Drivers of Change Impacting Education and Training in Clinical Health Psychology

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American Psychological Association

Overview
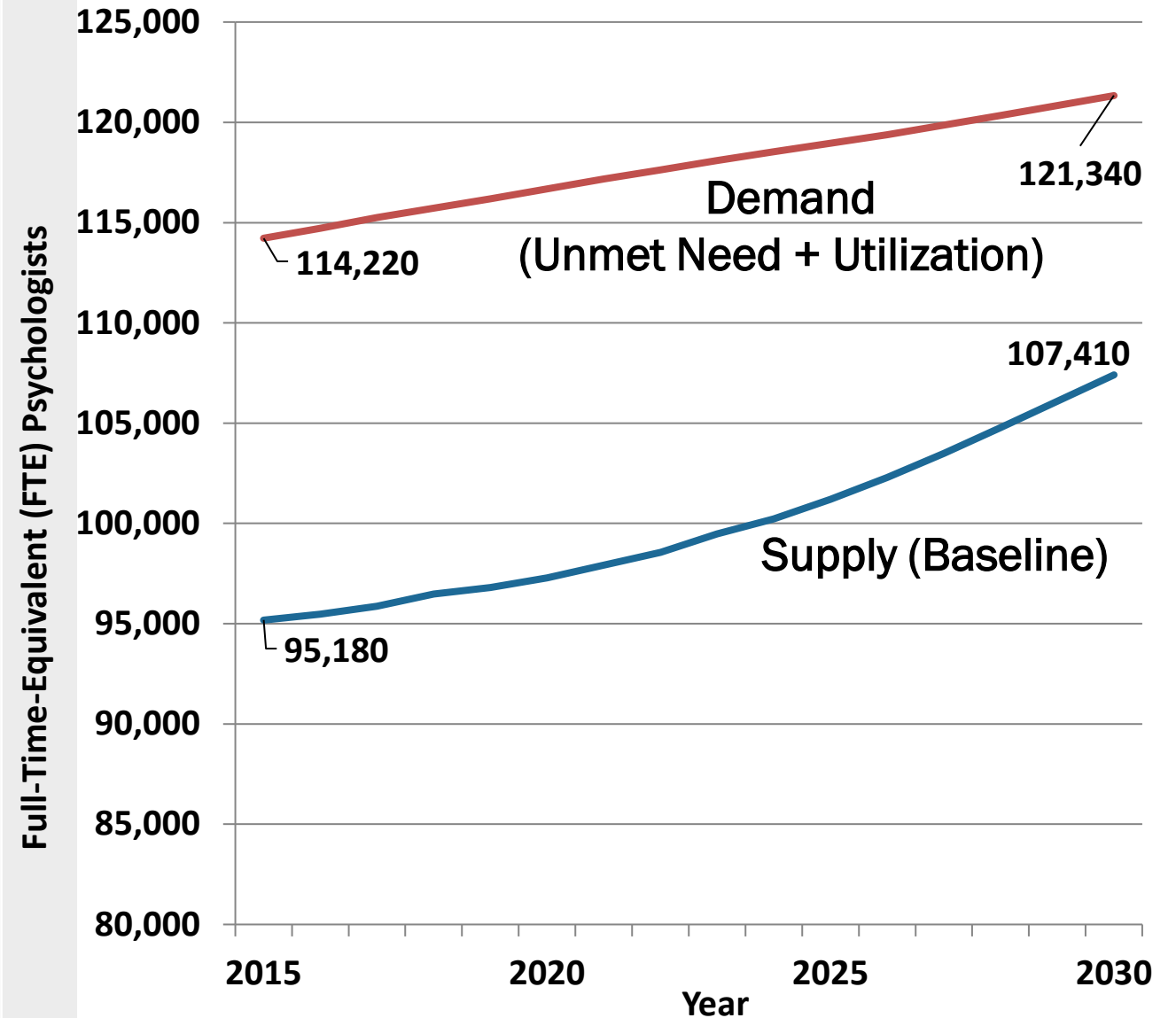
Drivers of change to consider in:

- the current psychology workforce
- the future psychology workforce
- education and training
- clinical practice

Driver 1: Current Psychology Workforce

Key Points:
Unmet need and a strained workforce

Gap in Supply and Unmet Need

Full-Time-Equivalent (FTE) Psychologists

Demand
(Unmet Need + Utilization)

121,340

114,220

107,410

Supply (Baseline)

95,180

Year

Change in Demand by Age

- Older adults
  - +54% or +5790 FTEs by 2030
  - Driven by shifting population demographics
  - Only 3% of psychologists specialize in geropsychology (APA, 2021 HSP Survey)
  - Workforce shortages in geropsychologists (Moye et al., 2019)
- Children & adolescents
  - +1% or +330 FTEs by 2030
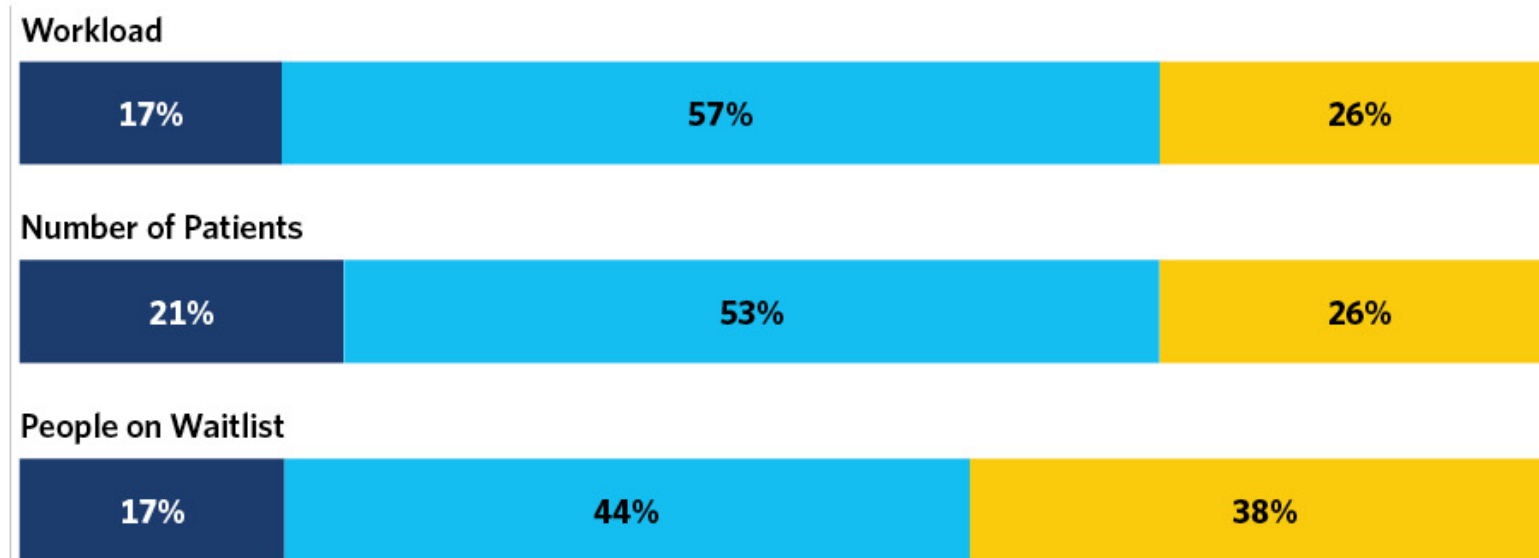 - Represent 29% of total demand in 2030
- Adults
  - Flat growth or -200 FTEs by 2030
  - Represent 45% of total demand in 2030

