

Karen E. Stamm, Jessica C. Conroy, Luona Lin, & Amrita C. Ghaness

1. Introduction

If you are pursuing a graduate degree in psychology, you probably know about job opportunities for practitioners or psychology faculty. Indeed, these are among the most common occupations for psychology graduate degree holders. What you may not know is the versatile range of jobs beyond health care and academia available to psychology degree holders. Psychology knowledge is important across many occupations (National Center for O*NET Development, 2020), even those that are seemingly unrelated to psychology, such as video game designers, real estate sales agents, and chief executives.

This chapter provides an overview of employment trends in the field of psychology. First, we address employment characteristics, such as top occupations, work activities, and how related the job is to the field of psychology for those who hold doctorates and master's degrees in psychology. We provide more detailed information for the health service psychology workforce, the academic psychology workforce, and a brief description of salary benchmarks. Second, we discuss skills and traits used in psychology jobs, such as communication, leadership, and teamwork. We give examples of "essential" skills, the broad set of skills that are common to the performance of all jobs. Third, we explore demographic characteristics of the workforce as a whole with attention to shifting trends that will better position psychology to respond to the needs of diverse communities. We also include special analyses on early career health service psychologists, those within 10 years of earning their doctorates. Fourth, we address future directions, such as an anticipated greater role of technology, opportunities for applied psychology, and opportunities to address equity issues. Finally, we conclude with resources and recommendations to use in the career exploration process.

2. Employment Characteristics

One of our main data sources is the National Survey of College Graduates (NSCG), a nationally representative survey of individuals in the United States with at least

a bachelor's degree. NSCG is conducted every two years by the National Center for Science and Engineering Statistics at the National Science Foundation. Using data from this survey, we analyzed major employment characteristics of individuals holding degrees in psychology by level of their highest degree, including occupations, employment rates, primary work activities, and more.

2.1 Doctorate Degree Holders

In 2017, 82 percent of psychology doctorate holders were employed, while 15 percent were not in the labor force (for reasons such as school, illness, or retirement) and only 2 percent were unemployed (APA, 2018a). Of those who were employed, 79 percent were employed full-time while 21 percent were employed part-time. Psychology doctoral holders worked in 61 of 129 occupational categories (APA, 2018a). About half (47 percent) of psychology doctorate holders were employed in two occupations: psychologists (including clinical and counseling psychologists, school psychologists, industrial/organizational psychologists, and other types of psychologists) and postsecondary teachers of psychology/psychology professors. The remaining half was employed in a range of occupations (Table 26.1, Figure 26.1).

There are two clusters of occupations worth highlighting. The first cluster is leadership or management occupations, such as top-level managers, executives, and administrators, education administrators, medical and health services managers, other mid-level managers, and other management-related occupations. The second cluster is professors or postsecondary teachers in fields other than psychology, such as education, mathematics and statistics, computer science, business, other social sciences, and health and related sciences. Collectively, these postsecondary teacher categories represent the third most common occupation for psychology doctorate

Table 26.1 *Top 10 occupations of psychology doctorate degree holders*

Occupation	Estimated count	% of total estimated count
Psychologists	89,200	39
Postsecondary teachers: Psychology	17,700	8
Counselors	7,600	3
Top-level managers, executives, administrators	7,500	3
Other management related occupations	7,300	3
Postsecondary teachers: Education	6,100	3
Medical and health services managers	5,200	2
RNs, pharmacists, dieticians, therapists, physician assistants, nurse practitioners	3,500	2
Personnel, training, and labor relations specialists	3,400	2
Other service occupations	3,200	1

Source: APA. (2018a). *Careers in psychology*. [Interactive data tool.]



Figure 26.1 Occupational categories for psychology doctorate holders.
 Source: APA. (2018a). *Careers in psychology*. [Interactive data tool.]

holders; they also represent about one third of psychology doctorate holders who work as professors.

To take a broader look beyond occupation titles, we also analyzed primary work activity and work sector to show the types of work psychologists do in their day-to-day jobs. The majority of doctorate degree holders performed professional services as their primary work activity (52 percent; APA, 2018a), a category which includes health care, counseling, financial services, and legal services. Professional services was followed by research (15 percent), teaching (15 percent), and management (12 percent) as the other top primary work activities. The most common work sectors were educational institutions (35 percent) and self-employment (30 percent). Smaller percentages of individuals with psychology doctorates reported working in private for-profit (14 percent), private non-profit (11 percent), and government (10 percent) work sectors. Many of these work sectors are ones you may expect (self-employed private practitioners or academia), while others are less obvious. Within these sectors, psychology doctorate holders may find employment at a variety of organizations, such as pharmaceutical companies, tech companies, organizations that provide social and community services, private research centers, policy-related organizations, and federal agencies.

You may suspect that being employed in such a wide spread of occupations, work sectors, and work activities would result in less use of psychology in their jobs. On the contrary, the vast majority (97 percent) of psychology doctorate degree holders reported that their job was related to psychology (APA, 2018a). Furthermore, 85 percent reported that their job was closely related to psychology (85 percent). These findings suggest that there are many ways to use psychology education at work.

2.2 Master's Degree Holders

In 2017, 76 percent of psychology master's degree holders were employed and only 3 percent were unemployed, while 21 percent were not in the labor force (APA, 2018a). Of those who were employed, 74 percent worked full-time and 26 percent were employed part-time. Psychology master's degree holders worked in 74 of 129 occupational categories (APA, 2018a). The top occupations form a cluster of practitioners, including counselors, psychologists (by occupation and not necessarily by licensure status), and social workers. Collectively, these three practitioner occupations represented about one third (35 percent) of psychology master's degree holders (Table 26.2 and Figure 26.2).

