How Many People Use ASL? and Other Questions Without Good Answers....

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History of Demography at the GRI

- Office of Demographic Studies (ODS)
- Center for Assessment and Demographic Studies (CADS)
- Gallaudet Research Institute (GRI)

Some of the demography researchers associated with ODS/CADS/GRI over the years:
Thomas Allen, Scott Campbell Brown, Augustine Gentile, Carl Jensema, Michael Karchmer, Brenda Rawlings, Peter Ries, Jerome Schein, Raymond Trybus
Demography Questions

As defined by Preston, Heuveline, and Guillot (2001), these are questions about *a collection of people* (population or collectivity)

*that persists through time* even though its members are continuously changing through attrition and accession [i.e., birth, death, and migration]…. [Demographic analysis is about studying changes in the *size, growth rate, and composition* of the population, as well as] the consequences of individual-level behavior for aggregate processes. (emphasis added, pp. 1-2)
Frequent Demography Questions Asked of the GRI

• How many deaf people are there in the United States (or in a particular state, county, or city)?

• How many people use ASL in the United States (or in a particular state, county, or city)?
Why These Questions?

Common Reasons Given:

• I have to report how many people would be served by my program or service.

• I have to know how many people are likely consumers of my product or service.

• I have to establish how many people do not have access to various goods and services because they do not have access to providers who understand deafness or use ASL.
Demographic Studies of Deafness and Hearing Loss at the GRI and Elsewhere

- Annual Survey of Deaf and Hard of Hearing Children and Youth (GRI)
- National Census of the Deaf Population (one-time-only study)
- National Health Interview Survey (National Center for Health Statistics)
- Decennial Census (U.S. Census Bureau)

National-Level Demographic Data ONLY
According to Preston, Heuveline, and Guillot (2001), no matter how a population is defined, there are only two ways of entering it: being born into it; or migrating into it. If the definition of the population includes a social element in addition to the customary geographic/temporal elements, the “migration” can include a change in the social label, a process often referred to as “social mobility.” (emphasis added, p. 2)
Today’s Demography Question:

How many people use American Sign Language in the United States?
Today’s Demography Answer (Short Version):

I can’t really say....

But I will tell you what I have learned when I search for an answer to today’s question.
First, there are numbers out there.

A search of the World Wide Web:

www.ASLinfo.com web site

ASL is now used by *approximately one-half million* Deaf people in the U.S. and Canada. (n.d.)
American Sign Language is the 3rd most used language in the U.S. (n.d.)

National Association of the Deaf web site
There are approximately 250,000 – 500,000 ASL users in USA and Canada. (Baker and Cokely, 1980)
Wilcox and Peyton (1999)

Although the precise number of ASL users is difficult to determine, ASL is the predominant language – in other words, the language used most frequently for face-to-face communication, learned either as a first or second language – of an estimated 100,000 to 500,000 Americans (Padden, 1987), including Deaf native signers, hearing children of Deaf parents, and adult Deaf signers who have learned ASL from other Deaf individuals. (p. 1)
American Sign Language (ASL) is the primary language of an estimated 100,000 to 500,000 Americans (Padden, 1987), including deaf native signers, hearing children of deaf parents, and fluent deaf signers who have learned ASL from other deaf individuals. (p. 1)
Second, the numbers are based on literature published in the 1980s.

Padden (1987)

No accurate census of users of ASL is available, but estimates of primary users vary from 100,000 to 500,000. Primary users include several groups of signers: native signers, who have learned ASL as a first language from deaf parents; fluent signers, from hearing families, who learned ASL from other deaf individuals; and hearing children of deaf parents, who have learned the language from childhood and continue to use it fluently with deaf people. (p. 44; bibliography on p. 53 cites Baker and Cokely [1980])
Further back in the 1980s...

Baker and Cokely (1980)
American Sign Language (also called ASL or Ameslan) is a visual gestural language created by Deaf people and used by approximately 250,000-500,000 Americans (and some Canadians) of all ages. (p. 47; footnote cites O’Rourke [1975] and Woodward [1978])
Third, the 1980s literature relies on publications from the 1970s.

Woodward (1978)

We could more safely estimate our *native* users of ASL at around 250,000…. There are nine languages with more than 500,000 *native* users in the U.S. and eighteen languages with more than 250,000 *native* users. ASL rates considerably lower than third as frequently used foreign language in the U.S. (p. 188; critique of O’Rourke [1975]; cites Schein and Delk [1974])
Further back in the 1970s...

O’Rourke (1975)

Just under 500,000 deaf persons use sign language (this figure does not take into account the number of people with normal hearing who have learned sign language. The total is actually double or triple that number)....

Users of Spanish in the United States number 4 ½ million; 631,000 speak Italian. The third “other” language is sign language. (p. 27; cites “research connected with proposed federal legislation to include deaf persons in the Bilingual Courts Act” [more commonly known as the Court Interpreters Act of 1978])
Finally, it all points to one source:

Schein and Delk (1974)

These authors report from their study, the National Census of the Deaf Population (NCDP):

The majority of the prevocationally deaf population regards its manual communication skills highly. (p. 62)

However, closer inspection of their report is required to understand what this means.
From Table IV.9, p. 63: About two-thirds of the survey respondents in 1972 (25-64 years) rated their expressive and receptive signing skills as “Good” – the highest rating possible.