Psychologist Workload Capacity

PROPORTION OF PSYCHOLOGISTS SEEING CHANGES IN THEIR WORKLOADS IN THE LAST 12 MONTHS, 2023

■ LESS THAN 12 MONTHS AGO   ■ SAME AS 12 MONTHS AGO   ■ MORE THAN 12 MONTHS AGO

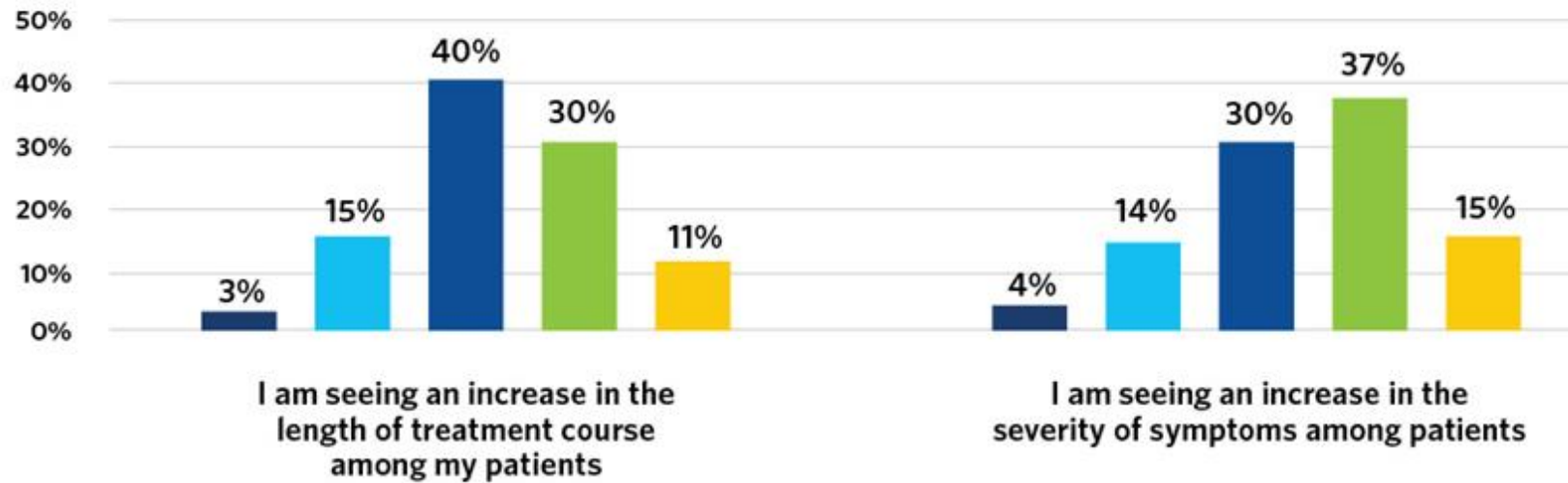**AMERICAN PSYCHOLOGICAL ASSOCIATION**

Workload

| 17% | 57% | 26% |

Number of Patients

| 21% | 53% | 26% |

People on Waitlist

| 17% | 44% | 38% |

NOTE: TOTALS MAY NOT SUM TO 100 PERCENT DUE TO ROUNDING.

Source: APA, 2023 Practitioner Pulse Survey.

https://www.apa.org/pubs/reports/practitioner/2023-psychologist-reach-limits

PROPORTION OF PSYCHOLOGISTS AGREEING WITH STATEMENTS ABOUT SELF-CARE AND BURNOUT, 2020-2023

% AGREE/STRONGLY AGREE

■ 2020 ■ 2021 ■ 2022 ■ 2023

I have been able to practice self-care*

- 66%
- 76%
- 77%
- 73%

I am able to maintain a positive work-life balance

- 55%
- 63%
- 63%
- 63%

I have sought out peer consultation/support to manage burnout

- 57%
- 60%
- 49%

I have not been able to meet the demand for treatment from my patients

- 41%
- 46%
- 42%

I feel burned out

- 41%
- 48%
- 45%
- 36%

*In 2020-2022, the time frame of the question was "as the pandemic continues." In 2023, the time frame changed to "over the past 12 months."

PRACTITIONER PULSE SURVEY   © 2023 American Psychological Association

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Driver 2: The Future Psychology Workforce

Key Point: Psychology remains a popular career option but efforts will be needed to ensure a future workforce

Psychology in Higher Education - Now

Least-regretted college majors
Percentage of graduates who would choose the same major again

| Major	Percentage
Computer + information sciences	72%
Criminology	72%
Engineering	71%
Nursing	69%
Health	67%
Business administration + management	66%
Finance	66%
Psychology	65%
Construction trades	65%
Human resources management	58%

Table: Gabriel Cortes / CNBC
Source: ZipRecruiter's monthly survey of 1,500 job seekers published November 2022
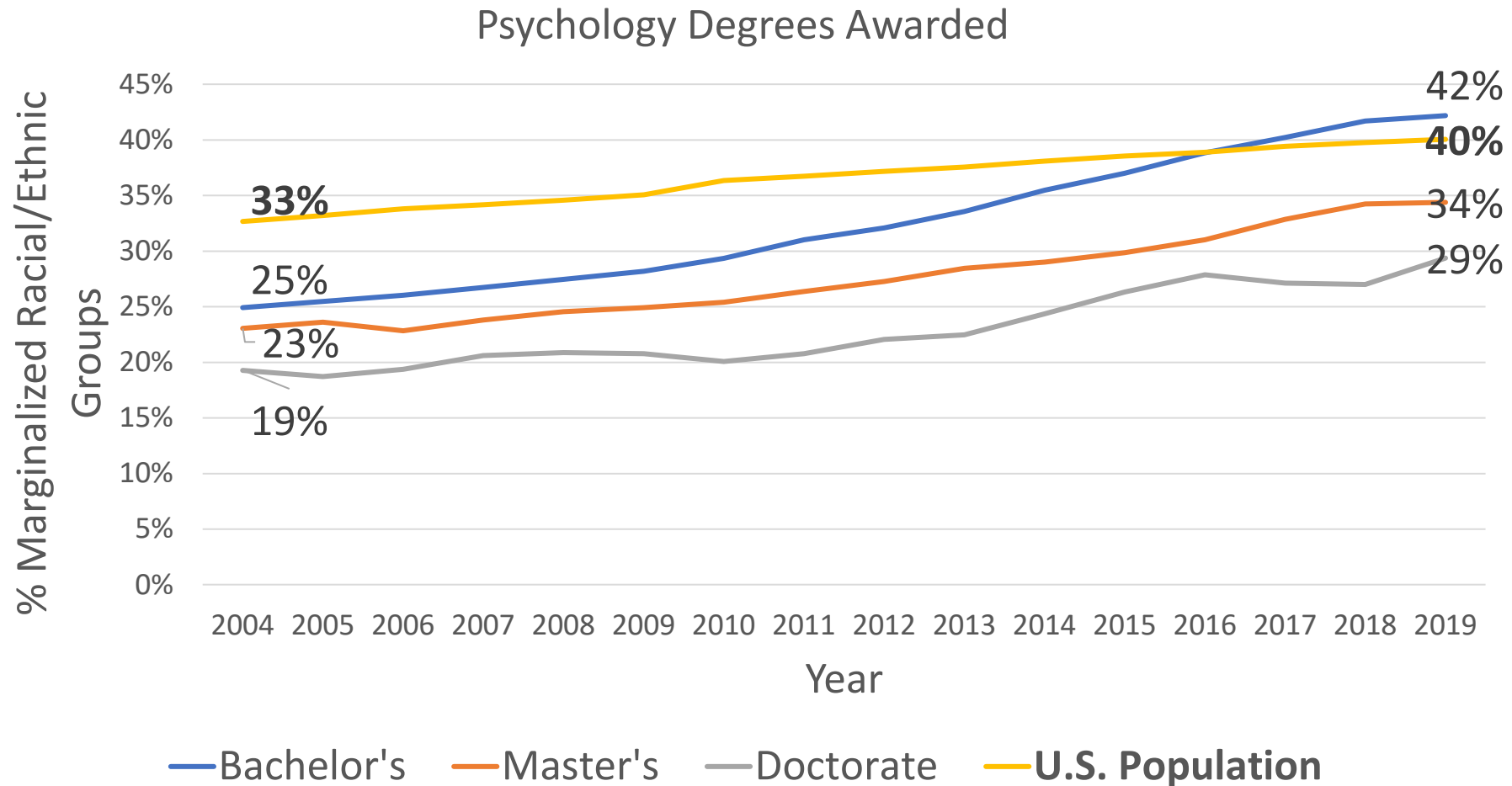
CNBC

