



PAEA RESEARCH

Student Report 4

By the Numbers | Data from the 2019 Matriculating Student and
End of Program Surveys



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Student Report 4

DATA FROM THE 2019 MATRICULATING STUDENT AND END OF PROGRAM SURVEYS (MSS & EOPS)

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INTRODUCTION

PHYSICIAN ASSISTANT EDUCATION ASSOCIATION

Founded in 1972, the Physician Assistant Education Association (PAEA) represents all physician assistant (PA) education programs in the United States. At the end of 2019, PAEA represented 247 accredited PA programs. For more information about PAEA and our member products and services, visit [PAEAonline.org](https://www.paeaonline.org).

METHODS

SURVEY INSTRUMENTS

This report compiles the results of two PAEA student surveys: the 2019 Matriculating Student Survey (MSS) and the 2019 End of Program Survey (EOPS). The goal of combining the results from these surveys is to give an overall picture of all PA student cohorts—from matriculants to graduates—in 2019.

The **MSS** collects information from entering PA students with the aim of improving education, recruitment, and retention. This survey is based on a previous student survey administered in collaboration with the American Academy of PAs (AAPA), along with items from the Association of American Medical College's (AAMC) [Matriculating Student Questionnaire](#) and the Higher Education Research Institute's (HERI) [College Senior Survey](#). The MSS was first administered in 2013.

The **EOPS** seeks information from graduating PA students to help schools evaluate and improve their education programs. The information is also used for research on PA education. Items include several questions adapted from the AAMC's [Medical School Graduation Questionnaire](#) and HERI's [College Senior Survey](#), as well as some assessing students' experiences in PA school and their post-graduation plans. The EOPS was first administered in 2016.

This report is divided into three main areas:

1. Overlapping data between the MSS and EOPS

- **Section 1. Students by Program Characteristics:** Information on the types of programs and institutions attended by the student respondents
- **Section 2. Student Demographics:** Student gender, race, ethnicity, and family composition
- **Section 3. Health & Well-Being:** Student socioemotional well-being, physical health, and stress
- **Section 4. Future Practice:** Considerations for career paths post-graduation, specialty and practice environment choices, and salary expectations
- **Section 5. Financial Information:** Loans, debt, and financing of pre-PA and graduate PA education

2. Data specific to the MSS

- **Section 6. MSS: Military Background:** Matriculating students' military experience
- **Section 7. MSS: Education Background:** Degrees, GPAs, and additional credits taken to satisfy prerequisites

- **Section 8. MSS: Employment History:** Prior health care employment and community service
- **Section 9. MSS: Application to PA School:** Factors influencing career and program choice, consideration of careers in other health professions, and cost of PA school applications

3. Data specific to the EOPS

- **Section 10. EOPS: Experiences in PA School:** Satisfaction with PA school, experiences in the didactic and clinical phases, and confidence in PA professional competencies
- **Section 11. EOPS: Employment Plans:** Post-graduate residencies and job applications, as well as information on accepted PA positions
- **Section 12. EOPS: Negative Experiences in PA School:** Mistreatment, discrimination, and harassment witnessed or experienced personally during PA school

Researchers interested in conducting further analysis of the MSS or EOPS may [request raw data](#) from these surveys. PA faculty interested in benchmarking and evaluation for accreditation and other purposes may request more specific disaggregated [custom research reports](#).

Survey Administration

Human subjects review determined that the MSS and EOPS were exempt. Information regarding the MSS and the EOPS was emailed to program directors of accredited member programs at the beginning of each month in 2019. The email timing corresponded to the month that their programs admitted first-year students into class or graduated a class of students. At the time of administration, there were 246 PA programs eligible to participate in the MSS and 220 eligible to participate in the EOPS. Program directors were asked to forward a survey link to their students and encourage participation. In addition, program directors were asked to provide a head count of their first-year or graduating class to calculate program and national response rates. To achieve an adequate response rate, PAEA research staff sent reminder emails to non-responding programs and conducted follow-up phone calls to programs with a student response rate less than 80%. Programs that achieved an 80% response rate were entered into drawings for a \$250 gift card and for a complimentary registration to the 2020 Education Forum.

Following the removal of duplicate cases, the MSS garnered 5,661 unique responses from 200 programs (81.3% of all eligible programs). Based on eligible programs' reports of first-year class sizes on the 2019 PAEA Program Survey ($N = 10,439$ first-year students), the overall matriculating student response rate is estimated at 54.2%. Sixty-eight programs (34.0% of all responding programs) achieved an 80% student response rate.

After the removal of duplicate cases, the EOPS received a total of 3,942 unique responses from 174 programs (79.1% of all eligible programs). Based on eligible programs' reports of graduating student cohorts on the 2019 PAEA Program Survey ($N = 9,446$ graduating students), the overall graduating student response rate is estimated at 41.7%. Forty programs (30.0% of all responding programs) achieved an 80% student response rate.

Data Cleaning & Analysis

Responses that fell outside of reasonable parameters were not included in the analyses. For example, a student loan of \$10 would be treated as missing data. Participants who selected "Other" as their response to multiple-choice questions were asked to specify. These write-in responses were recoded into existing categories when possible. The tables and figures presented in this report display aggregate data from the respondents.

In general, analyses of the data consisted of calculating descriptive statistics on the variables of interest — percentage, minimum and maximum values; arithmetic mean (M); standard deviation (SD); median (Mdn); and 10th, 25th, 50th, 75th, and 90th percentiles (P10, P25, P50, P75, P90). Tables describing financial information also include a 10% trimmed mean ($M(T)$), or the mean when the bottom and top 10% of responses are excluded. For some tables and figures, percentages will not equal 100% due to rounding or when multiple responses were allowed. Total columns on tables and figures are designated by n . Exact financial data were not reported if there were fewer than five respondents.

Limitations

A common challenge of survey research is attaining a robust response rate. Every year, PAEA strives to collect data from as many students at as many PA programs as possible. Although these surveys continue to be the richest source of national PA student data available, it is noteworthy that not all PA students or programs are represented. These missing data may have an unquantifiable impact on the results because the characteristics of non-respondents are unknown. Programs can help boost the value of these data, which are critical to PA education research as well as program benchmarking, evaluation, and accreditation, by encouraging students to participate in PAEA surveys. Increasing the number of students and programs that provide data improves the representativeness and usefulness of the data and reports. Another **critical limitation** to generalizability is that these data were collected in 2019 — it is unknown to what extent results are still reflective of PA students' experiences as the 2020 coronavirus (COVID-19) pandemic has forced PA programs to rapidly adapt on a situational basis.

SECTION 1. STUDENTS BY PROGRAM CHARACTERISTICS

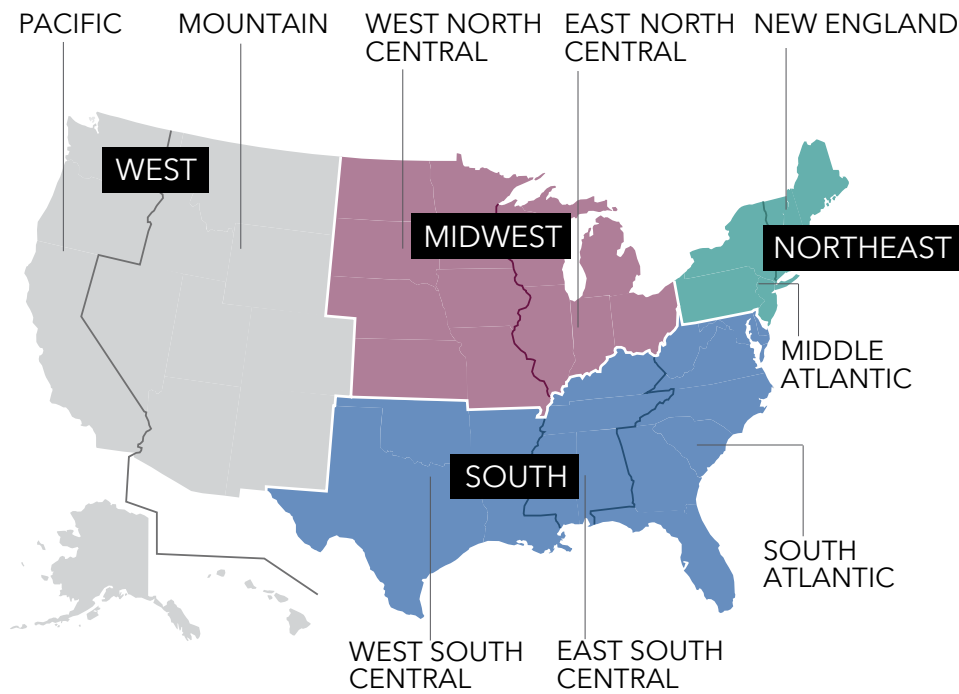
This section provides an overview of the responding students according to characteristics of the PA programs they attended. “Represented Programs” refers to the programs attended by the responding students. “Eligible Programs” refers to all accredited member programs that were either matriculating (MSS) or graduating (EOPS) a cohort of students during the survey administration period. “All Programs” refers to all accredited member programs at the time of survey administration ($N=247$). Information on programs’ public/private status and Academic Health Center status is taken from PAEA’s 2019 Program Survey. Three additional programs received provisional accreditation after the 2019 Program Survey closed and were not included in this section.

TABLE 1. DISTRIBUTION OF STUDENTS AND PROGRAMS BY U.S. CENSUS BUREAU REGIONS AND DIVISIONS

	Students		Represented Programs		Eligible Programs		All Programs	
	n	%	n	%	n	%	n	%
MSS								
Northeast Region								
New England Division	469	8.3	16	8.0	19	7.7	19	7.7
Middle Atlantic Division	956	16.9	36	18.0	49	19.9	50	20.2
Subtotal	1,425	25.2	52	26.0	68	27.6	69	27.9
Midwest Region								
East North Central Division	701	12.4	28	14.0	37	15.0	37	15.0
West North Central Division	369	6.5	18	9.0	19	7.7	19	7.7
Subtotal	1,070	18.9	46	23.0	56	22.8	56	22.7
South Region								
South Atlantic Division	1,299	22.9	45	22.5	53	21.5	53	21.5
East South Central Division	487	8.6	14	7.0	17	6.9	17	6.9
West South Central Division	479	8.5	14	7.0	17	6.9	17	6.9
Subtotal	2,265	40.0	73	36.5	87	35.4	87	35.2
West Region								
Mountain Division	447	7.9	14	7.0	15	6.1	15	6.1
Pacific Division	454	8.0	15	7.5	20	8.1	20	8.1
Subtotal	901	15.9	29	14.5	35	14.2	35	14.2
Total	5,661	100.0	200	100.0	246	100.0	247	100.0
EOPS								
Northeast Region								
New England Division	389	9.9	16	9.2	18	8.2	19	7.7
Middle Atlantic Division	880	22.3	37	21.3	47	21.4	50	20.2
Subtotal	1,269	32.2	53	30.5	65	29.5	69	27.9
Midwest Region								
East North Central Division	643	16.3	26	14.9	33	15.0	37	15.0
West North Central Division	286	7.3	15	8.6	18	8.2	19	7.7
Subtotal	929	23.6	41	23.6	51	23.2	56	22.7
South Region								
South Atlantic Division	686	17.4	35	20.1	47	21.4	53	21.5
East South Central Division	258	6.5	10	5.7	11	5.0	17	6.9
West South Central Division	331	8.4	15	8.6	17	7.7	17	6.9
Subtotal	1,275	32.3	60	34.5	75	34.1	87	35.2
West Region								
Mountain Division	153	3.9	9	5.2	12	5.5	15	6.1
Pacific Division	316	8.0	11	6.3	17	7.7	20	8.1
Subtotal	469	11.9	20	11.5	29	13.2	35	14.2
Total	3,942	100.0	174	100.0	220	100.0	247	100.0

