

National Deaf Center on Postsecondary Outcomes

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# Deaf People and Educational Attainment in the United States: 2017

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on Postsecondary Outcomes



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# INTRODUCTION

Continuing education and training after high school is becoming increasingly important for successful independent living and employment in the United States. Recognizing the great need for skilled employees who can meet the competitive demands of the modern workforce, current legislation and public policy are designed to facilitate conditions that support continuing education and training for all individuals. Legislation has also increased the accessibility of postsecondary education and training programs for deaf individuals, who are now enrolled in a wide variety of educational programs across the United States. Current data on educational attainment for deaf people suggest areas of optimism, but also areas of concern.

This report provides a comprehensive overview of the most current data on educational attainment trends and trajectories for deaf individuals in the United States, serving as a resource for community members, educators, researchers, and policymakers. We used data from the 2015 American Community Survey (ACS), a national survey conducted by the U.S. Census Bureau. We limited our sample to individuals ages 25–64 to capture educational attainment data for individuals more likely to have completed postsecondary education and training. More information about this dataset and the analyses are shared in the Methods section at the end of this report.

Key findings are summarized below.

- In general, deaf people attain lower levels of education than hearing people.
- 51% of deaf people complete at least some college.
- Younger deaf people are increasingly more likely to graduate from high school.
- General educational attainment rates have increased since 2008.
- Deafdisabled individuals demonstrate lower educational attainment levels.
- Deaf women attend college at higher rates than deaf men.
- It is necessary to recognize how the intersectional identities of deaf people interact with educational experiences and outcomes.
- Income and employment vary across fields of degree.

In this report, we use the term *deaf* in an all-encompassing manner to include individuals who identify as Deaf, hard of hearing, hearing impaired, late deafened, and deafdisabled.

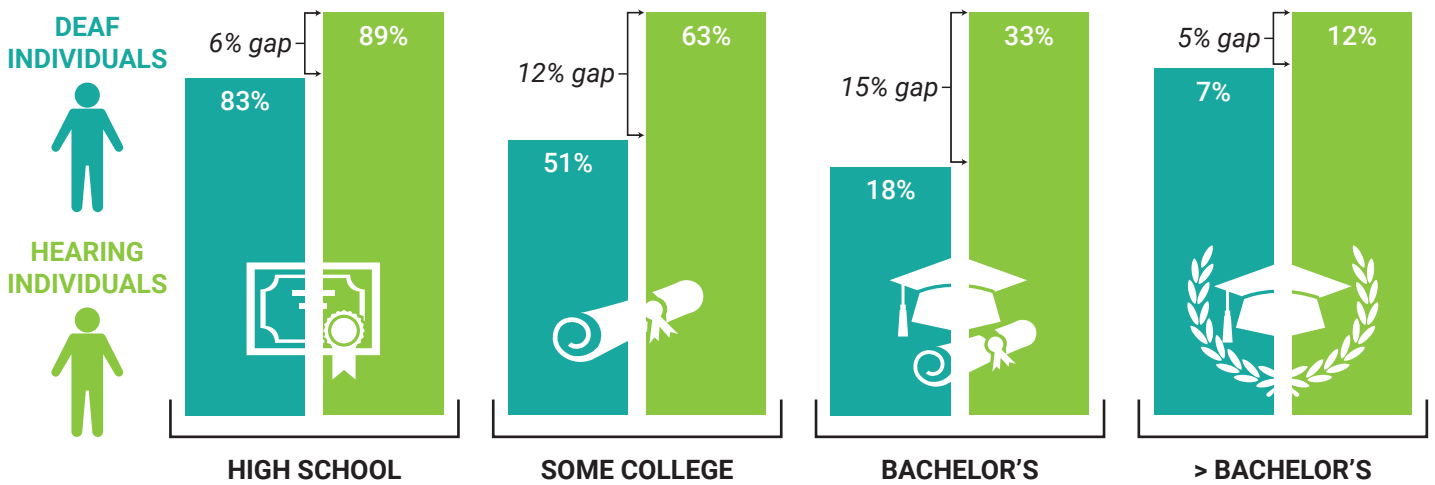
# GENERAL EDUCATIONAL ATTAINMENT STATISTICS

Overall, data show that deaf people attained lower levels of education than their hearing peers (see Figure 1). In 2015, 83% of deaf adults in the United States had successfully completed high school, compared to 89% of hearing adults, a gap of 6%. The gap in educational attainment between deaf and hearing people was the widest, at 15%, among individuals who had completed at least a bachelor's degree.

This is important because increasing levels of educational attainment narrows the employment gap between deaf and hearing individuals (Garberoglio, Cawthon, & Bond, 2016). Only 18% of deaf adults in the United States had completed a bachelor's degree or more, compared to 33% of hearing adults.