Trends in Psychology Degrees Awarded , 2004-2021
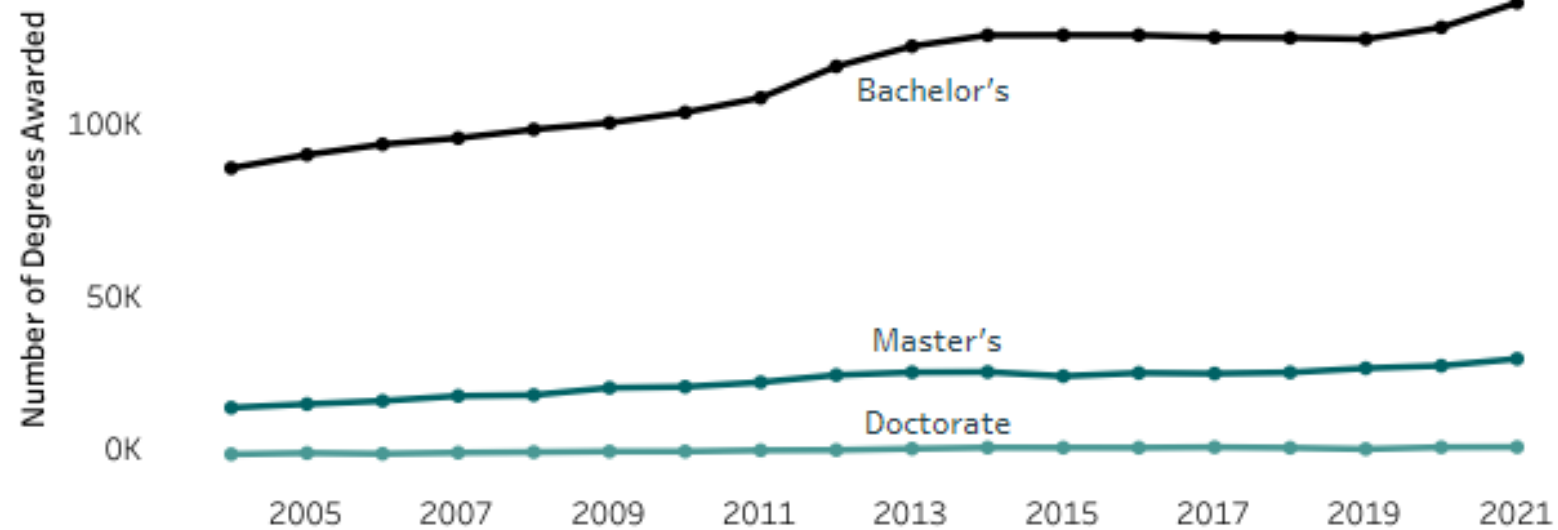
In 2021, 134,407 psychology bachelor's degrees were awarded; 32,270 psychology master's, and 6,969 psychology doctorate degrees were awarded.

Data Source: American Psychological Association; Integrated Postsecondary Education Data System, Department of Education
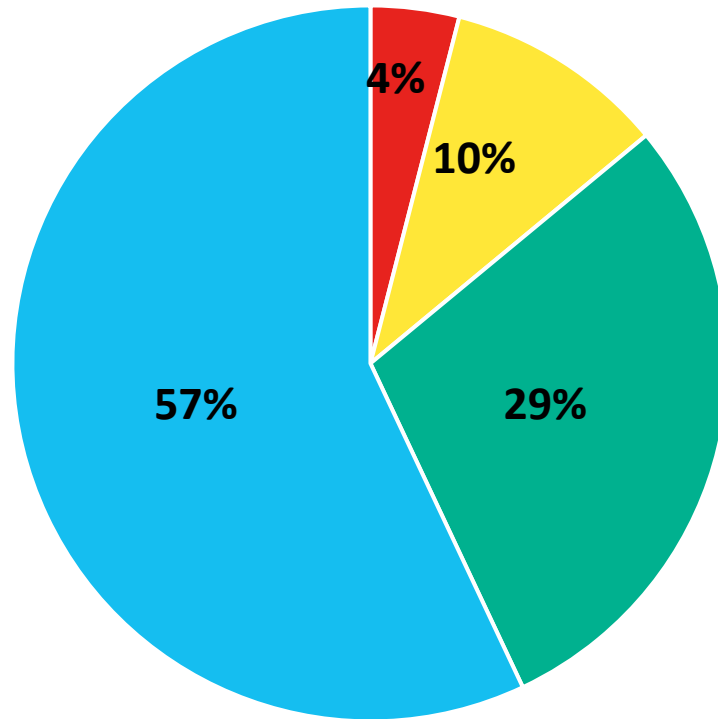
Trends in Psychology Degrees

Psychology Degrees Awarded

Sources: IPEDS Completions surveys (multiple years), U.S. Census (multiple years)

Degree Pathways

3.7 Million Psych Majors

- 🟥 Psych doctorate
- 🟨 Psych masters
- 🟩 Higher degree in other field

https://www.apa.org/workforce/data-tools/degrees-pathways

Demographic/Enrollment Cliff(s)

- Declines in US birth rates since 2008 mean there are fewer individuals who will enter into higher education

- Without proactive efforts in a few years psychology could see dramatic drops in numbers of students studying psychology

Table 1. Annual Births by Mother's Race/Ethnicity (U.S., Thousands)

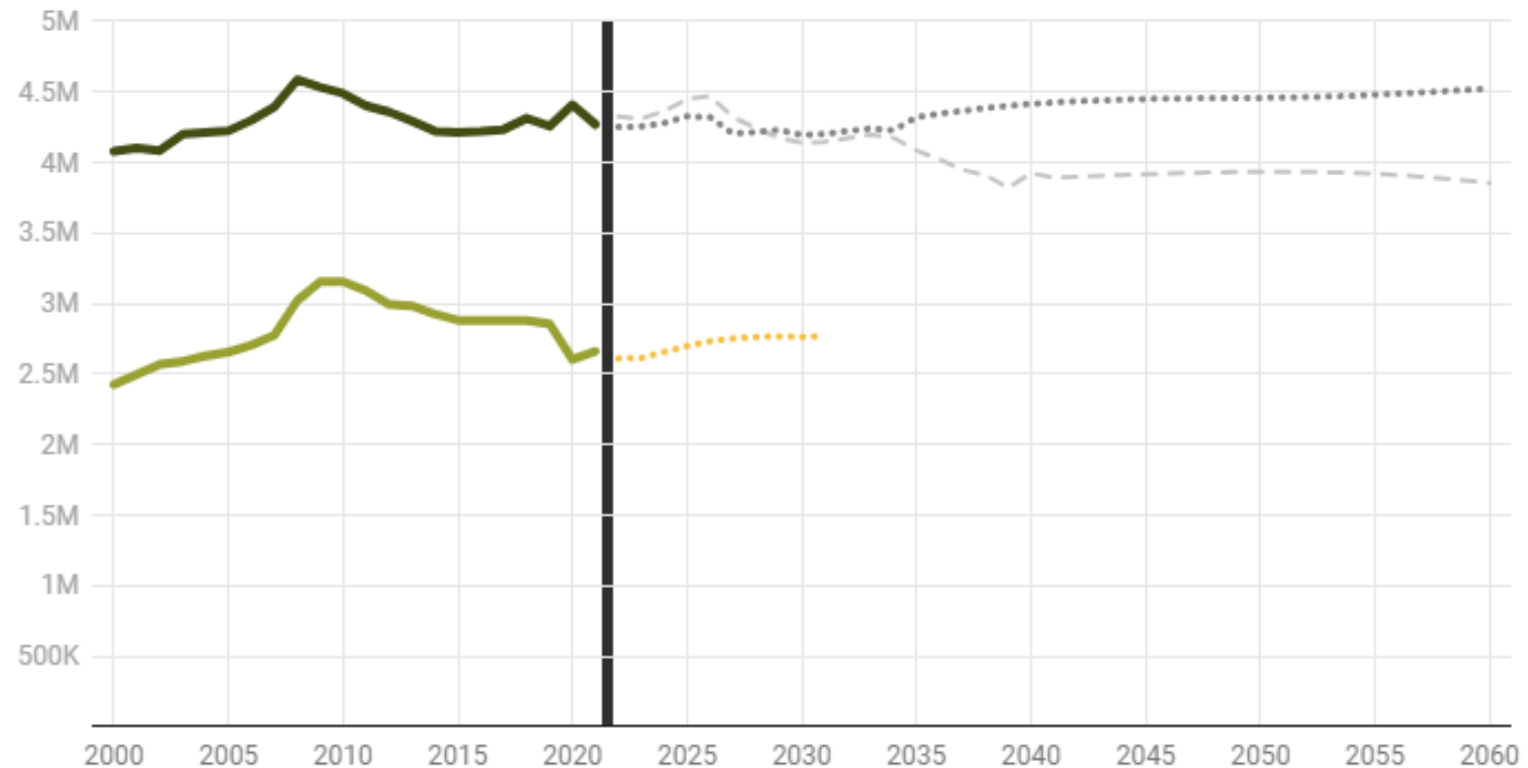|	Total	Hispanic	White	Asian/ Pacific Islander	Black	American Indian/ Alaska Native
1990	4,158	604	2,705	138	674	38
1995	3,900	680	2,435	157	593	35
2000	4,059	816	2,400	196	607	39
2005	4,138	986	2,303	221	587	41
2010	3,999	945	2,180	238	596	41
2015	3,978	924	2,152	271	594	37
2018	3,792	886	2,017	270	584	34
2019	3,746	n/a	n/a	n/a	n/a	n/a