*U.S. Census Bureau Divisions are nested within Regions. For a map of all Census Regions and Divisions, please see **Figure 1**. Student data are based on respondents' self-reported state in which they attend PA school. Program data are based on program-reported states. In a small minority of cases (1.3% in MSS, 0.2% in EOPS), student- and program-reported states do not match (e.g., if students are enrolled at an out-of-state satellite campus).*

FIGURE 1. CENSUS BUREAU REGIONS AND DIVISIONS



REGION 1 NORTHEAST

DIVISION 1 NEW ENGLAND

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Rhode Island
- Vermont

DIVISION 2 MIDDLE ATLANTIC

- New Jersey
- New York
- Pennsylvania

REGION 2 MIDWEST

DIVISION 3 EAST NORTH CENTRAL

- Indiana
- Illinois
- Michigan
- Ohio
- Wisconsin

DIVISION 4 WEST NORTH CENTRAL

- Iowa
- Kansas
- Minnesota
- Missouri
- Nebraska
- North Dakota
- South Dakota

REGION 3 SOUTH

DIVISION 5 SOUTH ATLANTIC

- Delaware
- District of Columbia
- Florida
- Georgia
- Maryland
- North Carolina
- South Carolina
- Virginia
- West Virginia

DIVISION 6 EAST SOUTH CENTRAL

- Alabama
- Kentucky
- Mississippi
- Tennessee

DIVISION 7 WEST SOUTH CENTRAL

- Arkansas
- Louisiana
- Oklahoma
- Texas

REGION 4 WEST

DIVISION 8 MOUNTAIN

- Arizona
- Colorado
- Idaho
- New Mexico
- Montana
- Utah
- Nevada
- Wyoming

DIVISION 9 PACIFIC

- Alaska
- California
- Hawaii
- Oregon
- Washington

TABLE 2. DISTRIBUTION OF STUDENTS AND PROGRAMS BY PROGRAM PUBLIC/PRIVATE STATUS

	Students		Represented Programs		Eligible Programs		All Programs	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
MSS								
Public	1,509	28.1	59	30.4	71	29.8	71	29.7
Private								
For-profit	322	6.0	10	5.2	14	5.9	14	5.9
Non-profit	3,534	65.9	125	64.4	153	64.3	154	64.4
Subtotal	3,856	71.9	135	69.6	167	70.2	168	70.3
Total	5,365	100.0	194	100.0	238	100.0	239	100.0
EOPS								
Public	1,136	29.2	53	31.4	66	31.0	71	29.7
Private								
For-profit	213	5.5	9	5.3	12	5.6	14	5.9
Non-profit	2,537	65.3	107	63.3	135	63.4	154	64.4
Subtotal	2,750	70.8	116	68.6	147	69.0	168	70.3
Total	3,886	100.0	169	100.0	213	100.0	239	100.0

Note: "Private" includes both for-profit and non-profit private programs. Military and public/private hybrid programs were excluded due to low frequencies.

TABLE 3. DISTRIBUTION OF STUDENTS AND PROGRAMS BY PROGRAM AHC STATUS

	Students		Represented Programs		Eligible Programs		All Programs	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
MSS								
Academic Health Center	1,567	27.7	55	27.5	67	27.2	67	27.1
Not Academic Health Center	4,094	72.3	145	72.5	179	72.8	180	72.9
Total	5,661	100.0	200	100.0	246	100.0	247	100.0
EOPS								
Academic Health Center	1,068	27.1	47	27.0	63	28.6	67	27.1
Not Academic Health Center	2,874	72.9	127	73.0	157	71.4	180	72.9
Total	3,942	100.0	174	100.0	220	100.0	247	100.0

TABLE 4. DISTRIBUTION OF STUDENTS BY TYPE OF CAMPUS

	Students	
	<i>n</i>	%
MSS		
Not enrolled in satellite/distance campus	5,149	91.5
Enrolled in satellite/distance campus	480	8.5
Total	5,629	100.0
EOPS		
Not enrolled in satellite/distance campus	3,637	92.5
Enrolled in satellite/distance campus	293	7.5
Total	3,930	100.0

SECTION 2. STUDENT DEMOGRAPHICS

GENDER

To stay current with best practices, which take a more inclusive approach to assessing gender identity, this survey utilized questions from the Multidimensional Sex/Gender Measure (Bauer, et al., 2017). Participants were asked to report their *sex assigned at birth* (i.e., male, female, or prefer not to answer) and *current gender identity* (i.e., male, female, indigenous or other cultural minority identity [e.g., two-spirit], something else [e.g., gender fluid, non-binary], or prefer not to answer). Of the 5,627 MSS respondents who answered with something other than “prefer not to answer” to both questions, 10 (< 0.1%) reported a non-cisgender identity (i.e., their current gender identity differed from their sex assigned at birth). Likewise, 11 (< 0.1%) of the 3,900 EOPS respondents who answered both questions reported a non-cisgender identity.

TABLE 5. CURRENT GENDER IDENTITY

	MSS		EOPS	
	<i>n</i>	%	<i>n</i>	%
Female	4,217	74.8	2,933	75.1
Male	1,410	25.0	961	24.6
Something else (e.g., gender fluid, non-binary)	6	0.1	8	0.2
Indigenous or other cultural gender minority (e.g., two-spirit)	1	0.0	3	0.1
Total	5,634	100.0	3,905	100.0

TABLE 6. SEX ASSIGNED AT BIRTH

	MSS		EOPS	
	<i>n</i>	%	<i>n</i>	%
Female	4,228	75.0	2,944	75.3
Male	1,411	25.0	966	24.7
Total	5,639	100.0	3,910	100.0

TABLE 7. SEXUAL ORIENTATION

	MSS		EOPS	
	<i>n</i>	%	<i>n</i>	%
Straight	5,329	95.2	3,672	95.1
Bisexual	143	2.6	67	1.7
Gay or lesbian	110	2.0	106	2.7
Other	14	0.3	16	0.4
Total	5,596	100.0	3,861	100.0

TABLE 8. AGE

	<i>n</i>	Min	Max	<i>M</i>	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
MSS	5,606	17.0	69.0	25.6	4.7	22.0	23.0	24.0	27.0	31.0
EOPS	3,930	20.0	59.0	27.6	4.8	24.0	25.0	26.0	29.0	33.0

TABLE 9. ETHNICITY

	MSS		EOPS	
	<i>n</i>	%	<i>n</i>	%
Hispanic, Latino, or Spanish in origin	507	9.1	263	6.8
Not Hispanic, Latino, or Spanish in origin	5,086	90.9	3,597	93.2
Total	5,593	100.0	3,860	100.0

TABLE 10. MIDDLE EASTERN ORIGIN

	MSS		EOPS	
	<i>n</i>	%	<i>n</i>	%
Middle Eastern or Arabic in origin	140	2.5	101	2.6
Not Middle Eastern or Arabic in origin	5,439	97.5	3,742	97.4
Total	5,579	100.0	3,843	100.0

RACE

In surveys prior to 2017, respondents were allowed to only select one race category to describe themselves. Beginning in 2017 and continuing forward, respondents have been able to check as many race categories as they felt were appropriate. “Single race” indicates that respondents selected only one race category. “In combination with other race” indicates that they selected two or more race categories. “Other race” was excluded when determining whether respondents selected multiple races.

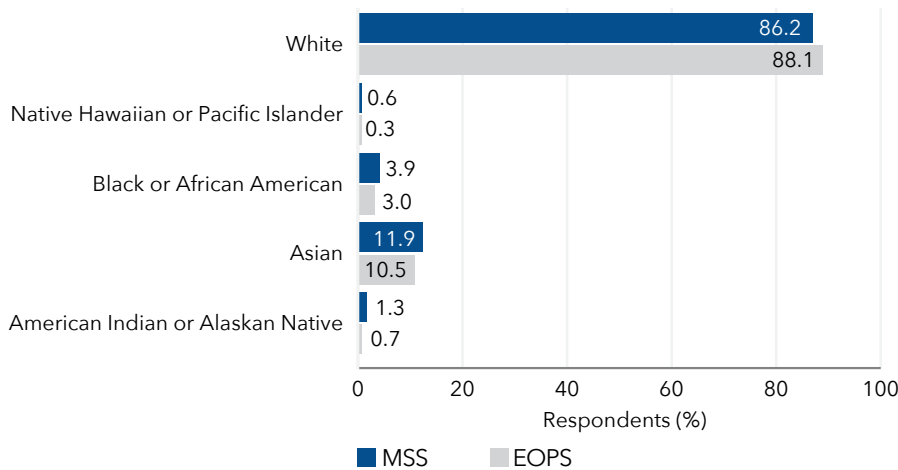
In the “Single race” and “In combination with other race” rows, percentages (%) indicate the proportion of students reporting that race who fell into each category. In the “Subtotal” rows, percentages (%) indicate the proportion of all responding students who reported that race, whether alone or in combination with another race. Subtotals will not sum to the total because students could select multiple race categories.

TABLE 11. RACE

	MSS		EOPS	
	n	%	n	%
American Indian or Alaskan Native				
Single race	11	15.9	6	22.2
In combination with other race	58	84.1	21	77.8
Subtotal	69	1.3	27	0.7
Asian				
Single race	535	84.0	337	85.3
In combination with other race	102	16.0	58	14.7
Subtotal	637	11.9	395	10.5
Black or African American				
Single race	171	82.2	92	82.1
In combination with other race	37	17.8	20	17.9
Subtotal	208	3.9	112	3.0
Native Hawaiian or Pacific Islander				
Single race	15	46.9	5	38.5
In combination with other race	17	53.1	8	61.5
Subtotal	32	0.6	13	0.3
White				
Single race	4,443	96.0	3,210	97.2
In combination with other race	185	4.0	91	2.8
Subtotal	4,628	86.2	3,301	88.1
Total	5,366	-	3,745	-

7.2% of matriculating students (MSS) and 5.2% of graduating students (EOPS) reported multiple races.

FIGURE 2. RACE



Percentages (%) indicate the proportion of all responding students who reported that race, whether alone or in combination with another race.

