

Technical Documentation and Data underlying CWS Data Tool: Careers in Psychology

The data analyzed in the CWS data tool: Careers in Psychology came from the 2015 National Survey of College Graduates (NSCG) by the National Science Foundation's (NSF) National Center for Science and Engineering Statistics.

The NSCG is a longitudinal biennial survey used to study the occupations and career paths of U.S. residents with bachelor's or higher- degrees, particularly in science and engineering fields. The reference time for the 2015 NSCG was the week of February 1, 2015.

NSCG has been conducted by the U.S. Census Bureau on behalf of NSF since 1993. The 2015 NSCG had a sample size of approximately 135,000 individuals. The weighted response rate was 70 percent. Sample weights were developed by NCSES and adjusted for differences in selection probabilities, nonresponse, and undercoverage, so that inferences could be made to the entire U.S. population.

Definitions of terms and the variable taxonomy used in the data tool are as follows:

Level of Highest Degree was based on variable DGRDG and included the following degree levels:

- Bachelor's Degree
- Master's Degree
- Doctorate Degree
- Professional Degree

According to NCSES, a Ph.D. degree in psychology is categorized as a doctoral degree, and a Psy.D. degree is categorized as a professional degree.

Field of Degree was based on variable NDGRMED and included the following psychology fields:

- General psychology
- Clinical psychology
- Counseling psychology
- Educational psychology
- Experimental psychology
- Industrial/Organizational psychology
- Social psychology
- Other psychology fields

Employment Status was based on variable LFSTAT:

- Employed
- Unemployed
- Not in Labor Force

Occupation was based on variables N2OCPRNG (occupation major group) and N2OCPR (occupation). Occupation groups included:

- Biological/agricultural/ other life scientists
- Computer and information scientists

- Mathematical scientists
- Physical scientists
- Psychologists
- Social scientists
- Engineers
- Science/engineering- related occupations
- Non-science/ non-engineering occupations

For more information on occupations, please refer to <https://www.nsf.gov/statistics/nsf13302/pdf/tabb2.pdf> .

Relatedness of occupation to highest degree was based on variable OCEDRLP and included the following options:

- Closely related
- Somewhat related
- Not related

The following table presents data underlying CWS data tool: Careers in Psychology.

Table. Number of Individuals by Occupation and Level of Highest Psychology Degree Obtained, 2015

Occupation Group	Occupation	Level of Highest Degree in Psychology		
		Bachelor's Degree	Master's Degree	Doctorate/ Professional Degree
Computer and mathematical scientists	Computer & information scientists, research	5,400	s	s
	Computer network architect	200	s	s
	Computer support specialists	5,700	900	s
	Computer system analysts	3,700	100	s
	Database administrators	600	300	s
	Information security analysts	1,100	s	s
	Network and computer systems administrators	4,400	200	s
	Software developers - applications and systems software	5,800	100	100
	Web developers	1,400	s	s
	OTHER computer information science occupations	10,300	7,200	1100
	Computer engineers - software	1,800	700	400
	Operations research analysts, including modeling	300	900	200
	Statisticians	1,000	100	400
	Postsecondary Teachers: Computer Science	s	s	500
	Postsecondary Teachers: Mathematics and Statistics	s	500	600
	Total	41,600	10,900	3,300
Biological, agricultural and other life scientists	Agricultural and food scientists	600	s	s
	Biochemists and biophysicists	s	s	s
	Biological scientists (e.g., botanists, ecologists, zoologists)	400	s	400
	Medical scientists (excluding practitioners)	3,800	300	600
	OTHER biological and life scientists	400	200	700
	Postsecondary Teachers: Biological Sciences	s	s	s
	Postsecondary Teachers: OTHER Natural Sciences	s	s	200
	Total	5,200	500	1,800
Physical and related scientists	Chemists, except biochemists	200	100	s
	Geologists, including earth scientists	200	s	s
	OTHER physical scientists	500	s	s
	Total	800	100	s
Social and related scientists	Psychologists, including clinical	21,300	77,100	85,300
	Anthropologists	100	s	s
	Sociologists	s	100	s
	OTHER social scientists	7,100	2,000	6,200
	Postsecondary Teachers: Psychology	4,800	8,400	19,300
	Postsecondary Teachers: Sociology	s	200	100
	Postsecondary Teachers: OTHER Social Sciences	s	1,100	2,000
	Total	33,200	89,000	112,900

Source: National Science Foundation, National Center for Science and Engineering Statistics. (2015). National Survey of College Graduates Public Use Microdata File and Codebook. Retrieved from <https://sestat.nsf.gov/datadownload/>
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Table. Number of Individuals by Occupation and Level of Highest Psychology Degree Obtained, 2015 (continued)