Source: WICHE analysis of natality data from U.S. Centers for Disease Control, National Center for Health Statistics. Showing selected years. The latest year available is 2018 for births by race and ethnicity, 2019 for totals.

Enrollment/Demographic Cliff(s)

Population of 18-Year-Olds Is Projected to Crater

The Census previously forecast, before the pandemic, that the number of 18-year-olds would rebound after 2035.

The **darker-shaded** lines (———) are derived from data sourced from the **U.S. Census Bureau**. The **lighter-shaded** lines (———), which depict estimates of freshman enrollment, are from **U.S. Department of Education** data. The — — — line represents Census estimates of America's future 18-year-old population, as modeled in 2023. The • • • and • • • lines are derived from projections preceding that 2023 modeling.

Source: U.S. Census Bureau and U.S. Department of Education · Get the data · Created with Datawrapper

Fall 2023 Current Term Enrollment Estimates (National Student Clearinghouse Research Center)

Figure 6.1 National Undergraduate 4-year Enrollment in Top 20 Major Field Families

	2018		2019		2020		2021		2022		2023	
	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..
Business, Management, Mark..	1,610,442		1,583,841	-1.7%	1,569,487	-0.9%	1,542,523	-1.7%	1,562,103	1.3%	1,591,037	1.9%
Health Professions and Relate..	1,009,622		1,001,071	-0.8%	1,017,227	1.6%	1,004,745	-1.2%	960,284	-4.4%	951,994	-0.9%
Liberal Arts and Sciences, Ge..	916,510		875,194	-4.5%	817,847	-6.6%	796,692	-2.6%	759,394	-4.7%	760,492	0.1%
Computer and Information Sci..	444,299		468,602	5.5%	497,367	6.1%	519,039	4.4%	573,403	10.5%	627,866	9.5%
Engineering	641,137		630,309	-1.7%	614,556	-2.5%	596,149	-3.0%	589,479	-1.1%	604,860	2.6%
Biological and Biomedical Sci..	627,896		625,319	-0.4%	626,401	0.2%	608,991	-2.8%	595,608	-2.2%	600,666	0.8%
Psychology	446,643		465,283	4.2%	497,108	6.8%	516,342	3.9%	522,993	1.3%	523,249	0.0%
Education	454,296		445,136	-2.0%	455,302	2.3%	446,094	-2.0%	434,132	-2.7%	429,052	-1.2%
Visual and Performing Arts	402,956		409,357	1.6%	409,781	0.1%	415,297	1.3%	422,475	1.7%	427,917	1.3%
Social Sciences	451,504		445,651	-1.3%	437,287	-1.9%	423,289	-3.2%	404,598	-4.4%	395,121	-2.3%
Communication, Journalism, a..	322,709		318,438	-1.3%	308,734	-3.0%	283,989	-8.0%	275,874	-2.9%	272,753	-1.1%
Multi/Interdisciplinary Studies	257,040		256,500	-0.2%	257,911	0.5%	261,450	1.4%	262,523	0.4%	271,279	3.3%
Parks, Recreation, Leisure an..	235,350		232,271	-1.3%	235,155	1.2%	230,987	-1.8%	234,453	1.5%	234,684	0.1%
Security and Protective Servic..	271,742		269,458	-0.8%	271,601	0.8%	252,984	-6.9%	242,193	-4.3%	233,568	-3.6%
Physical Sciences	145,961		139,631	-4.3%	132,852	-4.9%	125,452	-5.6%	120,088	-4.3%	119,121	-0.8%
Public Administration and Soci..	132,468		129,618	-2.2%	129,714	0.1%	123,984	-4.4%	115,934	-6.5%	113,490	-2.1%
English Language and Literat..	137,284		130,784	-4.7%	122,061	-6.7%	114,826	-5.9%	113,271	-1.4%	109,482	-3.3%
Agriculture, Agriculture Operat..	98,682		97,173	-1.5%	96,710	-0.5%	96,220	-0.5%	97,735	1.6%	100,189	2.5%
Engineering Technologies/Tec..	89,559		88,470	-1.2%	86,275	-2.5%	86,519	0.3%	86,129	-0.5%	87,279	1.3%
Natural Resources and Conse..	80,333		82,294	2.4%	82,594	0.4%	84,297	2.1%	86,965	3.2%	86,343	-0.7%

Fall 2023 Current Term Enrollment Estimates (National Student Clearinghouse Research Center)