RACE & ETHNICITY

Table 11 presents students' reports of both their race and ethnicity. In the "Not Hispanic" and "Hispanic" rows, percentages (%) indicate the proportion of students reporting that race who fell into each category. In the "Subtotal" rows, percentages (%) indicate the proportion of all responding students who reported both their race and ethnicity. Subtotals will not sum to the total because students could select more than one race category. "Prefer not to answer" and "Other" responses for either race or ethnicity were excluded from this table.

TABLE 12. RACE AND ETHNICITY

	MSS		EOPS	
	<i>n</i>	%	<i>n</i>	%
American Indian or Alaskan Native				
Not Hispanic, Latino, or Spanish in origin	49	71.0	22	81.5
Hispanic, Latino, or Spanish in origin	20	29.0	5	18.5
Subtotal	69	1.3	27	0.7
Asian				
Not Hispanic, Latino, or Spanish in origin	602	95.7	381	97.9
Hispanic, Latino, or Spanish in origin	27	4.3	8	2.1
Subtotal	629	11.8	389	10.4
Black or African American				
Not Hispanic, Latino, or Spanish in origin	187	90.8	100	90.1
Hispanic, Latino, or Spanish in origin	19	9.2	11	9.9
Subtotal	206	3.9	111	3.0
Native Hawaiian or Pacific Islander				
Not Hispanic, Latino, or Spanish in origin	27	87.1	13	100.0
Hispanic, Latino, or Spanish in origin	4	12.9	0	0.0
Subtotal	31	0.6	13	0.3
White				
Not Hispanic, Latino, or Spanish in origin	4,303	93.3	3,114	94.7
Hispanic, Latino, or Spanish in origin	307	6.7	175	5.3
Subtotal	4,610	86.3	3,289	88.3
Total	5,339	-	3,726	-

UNDERREPRESENTED STATUS

Underrepresented minority (URM) status is defined and reported in two different ways. In Table 13, URMs included those who identified as Hispanic, a single non-White race, or a non-White race in combination with White race. URMs are contrasted against non-Hispanic, single-race White respondents. Table 14 narrows the URM definition to “underrepresented (UR) in medicine,” [defined by the AAMC](#) as “those racial and ethnic populations that are underrepresented in the medical profession relative to their numbers in the general population.” In PAEA’s definition, Asian and Asian/White biracial individuals are not classified as UR in medicine. In both analyses, respondents who did not self-identify their race or ethnicity, or who only selected “Other” race, were excluded.

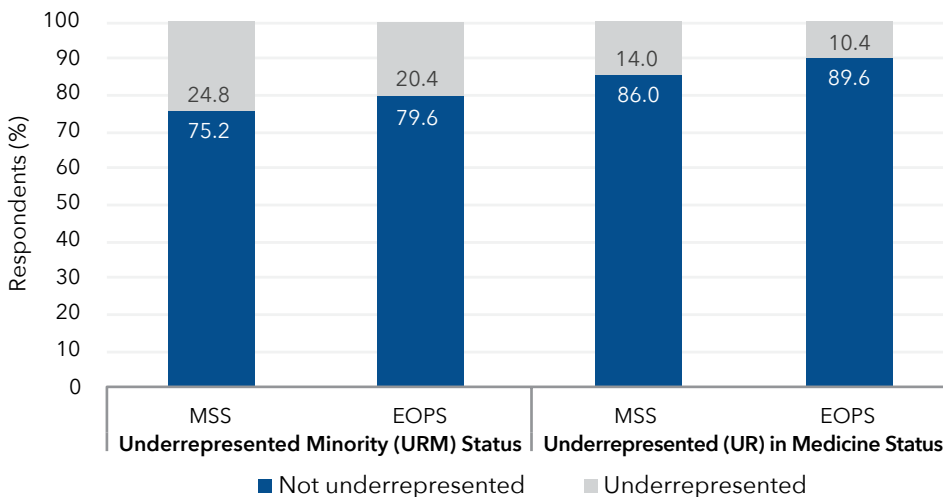
TABLE 13. UNDERREPRESENTED MINORITY (URM) STATUS

	MSS		EOPS	
	n	%	n	%
Non-URM	4,146	75.2	3,031	79.6
URM	1,368	24.8	777	20.4
Total	5,514	100.0	3,808	100.0

TABLE 14. UNDERREPRESENTED (UR) IN MEDICINE STATUS

	MSS		EOPS	
	n	%	n	%
Non-UR in medicine	4,738	86.0	3,407	89.6
UR in medicine	769	14.0	395	10.4
Total	5,507	100.0	3,802	100.0

FIGURE 3. UNDERREPRESENTED STATUS



FAMILY COMPOSITION

TABLE 15. CIVIL STATUS

	MSS		EOPS	
	n	%	n	%
Single (never legally married)	4,045	75.1	2,570	71.6
Married	1,172	21.8	897	25.0
Domestic partnership	86	1.6	53	1.5
Divorced	67	1.2	56	1.6
Separated, but still legally married	13	0.2	7	0.2
Civil union	2	0.0	3	0.1
Widowed	1	0.0	1	0.0
Total	5,386	100.0	3,587	100.0

TABLE 16. NUMBER OF LEGAL DEPENDENTS

	n	Min	Max	M	SD	Mdn
MSS	626	1	8	1.9	1.0	2.0
EOPS	372	1	8	1.9	1.1	2.0

Note: Respondents who did not report having any legal dependents were excluded from this table.

11.2% of matriculating students (MSS) and 9.4% of graduating students (EOPS) reported having legal dependents.

GEOGRAPHIC ORIGINS

TABLE 17. GEOGRAPHIC ORIGINS

	MSS		EOPS	
	n	%	n	%
Northeast Region				
New England Division	368	8.4	307	9.4
Middle Atlantic Division	869	19.7	815	25.0
Subtotal	1,237	28.1	1,122	34.4
Midwest Region				
East North Central Division	900	20.4	692	21.2
West North Central Division	411	9.3	346	10.6
Subtotal	1,311	29.8	1,038	31.8
South Region				
South Atlantic Division	1,040	23.6	652	20.0
East South Central Division	337	7.7	160	4.9
West South Central Division	401	9.1	310	9.5
Subtotal	738	16.8	470	14.4
West Region				
Mountain Division	468	10.6	205	6.3
Pacific Division	651	14.8	425	13.0
Subtotal	1,119	25.4	630	19.3
Total	4,405	100.0	3,260	100.0

Note: Geographic origins were determined based on students' home ZIP codes.

58.5% of matriculating students (MSS) and 47.8% of graduating students (EOPS) reported attending PA school outside of their home state.

TABLE 18. PERCENT OF LIFE SPENT IN VARIOUS ENVIRONMENTS (%)

	MSS					EOPS				
	n	% Reporting	M	SD	Mdn	n	% Reporting	M	SD	Mdn
Inner city	982	17.8	27.1	29.0	15.5	805	21.4	30.7	31.6	20.0
Military base(s)	307	5.6	20.9	18.4	15.0	138	3.7	18.9	18.5	13.0
Native American/American Indian reservation	13	0.2	20.0	33.1	3.0	7	0.2	23.4	35.5	2.5
Outside the U.S.	858	15.5	15.4	21.5	5.0	425	11.3	16.0	22.1	5.0
Rural	2,360	42.7	56.7	35.1	66.0	1,580	41.9	56.3	35.1	65.0
Suburban	4,104	74.3	72.7	30.6	83.0	2,790	74.0	72.9	30.8	85.0
Urban	2,259	40.9	32.5	31.3	20.0	1,578	41.9	31.9	30.8	20.0
Other	12	0.2	25.2	27.6	15.0	2	0.1	5.0	0.0	5.0
Total	5,522	-	-	-	-	3,768	-	-	-	-

Note: “% Reporting” represents the proportion of respondents who selected each environment and may sum to more than 100% because respondents could select multiple environments.

Students were presented with a list of all environments and asked to indicate the percentage of their lives spent in each. Students’ self-reported percentages had to sum to 100%.

EDUCATION

TABLE 19. HIGHEST LEVEL OF EDUCATION PRIOR TO ENROLLING IN PA SCHOOL

	MSS		EOPS	
	n	%	n	%
High school diploma/GED	36	0.6	44	1.1
Some college but no degree	165	3.0	37	1.0
Associate degree	28	0.5	28	0.7
Bachelor of Arts	720	12.9	554	14.2
Bachelor of Science	4,044	72.6	2,809	72.2
Other bachelor’s degree (e.g., business, BFA)	86	1.5	52	1.3
Master’s degree (health- or natural sciences-related, e.g., MPH)	343	6.2	281	7.2
Master’s degree (not health- or natural sciences-related, e.g., MBA)	97	1.7	54	1.4
Academic doctorate (health- or natural sciences-related, e.g., Biology PhD)	6	0.1	9	0.2
Academic doctorate (not health- or natural sciences-related, e.g., EdD)	3	0.1	0	0.0
Professional doctorate (health-related, e.g., MD)	18	0.3	12	0.3
Professional doctorate (not health-related, e.g., JD)	1	0.0	2	0.1
Foreign medical graduate/Unlicensed medical graduate	16	0.3	7	0.2
Other	9	0.2	0	0.0
Total	5,572	100.0	3,889	100.0

TABLE 20. YEARS SINCE COMPLETING MOST RECENT DEGREE

	n	Min	Max	M	SD	P10	P25	P50 (Mdn)			P75	P90
								P50	P75	P90		
Years	5,272	0.0	36.0	3.0	3.2	0.0	1.0	2.0	4.0	6.0		

Note: Years since completing most recent degree was calculated by subtracting respondents’ reports of the year they finished their most recent degree from 2019, the year the survey was administered. This question was asked only of matriculating students (MSS).

SECTION 3. HEALTH & WELL-BEING

WELL-BEING

The following questions were adapted from the [AAMC's Matriculating Student Questionnaire \(MSQ\)](#).

TABLE 21. HEALTH & WELL-BEING

In the past 30 days, rate...	MSS				EOPS			
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Financial concerns	5,610	5.7	2.8	6.0	3,837	6.6	2.8	7.0
Level of fatigue	5,596	4.9	2.4	5.0	3,846	6.0	2.4	6.0
Level of satisfaction with social support from friends and family	5,605	8.8	1.5	9.0	3,848	8.5	1.7	9.0

Note: Financial concerns: 0 = "No concerns" and 10 = "Constant concerns."
 Level of fatigue: 0 = "No fatigue" and 10 = "Constant tiredness."
 Level of satisfaction with social support from friends and family:
 0 = "Not at all satisfied" and 10 = "Highly satisfied."

TABLE 22. OVERALL WELL-BEING

In the past week, rate...	MSS				EOPS			
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Overall quality of life	5,606	8.2	1.5	8.0	3,851	7.8	1.7	8.0
Overall mental well-being	5,604	7.8	1.8	8.0	3,848	7.4	2.0	8.0
Overall physical well-being	5,605	7.7	1.7	8.0	3,849	7.2	2.0	8.0
Overall emotional well-being	5,599	7.6	1.8	8.0	3,846	7.3	2.0	8.0
Level of social activity	5,604	7.2	2.3	8.0	3,849	6.9	2.3	7.0
Spiritual well-being	5,597	7.6	2.0	8.0	3,840	7.2	2.2	8.0

Note: Respondents were asked to report their overall well-being during the past week, where 0 = "As bad as it can be" and 10 = "As good as it can be."

