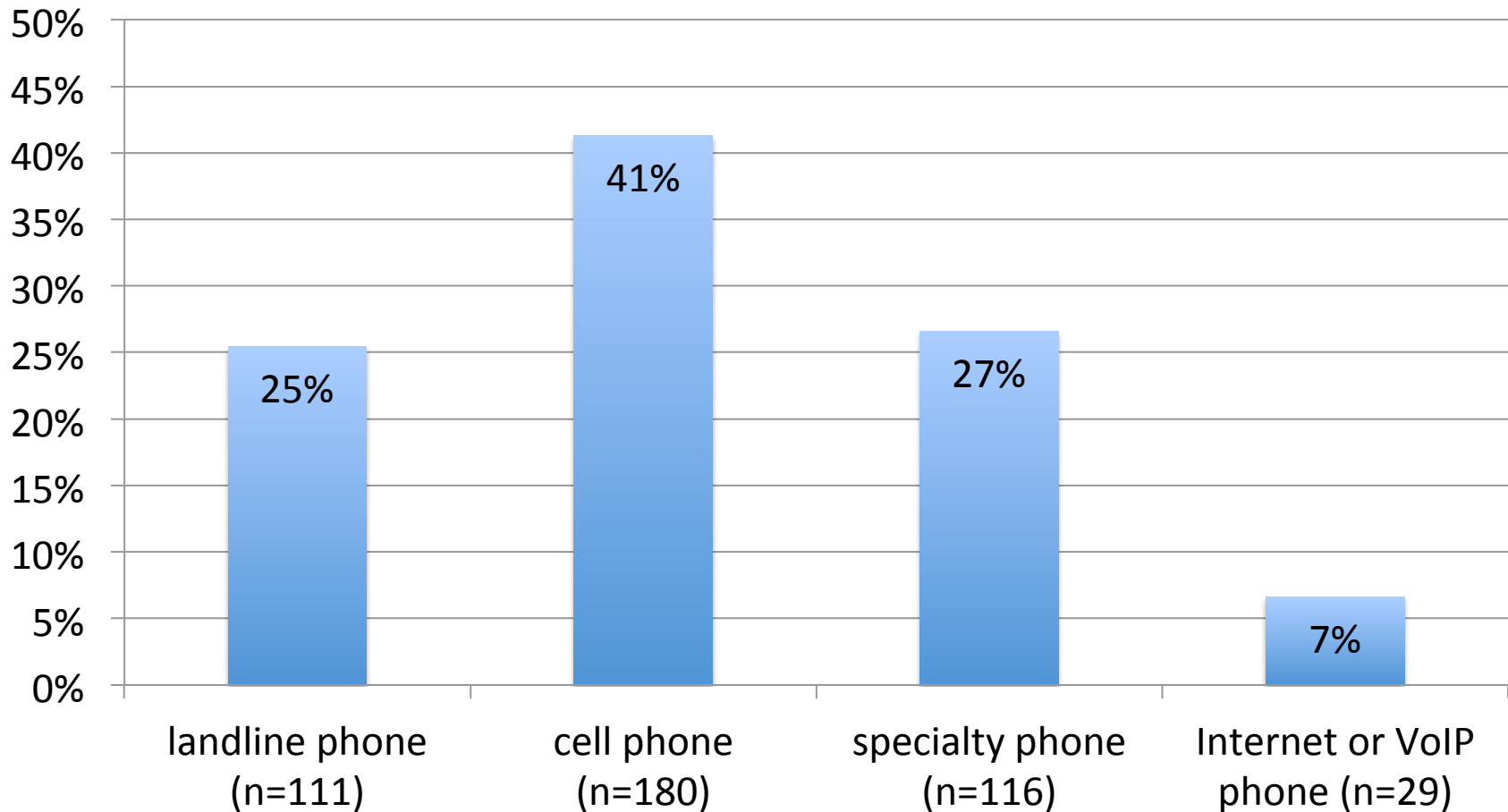
Q₁: How **important are the hearing device features you reported having to your successful use of the telephone?**
(5-point scale)

Q₂: How **satisfied or dissatisfied are you with the performance of these features when you use the telephone?**
(7-point scale)

Average Rating per Feature	Volume Control	T-coil	Streamer w/ Bluetooth	Feedback Control	Telephone listening program	Automatic telephone program	Binaural telephone program
Q₁: Feature Importance (avg. on 5-point scale)	Imp. (4.3)	Imp. (4.3)	Imp. (4.3)	Very Imp. (4.5)	Imp. (4.2)	Imp. (4.2)	Imp. (4.1)
Q₂: Feature Satisfaction (avg. on 7-point scale)	Somewhat Sat. (4.9)	Some-what Sat. (4.9)	Somewhat Sat. (5.2)	Somewhat Sat. (5.4)	Neutral (4.2)	Somewhat Sat. (4.7)	Somewhat Sat. (5.1)

Q: Of the phones you own for personal use, which one do you use most often for voice telecommunications?