Figure 6.1 National Graduate Enrollment in Top 20 Major Field Families

	2018		2019		2020		2021		2022		2023	
	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..	Enrollment	% Change From Previous Y..
Health Professions and Relate..	672,460		684,702	1.8%	714,124	4.3%	722,844	1.2%	712,456	-1.4%	711,510	-0.1%
Business, Management, Mark..	467,359		462,616	-1.0%	483,836	4.6%	482,794	-0.2%	457,923	-5.2%	448,449	-2.1%
Education	454,245		447,696	-1.4%	463,667	3.6%	454,742	-1.9%	430,866	-5.3%	422,302	-2.0%
Computer and Information Sci..	123,570		136,956	10.8%	139,744	2.0%	162,628	16.4%	192,941	18.6%	218,617	13.3%
Engineering	165,331		164,041	-0.8%	158,291	-3.5%	167,746	6.0%	175,855	4.8%	175,795	0.0%
Psychology	122,500		128,521	4.9%	140,150	9.0%	147,927	5.5%	148,215	0.2%	147,537	-0.5%
Legal Professions and Studies	128,690		131,363	2.1%	131,376	0.0%	139,431	6.1%	136,492	-2.1%	137,349	0.6%
Public Administration and Soci..	127,244		126,946	-0.2%	129,979	2.4%	132,804	2.2%	126,672	-4.6%	122,355	-3.4%
Biological and Biomedical Sci..	88,231		91,670	3.9%	95,239	3.9%	100,090	5.1%	102,911	2.8%	105,993	3.0%
Multi/Interdisciplinary Studies	34,173		36,582	7.0%	38,321	4.8%	45,075	17.6%	59,060	31.0%	75,370	27.6%
Social Sciences	62,619		61,110	-2.4%	61,285	0.3%	62,050	1.2%	60,786	-2.0%	58,892	-3.1%
Physical Sciences	53,900		54,062	0.3%	53,554	-0.9%	54,721	2.2%	54,591	-0.2%	54,944	0.6%
Visual and Performing Arts	50,912		50,285	-1.2%	48,548	-3.5%	49,255	1.5%	48,169	-2.2%	46,580	-3.3%
Theology and Religious Vocati..	46,723		45,881	-1.8%	45,817	-0.1%	44,350	-3.2%	44,155	-0.4%	45,926	4.0%
Mathematics and Statistics	34,976		36,024	3.0%	35,286	-2.0%	36,825	4.4%	36,820	0.0%	36,663	-0.4%
Agriculture, Agriculture Operat..	29,637		29,180	-1.5%	29,054	-0.4%	29,839	2.7%	28,715	-3.8%	29,448	2.5%
Communication, Journalism, a..	26,533		27,033	1.9%	28,995	7.3%	30,459	5.0%	28,962	-4.9%	27,586	-4.8%
Security and Protective Servic..	29,535		29,585	0.2%	31,874	7.7%	31,548	-1.0%	28,721	-9.0%	27,125	-5.6%
English Language and Literat..	30,324		29,333	-3.3%	29,187	-0.5%	29,559	1.3%	27,282	-7.7%	25,895	-5.1%
Engineering Technologies/Tec..	15,447		15,785	2.2%	16,672	5.6%	17,936	7.6%	20,549	14.6%	21,858	6.4%

Changing Educational Landscape: Growth in Alternative Educational Models

70 million Coursera learners; 70% one-year increase in profits[1]

68% agree certificate from vocational school more valuable than university degree[2]

[1]Business Wire, 2021; [2]Pearson, 2019

Other Factors to Consider

- Affordability of higher education

Driver 3: Education and Training

Key Point: How and what we teach is evolving

- Competencies
  - Values and Ethics
  - Roles and Responsibilities
  - Communication
  - Teams and Teamwork

- Subcompetencies
  - Values and Ethics +1
  - Roles and Responsibilities -5
  - Communication -1
  - Teams and Teamwork -1

CCTC Social Responsiveness Toolkit

- Social responsiveness toolkit
- 9 modules provide strategies and resources for educators
- Special issues of TEPP and PPRP provide further support for enhancing socially responsive education and training

- **Social Responsiveness Toolkit**

Council of Chairs of Training Councils (CCTC)

CCTC 2020: Social Responsiveness in Health Service Psychology Education and Training Toolkit
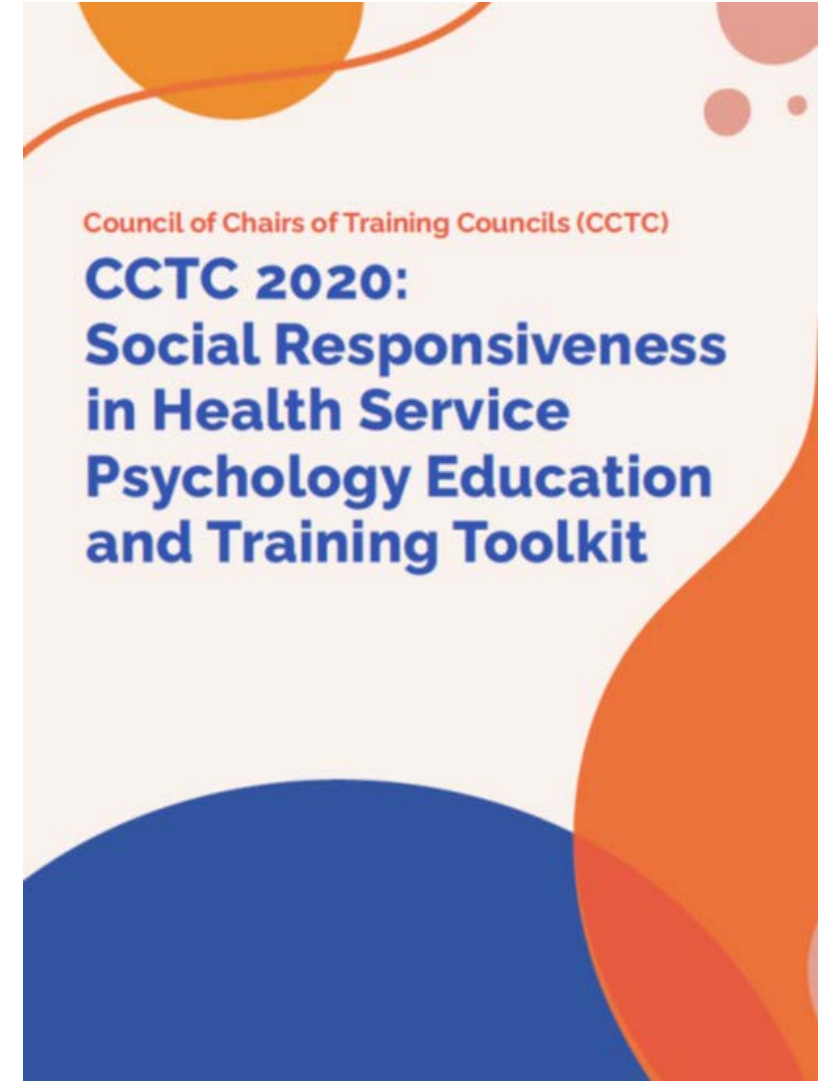
CCTC Social Responsiveness Toolkit Modules

- Module 1: Diversifying the HSP pipeline
- Module 2: Revisiting Our Program Structures With Increased Shared Governance
- Module 3: Liberating and Transforming Our Curriculum Toward Social Responsiveness Across All Levels of Training
- Module 4: Moving Toward Socially Responsive HSP Research Training
- Module 5: Socially Responsive Ethics and Professionalism
- Module 6: Social Justice and Advocacy
- Module 7: Community Engagement
- Module 8: Socially Responsive Evaluation of Students, Faculty and Supervisors
- Module 9: Lifelong Learning

APA Racial Equity Action Plan (2022)

Knowledge Production

Spearheading research that addresses social, institutional, and structural challenges, while promoting equitable and inclusive methodologies to advance racially conscious knowledge production and scholarship.

Health

Promoting, contributing to, and advancing health equity within communities of color and engaging in social innovation to strengthen and expand community-informed mental health services.

Workforce

Advancing equity, diversity, and inclusion to foster psychologically healthy workplaces.

Educational Equity

Opening pathways for students of color to succeed in psychology careers and promoting racial equity in education.