The specific questions (see Appendix E, Form B, Questions B-81, B-83, and B-84, p. 256) were simply:

   How good is your signing?
   How about reading signs?

And the responses requested were: Good, Fair, Poor, or Not at all.

*There was no specific mention of American Sign Language.*
From Table II.10, p. 28, the total prevocationally deaf population – civilian, noninstitutionalized persons of all ages – was estimated to be only 410,522 persons in 1971.
So what’s **wrong** with these numbers?

To find out, we have to ask two demographics questions:

- *Who counts as a person who uses ASL?*
- *What counts as ASL use?*
What are some ways by which a person gets to know ASL in the United States?

Three mechanisms of transmission/interaction:

- Intergenerational
- Intragenerational
- Direct Instruction
Intergenerational Transmission

- **Familial**
  Adult family member (typically one or both parents, who are very often deaf) to infant, or at least toddler, child (who may be either hearing or deaf) – deaf of-deaf children and CODAs are examples

- **Local**
  Adult (typically deaf) to child (who may be either hearing or deaf) in the context of neighborhood or community interaction – child with deaf neighbor is a historical example, e.g., the Martha’s Vineyard community (Groce, 1985)

- **Institutional**
  Adult (typically deaf, but may be hearing) institution member to “new” child institution member (deaf) – deaf children beginning their formal education with deaf dormitory supervisors and classroom teachers in a school for the deaf is an example
Intragenerational Transmission

- **Spousal**
  Spouse (deaf) to spouse (who may be either hearing or deaf) – signing-deaf adult marries oral-deaf or hearing adult

- **Familial**
  Sibling (deaf) to sibling (who may be either hearing or deaf) – deaf child with younger sibling(s) is an example

- **Local**
  Child (deaf) to child (who may be either hearing or deaf) in the context of school or neighborhood interaction – deaf child with neighborhood playmate or with school best friend are examples

- **Institutional**
  Child or adult institution member (deaf) to “new” child or adult institution member (deaf) – peer-to-peer transmission among deaf children in a school for the deaf or among deaf adults at Gallaudet University are examples
Direct Instruction

• **Families**
  Adult or child immediate or extended family members (hearing) from ASL instructor (hearing or deaf) – hearing parents of deaf children are examples of ASL learners in this category

• **School Personnel**
  Teachers, counselors, school psychologists, administrators, support staff, interpreters, etc. – Hearing adults becoming teachers of deaf children is an example

• **Social Service Providers**
  Social workers, counselors, psychologists, etc. – Hearing adults becoming social service providers is an example

• **Interested Persons**
  Employers, co-workers, students, church members, aspiring interpreters, neighbors, etc. – Hearing adults wishing to communicate with deaf people in their place of work, worship, neighborhood, etc. are examples
What counts as ASL use?

Problems in defining the enumeration process:

• *Signing vs. ASL*

• *Incorporation of ASL features vs. ASL*

• *Self-report vs. Observation*

These are problems of measurement
Signing vs. ASL

- **Time Period**
  The fairly safe, but far from foolproof, assumption made by people reading the results of the NCDP (Schein & Delk, 1974) was that asking prevocationally deaf people about their signing is equivalent to asking about ASL use. Certainly, this would not be a safe assumption today!
Incorporating Features vs. ASL

- Register, Contact, and English
  Depending on who is signing with whom, including issues of race, class, gender, and education level as well as hearing status, what counts as ASL use may not look the same from one context of interaction to the next.
Self-report vs. Observation

- **Knowledge & Fluency**
  Depending on who is using ASL, or some system of manual communication, obtaining an accurate assessment of ASL use can be very difficult based upon self-reports. This is especially true if fluency and sophistication, rather than usage in general, are important issues.
Today’s Demography Answer (Long Version):

So what can I say?

An estimate of the number of “primary users” in 1972 can be made based upon the somewhat narrow definitions in the NCDP.
Estimates based upon NCDP numbers (Schein & Delk, 1974)

- 276,888 Prevocationally deaf (PVD) good signers
  prevocational: prior to 18 years of age
  good signer: self-report of signing ability
  = (number of PVD persons x fraction of good signers)

- 202,741 Children born to prevocationally deaf couples in which the mother is a good signer
  (CODAs only, because deaf already counted)
  = (number of PVD mothers x avg. fertility) – (likely number of deaf children x fraction of children born to PVD mothers 40+ yrs.)
“Primary users” of ASL in the USA in 1972

479,629 $\approx \frac{1}{2}$ million

Caveats: Additional important methodological details have not been discussed, primarily related to sampling biases, not to mention changes in family, community, and institutional behavior related to sign use and instruction over the last 30+ years.
References