STRESS

The following questions were drawn from the Perceived Stress Scale. Respondents were asked to report how often they experienced certain thoughts and feelings during the past month using a 5-point scale, where 0 = “Never” to 4 = “Very often.”

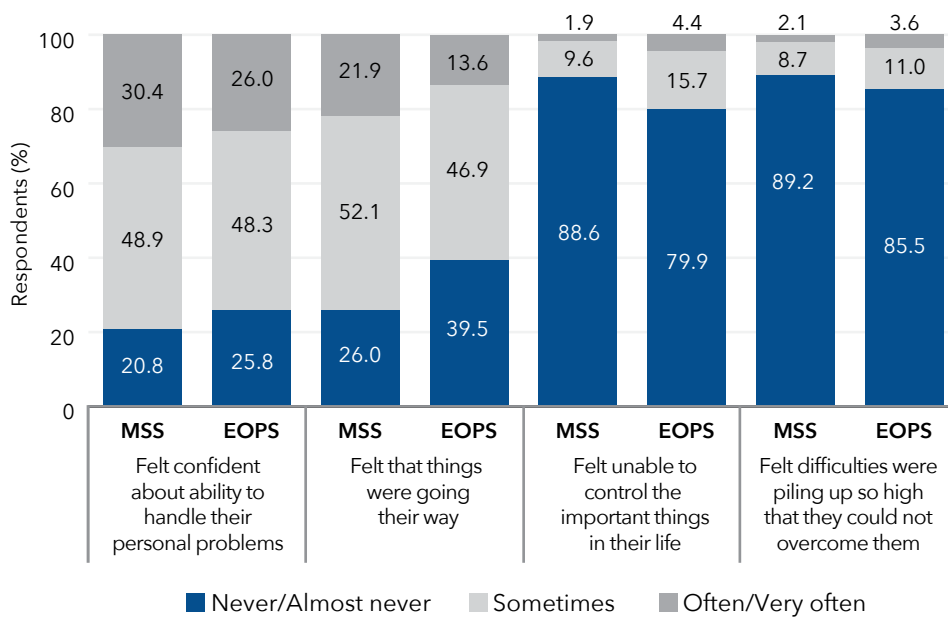
Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *Journal of Health and Social Behavior*. 1983;24:386-396.

TABLE 23. STRESS

	MSS				EOPS			
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Felt confident about ability to handle their personal problems	5,589	3.0	0.8	3.0	3,849	2.9	0.9	3.0
Felt that things were going their way	5,589	2.9	0.8	3.0	3,848	2.7	0.8	3.0
Felt unable to control the important things in their life	5,592	1.4	0.9	1.0	3,852	1.7	1.0	2.0
Felt difficulties were piling up so high that they could not overcome them	5,591	1.3	1.0	1.0	3,849	1.5	1.0	1.0

A perceived stress score is typically obtained by reverse-scoring the positively phrased items then summing all items to create an index ranging from 0 to 16, where 16 represents the maximum stress score. On average, matriculating students (MSS) scored 4.8 (SD = 2.6, Mdn = 5.0) and graduating students (EOPS) scored 5.6 (SD = 2.8, Mdn = 5.0).

FIGURE 4. STRESS



SECTION 4. FUTURE PRACTICE

TABLE 24. IMPORTANCE OF CONSIDERATIONS FOR CAREER PATH AFTER PA SCHOOL

	MSS				EOPS			
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Ability to pay off debt	5,397	3.4	0.8	4.0	3,658	3.4	0.8	4.0
Availability of jobs	5,396	3.5	0.6	4.0	3,654	3.5	0.6	4.0
Flexible working schedule	5,395	3.1	0.7	3.0	3,659	2.9	0.8	3.0
High income potential	5,391	3.1	0.7	3.0	3,660	2.9	0.8	3.0
High level of autonomy	5,390	2.8	0.8	3.0	3,661	2.8	0.8	3.0
Leadership potential	5,383	2.7	0.8	3.0	3,654	2.5	0.8	2.0
Social recognition or status	5,384	2.0	0.9	2.0	3,655	1.9	0.9	2.0
Stable, secure future	5,383	3.5	0.6	4.0	3,658	3.5	0.6	4.0
Supervising physician relationship	5,381	3.3	0.7	3.0	3,657	3.4	0.7	4.0
Work-life balance	5,391	3.5	0.6	4.0	3,656	3.6	0.6	4.0
Working for social change	5,390	2.7	0.9	3.0	3,655	2.5	0.9	2.0

Note: 1 = "Not important"; 2 = "Somewhat important"; 3 = "Very important"; 4 = "Essential."

TABLE 25. EXPECTED SALARY FOR FULL-TIME POSITION AS A PA

	MSS			EOPS		
	<i>n</i>	%	% (Cum.)	<i>n</i>	%	% (Cum.)
\$49,999 or less	3	0.1	0.1	3	0.1	0.1
\$50,000 to \$59,999	13	0.2	0.3	9	0.3	0.4
\$60,000 to \$69,999	46	0.9	1.1	11	0.4	0.9
\$70,000 to \$79,999	230	4.3	5.4	31	1.2	2.0
\$80,000 to \$89,999	1,066	19.7	25.1	408	15.2	17.2
\$90,000 to \$99,999	1,902	35.2	60.2	1,146	42.7	59.9
\$100,000 to \$109,999	1,540	28.5	88.7	790	29.4	89.3
\$110,000 to \$119,999	428	7.9	96.6	186	6.9	96.2
\$120,000 to \$129,999	110	2.0	98.7	57	2.1	98.4
\$130,000 or more	73	1.3	100.0	44	1.6	100.0
Total	5,411	100.0	-	2,685	100.0	-

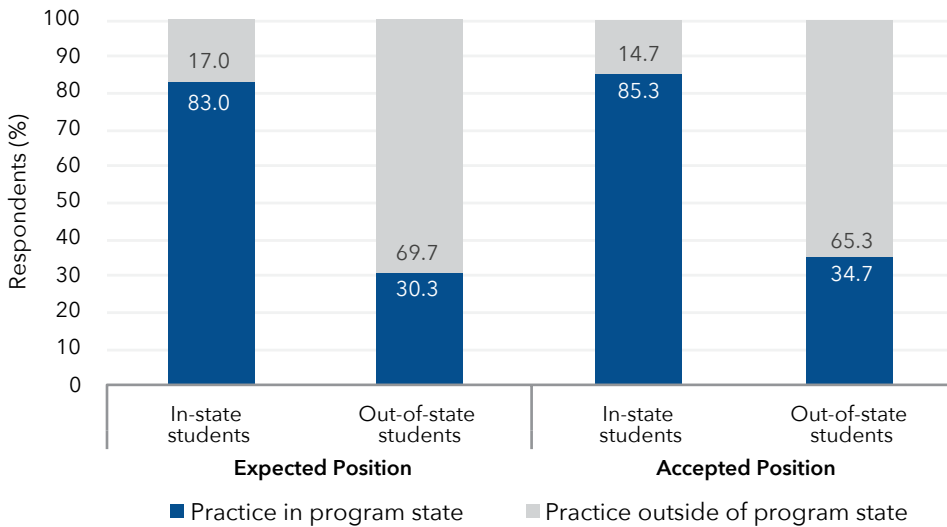
Note: "% (Cum.)" refers to the cumulative percentage of respondents. Graduating students (EOPS) who indicated that they had already accepted a job offer or that they did not plan to apply for a job as a PA were not asked to respond to this question.

TABLE 26. DESIRABILITY OF SPECIALTIES (%)

	MSS					EOPS				
	n	Undesirable	Neither Undesirable nor Desirable	Desirable	Do Not Know Enough	n	Undesirable	Neither Undesirable nor Desirable	Desirable	Do Not Know Enough
Emergency medicine specialties										
Emergency medicine (not urgent care)	5,365	10.9	18.8	66.4	3.9	3,582	15.0	17.3	67.4	0.3
Urgent care	5,334	17.2	29.9	49.4	3.5	3,562	14.9	25.9	58.7	0.5
Inpatient specialties										
Critical care	5,355	10.7	25.7	54.5	9.1	3,563	33.3	23.7	39.9	3.1
Hospitalist	5,308	14.5	32.0	40.8	12.7	3,560	29.7	25.7	42.8	1.7
Internal medicine subspecialties										
Cardiology	5,333	8.6	26.5	57.7	7.2	3,557	27.1	29.4	41.7	1.8
Endocrinology	5,365	17.2	37.4	29.7	15.8	3,576	42.4	33.9	20.1	3.6
Gastroenterology	5,357	23.6	39.7	24.1	12.6	3,574	28.5	37.4	31.8	2.4
Infectious Disease	5,361	16.3	32.1	39.2	12.5	3,577	37.9	33.8	24.8	3.5
Nephrology	5,362	23.2	40.1	19.2	17.6	3,574	51.7	31.5	12.2	4.6
Oncology/Hematology	5,355	16.7	30.3	43.0	10.0	3,575	43.9	29.5	22.1	4.5
Rheumatology	5,336	21.8	40.1	16.5	21.7	3,565	48.4	33.2	14.0	4.4
Other internal medicine subspecialty	1,458	11.9	38.2	13.6	36.4	826	31.8	26.2	16.8	25.2
Primary care specialties										
Family/General medicine	5,352	10.8	23.2	63.8	2.1	3,578	18.5	25.5	55.8	0.1
General internal medicine	5,360	10.5	29.0	54.7	5.7	3,588	23.2	27.8	48.6	0.4
General pediatrics	5,374	20.3	24.7	51.6	3.5	3,583	35.6	26.5	37.4	0.5
Geriatrics	5,357	39.1	36.3	19.9	4.6	3,582	50.2	32.0	16.7	1.1
Obstetrics/Gynecology/Women's health	5,320	22.6	26.8	45.9	4.7	3,557	33.7	26.7	39.3	0.3
Surgical specialties										
Cardiovascular/Cardiothoracic	5,361	11.5	25.1	54.9	8.5	3,580	35.0	27.2	35.3	2.5
General surgery	5,299	11.5	20.8	61.4	6.3	3,543	35.0	21.6	42.9	0.5
Neurosurgery	5,370	19.0	29.1	41.3	10.7	3,578	50.0	27.0	18.5	4.5
Orthopedics	5,380	16.3	22.4	54.8	6.5	3,582	39.3	21.2	38.1	1.4
Plastic surgery	5,359	26.1	27.7	36.8	9.4	3,566	36.7	25.9	32.6	4.8
Urology	5,365	34.3	36.8	15.9	13.0	3,577	50.6	30.0	15.0	4.4
Other surgical subspecialties	1,366	13.1	32.7	20.7	33.5	844	32.0	20.9	23.9	23.2
Other specialties										
Correctional medicine	5,330	31.4	31.6	9.3	27.8	3,553	58.4	23.8	7.0	10.8
Dermatology	5,352	17.6	24.0	52.7	5.6	3,563	33.3	25.9	38.5	2.3
Interventional radiology	4,123	20.9	32.9	23.1	23.1	3,567	38.8	27.1	25.1	9.0
Neurology	5,365	14.4	32.9	42.0	10.7	3,569	45.2	33.5	17.6	3.7
Occupational medicine	5,351	27.0	36.3	16.2	20.5	3,572	55.8	26.4	7.5	10.3
Pain management	5,364	45.3	31.3	13.4	9.9	3,572	70.0	19.9	6.6	3.5
Palliative care	5,356	36.5	32.6	13.9	17.0	3,568	57.8	25.9	11.2	5.1
Pediatric subspecialties	5,371	20.4	24.0	48.0	7.6	3,573	38.5	25.6	33.1	2.8
Psychiatry/Behavioral medicine	5,361	34.8	31.8	26.6	6.8	3,579	47.3	29.4	22.8	0.5
Retail clinic	5,354	45.2	26.5	6.1	22.1	3,570	66.2	18.7	4.1	11.0
Other specialty	1,248	12.0	35.2	14.7	38.1	724	31.1	23.3	18.4	27.2

Respondents were asked to indicate whether each of 35 specialties was desirable to them. This table presents information on how many specialties respondents thought were desirable.