(n=436; 3 did not respond)



Q: What is the most common way you listen over your personal-use phone?

(n=426; 3 landline and 7 specialty phone users did not respond)

	Overall	Landline	Cell	Specialty	Internet /VoIP
I hold the phone to my ear and use my hearing device's microphone.	31%	26%	36%	34%	7%
I hold the phone to my ear and use the telecoil setting on my hearing device.	16%	25%	8%	18%	24%
I remove my hearing device.	14%	20%	9%	15%	10%
Other	10%	8%	5%	18%	17%
I do not use hearing devices.	9%	6%	10%	6%	24%
I use the speakerphone or other speakers with my hearing device's microphone.	8%	7%	11%	5%	7%
I use the remote control/streamer for my hearing device to connect to the <i>Bluetooth</i> wireless capability of my phone/computer.	7%	3%	14%	1%	7%
I use an accessory (neckloop/silhouette/earhook) with my hearing device on the telecoil setting.	4%	3%	6%	3%	3%
I use an accessory (headset) with my hearing device's microphone.	1%	1%	2%	1%	0%

Q: Where do you find information about telephone products and services for your personal use?

(n=435; 4 did not respond)

%age	Sources of Information about telephone products and services
50%	Internet searches (for example, using Google)
47%	Consumer organization websites, meetings, conferences or events (for example, HLAA)
35%	Other consumers with hearing loss
30%	My hearing health care provider (for example, your audiologist)
28%	Print publications/magazines
27%	Distributors of specialty phones and accessories
23%	Manufacturer or service provider websites (for example, Motorola, Samsung, AT&T, Verizon)
23%	Family and/or friends
22%	Service provider retail stores (for example, AT&T, Sprint, T-Mobile, Verizon)
11%	All other categories: Social media (for example, Facebook, Twitter)/Government websites (for example, FCC accessibility clearinghouse)/Retail stores (for example, Best Buy)/www.accesswireless.org (CTIA website)/Other

Barriers and Needs

Q: What are the **biggest barriers** to satisfactory telephone communication for you? (n=427; 12 reported no barriers)
Top 10 List – (with percent of respondents reporting the barrier)

1	Understanding people I talk with on the phone (who may be unfamiliar, have an accent or do not speak clearly or slowly enough) (73%)
2	My hearing loss, which makes it difficult to understand others over the phone (65%)
3	Using a phone in a noisy environment (61%)
4	Telephone sound quality is often not good enough, making it difficult for me to understand the other person on the call (55%)
5	Telephone captions are not accurate enough, too delayed or both (44%)
6	Difficulty listening to my voice mail (41%)
7	Speech is not comfortably loud regardless of how I adjust my phone's or hearing device's volume control (33%)
8	Positioning phone and hearing device at ear (32%)
9	Difficulty finding telephone products (phones, accessories or assistive devices) that work for me (26%)
10	Costs are too high for accessories and other special telephone equipment (22%)

Q: What are the **most important needs** you have for achieving successful telephone communication?

(n=420; 19 reported no needs)

Top 10 List – (with percent of respondents reporting the need)

1	Better telephone sound quality (59%)
2	Improved telephone captions, which are more accurate, less delayed or both (53%)
3	Better ways to test telephone products (phones, accessories or assistive devices) to find ones that work for me (48%)
4	More affordable prices for accessories and other special telephone equipment (43%)
5	More or better information about telephone communication options for people with hearing loss (42%)
6	Better options for listening to voice mail (37%)
7	More or better information about hearing aid compatibility for cell phones (37%)
8	The ability to hear over the telephone using both my hearing devices at the same time (30%)
9	More training on strategies I can use to improve my telephone communication with people I find difficult to understand (29%)
10	More attention to assessing my telephone communication needs by my audiologist or hearing instrument specialist (26%)

Acknowledgments

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