Supreme Court – Race and Admissions

AMERICAN PSYCHOLOGICAL ASSOCIATION

APA Policy Statement on Equitable and Inclusive Student Admissions in Higher Education

AUGUST 2023

On June 29, 2023, a majority of the U.S. Supreme Court struck down the use of race-conscious admissions programs in public and private colleges and universities. In so ruling, the Court majority overturned decades of legal precedent and ignored psychological science on which colleges and universities have relied in seeking to address the underrepresentation of students of color to achieve a diverse student body. The court majority decided that such admissions policies violate the Equal Protection Clause of the 14th Amendment of the U.S. Constitution. Justice Ketanji Brown Jackson wrote in her dissent, which relied heavily on the APA *amicus* brief and the psychological science the brief presented:

[D]eeming race irrelevant in law does not make it so in life. And having so detached itself from this country's actual past and present experiences, the Court has now been lured into interfering with the crucial work that UNC and other institutions of higher learning are doing to solve America's real-world problems. (*Students for Fair Admissions, Inc. v. President and Fellows of Harvard College*, 2023, p. [233])

The Supreme Court majority in *Students for Fair Admissions, Inc. v.*

The U.S. Supreme Court's Majority Decision Striking Down Race-Conscious Admissions Will Not Achieve Color-Blindness or Make Race Irrelevant on Most College Campuses

The court's decisions will worsen underrepresentation of certain racial and ethnic groups at higher education institutions that are not Historically Black Colleges and Universities (HBCUs) or tribal colleges and universities. One recent study, examining enrollment data from 53 public universities in states with and without bans, found that having a ban reduced representation of racial and ethnic minorities by a staggering 37% (Ly et al., 2022). In states without bans, representation *increased* by 0.7%. Other studies have observed similar impacts (Garces, 2013). The drop in admitted students of color at Primarily White Institutions (PWIs) is well documented. Black undergraduate enrollment at the University of Michigan at Ann Arbor dropped from 7% in 2006 to 4% in 2021 after Michigan banned affirmative action in 2006. The number of Black students at the University of California, Los Angeles, fell from 7% in 1996 to 3.43% in 1998

Generative AI in the Classroom

Personal Tutor

Concept clarification

Article summary

Real word application

Brainstorming

Provide talking points for discussion facilitation

Exam preparation

Generate practice questions

Writing coach

Grammar and style checks

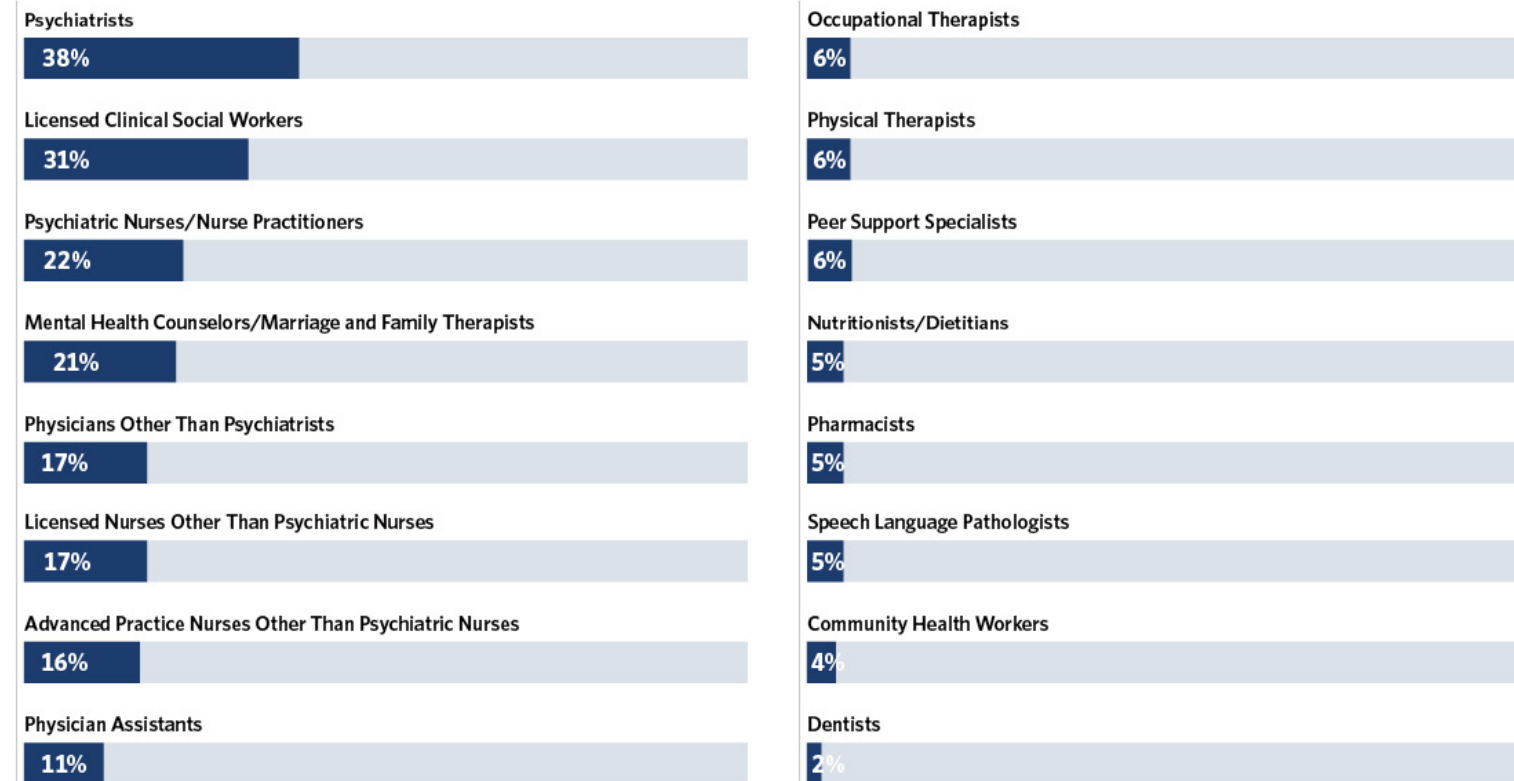Argument strengthening

Revision strategies

Stats tutor

Software guidance

Statistical assumptions

Selecting the correct analysis

Driver 4: Clinical Practice

Key Point: How we provide care is changing

PROFESSIONALS THAT PSYCHOLOGISTS HAVE SERVED WITH ON CARE TEAMS IN THE LAST 12 MONTHS, 2023

% PSYCHOLOGISTS FREQUENTLY/VERY FREQUENTLY WORKING WITH EACH TYPE OF PROFESSIONAL

Professional	%
Psychiatrists	38%
Licensed Clinical Social Workers	31%
Psychiatric Nurses/Nurse Practitioners	22%
Mental Health Counselors/Marriage and Family Therapists	21%
Physicians Other Than Psychiatrists	17%
Licensed Nurses Other Than Psychiatric Nurses	17%
Advanced Practice Nurses Other Than Psychiatric Nurses	16%
Physician Assistants	11%
Occupational Therapists	6%
Physical Therapists	6%
Peer Support Specialists	6%
Nutritionists/Dietitians	5%
Pharmacists	5%
Speech Language Pathologists	5%
Community Health Workers	4%
Dentists	2%

Health Service Psychologists across Areas of Specialty

AMERICAN PSYCHOLOGICAL ASSOCIATION

Select an Area of Specialty: ⓘ

- ○ Behavioral and Cognitive Psychology
- ○ Clinical Psychology
- ○ Clinical Child and Adolescent Psychology
- ◉ Clinical Health Psychology
- ○ Clinical Neuropsychology
- ○ Counseling Psychology
- ○ Couple and Family Psychology
- ○ Forensic Psychology
- ○ Geropsychology
- ○ Psychoanalysis
- ○ School Psychology

14% of health service psychologists specialize in **Clinical Health Psychology**. Select a section below to see their characteristics.