Figure 1

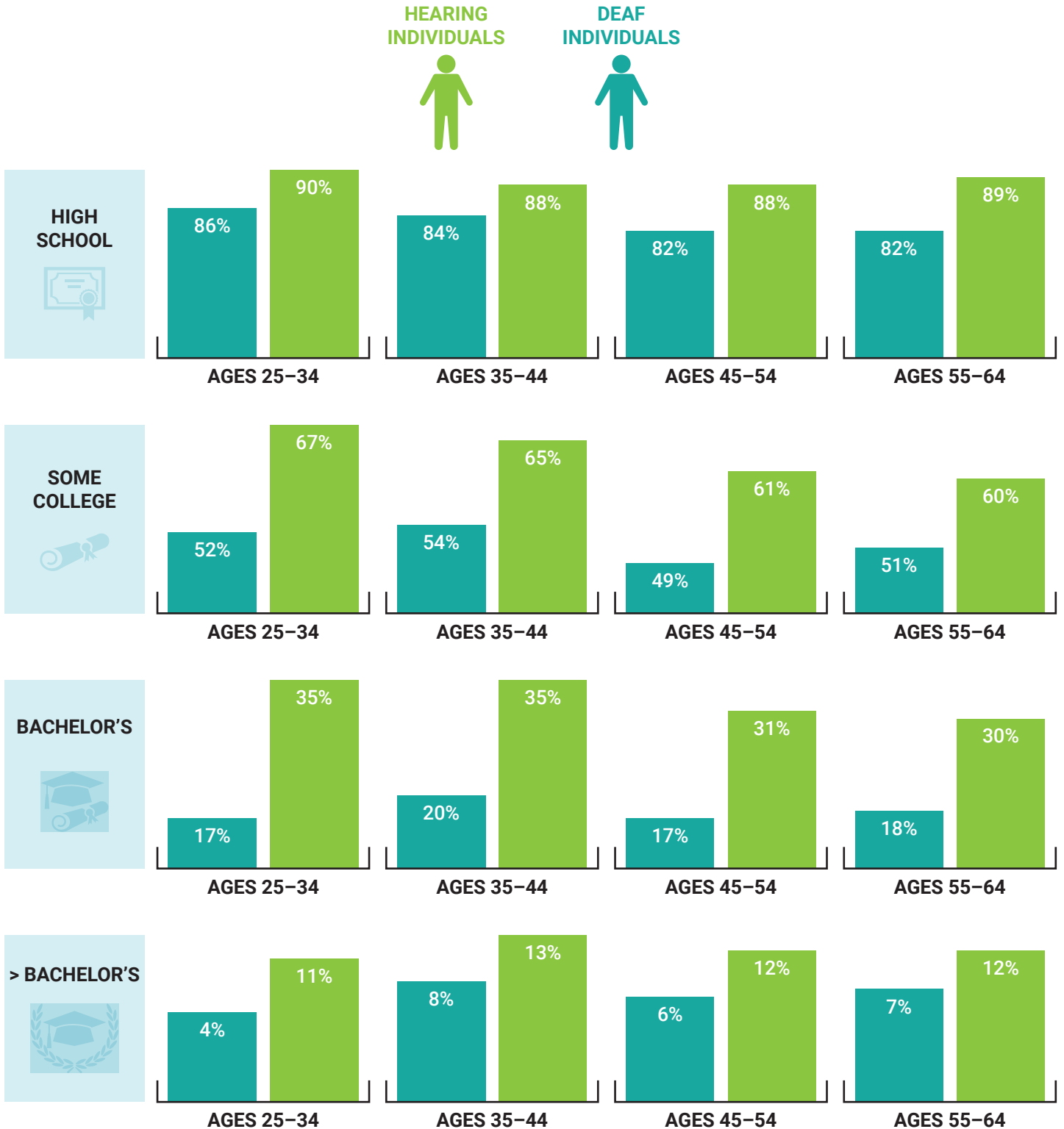
## EDUCATIONAL ATTAINMENT



There is evidence that educational attainment may be improving for younger people. Adults ages 25–34 have the highest rates of high school completion (see Figure 2). Deaf adults demonstrated a significant downward trend in high school completion across age, indicating that younger deaf people were more likely to complete high school. College completion is

more variable between age groups for deaf individuals, with no clear demonstrated trends in college completion across age groups. Educational attainment gaps between deaf and hearing people appear to be roughly consistent across age groups.

Figure 2  
**EDUCATIONAL ATTAINMENT BY AGE**



# EDUCATIONAL ATTAINMENT AMONG DEAFDISABLED INDIVIDUALS

A large percentage of deaf individuals have an additional disability, each combination of which results in unique strengths and challenges. Educational attainment rates vary across type of disability (see Figure 3). On average, deaf individuals with any type of additional disability reported lower educational attainment levels. The lowest educational attainment levels were found amongst deaf individuals who were reported to have difficulties with living independently.

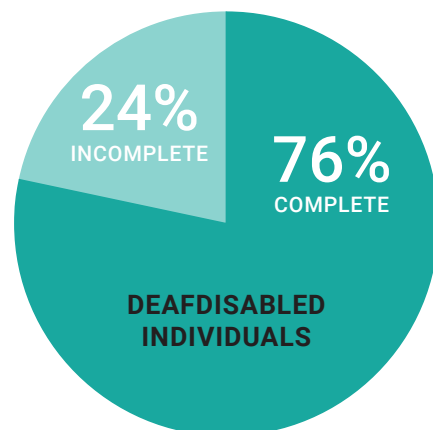
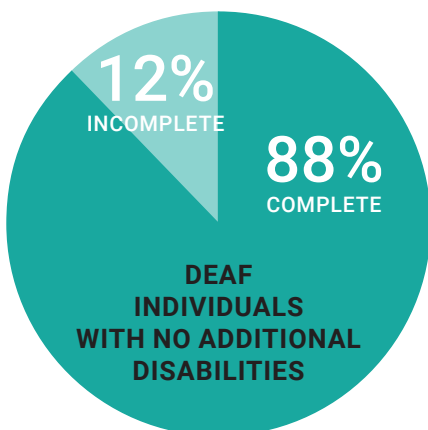
In our analyses, we were limited to the disability categories that are used by the U.S. Census, which does not recognize group identity preferences or complex differences within broad disability categories. The U.S. Census focuses on functional abilities and does not attend to more complex issues surrounding identity, which is a limitation of this dataset. However, at a minimum, it is necessary to recognize that educational experiences continue to be significantly more challenging for deafdisabled individuals.

Figure 3

## EDUCATIONAL ATTAINMENT BY DISABILITY

	HIGH SCHOOL	SOME COLLEGE	BACHELOR'S	> BACHELOR'S
DEAF + NO ADDITIONAL DISABILITY	88%	56%	23%	8%
DEAF + ANY ADDITIONAL DISABILITY	76%	44%	12%	4%
DEAF + AMBULATORY DISABILITY	74%	41%	9%	4%
DEAFBLIND	72%	40%	11%	4%
DEAF + COGNITIVE DISABILITY	72%	38%	9%	3%
DEAF + INDEPENDENT LIVING DIFFICULTY	71%	36%	9%	3%