As expected, the most common primary work activity was professional services (49 percent; APA, 2018a). A notable finding was that the second most common activity was management (21 percent), further supporting the role of psychology in leadership. Work sectors for master's degree holders varied, with most working in educational institutions (33 percent), followed by private for-profit (20 percent), self-employment (20 percent), private non-profit (17 percent), and government

Table 26.2 *Top 10 occupations of psychology master's degree holders*

Occupation	Estimated count	% of total estimated count
Counselors	138,200	22
Psychologists	61,300	10
Social workers	28,300	5
Teachers: Special education – primary and secondary	19,900	3
Personnel, training, and labor relations specialists	16,700	3
Other management related occupations	15,000	2
Teachers: Elementary	14,100	2
Accountants, auditors, and other financial specialists	13,600	2
Other service occupations	13,200	2
Top-level managers, executives, administrators	12,500	2

Source: APA (2018a). *Careers in psychology*. [Interactive data tool.]

(10 percent). Similar to psychology doctorate holders, psychology master's degree holders work in a wider variety of organizations than you may expect.

A high proportion of psychology master's degree holders reported that their master's degree was somewhat or closely related to psychology (89 percent; APA, 2018a). Furthermore, 70 percent reported that their jobs were closely related to psychology. Given the breadth of occupations, work settings and work activities performed by psychology master's degree holders, this demonstrates the versatility and broad application of psychology in the workforce.

2.3 Trends in the Health Service Psychology Workforce

Approximately 102,000 individuals in the United States hold doctoral-level psychologist licenses (Lin et al., 2020). The 2015 APA Survey of Psychology Health Service Providers (APA, 2016a) explored the employment characteristics of licensed psychologists. Most psychologists worked in private practice as their primary employment setting (45 percent), hospitals and organized human service settings (24 percent), and education settings (19 percent; APA, 2016a; Figure 26.3). In terms of work hours and work activities, licensed psychologists reported a mean of 36 work hours per week in their primary position with a median of 40 hours per week (APA, 2016a). They spent the most time on direct services (mean = 18.4 hours per week, median = 20 hours per week; APA, 2016a). This indicates that about half of health service psychologists' work activities fall under health services. The most common primary specialty areas included clinical psychology (45 percent), clinical child and adolescent psychology (16 percent), and counseling psychology (9 percent; APA, 2016a). In looking at trends over time, most practice patterns in the 2015 survey were comparable with those found in the 2008 survey of health service psychologists (Michalski & Kohout, 2011).

The health service psychologist workforce exhibits differences in primary work setting by career stage. Career stage was defined as early career (1–10 years

Architects
 Diagnosing/treating practitioner
 Postsecondary Teachers: Education
 Teachers: Pre-kindergarten and kindergarten
 Civil, including architectural/sanitary engineers
 Sales: Commodities except retail
 RNs, pharmacists, dieticians, therapists, physician asst, nurse practitioners
 Other engineers
 Medical scientists
 Architects
 Other health occupations
 Transportation and material moving occupations
 Postsecondary Teachers: Education
 Marketing and sales occupations
 Construction and extraction occupations
 Other teachers and instructors
 Computer support specialists
 Other teachers and instructors
 Other religious workers
 Teachers: Elementary
 Other mid-level managers
 Clergy and other religious workers
 Postsecondary Teachers: Art, Drama, and Music
 Accounting clerks and bookkeepers
 Other administrative occupations
 Postsecondary Teachers: Mathematics and Statistics
 Web developers
 Top-level managers, execs, admins
 Teachers: Special education - primary and secondary

Psychologists Counselors

Other computer information science occupations
 Computer system analysts
 Other social scientists
 Sociologists
 Sales engineers
 Postsecondary Teachers: Psychology
 Sales- retail
 Software developers - applications and systems software
 OTHER OCCUPATIONS
 Social Workers
 Personnel, training, and labor relations specialists
 Accountants, auditors, and other financial specialists
 Other service occupations
 Computer engineers - software
 Teachers: Secondary - other subjects
 Medical and health services managers
 Teachers: OTHER precollegiate area
 Teachers: Secondary - social sciences
 Health and Related Sciences
 Postsecondary Teachers: Sociology
 Writers, editors, PR specialists, artists, entertainers, broadcasters
 Education administrators
 Secretaries, receptionists, typists
 Food preparation and service
 Protective services
 Teachers: Secondary - computer, math or sciences
 Precision/production occupations
 Installation, maintenance, and repair occupations
 Postsecondary Teachers: Computer Science
 OTHER mathematical scientists
 Health technologists and technicians

Figure 26.2 Occupational categories for psychology master's degree holders.
 Source: APA. (2018a). *Careers in psychology*. [Interactive data tool.]