FIGURE 5. PLANS TO PRACTICE IN SAME STATE AS PROGRAM AFTER GRADUATION BY STUDENT RESIDENCY



Graduating students (EOPS) who had not yet accepted a job were asked to select the state where they **expected** to practice upon graduation. Graduating students who had already **accepted** a job offer were asked to select the state where their new job was located. If the state that students selected was the same state where their program was located, they were considered to plan to “practice in program state.” Otherwise, they were considered to plan to “practice outside of program state.” Students’ residency status was based on their self-reported program states and home ZIP codes. Matriculating students (MSS) were not asked to respond to this question.

TABLE 27. DESIRABILITY OF PRACTICE ENVIRONMENTS

	MSS				EOPS			
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Federal/State prison system	5,267	2.2	1.0	2.0	3,551	2.1	1.0	2.0
Inner city	5,362	3.2	1.1	3.0	3,596	3.0	1.1	3.0
Military base(s)	5,284	2.8	1.1	3.0	3,556	2.5	1.0	3.0
Native American/ American Indian Reservation	5,281	2.8	1.0	3.0	3,553	2.4	1.0	3.0
Practice outside the U.S.	5,300	3.1	1.2	3.0	3,552	2.5	1.2	2.0
Rural	5,383	3.4	1.1	4.0	3,593	3.1	1.1	3.0
Suburban	5,401	4.0	0.8	4.0	3,587	3.8	0.8	4.0
Urban	5,377	3.8	0.9	4.0	3,591	3.7	0.9	4.0
Veterans Affairs (VA)	5,287	3.1	1.0	3.0	3,552	2.7	1.0	3.0

Note: 1 = “Very undesirable” to 5 = “Very desirable”

TABLE 28. LIKELIHOOD OF WORKING IN A MEDICALLY UNDERSERVED AREA (MUA) AFTER GRADUATION

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
MSS	5,400	3.8	0.9	4.0
EOPS	3,558	3.5	1.0	3.0

Note: 1 = “Very unlikely” to 5 = “Very likely.”

TABLE 29. INTEREST IN PRACTICE SETTINGS

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Group private practice	3,586	3.1	0.9	3.0
Community health center (CHC)	3,590	2.7	0.9	3.0
Health maintenance organization (HMO)	3,579	2.6	0.9	3.0
Solo private practice	3,582	2.5	1.0	3.0

Note: This question was only asked of graduating students (EOPS). Respondents were asked to indicate how much they would like to practice in each setting, where 1 = “Not at all” to 4 = “Very much.”

TABLE 30. LIKELIHOOD OF PURSUING CAREER AS PA EDUCATOR

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Likelihood	3,599	3.2	1.1	3.0

Note: This question was only asked of graduating students (EOPS). Respondents were asked to indicate how likely they are to pursue a career as a PA educator, where 1 = “Very unlikely” to 5 = “Very likely.”

SECTION 5. FINANCIAL INFORMATION

TABLE 31. HOUSEHOLD INCOME

	Considered Dependent by Parents			Not Considered Dependent by Parents		
	<i>n</i>	%	% (Cum.)	<i>n</i>	%	% (Cum.)
Less than \$25,000	35	2.6	2.6	1,125	36.3	36.3
\$25,000 to \$49,999	88	6.5	9.0	735	23.7	60.0
\$50,000 to \$74,999	160	11.8	20.8	537	17.3	77.3
\$75,000 to \$99,999	210	15.4	36.3	323	10.4	87.7
\$100,000 to \$149,999	363	26.7	62.9	218	7.0	94.7
\$150,000 to \$199,999	200	14.7	77.6	87	2.8	97.5
\$200,000 to \$249,999	131	9.6	87.3	43	1.4	98.9
\$250,000 to \$299,999	70	5.1	92.4	15	0.5	99.4
\$300,000 or higher	103	7.6	100.0	18	0.6	100.0
Total	1,360	100.0	-	3,101	100.0	-

This question was only asked of matriculating students (MSS). Respondents who were considered to be a dependent by their parents reported on the estimated combined (both parents/guardians') gross income for their families. Respondents who were not considered to be a dependent reported on their estimated gross income for themselves and, if applicable, their spouse/partner. "% (Cum.)" refers to the cumulative percentage of respondents.

FINANCING PRE-PA EDUCATION

Respondents were asked whether they had outstanding education loans, excluding interest, from their pre-PA educations (i.e., undergraduate and/or non-PA graduate training) prior to entering their graduate PA programs. 46.4% of 5,326 MSS respondents and 46.9% of 3,556 EOPS respondents said “Yes” they had outstanding pre-PA educational loans. Those who said “Yes” were then asked to report the amount owed on their outstanding loans by providing exact dollar amounts or by selecting the appropriate range. All tables reporting the distribution of ranges include reports of exact dollar amounts when available, which were first recoded to the correct range. Zeroes and clear outliers were removed prior to analysis.

TABLE 32. AMOUNT OF OUTSTANDING PRE-PA EDUCATIONAL LOANS (\$)

	<i>n</i>	Min	Max	<i>M</i>	<i>M</i> (T)	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
MSS	2,386	800	400,000	35,712	30,042	33,230	7,500	15,000	26,000	45,000	75,000
EOPS	1,561	1,000	350,000	42,738	35,351	40,810	9,000	20,000	30,000	50,000	100,000

Note: "M (T)" refers to the trimmed mean, or the mean when the top and bottom 10% of values are removed.

TABLE 33. AMOUNT OF OUTSTANDING PRE-PA EDUCATIONAL LOANS (RANGES)

	MSS			EOPS		
	<i>n</i>	%	% (Cum.)	<i>n</i>	%	% (Cum.)
\$1 to \$24,999	1,068	43.6	43.6	598	36.7	36.7
\$25,000 to \$49,999	806	32.9	76.4	559	34.3	71.0
\$50,000 to \$74,999	307	12.5	88.9	200	12.3	83.3
\$75,000 to \$99,999	127	5.2	94.1	93	5.7	89.0
\$100,000 to \$124,999	90	3.7	97.8	91	5.6	94.5
\$125,000 to \$149,999	18	0.7	98.5	21	1.3	95.8
\$150,000 to \$174,999	17	0.7	99.2	40	2.5	98.3
\$175,000 to \$199,999	3	0.1	99.3	8	0.5	98.8
\$200,000 to \$224,999	8	0.3	99.7	11	0.7	99.4
\$225,000 or more	8	0.3	100.0	9	0.6	100.0
Total	2,452	100.0	-	1,630	100.0	-

Note: "% (Cum.)" refers to the cumulative percentage of respondents.

TABLE 34. SOURCES OF FINANCING FOR PRE-PA EDUCATION COSTS

	<i>n</i>	%
Employer support (e.g., tuition reimbursement)	241	4.5
Family support (excluding support from spouse/partner)	2,699	50.8
Loans	2,633	49.6
Military benefits	254	4.8
Money earned by spouse/partner	199	3.7
Personal income and savings	2,168	40.8
Scholarships or awards from external sources	1,711	32.2
Scholarships or awards from your college/university	2,669	50.3
Work study program	564	10.6
Total	5,310	-

Respondents were asked to indicate each source of funding for their pre-PA education costs. They were then presented with the list of all sources they had previously checked and asked to report the percentage of their funding from each source. Percentages had to sum to 100%.

Note: Only matriculating students (MSS) were asked to respond to this question. Percentages will sum to more than 100% because respondents could select multiple categories.

TABLE 35. PERCENT OF PRE-PA EDUCATION COSTS PAID FOR BY EACH SOURCE (%)

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Employer support (e.g., tuition reimbursement)	184	16.4	20.4	10.0
Family support (excluding support from spouse/partner)	1,800	41.6	28.4	38.5
Loans	1,826	47.2	28.5	50.0
Military benefits	131	54.9	28.3	60.0
Money earned by spouse/partner	153	18.3	18.2	10.0
Personal income and savings	1,693	17.9	19.5	10.0
Scholarships or awards from external sources	1,458	18.4	21.8	10.0
Scholarships or awards from your college/university	2,198	35.3	27.0	30.0
Work study program	418	34.1	26.0	30.0

Note: Only matriculating students (MSS) were asked to respond to this question. Zeroes were removed prior to analysis.

FINANCING GRADUATE PA EDUCATION

Respondents were asked whether they had received grants, scholarships, and/or stipends, excluding loans, for their graduate PA education. 15.4% of 5,413 MSS respondents and 27.6% of 3,548 EOPS respondents said “Yes” they received grants, scholarships, and/or stipends for their graduate PA education. Those who said “Yes” were then asked to report the amount still owed on their outstanding loans by providing exact dollar amounts or by selecting the appropriate range. All tables reporting the distribution of ranges include reports of exact dollar amounts when available, which were first recoded to the correct range. Zeroes and clear outliers were removed prior to analysis.

TABLE 36. AMOUNT OF GRANTS, SCHOLARSHIPS, OR STIPENDS (\$)

	<i>n</i>	Min	Max	<i>M</i>	<i>M</i> (T)	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
MSS	737	100	150,000	17,515	11,237	25,608	1,000	2,400	8,000	20,000	50,000
EOPS	883	100	187,000	15,740	8,252	28,823	1,000	1,900	4,200	14,000	40,000

Note: “*M* (T)” refers to the trimmed mean, or the mean when the top and bottom 10% of values are removed.