## HIGH SCHOOL COMPLETION

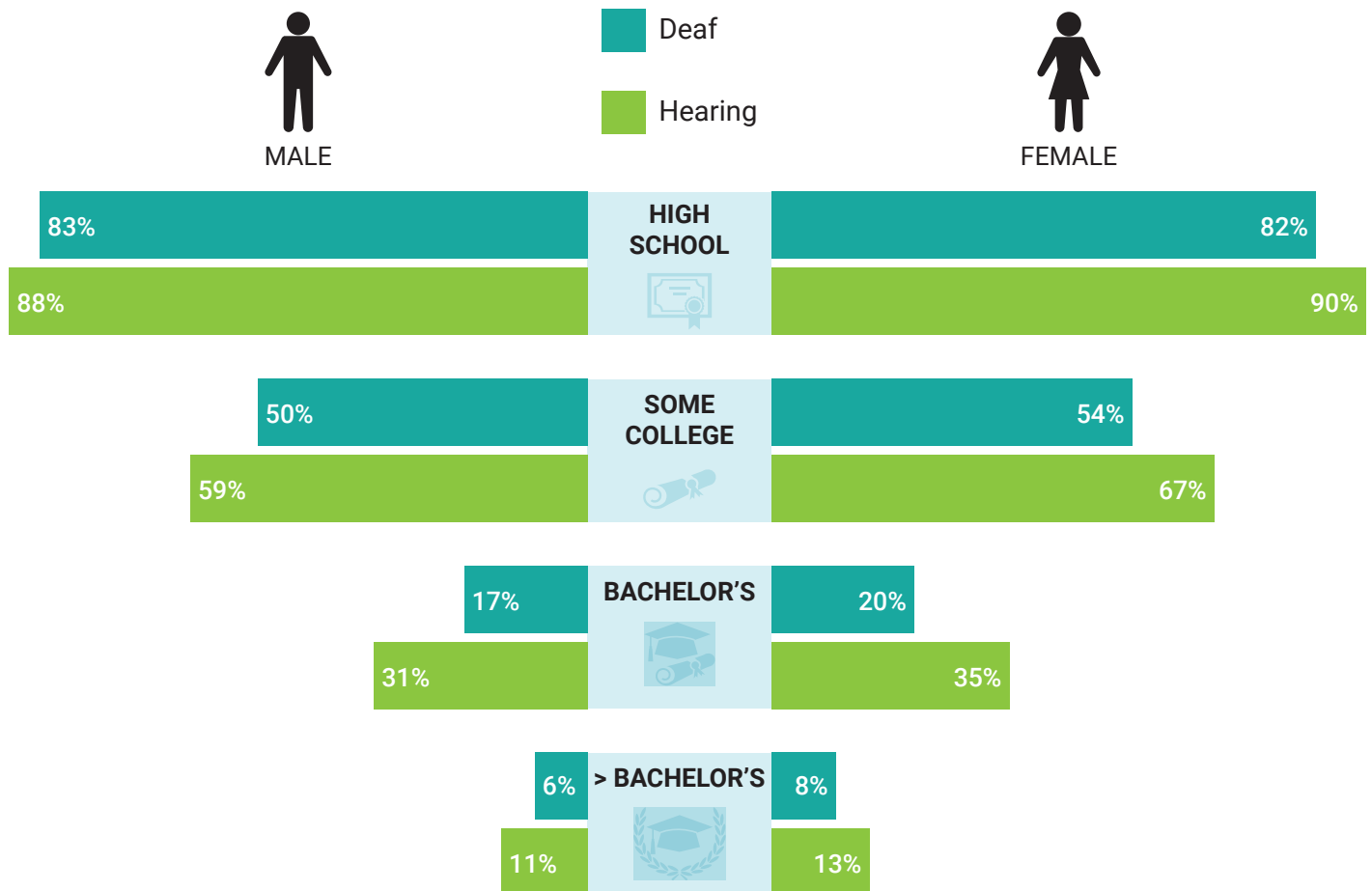


# EDUCATIONAL ATTAINMENT BY RACE, ETHNICITY, AND GENDER

Educational attainment varies across gender, race, and ethnicity (see Figures 4 and 5). There are gender gaps in educational attainment in both groups; however, they occur at different stages. Hearing women are more likely than hearing men to graduate high school, whereas deaf women and men graduate high school at approximately the same rate. On the other hand, both deaf and hearing women are more likely

than men to go to college, even if they do not receive a degree. However, a closer look at the educational attainment gap between hearing and deaf people reveals that the gap is in most cases wider for women than for men. In other words, compared to deaf women, deaf men are completing high school, enrolling in college, and earning a bachelor's degree at rates closer to national averages for their peers.