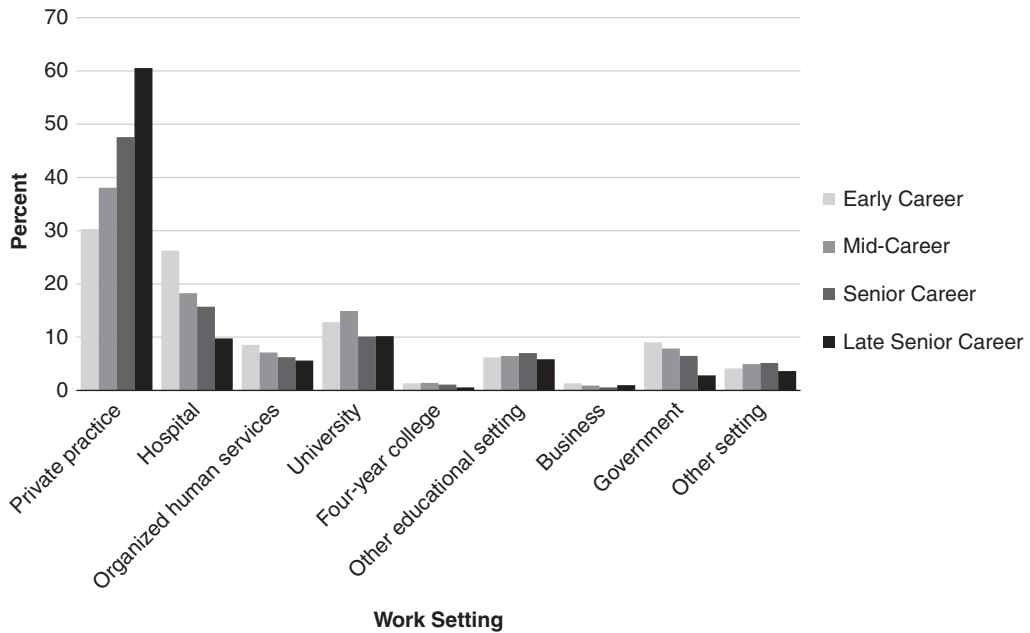


Figure 26.3 Primary position work settings by career stage. Source: APA (2017). *Career stages of health service providers: Special analysis of the 2015 APA Survey of Psychology Health Service Providers*. Copyright © 2017. American Psychological Association. All rights reserved.

post-doctorate), mid-career (11–20 years post-doctorate), late career (21–30 years post-doctorate), and late senior career (more than 30 years post-doctorate). Generally, earlier career psychologists were more likely to work in hospitals and organized human service settings, whereas later career psychologists were more likely to work in private practice (APA, 2017). It is uncertain whether these shifts represent typical career pathway patterns in which psychologists start out in hospitals and organized human service settings and then move into private practice at later career stages or whether the shifts represent differences in employment patterns corresponding to the changing nature of healthcare delivery and an increased emphasis on integrated care. It is probable that both patterns influence these shifts; further research will continue to address this topic.

2.4 Trends in the Academic Psychology Workforce

In 2019, approximately 29,300 psychology research doctorate holders worked in faculty positions (APA, 2019a). The majority (70 percent) worked in four-year colleges, and top primary work activities included teaching (45 percent) and research (33 percent). For those working as postsecondary teachers/professors, the majority (69 percent) were psychology professors, while the remaining 31 percent worked as professors in other fields such as education, other social sciences, and health fields.

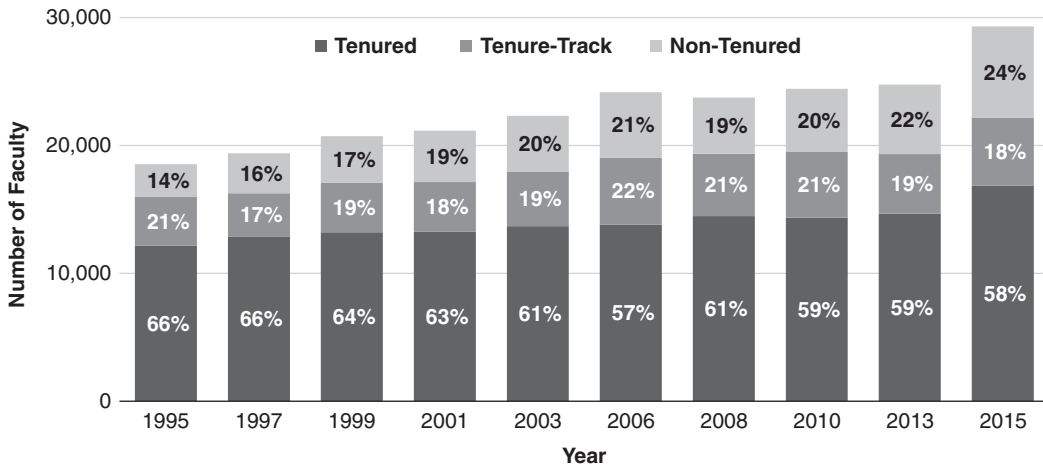


Figure 26.4 The academic psychology workforce by tenure status, 1995–2015.

Source: APA. (2019a). *The academic psychology workforce: Characteristics of psychology research doctorates in faculty positions (1995–2015)*. Copyright © 2019. American Psychological Association. All rights reserved.

Note: Percentages may not add up to 100 percent due to rounding.

This finding is important because it highlights that psychology is interdisciplinary and connects to many other fields. About 4600 (16 percent) faculty worked in leadership positions (e.g., provost, dean, chair). Between 1995 and 2015, female representation among faculty increased from 37 percent to 53 percent, and racial/ethnic minority representation among faculty increased from 8 percent to 22 percent.

The proportion of tenured/tenure-track positions has been shrinking during the past two decades. In 2015, approximately 76 percent of the academic psychology workforce held tenured/tenure-track positions and 24 percent held non-tenured positions. Over the last two decades, the number of faculty in tenured/tenure-track positions increased by 39 percent, whereas the number of faculty in non-tenured positions increased by 179 percent. The proportion of tenured/tenure-track positions decreased from 86 percent to 76 percent between 1995 and 2015, while the proportion of non-tenured positions increased from 14 percent to 24 percent (Figure 26.4).