Occupation Group	Occupation	Level of Highest Degree in Psychology		
		Bachelor's Degree	Master's Degree	Doctorate/ Professional Degree
Engineers	Aeronautical/aerospace/astronautical engineers	s	s	s
	Civil, including architectural/sanitary engineers	s	400	s
	Industrial engineers	2,400	1,100	100
	Mechanical engineers	400	s	s
	Bioengineers or biomedical engineers	300	s	100
	Environmental engineers	100	s	s
	Sales engineers	3,900	200	s
	OTHER engineers	s	100	500
	Postsecondary Teachers: Engineering	300	s	s
	Total	7,400	1,900	700
S&E related occupations	Diagnosing/treating practitioners (dent, optom, physicians, psych, pod, surgn, vet)	2,700	100	1,300
	RNs, pharmacists, dieticians, therapists, physician asst, nurse practitioners	26,500	9,600	900
	Health technologists and technicians (dent hyg, hlth rcrd tech, LPN, lab/rad tech)	23,100	4,000	300
	OTHER health occupations	36,100	7,400	1,400
	Postsecondary Teachers: Health and Related Sciences	3,300	800	300
	Computer and information systems managers	4,200	s	200
	Engineering managers	300	s	s
	Medical and health services managers	5,000	5,700	4,600
	Natural sciences managers	s	s	s
	Teachers: Secondary - computer, math or sciences	3,100	2,100	100
	Teachers: Secondary - social sciences	1,200	2,300	1,200
	Technologists and technicians in the biological/life sciences	500	200	s
	Computer programmers (business, scientific, process control)	1,500	s	200
	Electrical, electronic, industrial, and mechanical technicians	1,500	s	s
	Surveying and mapping technicians	400	s	s
	OTHER engineering technologists and technicians	800	2,600	s
	Technologists and technicians in the physical sciences	1,500	s	s
	Architects	s	s	200
	Actuaries	1,500	s	200
	Total	113,000	34,800	10,800

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Table. Number of Individuals by Occupation and Level of Highest Psychology Degree Obtained, 2015 (continued)

Occupation Group	Occupation	Level of Highest Degree in Psychology		
		Bachelor's Degree	Master's Degree	Doctorate/ Professional Degree
Non-S&E Occupations	Top-level managers, execs, admins (CEO/COO/CFO, pres, dist/gen mngr, provost)	63,500	9,900	7,600
	Education administrators (e.g. registrar, dean, principal)	1,600	11,900	3,000
	OTHER mid-level managers	24,800	15,800	700
	Accountants, auditors, and other financial specialists	52,000	12,900	600
	Personnel, training, and labor relations specialists	52,500	12,200	3,700
	OTHER management related occupations	78,500	8,300	2,500
	Teachers: Pre-kindergarten and kindergarten	30,500	3,900	300
	Teachers: Elementary	39,500	12,300	s
	Teachers: Secondary - other subjects	13,900	3,100	s
	Teachers: Special education - primary and secondary	17,200	5,100	s
	Teachers: OTHER precollegiate area	6,400	100	s
	Postsecondary Teachers: Business Commerce and Marketing	s	s	800
	Postsecondary Teachers: Education	1,000	s	4,100
	Postsecondary Teachers: English	500	s	s
	Postsecondary Teachers: Foreign Language	200	300	s
	Postsecondary Teachers: OTHER Postsecondary fields	1,600	3,500	1,500
	Clergy and other religious workers	13,900	800	s
	Counselors (Educational, vocational, mental health, substance abuse)	41,600	118,000	6,900
	Social Workers	71,100	30,700	700
	Insurance, securities, real estate and business services	34,000	7,100	s
	Sales- Commodities except retail (industrial/med/dental machine, equip, supplies)	17,400	600	s
	Sales- retail (e.g., furnishings, clothing, motor vehicles, cosmetics)	30,900	3,500	100
	OTHER marketing and sales occupations	60,500	4,000	1,300
	Writers, editors, PR specialists, artists, entertainers, broadcasters	27,600	3,800	5,200
	Accounting clerks and bookkeepers	47,500	3,800	s
	Secretaries, receptionists, typists	43,300	3,900	200
	OTHER administrative (e.g. record clerks, telephone operators)	102,400	8,900	700
	Farmers, Foresters and Fishermen	100	400	s
	Lawyers, judges	8,400	s	s
	Librarians, archivists, curators	6,600	s	100
	Food preparation and service (e.g., cooks, waitresses, bartenders)	24,600	s	100
	Protective services (e.g., fire fighters, police, guards, park rangers)	28,300	1,500	s
	OTHER service occupations, except health (probation officer, human services work)	76,800	3,700	1400
	OTHER teachers and instructors (private tutors, dance, martial arts)	61,200	4,000	1,200
	Construction and extraction occupations	8,300	100	s
	Installation, maintenance, and repair occupations	14,600	1,300	400
	Precision/production occupations (metal/wood work, butchers, baker, assmblr, tailor)	5,600	7,000	s
	Transportation and material moving occupations	15,400	4,500	s
	OTHER OCCUPATIONS	21,000	4,300	s
	Total	1,144,300	311,300	43,200
Total		1,345,400	448,600	172,700

Source: National Science Foundation, National Center for Science and Engineering Statistics. (2015). National Survey of College Graduates Public Use Microdata File and Codebook. Retrieved from <https://sestat.nsf.gov/datadownload/>
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