Figure 4  
EDUCATIONAL ATTAINMENT BY GENDER

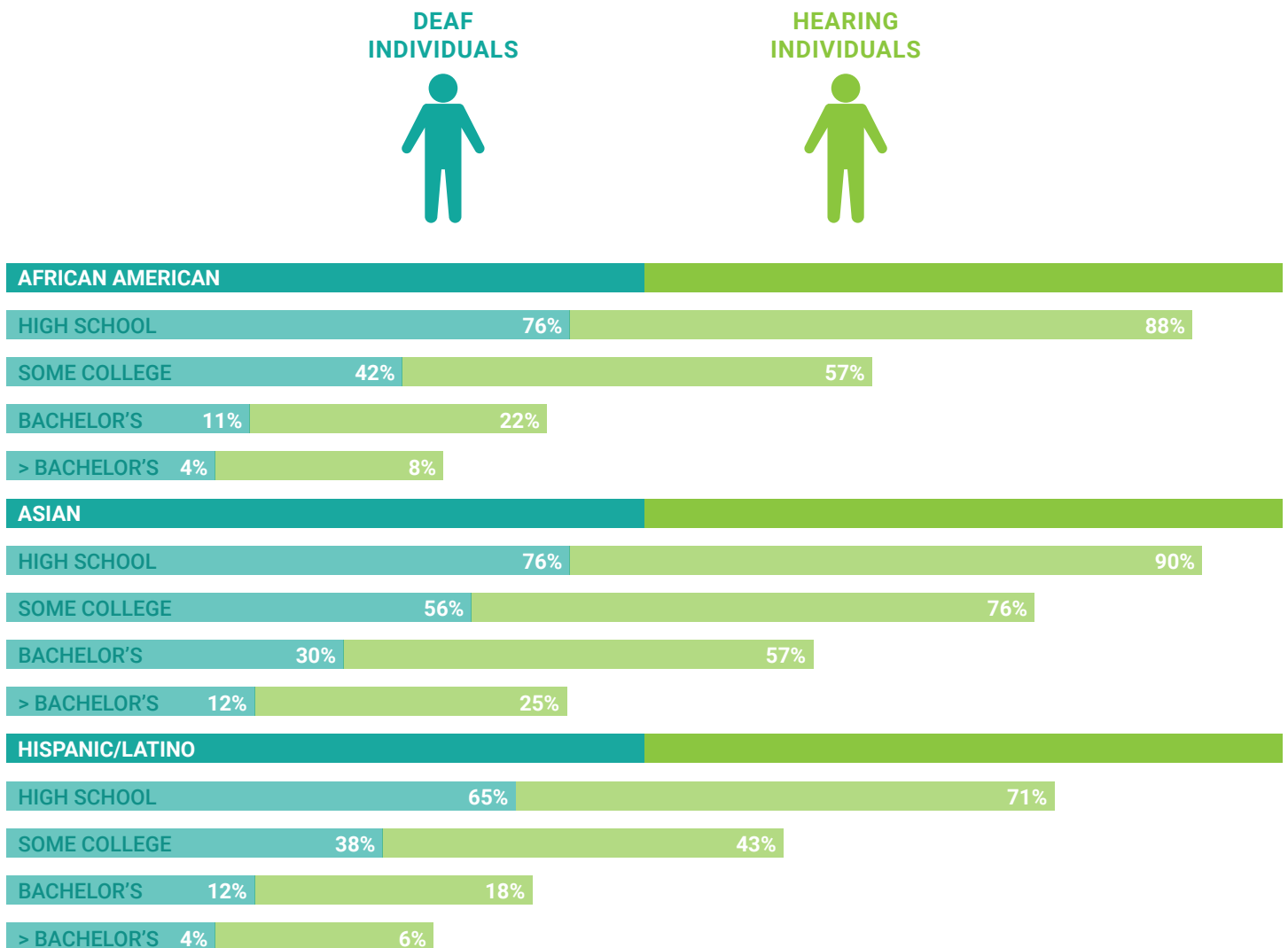


Educational attainment varies wildly across race and ethnicity for hearing and deaf people. Among deaf and hearing people, white people were most likely to have completed at least a high school education and Asian people were more likely to have taken college classes or completed a college degree. Educational attainment disparities between deaf and hearing people of specific race and ethnicity groups varied between 1% and 27%. A closer look at

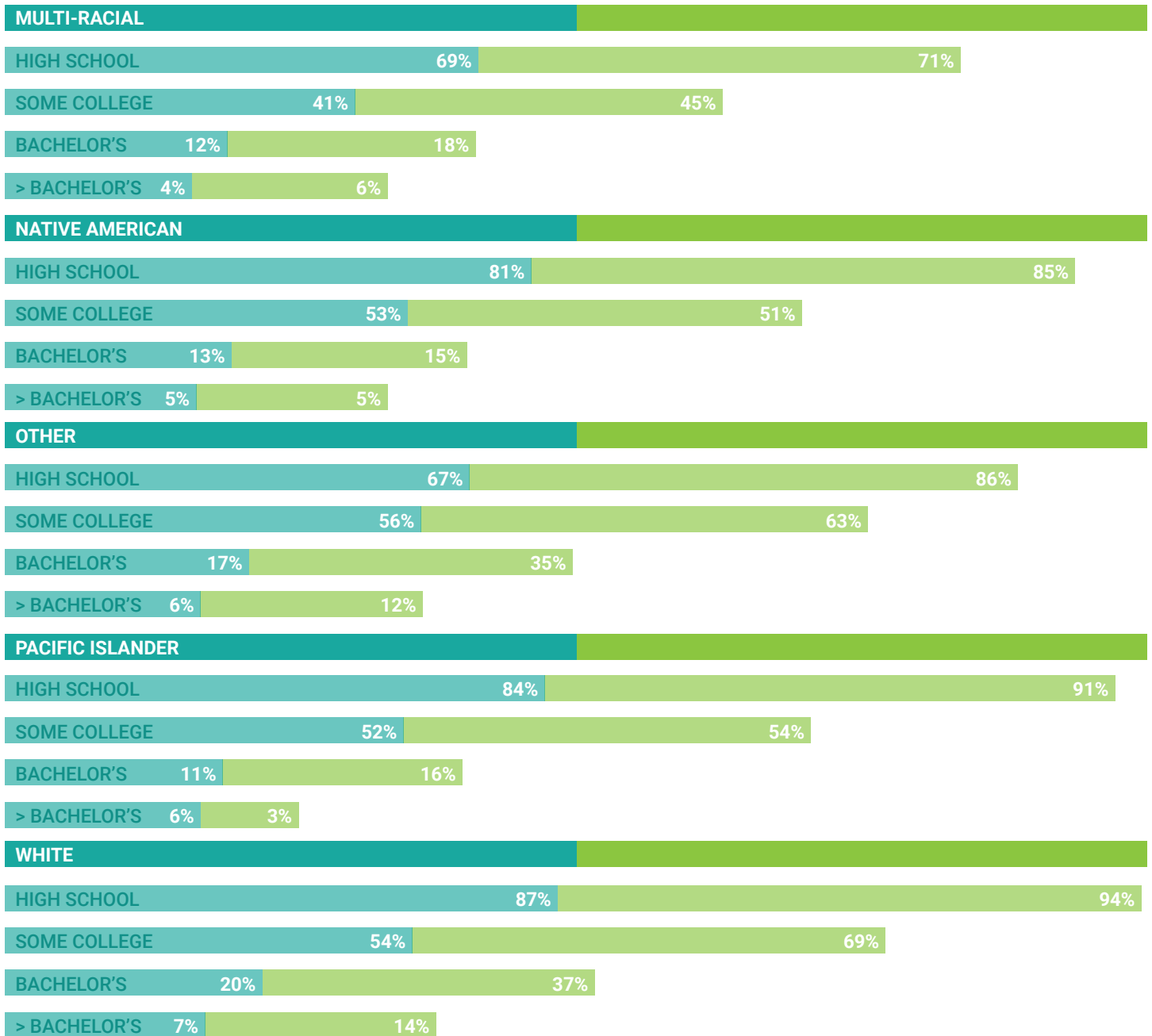
educational attainment gaps across race and ethnicity reveals that the gap is larger for Asians than for all other race and ethnicity groups. For instance, 27% fewer deaf Asians than hearing Asians had completed at least a bachelor's degree. In other words, while an educational attainment advantage was present for deaf Asians, it was not as large as expected based on the educational attainment trends for hearing Asians.