2.5 Salary Benchmarks

Not surprisingly, median salaries increase as degree level increases. Using the 2017 National Survey of College Graduates (NSF, NCSSES, 2019), we identified salary benchmarks for psychology master's and doctorate degree holders. In comparison to the median salary for psychology bachelor's degree holders (\$50,000), psychology master's degree holders earned a median salary of \$60,000, representing a 20 percent increase above the median salary for psychology bachelor's degree holders. The salary premium was larger for psychology doctorate holders, who earned a median

salary of \$86,000. This represented a 72 percent increase above the median salary of psychology bachelor's degree holders and a 43 percent increase above the median salary of psychology master's degree holders.

3. Skills and Traits in Psychology Jobs

In general, jobs require both deep expertise in a specialized area (that may correspond to a psychology subfield, a specialized population, specific technical knowledge, or some other narrowly defined area) and a broad set of essential skills. What exactly are essential skills? Essential skills are universally required in the performance of every job across labor markets. Typically, these skills include communication, leadership, and teamwork, among other areas. Essential skills are common to all jobs, and these skills can carry over from one job to another. They are also inherently human and based in behavior; by extension, essential skills have a foundation in psychology. Although the exact combination of deep expertise and essential skills needed for a job will vary depending on the specific requirements of the job, the universal nature of essential skills is important to recognize. For example, in jobs posted during the COVID-19 pandemic from March to July 2020, the top six essential or “human” skills included: communication, management, leadership, problem solving, teamwork, and critical thinking (Emsi, 2020). In fact, 84 percent of these job advertisements included at least one of the top six “human” skills listed above (Emsi, 2020). When skills were broadened to a more expansive list of all “human” skills, 100 percent of job advertisements included at least one “human” skill.

To understand skills specific to psychology jobs, including the essential skills that are valuable to performing these jobs, we conducted a series of analyses on multiple data sources in an effort to assess both the skills that psychology degree holders use in their jobs, and the skills that are most in demand among employers. The key findings are that psychology knowledge is important across a wide range of occupations, including some occupations that may be unexpected, and that essential skills like teamwork, leadership, and communication are among the most in demand on the job market.

We used three years (2015 through 2017) of job advertisements from the APA *psycCareers* job board to answer the question (APA, 2018b): What skills and traits are most important to the psychology job market? Major job types, such as health service and faculty positions, were analyzed independently, as well as in aggregate. Overall, the skills most frequently requested by employers were leadership skills, cultural awareness, and teamwork skills. The traits most frequently requested were adaptability, ethical conduct, and compassion/empathy (Table 26.3).

For health service psychologist job advertisements, which represented 48 percent of job advertisements posted, the most frequently requested skills and traits were consistent with the overall patterns, with leadership, cultural awareness, and teamwork as the top skills, and adaptability, ethical conduct, and compassion as the top traits (APA, 2018b). The second largest group of job advertisements, those for

Table 26.3 *Top skills requested in psychology job advertisements, 2015–17*

Skill (rank)	Type of job advertisement			
	Health service psychologist	Faculty	Researcher	Applied psychologist
1	Leadership	Cultural awareness	Analytical skills	Communication
2	Teamwork	Leadership	Leadership	Leadership
3	Communication	Teamwork	Communication	Teamwork
4	Cultural awareness	Analytical skills	Teamwork	Organizational skills
5	Specific language/multi-lingual	Communication	Organizational skills	Computer skills

Source: APA (2018b). *Overview of psychology job advertisements: Characteristics of psychology job advertisements on the APA psycCareers platform.*

faculty positions (37 percent of job advertisements), placed the greatest emphasis on cultural awareness, leadership, and teamwork as the top skills and ethical conduct, adaptability, and positive attitudes as the top traits. Job advertisements for researcher positions, representing 6 percent of job advertisements overall, mentioned analytical skills most frequently, followed by leadership and communication skills. The traits most frequently mentioned in job advertisements for researcher positions were independence, adaptability, and motivation. Finally, job advertisements for applied psychologists, which represented 4 percent of job advertisements overall, emphasized communication and leadership skills the most, followed by teamwork. Adaptability, ethical conduct, and independence were the most frequently mentioned traits in applied psychologist job advertisements.

In addition to our investigation of skills in job advertisements, we were interested in the skills used on a day-to-day basis, and the importance of psychology skills across occupations. We analyzed a collection of informational interviews conducted in APA's How Did You Get That Job webinar (APA, 2019b), as well as data from the O*NET database (Fleishmann et al., 2019) to answer the question: What skills do psychologists use in their jobs?

The How Did You Get That Job data set consists of text from 18 interviews with psychologists in uncommon psychology occupations (APA, 2019b). Based on the responses, the most common skills cited as being useful in day-to-day work included communication, analytical skills, and critical thinking. This was further supported by an analysis of jobs in the O*NET database, which rated the importance of psychology greater than average (2.38 out of 5). The analysis found that these occupations ranked communication skills like active listening and speaking as most important, followed by critical thinking, reading comprehension, and social perceptiveness (Fleishmann et al., 2019).

Very few data sources provide glimpses into the skills that psychology degree holders use in their jobs. Each data source has both strengths and limitations. Although the How Did You Get That Job webinar series has the strength of

targeting less-obvious career pathways, the webinar series is a small sample with a large proportion of applied psychology occupations. Similarly, although the O*NET database has the strength of including all jobs across labor markets, it does not separate occupations by degree level or type. Therefore, isolating and analyzing occupations that specifically require a degree in psychology, and the associated skills needed to perform those occupations, is not possible. Additional research is necessary in order to form a robust and complete idea of what skills psychologists use in their careers and how well their educational programs provided those skills.

Ultimately, these analyses highlight the key point that essential skills such as communication, leadership, and the ability to work on a team are critically important both on the psychology job market and in the day-to-day performance of jobs.