TABLE 37. AMOUNT OF GRANTS, SCHOLARSHIPS, OR STIPENDS (RANGES)

	MSS			EOPS		
	<i>n</i>	%	% (Cum.)	<i>n</i>	%	% (Cum.)
\$1 to \$4,999	285	36.1	36.1	492	51.7	51.7
\$5,000 to \$9,999	134	17.0	53.0	142	14.9	66.6
\$10,000 to \$14,999	100	12.7	65.7	87	9.1	75.7
\$15,000 to \$19,999	53	6.7	72.4	25	2.6	78.4
\$20,000 to \$24,999	63	8.0	80.4	37	3.9	82.2
\$25,000 to \$29,999	22	2.8	83.2	29	3.0	85.3
\$30,000 to \$49,999	47	5.9	89.1	52	5.5	90.8
\$50,000 to \$74,999	28	3.5	92.7	27	2.8	93.6
\$75,000 to \$99,999	21	2.7	95.3	22	2.3	95.9
\$100,000 or more	37	4.7	100.0	39	4.1	100.0
Total	790	100.0	-	952	100.0	-

Note: “% (Cum.)” refers to the cumulative percentage of respondents.

TABLE 38. TOOK OUT EDUCATIONAL LOANS TO PAY FOR GRADUATE PA EDUCATION

	MSS		EOPS	
	<i>n</i>	%	<i>n</i>	%
Yes	3,745	74.1	2,981	84.5
No	1,307	25.9	548	15.5
Total	5,052	100.0	3,529	100.0

Respondents were asked whether they had taken out any education loans to finance their graduate PA education. 74.1% of 5,052 MSS respondents and 84.5% of 3,529 EOPS respondents said “Yes” they took out educational loans to pay for their graduate PA education. Those who said “Yes” were then asked to report the amount still owed on their outstanding loans by providing exact dollar amounts or by selecting the appropriate range. All tables reporting the distribution of ranges include reports of exact dollar amounts when available, which were first recoded to the correct range. Zeroes and clear outliers were removed prior to analysis.

TABLE 39. AMOUNT OF EDUCATIONAL LOANS FOR GRADUATE PA EDUCATION (\$)

	<i>n</i>	Min	Max	<i>M</i>	<i>M</i> (<i>T</i>)	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
MSS	3,408	2,000	250,000	66,854	62,876	43,952	15,000	30,000	60,000	98,000	129,300
EOPS	2,796	4,000	300,000	107,821	107,344	46,275	50,000	75,000	105,000	140,000	165,000

Note: "*M*(*T*)" refers to the trimmed mean, or the mean when the top and bottom 10% of values are removed.

TABLE 40. AMOUNT OF EDUCATIONAL LOANS FOR GRADUATE PA EDUCATION (RANGES)

	MSS			EOPS		
	<i>n</i>	%	% (Cum.)	<i>n</i>	%	% (Cum.)
\$1 to \$24,999	810	22.1	22.1	124	4.2	4.2
\$25,000 to \$49,999	587	16.0	38.2	193	6.6	10.8
\$50,000 to \$74,999	737	20.1	58.3	403	13.7	24.4
\$75,000 to \$99,999	605	16.5	74.9	459	15.6	40.0
\$100,000 to \$124,999	532	14.5	89.4	736	25.0	65.0
\$125,000 to \$149,999	160	4.4	93.8	381	12.9	78.0
\$150,000 to \$174,999	165	4.5	98.3	425	14.4	92.4
\$175,000 to \$199,999	31	0.8	99.1	131	4.4	96.8
\$200,000 to \$224,999	25	0.7	99.8	75	2.5	99.4
\$225,000 or more	7	0.2	100.0	18	0.6	100.0
Total	3,659	100.0	-	2,945	100.0	-

Note: "% (Cum.)" refers to the cumulative percentage of respondents.

TABLE 41. SOURCES OF FINANCING FOR GRADUATE PA EDUCATION COSTS

	<i>n</i>	%
Family support (excluding support from spouse/partner)	1,457	27.5
Loans	4,469	84.3
Military benefits	273	5.2
Money earned by spouse/partner	599	11.3
Personal income and savings	1,937	36.5
Scholarships or awards from external sources	615	11.6
Scholarships or awards from your college/university	515	9.7
Work study program	68	1.3
Total	5,300	-

Respondents were asked to indicate each source of funding for their graduate PA education costs. They were then presented with the list of all sources they had checked and asked to report the percentage of funding from each source. Percentages had to sum to 100%.

Note: Only matriculating students (MSS) were asked to respond to this question. Percentages will exceed 100% because respondents could select multiple categories.

TABLE 42. PERCENT OF GRADUATE PA EDUCATION COSTS PAID FOR BY EACH SOURCE (%)

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Family support (excluding support from spouse/partner)	1,255	47.2	36.3	40.0
Loans	4,060	85.1	21.8	95.0
Military benefits	234	72.1	33.7	90.0
Money earned by spouse/partner	502	21.4	24.0	10.0
Personal income and savings	1,640	18.8	22.1	10.0
Scholarships or awards from external sources	415	15.1	22.4	8.0
Scholarships or awards from your college/university	372	14.2	16.4	10.0
Work study program	47	7.1	14.1	5.0

Note: Only matriculating students (MSS) were asked to respond to this question. Zeroes were removed prior to analysis.

TABLE 43. ANTICIPATED TOTAL DEBT FROM ATTENDING PA SCHOOL

	MSS			EOPS		
	<i>n</i>	%	% (Cum.)	<i>n</i>	%	% (Cum.)
\$0	491	9.5	9.5	394	11.4	11.4
\$1 to \$24,999	247	4.8	14.3	102	2.9	14.3
\$25,000 to \$49,999	333	6.5	20.8	191	5.5	19.8
\$50,000 to \$74,999	623	12.1	32.9	290	8.4	28.2
\$75,000 to \$99,999	961	18.6	51.5	447	12.9	41.1
\$100,000 to \$124,999	1,142	22.2	73.7	572	16.5	57.6
\$125,000 to \$149,999	678	13.2	86.8	549	15.8	73.4
\$150,000 to \$174,999	371	7.2	94.0	384	11.1	84.5
\$175,000 to \$199,999	167	3.2	97.3	292	8.4	93.0
\$200,000 or greater	141	2.7	100.0	244	7.0	100.0
Total	5,154	100.0	-	3,465	100.0	-

Note: Total debt excludes personal debt. "% (Cum.)" refers to the cumulative percentage of respondents.

SERVICE INDEBTEDNESS & LOAN FORGIVENESS PROGRAMS

Matriculating students (MSS) reported their service indebtedness for their pre-PA education. Graduating students (EOPS) reported the type of loan forgiveness program they planned to enter following their graduation from PA school. 1.3% of 5,406 MSS reported their service indebtedness for their pre-PA education. 28.7% of 3,545 EOPS respondents said they planned to enter a state or federal loan forgiveness program following their program graduation. Among graduating students (EOPS), percentages may exceed 100% because they could select multiple programs, whereas matriculating students (MSS) could only select one.

TABLE 44. TYPE OF SERVICE INDEBTEDNESS/LOAN FORGIVENESS PROGRAMS

	MSS		EOPS	
	<i>n</i>	%	<i>n</i>	%
Armed Services (e.g., Navy, Army, Air Force)	28	63.6	894	90.0
Department of Education's Public Service Loan Forgiveness (PSLF)	4	9.1	920	92.6
Indian Health Service Corps	0	0.0	878	88.4
National Health Service Corps	1	2.3	912	91.8
State loan forgiveness program	3	6.8	936	94.3
Uniformed Service (Centers for Disease Control, Department of Health and Human Services)	2	4.5	879	88.5
Other	6	13.6	195	19.6
Total	44	100.0	993	-

CONSUMER DEBT

Respondents were asked whether they had any non-education, consumer debt, which included car loans, credit card debt, and mortgages. 38.8% of 4,734 MSS respondents and 43.4% of 3,168 EOPS respondents indicated they had non-educational, consumer debt. Those who said "Yes" were asked to report the amount of their debt by providing exact dollar amounts or by selecting the appropriate range. All tables reporting the distribution of ranges include reports of exact dollar amounts when available, which were first recoded to the correct range. Zeroes and clear outliers were removed prior to analysis.

TABLE 45. AMOUNT OF MATRICULATING STUDENTS' NON-EDUCATIONAL, CONSUMER DEBT (\$)

	<i>n</i>	Min	Max	<i>M</i>	<i>M</i> (T)	<i>SD</i>	P10	P25	P50 (<i>Mdn</i>)	P75	P90
Car loans	1,026	100	90,000	13,150	11,883	10,123	3,000	6,000	10,000	18,000	25,000
Credit card debt	967	100	75,000	5,738	4,416	6,937	700	1,500	3,500	7,000	13,640
Mortgage	445	100	585,000	180,850	174,807	106,607	50,800	120,000	170,000	235,000	324,600
Other consumer debt	85	200	60,000	9,626	7,729	10,664	1,000	3,000	7,000	11,000	20,000
Total consumer debt											
Individuals with mortgage	445	300	591,000	193,289	187,412	110,140	65,200	127,000	180,000	250,000	334,600
Individuals without mortgage	1,290	100	80,000	11,103	9,493	10,337	1,000	3,500	8,000	15,463	24,550
All respondents	1,735	100	591,000	57,831	34,874	97,565	1,500	5,000	12,000	40,000	205,000

Note: A survey platform error resulted in only matriculating students (MSS) being asked this question.

TABLE 46. AMOUNT OF NON-EDUCATIONAL, CONSUMER DEBT (RANGES)

	MSS			EOPS		
	n	%	% (Cum.)	n	%	% (Cum.)
Car loans						
\$1 to \$4,999	157	14.8	14.8	2	0.3	0.3
\$5,000 to \$9,999	293	27.6	42.5	162	22.3	22.6
\$10,000 to \$14,999	202	19.1	61.5	163	22.5	45.1
\$15,000 to \$19,999	154	14.5	76.0	168	23.2	68.3
\$20,000 to \$24,999	124	11.7	87.7	92	12.7	81.0
\$25,000 to \$29,999	47	4.4	92.2	66	9.1	90.1
\$30,000 to \$49,999	69	6.5	98.7	39	5.4	95.4
\$50,000 to \$74,999	13	1.2	99.9	27	3.7	99.2
\$75,000 to \$99,999	1	0.1	100.0	4	0.6	99.7
\$100,000 or more	0	0.0	100.0	2	0.3	100.0
Subtotal	1,060	100.0	-	725	100.0	-
Credit card debt						
\$1 to \$4,999	555	55.6	55.6	5	0.7	0.7
\$5,000 to \$9,999	239	23.9	79.6	402	55.9	56.6
\$10,000 to \$14,999	107	10.7	90.3	144	20.0	76.6
\$15,000 to \$19,999	51	5.1	95.4	75	10.4	87.1
\$20,000 to \$24,999	21	2.1	97.5	35	4.9	91.9
\$25,000 to \$29,999	9	0.9	98.4	18	2.5	94.4
\$30,000 to \$49,999	13	1.3	99.7	22	3.1	97.5
\$50,000 to \$74,999	2	0.2	99.9	17	2.4	99.9
\$75,000 to \$99,999	1	0.1	100.0	0	0.0	99.9
\$100,000 or more	0	0.0	100.0	1	0.1	100.0
Subtotal	998	100.0	-	719	100.0	-
Mortgage						
\$1 to \$4,999	32	6.9	6.9	3	0.9	0.9
\$5,000 to \$9,999	0	0.0	6.9	3	0.9	1.8
\$10,000 to \$14,999	0	0.0	6.9	2	0.6	2.5
\$15,000 to \$19,999	2	0.4	7.3	1	0.3	2.8
\$20,000 to \$24,999	1	0.2	7.5	0	0.0	2.8
\$25,000 to \$29,999	1	0.2	7.7	2	0.6	3.4
\$30,000 to \$49,999	7	1.5	9.2	1	0.3	3.7
\$50,000 to \$74,999	13	2.8	12.0	8	2.5	6.1
\$75,000 to \$99,999	24	5.2	17.2	14	4.3	10.4
\$100,000 to \$124,999	41	8.8	26.0	29	8.9	19.3
\$125,000 to \$149,999	60	12.9	38.9	37	11.3	30.7
\$150,000 to \$174,999	56	12.0	51.0	39	12.0	42.6
\$175,000 to \$199,999	49	10.5	61.5	30	9.2	51.8
\$200,000 to \$224,999	50	10.8	72.3	27	8.3	60.1
\$225,000 to \$249,999	21	4.5	76.8	32	9.8	69.9
\$250,000 to \$274,999	26	5.6	82.4	20	6.1	76.1
\$275,000 to \$299,999	11	2.4	84.7	15	4.6	80.7
\$300,000 to \$349,999	31	6.7	91.4	18	5.5	86.2