Figure 5

**EDUCATIONAL ATTAINMENT BY RACE AND ETHNICITY**







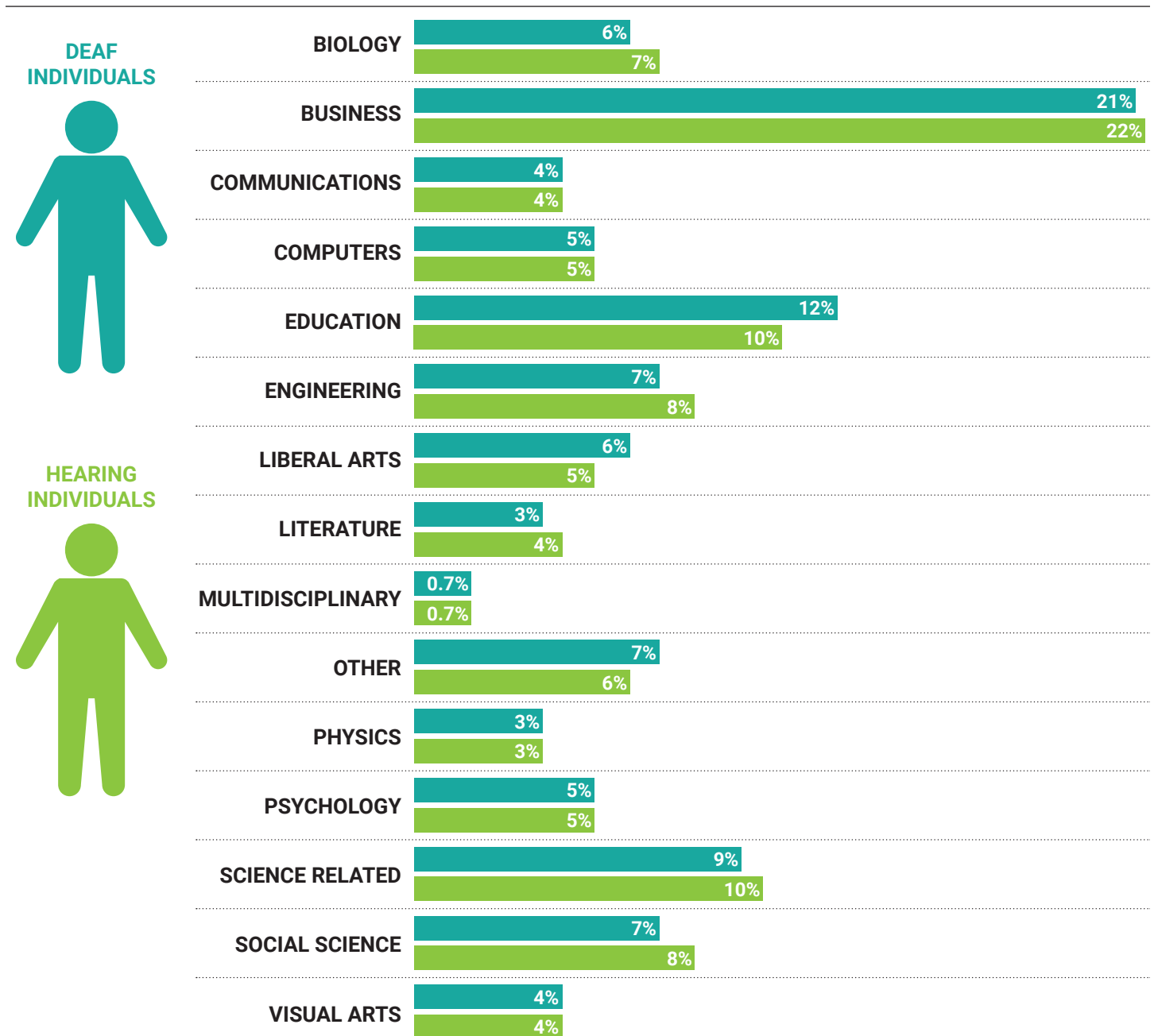
Clearly, the complex intersections of race, ethnicity, and gender play a role in the educational experiences and outcomes of deaf people.

## FIELD OF DEGREE

Individuals in the United States receive bachelor's degrees in fields ranging from biology to visual arts. The categories used in this report are based on the categories used by the U.S. Census. Deaf individuals completed their bachelor's degrees in a variety of fields, at comparable rates to their hearing peers (see Figure 6). The most popular field of degree for both hearing and deaf people was business and the second most popular was education.

Figure 6

### PERCENTAGE OF GRADUATES BY FIELD OF DEGREE



Individuals' income and employment rates varied across fields of degree (see Figures 7 and 8). The income gap between deaf and hearing people by field of degree ranged from none for those with degrees in communications to \$18,000 for those with degrees in engineering. Deaf people with degrees in physics had median earnings of \$6,000 more than their hearing peers.

In general, individuals with bachelor's degrees are employed at higher rates than those without them, and deaf people are employed at lower rates than their hearing peers. For more

information about employment rates for deaf individuals in the United States, see Garberoglio, Cawthon, and Bond (2016). Employment rates for deaf individuals ranged from 64% for those with degrees in psychology to 80% for those with degrees in physics. For hearing individuals, those with degrees in education had the lowest employment rates and those with degrees in engineering had the highest employment rates. The employment gap between deaf and hearing individuals ranged from 4% for those with degrees in physics to 17% for those with degrees in psychology.