3.1 Examples of Essential Skills

Your psychology education is a learning experience for essential skills. Perhaps you have never thought about your education as work experience. For example, you may have gained the ability to create hypotheses, design study methods, analyze data, lead teams, synthesize literature into cohesive writing, apply science to practical problems, and generate future directions with measurable outcomes. Similarly, theses, dissertations, independent research projects, teaching, internships, practica, and graduate assistantships are all examples of relevant work experiences that build essential skills. You should give yourself credit for the essential skills you develop through those experiences. You may take your essential skills for granted or not recognize their value. You may not have learned the language to describe your essential skills. As you go into the workplace, having concrete examples that demonstrate essential skills are critical to a successful job search strategy. Indeed, essential skills are the most in-demand skills in the workplace and are highly valued by employers.

One example of an essential skill is behaviors that influence others. This is one view of leadership. For example, a leader could use individual- and situation-specific approaches by making decisions about whether to direct, coach, support, or delegate someone on their team. Leadership can also be demonstrated by serving as an informal mentor, which could happen by serving as a peer mentor, working closely with team members in any kind of work environment, informally supervising someone without having formal supervisory responsibilities, or serving in a leadership position in a student organization or professional association. It is also important to consider leadership potential, especially if you are a student or are at an early point in your career. Given where you are in your career, you might not have many demonstrated leadership examples, but you may have examples of these informal mentoring experiences that could demonstrate leadership potential.

These next two examples of essential skills are similar and highlight two slightly different skills. The ability to identify actionable insights in data demonstrates critical thinking skills. Identifying actionable insights could also draw in data literacy

skills and making judgments about how to use those data appropriately. As a related example, the ability to describe actionable insights in data demonstrates communication skills. This skill brings insights to the people who need them for informed decision making.

Another example is working on a group project. This demonstrates teamwork or collaboration. You may not have enjoyed these projects, and it may be difficult to see how these projects relate to the real world. However, they are learning experiences for teamwork skills that will serve you well in your future workplace. Group projects can teach you about how people work together, effective (or sometimes ineffective) strategies for collaboration, and how to set goals and meet deadlines. It is especially important to learn how to work with people from different kinds of backgrounds who may have different skills, expertise, and contributions to make.

An additional example is teaching. The skills used in teaching, such as planning and organizing a course schedule, presenting information, and leading discussions, apply beyond the classroom. The ability to effectively engage in a classroom discussion, especially if it involves differing viewpoints, translates into the ability to facilitate effective meetings. Keeping discussions respectful, productive, and on topic happens every day in both classrooms and in the workplace.

A final example is the ability to use the scientific method. This could demonstrate research management as well as project management. Project management is a skill that does not always show up specifically, in part because it overlaps with many other skills. Project management involves taking a complex task and breaking it down into more manageable, smaller pieces. This is an essential skill for completing a research project of any kind, such as a thesis, dissertation, or independent study. The way to achieve the goal is to focus on the smaller pieces and make steady progress toward those individual pieces.

This list of examples is not exhaustive. If you have a particular job in mind, you could identify the essential skills that are required to perform that job and generate examples of essential skills that you have demonstrated through your own experience. You could probably think of many additional examples of essential skills to add to this list.

4. Demographics of the Psychology Workforce

What are the demographic characteristics of those who become psychologists, how do new entrants impact the field of psychology as a whole, and how do the demographic characteristics of the psychology workforce compare to those of the US population as a whole? We examined the psychology workforce across various demographic categories, including gender, age, and race/ethnicity (APA, 2019c). Since 2008, the psychology workforce has become more racially/ethnically diverse. Racial/ethnic minorities made up about 12 percent of the psychology workforce in 2008; that proportion increased to 16 percent in 2018. Furthermore, the percentage of women has increased from 60 percent in 2008 to 71 percent in 2018. Finally, the

Table 26.4 *Demographic characteristics of the psychology workforce, 2008 and 2018*

Demographic characteristic	Year	
	2008 (%)	2018 (%)
Gender		
Female	60	40
Male	71	29
Race/ethnicity		
Asian	2	4
Black/African American	4	4
Hispanic	4	6
White	88	84
Other	1	2
Total	100	100

Source: APA (2019b). *Demographics of U.S. psychology workforce*.
[Interactive data tool.]

Note: "Other" racial/ethnic groups included American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and people of two or more races. Totals may not sum to 100 percent due to rounding.

average age of the psychology workforce has gone up slightly to 50.1 years from 49.9 in 2008 (Table 26.4).

The psychology workforce is becoming more racially/ethnically diverse because new entrants to the workforce have a higher proportion of racial/ethnic minority groups (APA, 2019c). In 2018, racial/ethnic minorities represented 29 percent of psychologists aged 26–30 and 25 percent of those aged 31–35. In comparison, psychologists in older cohorts had lower proportions of racial/ethnic minorities. Generally, although not always, the proportion of racial/ethnic minorities decreases as age increases. For example, racial/ethnic minorities represented 13 percent of psychologists aged 51–55, 4 percent of psychologists ages 56–60, and 7 percent of psychologists ages 61–65.

In terms of gender representation, younger cohorts of psychologists contribute to the higher proportion of women in the workforce overall (APA, 2019c). Younger cohorts have a higher proportion of women than older cohorts, with women representing 85 percent of psychologists aged 26–30, 82 percent of psychologists aged 31–35, and 82 percent of psychologists aged 36–40. In older cohorts, women represented 76 percent of psychologists aged 51–55, 61 percent of psychologists aged 56–60, and 57 percent of psychologists aged 61–65. Generally, as age increases, the proportion of women in the workforce decreases.