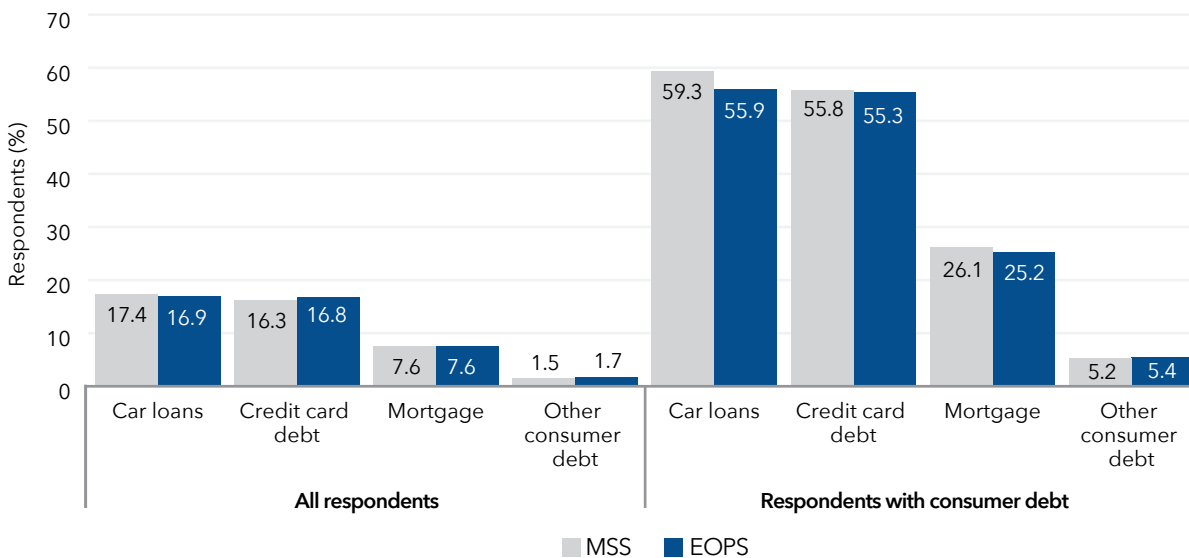
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TABLE 46. AMOUNT OF NON-EDUCATIONAL, CONSUMER DEBT (RANGES), CONTINUED

	MSS			EOPS		
	n	%	% (Cum.)	n	%	% (Cum.)
\$350,000 to \$399,999	20	4.3	95.7	16	4.9	91.1
\$400,000 to \$449,999	6	1.3	97.0	14	4.3	95.4
\$450,000 to \$499,999	3	0.6	97.6	7	2.1	97.5
\$500,000 to \$549,999	10	2.2	99.8	5	1.5	99.1
\$550,000 to \$599,999	1	0.2	100.0	3	0.9	100.0
\$600,000 or higher	0	0.0	100.0	0	0.0	100.0
Subtotal	465	100.0	-	326	100.0	-
Other consumer debt						
\$1 to \$4,999	32	34.4	34.4	2	2.9	2.9
\$5,000 to \$9,999	26	28.0	62.4	20	29.0	31.9
\$10,000 to \$14,999	13	14.0	76.3	11	15.9	47.8
\$15,000 to \$19,999	6	6.5	82.8	6	8.7	56.5
\$20,000 to \$24,999	7	7.5	90.3	12	17.4	73.9
\$25,000 to \$29,999	2	2.2	92.5	4	5.8	79.7
\$30,000 to \$49,999	3	3.2	95.7	3	4.3	84.1
\$50,000 to \$74,999	4	4.3	100.0	4	5.8	89.9
\$75,000 to \$99,999	0	0.0	100.0	6	8.7	98.6
\$100,000 or more	0	0.0	100.0	1	1.4	100.0
Subtotal	93	100.0	-	69	100.0	-

Note: Zeroes were excluded from this analysis. "% (Cum.)" refers to the cumulative percentage of respondents.

FIGURE 6. TYPES OF NON-EDUCATIONAL, CONSUMER DEBT HELD



Note: In the "All respondents" section, percentages represent the proportion of all respondents who reported each type of debt. In the "Respondents with consumer debt" section, percentages represent the proportion of respondents who had each type of debt, out of only those respondents who reported having any consumer debt.

6. MSS: MILITARY BACKGROUND

5.2% of respondents reported that they had served or were currently serving in the military. On average, military respondents had 6.9 years of active-duty service ($SD = 4.3$, $Mdn = 6.0$).

TABLE 47. CURRENT OR PAST MILITARY SERVICE

	<i>n</i>	%
Veteran/Commitment complete	112	39.3
Regular military - active	97	34.0
Reserve military - active	53	18.6
Reserve military - inactive	21	7.4
Regular military - inactive	2	0.7
Total	285	100.0

TABLE 48. MILITARY BRANCH SERVED IN

	<i>n</i>	%
Army	174	60.6
Air Force	51	17.8
Navy	40	13.9
Marine Corps	16	5.6
Coast Guard	4	1.4
Other	2	0.7
Total	287	100.0

Note: If respondents had served in multiple branches, they were asked to select the one in which they had served the longest.

TABLE 49. MILITARY HEALTH CARE EXPERIENCE

	<i>n</i>	%
Combat lifesaving	136	68.0
Emergency medical technician (EMT)	110	55.0
General duty medic or corpsman	86	43.0
Health care administration	42	21.0
Medical logistics	35	17.5
Patient administration	28	14.0
Nursing	24	12.0
Mental health	18	9.0
Nutrition care	18	9.0
Operating room (e.g., surgical tech)	14	7.0
Pharmacy	14	7.0
Dental	10	5.0
Radiology	6	3.0
Respiratory	5	2.5
Other		
Special forces*	5	2.5
All other military health care experiences	17	8.5
Total	200	-

70.7% of military respondents reported that they had received health care-related training or experience in the military.

*Note: Percentages may sum to more than 100% because respondents could select multiple types of health care experience. * indicates that the military health care experience was recoded from respondents' write-in "Other" responses.*

7. MSS: EDUCATION BACKGROUND

TABLE 50. PARENTS' HIGHEST LEVEL OF EDUCATION

	n	%
Grade school (did not enter high school)	87	1.6
Some high school	117	2.1
High school diploma/GED	640	11.5
Some college	546	9.8
Associate degree	489	8.8
Bachelor's degree	1,736	31.1
Master's degree	142	2.5
Academic doctorate (e.g., PhD, EdD)	1,333	23.9
Professional doctorate (e.g., MD, DO, PharmD, JD)	480	8.6
Total	5,576	100.0

98.5% of respondents reported the highest level of education attained by their parents.

TABLE 51. COMPLETED A NON-PA DEGREE

	n	%
Have completed a non-PA degree	5,272	94.8
Moved from undergraduate, pre-professional phase directly to the graduate, professional phase of the program without completing an undergraduate degree.	196	3.5
Have not yet completed a non-PA degree	91	1.6
Total	5,559	100.0

Note: Respondents were asked whether they had completed a non-PA degree prior to their matriculation.

TABLE 52. YEARS SINCE MOST RECENT DEGREE

	n	Min	Max	M	SD	P10	P25	P50 (Mdn)	P75	P90
Years	5,272	0.0	36.0	3.0	3.2	0.0	1.0	2.0	4.0	6.0

Note: Respondents who indicated that they had completed a non-PA degree were asked what year that occurred. That year was subtracted from 2019, the year data were collected, and zeroes were not removed.

TABLE 53. BACHELOR'S DEGREE: PRIMARY MAJOR

	n	%
Biology (includes Anatomy, Physiology, Microbiology, and Zoology)	2,126	41.5
Health Sciences	758	14.8
Exercise Science/Athletic Training	449	8.8
Psychology	292	5.7
Kinesiology	244	4.8
Chemistry (includes Biochemistry)	208	4.1
Nutrition/Dietetics	166	3.2
Neuroscience	149	2.9
Public Health	133	2.6
Premedical Studies	131	2.6
Social Sciences (e.g., Social Work, Anthropology)	119	2.3
Business	75	1.5
Humanities (e.g., History, Philosophy)	65	1.3
Medical Laboratory Sciences	42	0.8
Engineering	39	0.8
Fine Arts (e.g., Performing or Visual Arts)	30	0.6
Foreign Language (e.g., Spanish, French)	26	0.5
General Studies	25	0.5
Communications (includes Advertising and Journalism)	22	0.4
Nursing	21	0.4
Education	17	0.3
Health Care Administration	15	0.3
Mathematics	14	0.3
Earth Sciences	7	0.1
Audiology/Speech-Language Pathology	6	0.1
Physics	5	0.1
Other	5	0.1
Total	5,120	100.0

Note: Respondents were presented with a list of 21 majors; only majors with 5 or more respondents are included in this table.

TABLE 54. BACHELOR'S DEGREE: SECONDARY MAJOR

	n	%
Psychology	69	19.3
Foreign Language (e.g., Spanish, French)	58	16.2
Biology (includes Anatomy, Physiology, Microbiology, and Zoology)	51	14.2
Social Sciences (e.g., Social Work, Anthropology)	35	9.8
Chemistry (includes Biochemistry)	31	8.7
Humanities (e.g., History, Philosophy)	31	8.7
Health Sciences	17	4.7
Public Health	13	3.6
Exercise Science/Athletic Training	12	3.4
Neuroscience	10	2.8
Fine Arts (e.g., Performing or Visual Arts)	9	2.5
Premedical Studies	9	2.5
Nutrition/Dietetics	7	2.0
Business	6	1.7
Total	358	100.0

7.0% of respondents reported that they had double-majored as undergraduates.