Figure 7

**MEDIAN INCOME BY FIELD OF DEGREE**

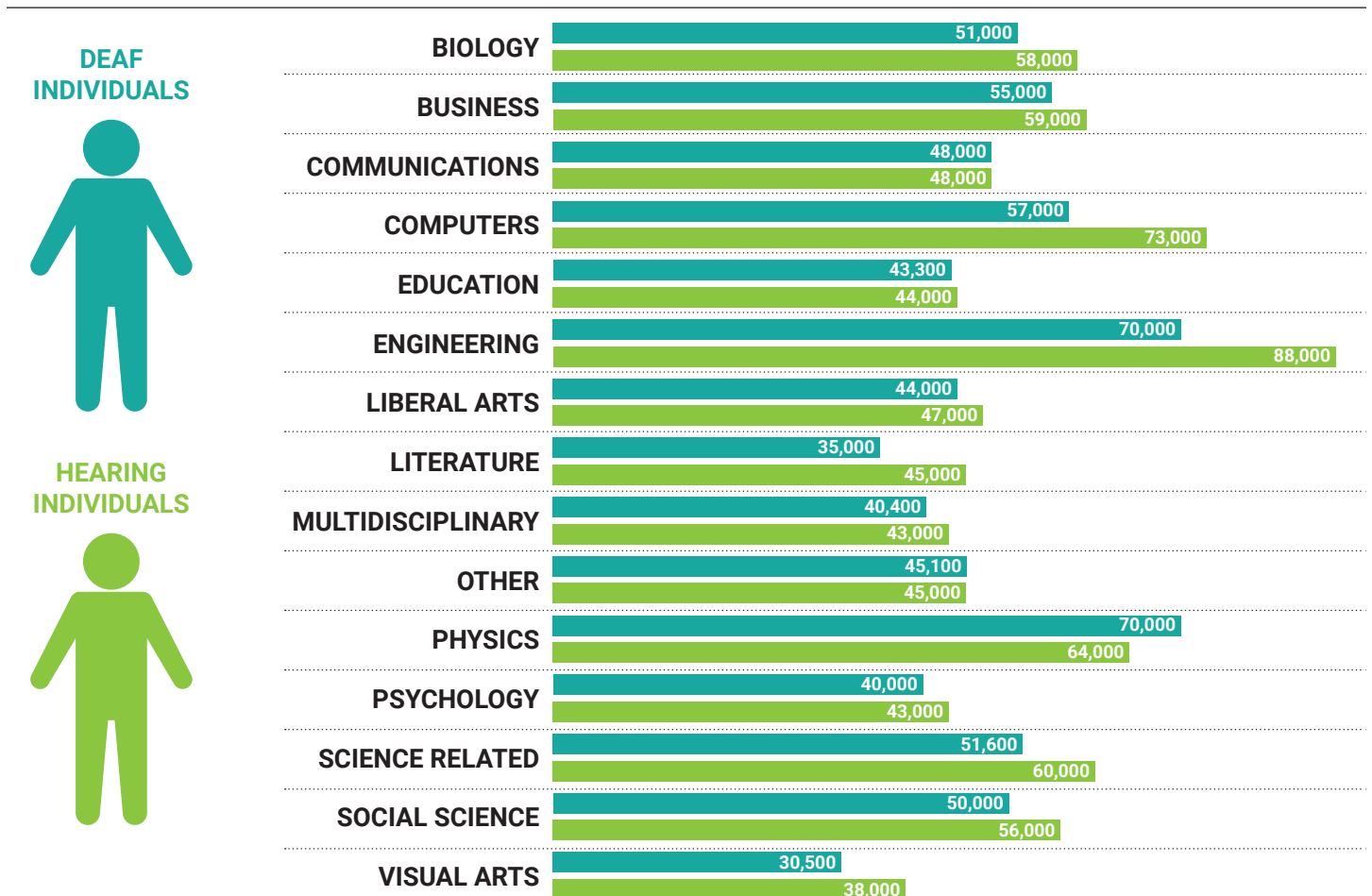
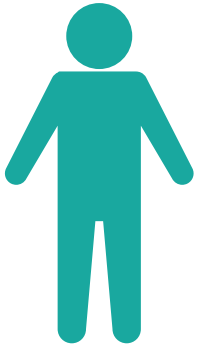


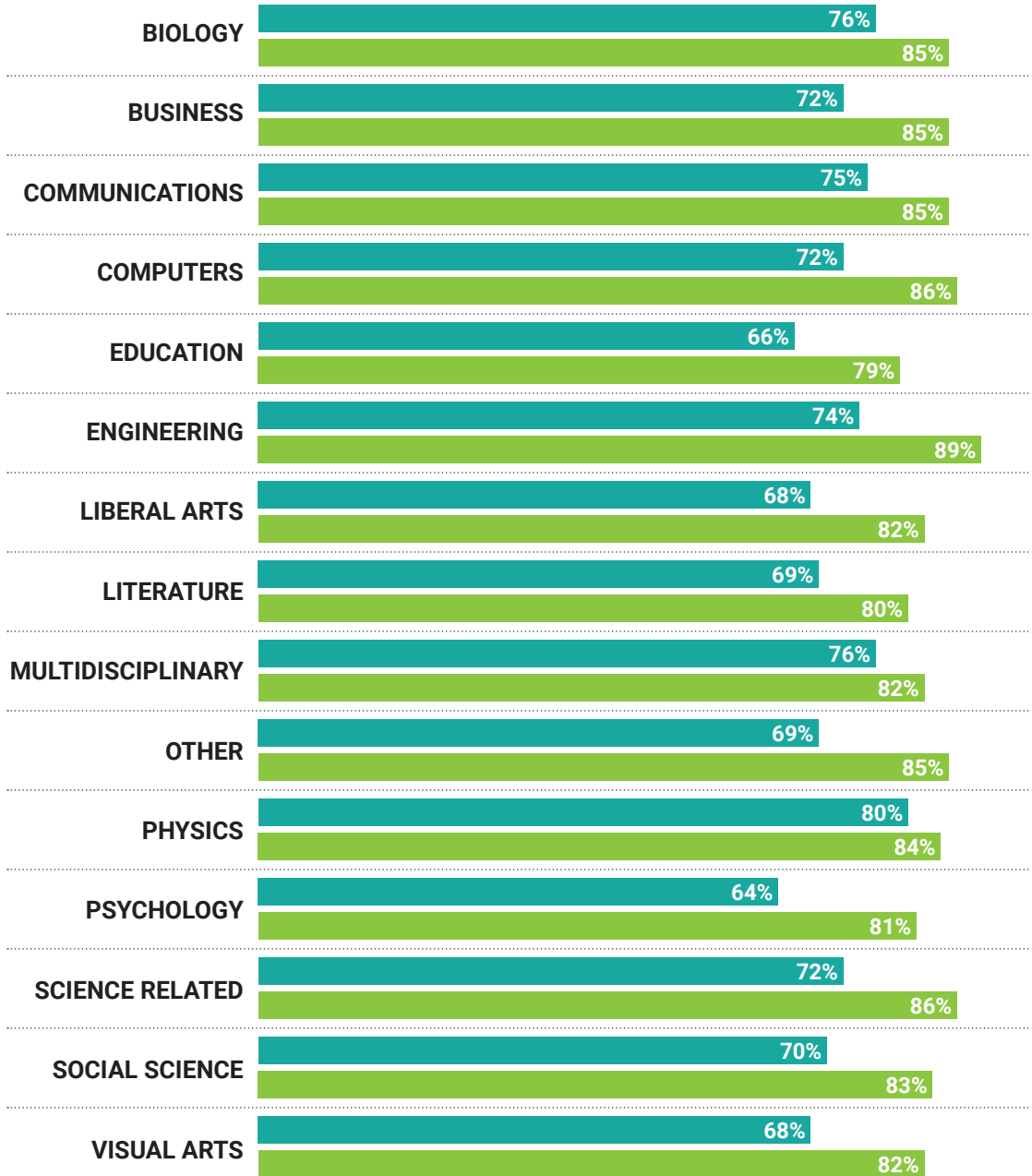
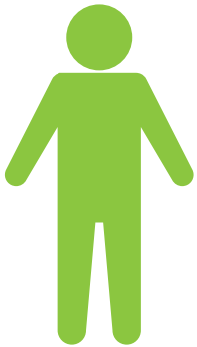
Figure 8