With an increasingly racially/ethnically diverse workforce, how does the psychology workforce compare to the US population overall? Based on the 2018 American Community Survey (US Census Bureau, 2019), 40 percent of the US population is racially/ethnically diverse with 60 percent of the population being White. This indicates while the psychology workforce is improving on metrics

of racial/ethnic diversity, the field has a long way to go to achieve equivalent representation across racial/ethnic groups. This holds implications when considered in the context of workforce projections, which suggest increases in demand will occur from older adults and Hispanic populations (APA, 2018c). Research on the health service psychology workforce indicates that the current workforce is not adequately prepared to meet the needs of diverse populations. For example, few psychologists specialize in geropsychology (Moye et al., 2019), which suggests a lack of supply to respond to the unique needs of older adults. As another example, only about 5.5 percent of licensed psychologists can provide services in Spanish, and only 4.4 percent of psychologists are Hispanic (APA, 2016a). This is far short of the 18.5 percent of the total US population represented by Hispanic populations (US Census Bureau, 2020), indicating that the current health service psychology workforce may not meet the needs of diverse populations.

4.1 Characteristics of Early Career Health Service Psychologists

Early career psychologists, defined as those within 10 years of earning their doctorates, have greater racial/ethnic diversity than the workforce as a whole. For example, when looking at health service psychologists, racial/ethnic minority groups represented 22 percent of early career psychologists, compared to 14 percent of health service psychologists across all career stages (APA, 2019c; Table 26.5).

Early career psychologists also reported a higher level of cultural competency in working with diverse groups of populations. When asked to rate how well their graduate training prepared them to provide services to diverse populations (on a 5-point scale where 1 = not at all prepared and 5 = extremely well-prepared), early career psychologists scored a mean of 3.88 (APA, 2017), much higher than psychologists in later career stages. Early career psychologists also reported higher knowledge ratings for working with most population groups compared to psychologists in later career stages (APA, 2017). One notable exception was older adults, in which psychologists in later career stages reported higher knowledge ratings for working with

Table 26.5 *Demographic characteristics of health service psychologists by career stage, 2015*

Demographic characteristic	Career stage			
	Early career	Mid-career	Senior career	Late senior career
Median age (years)	37	48	59	67
Gender (%)				
Female	77	72	59	38
Male	23	28	41	62
Race/ethnicity (%)				
White	78	84	89	91
Racial/ethnic minority groups	22	16	11	9
Total	100	100	100	100

Source: APA (2017). *Career stages of health service psychologists: Special analysis of the 2015 APA Survey of Psychology Health Service Providers*.

older adults than psychologists in earlier career stages. The health service psychologist workforce is not only becoming younger and more diverse but also more culturally responsive to the ever more diverse US population (Figure 26.5).

5. Future Directions and Opportunities

In light of the intersecting and ongoing crises impacting the US today, we anticipate a wide range of applications of psychology in society. First, we anticipate a larger role for technology. The role of technology in day-to-day life has transformed overnight as a result of the COVID-19 pandemic. While it is uncertain whether shifts will become permanent, it is also unlikely that the use and perceptions of technology will return to pre-pandemic patterns. For example, research on telepsychology patterns prior to the COVID-19 pandemic found that only 21 percent of practitioners engaged in telepsychology (Pierce et al., 2020). Yet the COVID-19 pandemic has demonstrated that undertakings thought to be impossible are, in fact, possible. Whether technology is used to deliver telehealth services, to engage in distance learning, or to hold virtual meetings in place of in-person events, there will be lasting effects on the future of work.

Second, we anticipate opportunities for applied psychology. This is an area of psychology that translates psychological research into the real world. Now more than ever, psychology is needed to make important contributions to everyday life. The field of psychology is well situated to respond to demand for research on human technology interaction, conducting business in a virtual environment, and the range of psychological side effects resulting from extended stress. Examples of applied psychology questions include:

- What are best practices in telehealth?
- How do students learn and how do teachers teach effectively in online education?
- How do teams function in a virtual environment?
- What are the effects of long-term social isolation?
- How do organizations manage change?
- How can psychology inform the future of work?

Finally, we anticipate opportunities to address equity issues. The COVID-19 pandemic brought existing health, education, and economic disparities to the forefront, especially in the context of a combination of factors that disproportionately affect certain groups. The “digital divide” created by increased reliance on technology further exacerbates these disparities. As a field, psychology has a responsibility to address critical societal issues, such as systemic racism, police violence, the lasting psychosocial effects of the COVID-19 pandemic, and other real-world issues.

6. Resources and Recommendations

For students, those who are early in their careers, and anyone seeking a job or career change, many resources are available to guide you through the career exploration