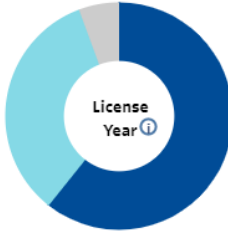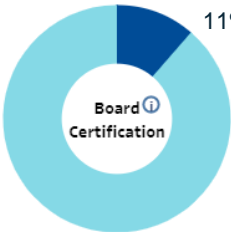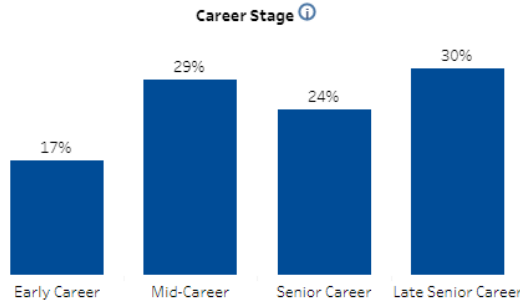|		
Demographic, Licensure, and Board-Certification	Degrees, Training, and Areas of Specialty	Work Hours, Work Activities, and Telehealth
Work Settings and Treatment Areas	Populations Served	Show Instructions
		Show Documentation

Gender
- ■ Female
- ■ Male
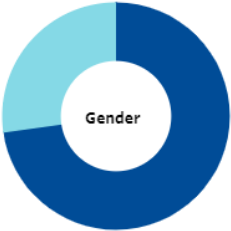
Race Ethnicity ⓘ
- ■ People of Color
- ■ White

Number of Licenses ⓘ
- ■ Licensed in 1 state
- ■ Licensed in 2 or more states

License Year ⓘ
- ■ Licensed within 1 year since doctorate
- ■ Licensed 2-4 years since doctorate
- ■ Licensed 5 or more years since doctorate

Career Stage ⓘ

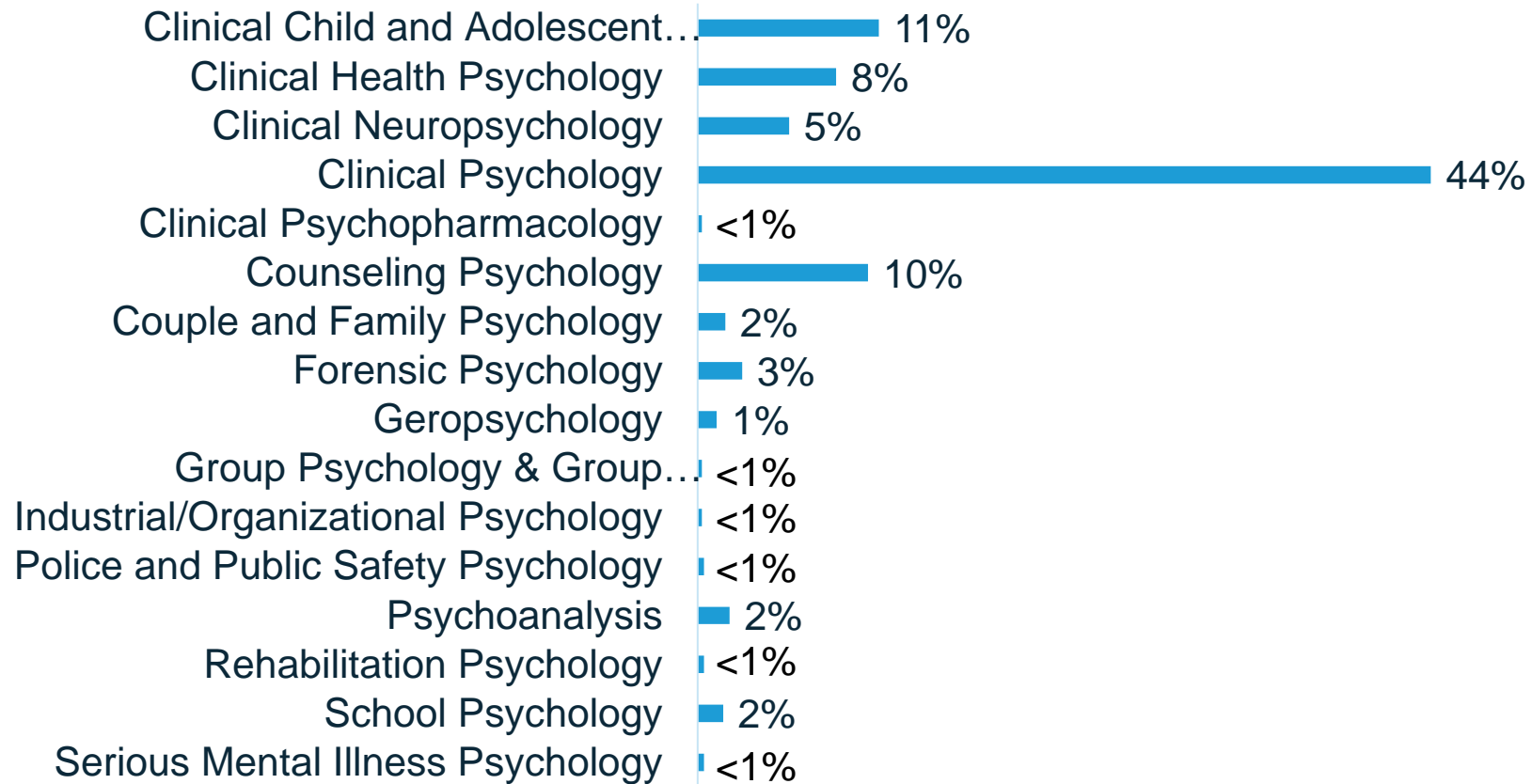| Early Career	Mid-Career	Senior Career	Late Senior Career
17%	29%	24%	30%

Board Certification ⓘ

11%

- ■ Board-certified
- ■ Not board-certified

In total, approximately 4,000 (4%) of licensed psychologists in the United States were board-certified. ⓘ

6% of **board-certified psychologists** were certified in the area of **Clinical Health Psychology**.

Self-Reported Primary Specialties

Specialty	Percentage
Clinical Child and Adolescent…	11%
Clinical Health Psychology	8%
Clinical Neuropsychology	5%
Clinical Psychology	44%
Clinical Psychopharmacology	<1%
Counseling Psychology	10%
Couple and Family Psychology	2%
Forensic Psychology	3%
Geropsychology	1%
Group Psychology & Group…	<1%
Industrial/Organizational Psychology	<1%
Police and Public Safety Psychology	<1%
Psychoanalysis	2%
Rehabilitation Psychology	<1%
School Psychology	2%
Serious Mental Illness Psychology	<1%

Technology

- Digital therapeutics
  - the use of software programs to deliver evidence-based and validated interventions to treat or manage mental and behavioral health disorders