EMPLOYMENT RATES BY FIELD OF DEGREE

DEAF  
INDIVIDUALS



HEARING  
INDIVIDUALS

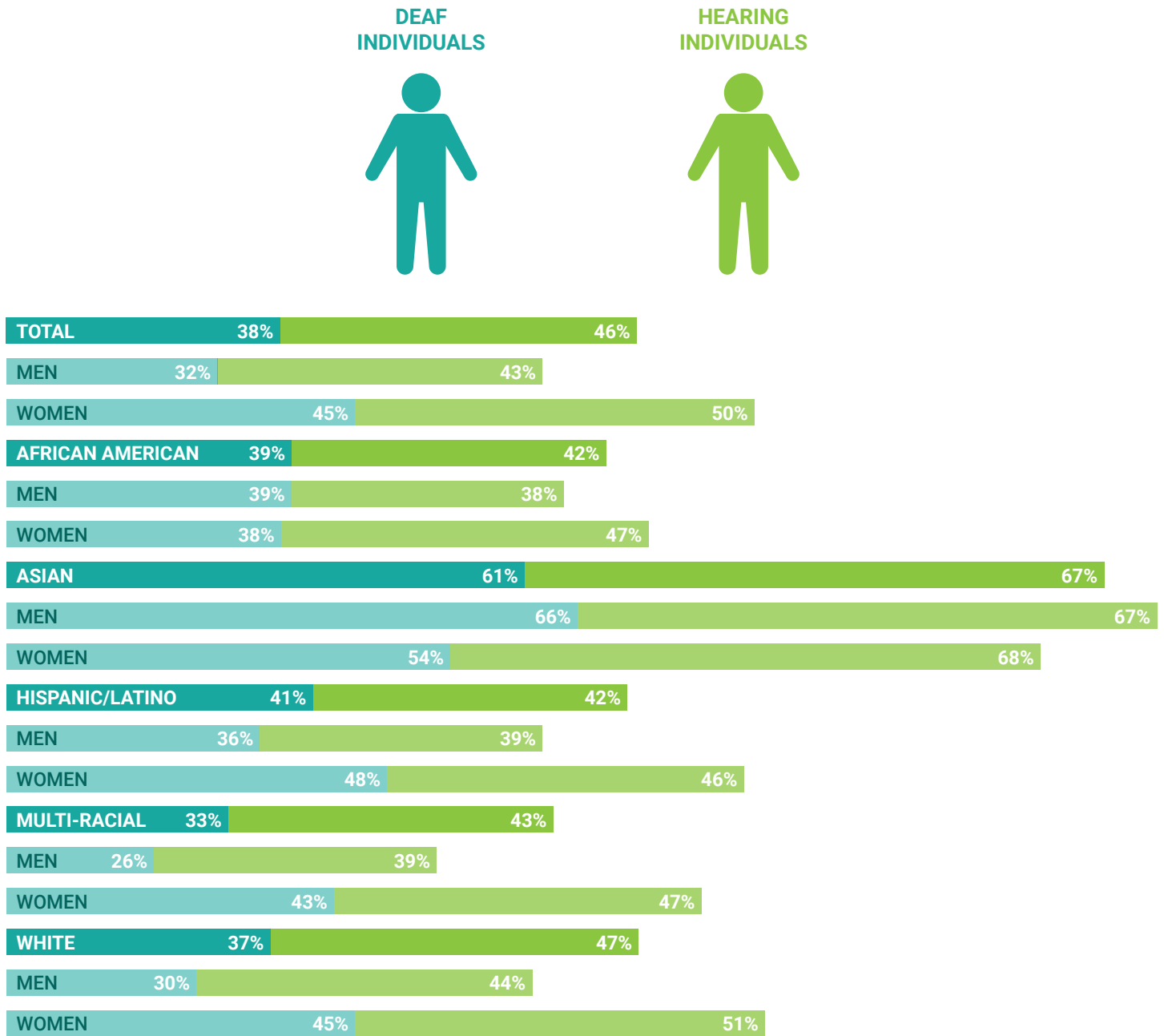


# CURRENT POSTSECONDARY ENROLLMENT

In 2015, 27% of deaf individuals ages 18–25 were currently enrolled in postsecondary education and training programs, compared to 39% of hearing individuals. Enrollment varied across gender, race, and ethnicity (see Figure 9).