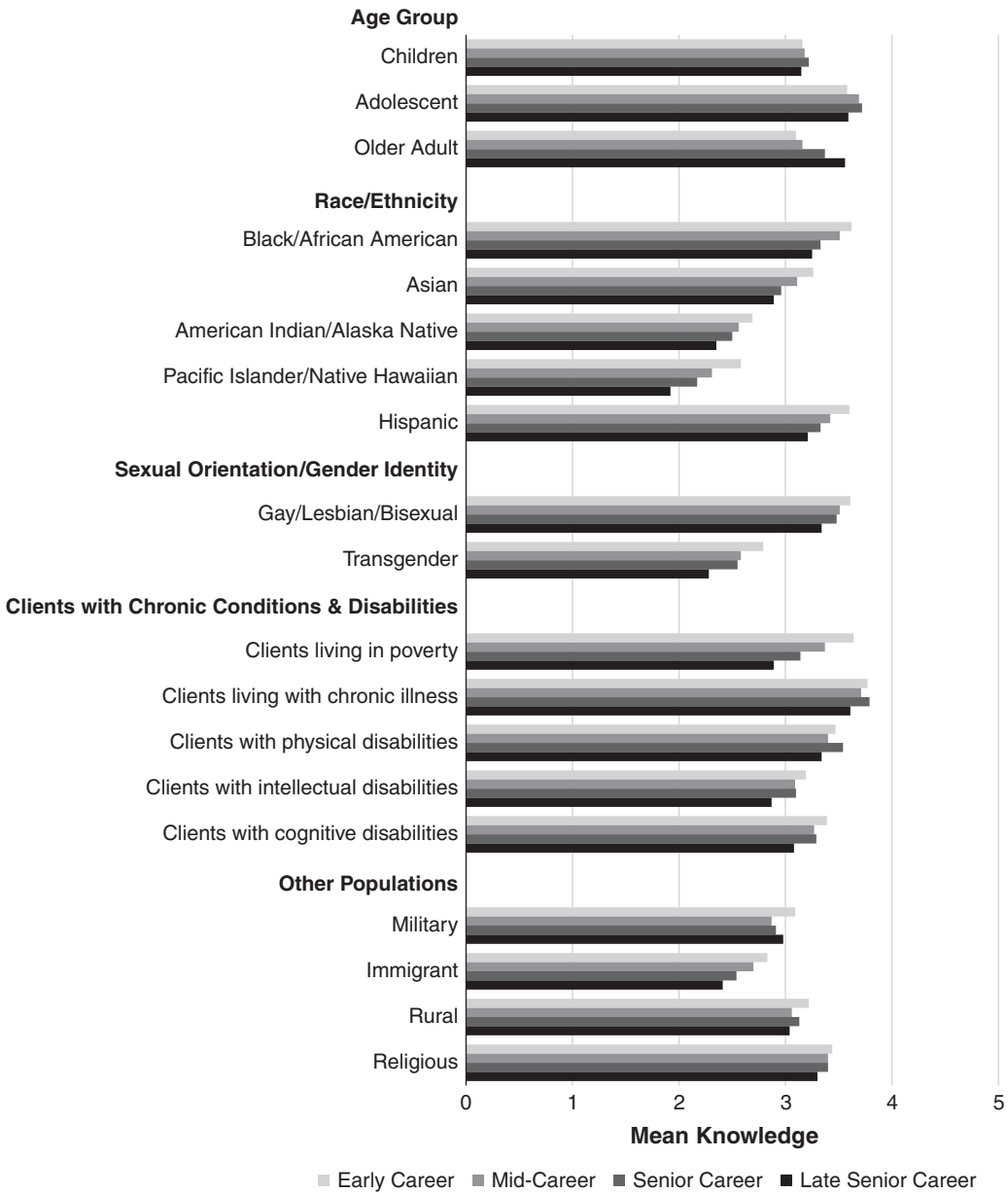


Figure 26.5 Knowledge ratings for working with specific populations by career stage. Source: APA (2017). *Career stages of health service providers: Special analysis of the 2015 APA Survey of Psychology Health Service Providers*. Copyright © 2017. American Psychological Association. All rights reserved.

process. As you journey through career exploration, it is entirely possible that your goals may change. This is a normal part of the process.

Explore data on career options. The APA Center for Workforce Studies has a series of interactive data tools that address workforce and education pathways topics. The Careers in Psychology data tool (APA, 2018a) shows occupations, work activities, work sectors, relatedness of the job to psychology, and other employment characteristics by level of psychology degree. The section of this chapter on employment characteristics for psychology doctorate and master's degree holders was entirely based on the Careers in Psychology data tool. Another resource is the O*NET occupational database (National Center for O*NET Development, 2020), which contains profiles on over 1000 jobs and can be searched by skills, knowledge, industry, career clusters, and other employment characteristics. O*NET also includes tools for assessing interests.

Be planful. The APA Individual Development Plan (IDP; APA, 2016b) is a five-step plan to help you explore your interests and career goals and generate a plan to achieve those goals. It is important to recognize that your career goals may shift. It is okay to change your mind. As you gain experience, you may learn that there are some things you don't want to do. Sometimes insights about what you *do not* want to do are just as valuable as learning what you *do* want to do. The IDP is built on knowing yourself. Indeed, self-reflection is an important tool in the career exploration process. An informal way to begin self-reflection is ask yourself, "Where have you been? Where are you now? Where are you going?" Another way to do this is to examine the skills you have and the skills you need. If the skills you have match the skills you need, then use that knowledge to look for career pathways that will allow you to use those skills. If the skills you have do not match the skills you need, then look for opportunities to acquire new skills or further develop the skills you already have. In either situation, look for job descriptions that would enable you to use those skills and interests. Look carefully at the duties, responsibilities, and qualifications for those jobs. Start to think about your own experiences and generate language to describe your background. You can try to mimic or mirror the language in the job descriptions. You can begin looking at job descriptions at any point in your career exploration process, even if you are not actively seeking employment.

Use career services. For current students, career services at your institution may have a broader range of career resources than faculty. For alumni, you may be eligible to use careers services at an institution from which you recently graduated. Psychology professors will be good resources for how to navigate the academic job market. This makes sense as their own career pathway included going to graduate school (most likely in psychology) and then becoming a psychology professor. This is a sizeable pathway in the psychology workforce, but it is a fairly narrow pathway. Similarly, psychology professors in health service areas will be knowledgeable about the behavioral health job market. Your faculty mentors and advisors may be less knowledgeable about the broad range of job options available to individuals with psychology backgrounds. This is where career services may be able to fill in a gap by providing realistic career planning information.