- Digital mental health tools
  - Apps and computer software
  - Wellness

- AI
  - Diagnosis, treatment plans
  - Ethical considerations

Interjurisdictional Practice
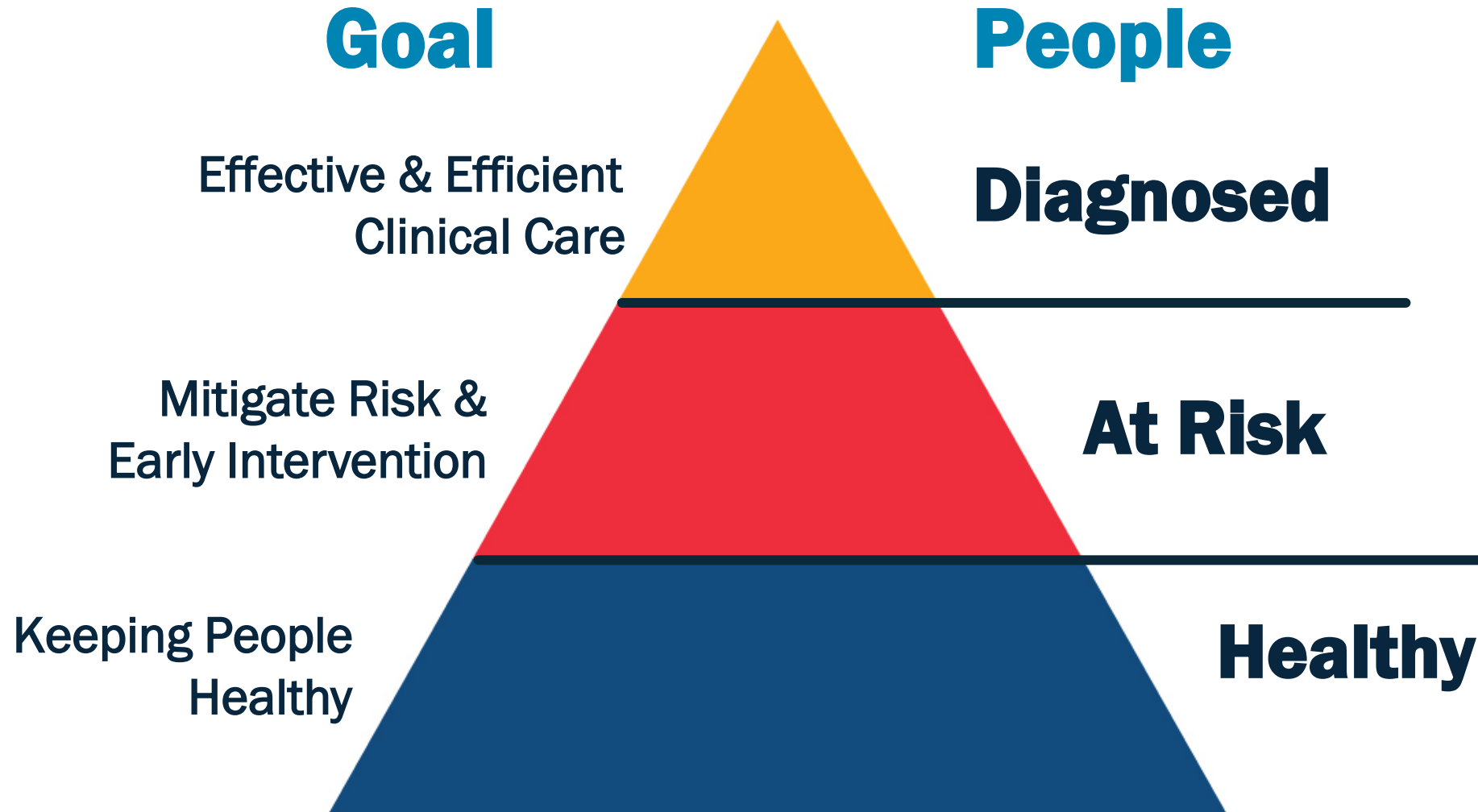

PSYPACT Participating States

- PSYPACT participating state
- Enacted PSYPACT legislation
  (practice under PSYPACT not yet permitted)
- PSYPACT legislation introduced
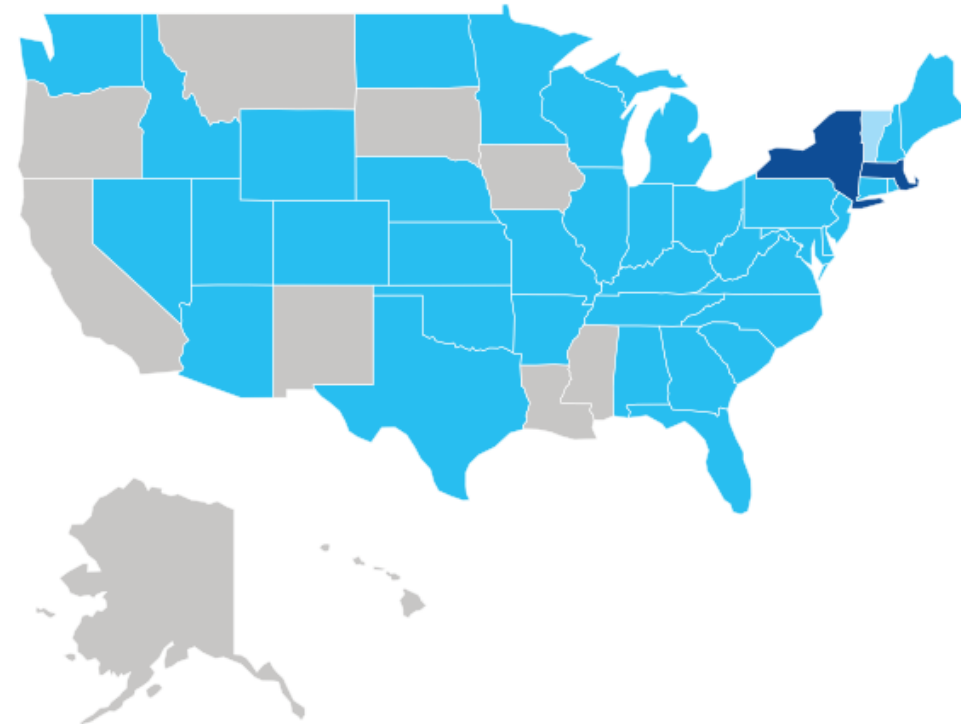
Population health

- "improving the health, health equity, safety, and wellbeing of entire populations, including individuals within those populations"

Psychology's Role in Advancing Population Health

Population health focuses on improving the health, health equity, safety, and wellbeing of entire populations, including individuals within those populations. This approach is supported by a multidisciplinary science base from psychology as well as sociology, cultural anthropology, medicine, economics, education, and other disciplines. Population health aims to address the cultural, economic, systemic, historical, environmental, relational, and occupational contexts that influence health status, wellbeing, and functioning across the lifespan. Its ultimate goal is to foster equitable human flourishing.

Consistent with a social-ecological framework (see Fig. 1 in the Appendix), APA affirms that an individual's health cannot be considered in isolation from the relationships, communities, and societies to which the individual belongs. There are major influencers and social determinants of health outside of the traditional healthcare system that include, but are not limited to, education, work and work

Many of today's key population health issues—including vaccination, climate change, addiction, violence, and trauma—involve important psychological components. The science and expertise that psychology brings to these challenges should continue to be recognized and promoted. Psychological scientists, educators, consultants, practitioners, and trainees are encouraged to engage in the design, implementation, operation, and evaluation of new and existing population health models. It is crucial for such models to be grounded in, and to promote, human rights and ethics. Because the pace of change in society is so rapid, it is important to continually evaluate the effectiveness, cost-effectiveness, efficiency, and impact of these models. APA calls on the discipline and profession of psychology to support a population health approach. APA encourages its members, committees, divisions, and boards to use the following principles as a "lens" through which activities for health promotion can be viewed:

Psychology as a Multi-tiered Profession

Assembly on the Value and Distinctiveness of the Doctoral Degree (2021)

The doctoral degree/license adds significant value within our multi-tiered profession.

- Evaluation, specialty practice, leadership, interprofessional teamwork
- Areas that include and go beyond direct service provision
- Multiple tiers within the profession may be important to advance population health, wherein doctoral psychologists' practice with a scope of greatest complexity in both breadth and depth.

Science characterizes and distinguishes psychology, and it undergirds all education and practice.

- Doctoral professionals are adept at understanding and utilizing science to make complex decisions to improve the health of the people and communities we serve.

Equity, diversity, and inclusion (EDI) is foundational to psychology and effective health care.

- The psychology workforce must diversify and reflect the U.S. population.
- Developing and maintaining competence in EDI is essential across the professional lifespan of the psychology practitioner.

Themes from the APA Summit on the Future of Education and Practice – Vision for Moving Forward (2021)

- Inclusive
    - Master's practitioners
    - Interprofessional collaborative practice

- Expansive
    - New roles, responsibilities, services

- Representative
    - Increased diversity in the workforce
    - What we teach, how we teach, our science

- Responsive
    - Continuous quality improvement efforts

Delphi Poll on the Future

Conducted in order to provide a glimpse into the field's probable future **10 years from now.**

Master's level providers with psychology degrees will increase their contribution to psychology more than other providers

Telehealth will increase more than other modalities

Specialization, supervision, leadership, and consultation differentiate master's and doctoral

Training will include more emphasis on technology and EDI

More psychologists will work in integrated care, fewer in independent private practice

Neimeyer, G. J., Macura, Z., Grus, C. L., Skillings, J. L., Bufka, L. F., & Rose, S. A. (2022). The future of education and practice in health service psychology: A Delphi study. *Professional Psychology: Research and Practice, 53*(2), 116–126. https://doi.org/10.1037/pro0000445

Closing Comments

Change is inevitable, the choice is incremental or transformative

- How many are needed?
- At what educational level?
- How to ensure a vibrant future?
- What should we be teaching?
- What will we be doing?

"The future depends on what you do today."

— Mahatma Gandhi

Thank you!

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