Figure 9

## CURRENT ENROLLMENT BY RACE, GENDER, AND ETHNICITY

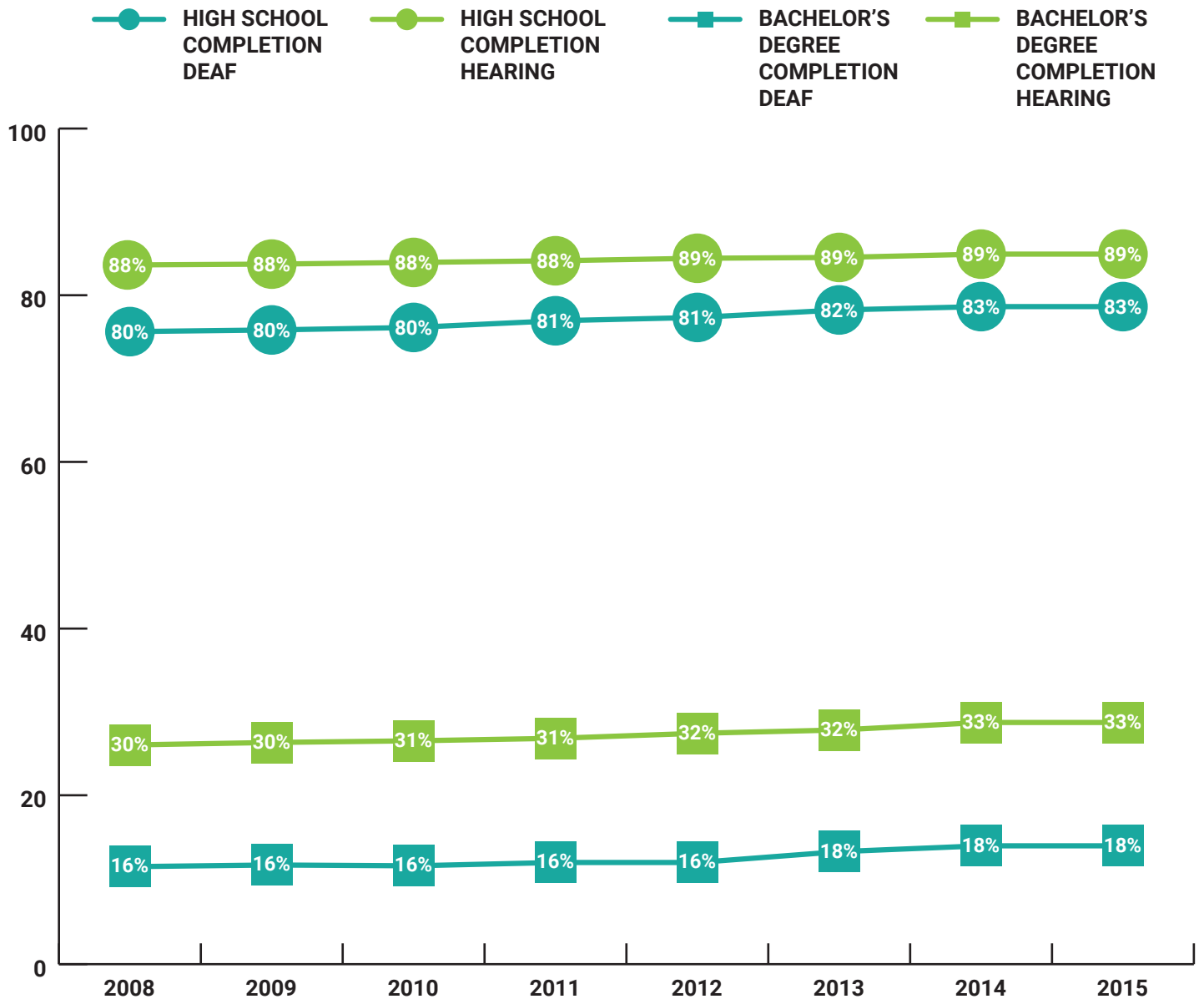


## CHANGE OVER TIME IN EDUCATIONAL ATTAINMENT

In the United States, educational attainment rates have steadily increased over the years. This trend is present for both deaf and hearing individuals, as seen in Figure 10. High school completion increased at a significantly higher rate for deaf adults (3%) than for hearing adults (1%) from 2008 to 2015. For bachelor's degree attainment, the growth rates over time were comparable for deaf and hearing adults at 2% and 3%, respectively.

Figure 10

### EDUCATIONAL ATTAINMENT OVER TIME, AGES 25-64



## METHODS

The data for this project were taken from the Public Use Microdata Sample (PUMS) in the 2015 American Community Survey (ACS) conducted by the U.S. Census. The PUMS provide a confidential subset of the ACS for the public to analyze. The ACS is a legally mandated questionnaire that is typically used to determine how federal funds are allocated from region to region. As such, addresses of homes and group quarters, rather than individuals, are sampled, meaning that these data are meant to generalize to housing units, not individuals. Although the PUMS provides data on both individuals and housing units, only individual-level data were used for this project. More information on the ACS can be found at [www.census.gov/programs-surveys/acs/about.html](http://www.census.gov/programs-surveys/acs/about.html).

The sample of interest in these analyses was people ages 25–64. Recall that the U.S. Census collects data on functional limitations rather than disability or identity labels, so we used the variable “hearing difficulties” to track deaf individuals. The survey respondents who stated that they had “hearing difficulties” were used to represent the deaf population in these analyses. The final sample included more than 38,000

deaf individuals. The comparison group, what we call hearing individuals, were those who did not report having any “hearing difficulties.” For the most part, the data for the group of hearing individuals are largely comparable to data for the general population. But for comparison purposes, this analysis focuses on individuals in the general population who did not report any type of “hearing difficulties,” which allows for an understanding of what educational experiences may be unique to the deaf population.

The descriptive statistics in this report were all corrected by the person-level survey weights provided by the U.S. Census. These survey weights are intended to account for the intricacies involved in getting a sample that is representative of the United States population. When numbers are compared to each other in this report, we used a survey-corrected t-test to determine if difference in the numbers were due to statistical noise. These statistical tests are purely descriptive in nature, and we do not intend to suggest that any of the associations described are causal in nature. As such, we did not correct for any other variables in providing these descriptive statistics.

### THIS REPORT MAY BE CITED AS:

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### References:

Garberoglio, C. L., Cawthon, S., & Bond, M. (2016). *Deaf People and Employment in the United States: 2016*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Deaf Center on Postsecondary Outcomes.