Keep in mind, however, that not all career services have relevant resources for graduate students. For example, career services may provide guidance on how to write a résumé but less guidance on how to write a curriculum vitae (CV). On the other hand, many career resources are broad enough that they can be adapted to the unique needs of graduate students.

Learn about career options through informational interviews. These are interviews where you ask questions about people's careers. They typically cover education pathways, the type of work activities they engage in on a daily basis, the skills they use, and strategies for obtaining a similar job. The purpose of an informational interview is to learn about career options rather than to solicit a job offer. Do not be surprised by a lack of response to a request for an informational interview, especially if the request was a "cold call" to someone you do not know personally. Try tapping into career services, alumni networks, mentors, and other channels to find people in careers you find interesting.

Build relationships. Some jobs are advertised through informal channels. Let your network know about the types of career pathways you are interested in pursuing. The more information you share about your career goals, the better able others are to guide you toward appropriate opportunities to reach those goals. You can leverage your relationships for possible informational interview connections. Also remember that you can and should have more than one mentor. Mentors with differing backgrounds can provide guidance for specific aspects of your career pathway, such as one person for clinical advising, another person outside of academia or psychology, or any other person with relevant expertise.

Keep learning. People who can adapt to change, be flexible, and learn new things will have an advantage in the future of work. Learning is a continuous lifelong process. Your education does not end when you earn a degree. Your formal education may not provide you with all the career-relevant skills you need, such as skills related to operating your own business (whether this is a private practice, consulting organization, or another type of self-employment), how to serve as a constructive journal article reviewer, or how to write bias-free recommendation letters. You may have opportunities to learn these skills on the job or by working closely with a mentor.

7. Conclusions

Throughout this chapter, we provided data on career versatility for people with graduate degrees in psychology. Remember that your degree is not your destiny; what you do on a daily basis in your job may be very different from what you trained to do in your graduate program. We hope that we challenged the myth that the only career pathway you can pursue is to become a therapist or a professor. These are common career outcomes and they are certainly not the only ones in which it is possible to use psychology at work. Having a keen awareness of your own skills, abilities, and interests will serve you well in identifying and pursuing a satisfying meaningful career pathway.

REFERENCES

- American Psychological Association. (2016a). *2015 APA Survey of Psychology Health Service Providers*. Washington, DC: APA. www.apa.org/workforce/publications/15-health-service-providers
- American Psychological Association. (2016b). *APA's resource for individual development plans*. [Online resource.] www.apa.org/education/grad/individual-development-plan
- American Psychological Association. (2017). *Career stages of health service providers: Special analysis of the 2015 APA Survey of Psychology Health Service Providers*. Washington, DC: APA. www.apa.org/workforce/publications/15-health-service-career
- American Psychological Association. (2018a). *Careers in psychology*. [Interactive data tool.] www.apa.org/workforce/data-tools/careers-psychology
- American Psychological Association. (2018b). *Overview of psychology job advertisements: Characteristics of psychology job advertisements on the APA psycCareers platform*. [Interactive data tool.] www.apa.org/workforce/data-tools/overview-job-advertisements
- American Psychological Association. (2018c). *Psychologist workforce projections 2015–30*. Washington, DC: APA. www.apa.org/workforce/publications/supply-demand/default.aspx
- American Psychological Association. (2019a). *The academic psychology workforce: Characteristics of psychology research doctorates in faculty positions (1995–2015)*. Washington, DC: APA. www.apa.org/workforce/publications/academic-psychology.pdf
- American Psychological Association. (2019b). *2018–19 How Did You Get That Job*. [Unpublished special analysis.]
- American Psychological Association. (2019c). *Demographics of the U.S. psychology workforce*. [Interactive data tool.] www.apa.org/workforce/data-tools/demographics
- Emsi. (2020). *Resilient skills: The survivor skills that the Class of COVID-19 should pursue*. www.economicmodeling.com/resilient-skills/
- Fleischmann, M., Conroy, J., Christidis, P., & Lin, L. (2019, December). Psychology degrees build useful skills. *Monitor on Psychology*, 50(11), 19. www.apa.org/monitor/2019/12/data-point-skills
- Lin, L., Conroy, J., & Christidis, P. (2020). Which states have the most licensed psychologists? *Monitor on Psychology*, 51(1), 19. www.apa.org/monitor/2020/01/datapoint-states
- Michalski, D. S., & Kohut, J. L. (2011). The state of the psychology health service provider workforce. *American Psychologist*, 66(9), 825–834.
- Moye, J., Karel, M. J., Stamm, K. E., Qualls, S. H., Segal, D. L., Tazeau, Y. N., & DiGilio, D. A. (2019). Workforce analysis of psychological practice with older adults: Growing crisis requires urgent action. *Training and Education in Professional Psychology*, 13(1), 46–55.
- National Center for O*NET Development. (2020). *O*NET Online*. www.onetonline.org/
- National Science Foundation, National Center for Science and Engineering Statistics. (2019). *2017 National Survey of College Graduates*. [Public use data file.] <https://ncesdata.nsf.gov/datadownload/>
- Pierce, B. S., Perrin, P. B., & McDonald, S. D. (2020). Demographic, organizational, and clinical practice predictors of US psychologists' use of telepsychology. *Professional Psychology: Research and Practice*, 51(2), 184–193.
- U.S. Census Bureau. (2019). *American Community Survey 1-year PUMS file*. [Data file.] www.census.gov/programs-surveys/acs/microdata.html
- U.S. Census Bureau. (2020). *Current Population Survey, Annual Social and Economic Supplement, 2019*. www.census.gov/data/tables/2019/demo/hispanic-origin/2019-cps.html