Note: Respondents were presented with a list of 21 majors; only majors with 5 or more respondents are included in this table.

TABLE 55. UNDERGRADUATE GPA

	<i>n</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>P10</i>	<i>P25</i>	<i>P50 (Mdn)</i>	<i>P75</i>	<i>P90</i>
Undergraduate GPA	5,225	2.00	4.00	3.60	0.27	3.22	3.43	3.63	3.80	3.90

Respondents were asked to report their undergraduate overall GPA at the time of their graduation, excluding any college-level work done after graduation.

TABLE 56. ADDITIONAL CREDITS TO SATISFY PREREQUISITE REQUIREMENTS

	<i>n</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>	<i>P10</i>	<i>P25</i>	<i>P50 (Mdn)</i>	<i>P75</i>	<i>P90</i>
Additional credits	3,767	0.5	55.0	14.5	12.5	3.0	6.0	11.0	20.0	32.0

70.2% of respondents reported taking additional credits to satisfy prerequisite requirements for the PA programs where they had applied.

8. MSS: EMPLOYMENT HISTORY

TABLE 57. PRIOR HEALTH CARE EMPLOYMENT

	n	%
Nursing assistant	1,507	30.4
Medical assistant	1,312	26.5
Scribe	1,155	23.3
EMT/Paramedic	955	19.3
Emergency room technician	441	8.9
Home health aide	429	8.7
Phlebotomist	362	7.3
Clinical research coordinator/assistant	359	7.3
Physical therapist/Physical therapy assistant	282	5.7
Pharmacy technician	202	4.1
Athletic trainer	188	3.8
Medical technician	163	3.3
Medical reception/records	146	2.9
Ophthalmic technician/assistant	143	2.9
Medical lab technician	116	2.3
Surgical technician/assistant	116	2.3
Health care administrator	110	2.2
Medic or medical corpsman	85	1.7
Radiology technician	81	1.6
Dental assistant/hygienist	68	1.4
Total	4,950	-

90.5% of respondents reported having been employed in a health care field. These respondents were then asked to indicate what other health care field they had been employed in prior to PA school. The top 20 most reported categories of prior employment are reported here. Respondents were asked to exclude internships or other experiences related to completion of a degree.

Note: The top 20 most reported categories of prior health care employment are reported here. "Other" categories were excluded. Percentages may sum to more than 100% because respondents could select multiple categories.

TABLE 58. LENGTH OF HEALTH CARE EMPLOYMENT

	n	M	M (T)	SD	P10	P25	P50 (Mdn)	P75	P90
Direct patient contact (e.g., nurse or nursing aide)									
Weeks	4,452	132.3	108.3	126.0	35.0	52.0	100.0	156.0	260.0
Hours per week	4,485	33.4	34.1	11.8	15.0	25.0	37.0	40.0	41.0
Subtotal (hours)	4,411	4,631.0	3,564.7	5,371.6	800.0	1,600.0	3,120.0	5,400.0	10,000.0
Health care setting (indirect patient contact; e.g., medical secretary)									
Weeks	2,068	88.2	69.6	102.4	10.0	26.0	52.0	104.0	200.0
Hours per week	2,069	25.1	25.6	14.0	5.0	10.0	25.0	40.0	40.0
Subtotal (hours)	2,026	2,423.9	1,740.3	3,493.5	100.0	400.0	1,255.0	3,195.0	6,000.0

Note: Zeroes and reports of more than 80 hours worked per week were excluded prior to analysis. "M (T)" refers to the trimmed mean, or the mean when the top and bottom 10% of values are removed.

Respondents were asked to only report paid health care experiences. "Subtotal" hours were determined by multiplying hours worked per week by the number of reported weeks.

TABLE 59. COMMUNITY SERVICE (WEEKS)

	<i>n</i>	<i>M</i>	<i>M (T)</i>	<i>SD</i>	<i>P10</i>	<i>P25</i>	<i>P50 (Mdn)</i>	<i>P75</i>	<i>P90</i>
International medical									
Paid experiences	34	90.9	72.1	118.3	1.3	4.5	45.0	113.8	296.4
Volunteer experiences	786	7.1	2.6	21.4	1.0	1.0	2.0	4.0	12.0
Service learning experiences	129	15.0	6.9	37.9	1.0	2.0	4.0	12.0	32.0
Subtotal	844	12.6	3.5	46.0	1.0	1.0	2.0	5.0	21.0
International non-medical									
Paid experiences	16	27.4	25.4	29.5	2.0	2.8	8.5	52.0	66.0
Volunteer experiences	446	18.1	6.0	53.0	1.0	2.0	3.0	8.0	60.0
Service learning experiences	79	20.6	7.2	86.7	1.0	2.0	5.0	12.0	24.0
Subtotal	504	20.1	6.8	74.6	1.0	2.0	3.0	10.0	52.7
U.S. medical									
Paid experiences	274	110.3	85.0	130.7	12.0	40.0	75.0	130.0	208.0
Volunteer experiences	1,170	48.5	32.9	75.9	3.0	10.0	24.0	52.0	106.2
Service learning experiences	252	34.0	19.8	63.9	2.0	6.0	13.0	30.0	100.0
Subtotal	1,335	71.6	48.2	111.6	4.0	10.0	36.0	88.0	163.6
U.S. non-medical									
Paid experiences	110	90.6	65.6	120.0	4.9	15.0	51.0	104.0	212.2
Volunteer experiences	1,301	48.0	29.9	82.0	2.0	5.0	20.0	52.0	120.0
Service learning experiences	301	31.7	15.4	67.2	2.0	4.0	10.0	24.0	80.0
Subtotal	1,435	57.1	36.2	96.1	2.0	6.0	20.0	60.0	150.0
All community service experiences									
Paid experiences	392	111.6	82.5	140.5	8.0	30.0	62.0	141.0	248.2
Volunteer experiences	2,531	52.5	32.7	90.8	2.0	5.0	20.0	60.0	128.0
Service learning experiences	676	32.1	14.9	76.1	2.0	4.0	10.0	24.0	80.0
Total	2,673	74.2	47.1	124.1	2.0	7.0	30.0	96.0	196.9

Note: Zeroes were excluded prior to analysis. "M (T)" refers to the trimmed mean, or the mean when the top and bottom 10% of values are removed.

55.2% of respondents reported having participated in paid or volunteer community service work, such as Peace Corps, AmeriCorps, service learning activities, and mission work.

9. MSS: APPLICATION TO PA SCHOOL

TABLE 60. WHEN STUDENT DECIDED TO BECOME A PA

	n	%
Before high school	77	1.4
During high school/Before college	997	18.0
During the first two years of college	1,545	27.9
After receiving an associate degree	133	2.4
During junior year of college	825	14.9
During senior year of college	415	7.5
After receiving a bachelor's degree	1,191	21.5
During advanced/graduate training or degree (non-PA)	122	2.2
After completing an advanced/graduate training or degree (non-PA)	227	4.1
Total	5,539	100.0

TABLE 61. REASONS TO BECOME A PA

	n	%
Desire to care for patients	4,176	76.0
Work-life balance	4,029	73.4
Mobility within PA specialties	3,945	71.8
Financial stability	3,341	60.8
Excitement of health care	3,082	56.1
Length of education	2,965	54.0
A "calling" to the health care profession	2,777	50.6
Desire to care for underserved populations	2,302	41.9
Want to expand scope of practice as a health professional (previously served in a more limited provider role)	1,724	31.4
Desire to influence the direction of health care	1,568	28.6
To relieve pain and suffering	1,486	27.1
Cost of education/Affordability	1,305	23.8
Other health professions were less appealing	1,005	18.3
Mobility (geographically)	964	17.6
Level of education	807	14.7
Prestige	630	11.5
Parental/Peer pressure	211	3.8
Other	55	1.0
Total	5,492	-

Respondents were asked to select all the reasons they chose to pursue a PA career, from a list of 16 choices.

Note: Percentages may sum to more than 100% because respondents could select multiple reasons.

TABLE 62. INFLUENCES ON DECISION TO BECOME A PA

	n	%
Previous health care experience	3,725	68.3
Other PA acquaintance	2,095	38.4
PA who treated me/my family	1,940	35.6
Family member	1,765	32.4
Friend	1,430	26.2
Physician who treated me/my family	992	18.2
Other health professional	931	17.1
PA program faculty/staff	928	17.0
Other physician acquaintance	876	16.1
PA program literature	806	14.8
Career counselor/teacher (high school or college)	804	14.7
College/Campus admissions department	577	10.6
AAPA website/literature	423	7.8
Social media (e.g., YouTube, Facebook)	345	6.3
PAEA website/literature	330	6.1
Public media (e.g., television, newspaper, radio)	314	5.8
Previous military experience	220	4.0
Project Access	60	1.1
Other		
Pre-PA student organization*	14	0.3
A calling to the profession*	6	0.1
All others	51	0.9
Total	5,453	-

Respondents were asked to select all the influences that made them decide to pursue a PA career, from a list of 18 choices.

Note: Percentages may sum to more than 100% because respondents could select multiple reasons. * indicates that these categories were recoded from students' write-in responses to an "Other" influence.

CONSIDERATION OF CAREER IN ANOTHER HEALTH PROFESSION

42.4% of respondents indicated that they applied to or seriously considered a career in another health profession. Students who indicated that they had applied to or seriously considered a career in another health profession were asked to report why they had chosen to pursue a career as a PA instead.

TABLE 63. REASONS TO PURSUE CAREER AS PA INSTEAD OF OTHER HEALTH PROFESSIONAL

	n	%
PA profession was a better fit for my personality	1,855	79.1
Length of PA education was shorter	1,215	51.8
PA scope of practice	1,154	49.2
Cost of attending PA school was lower	634	27.0
Wanted supervising physician relationship	478	20.4
Was not accepted by another health professions program	121	5.2
Other		
Work-life balance*	53	2.3
Ability to change specialties*	51	2.2
All others	180	7.7
Total	2,344	-

Note: Percentages may sum to more than 100% because respondents could select multiple reasons. * indicates that these categories were recoded from students' write-in responses to an "Other" reason to pursue a career as a PA instead of as another health professional.

PA PROGRAM APPLICATIONS

92.0% of respondents indicated that they completed an application in CASPA. 65.3% of respondents indicated that they had previously applied to PA school. Respondents who indicated that they had previously applied to PA school were asked to report the number of years they had applied, including the current year. On average, applicants had applied for 2.2 years ($Mdn = 2.0$, $SD = 1.1$).

TABLE 64. PA PROGRAM APPLICATIONS, INTERVIEWS, AND ACCEPTANCES

	<i>n</i>	<i>M</i>	<i>M (T)</i>	<i>Mdn</i>	<i>SD</i>
Number of PA programs applied to	5,429	7.7	7.1	7.0	5.6
Number of PA programs where granted an interview	5,304	3.2	2.9	3.0	2.4
Number of PA program acceptances	5,417	1.7	1.4	1.0	1.3

Note: Zeroes and respondents who reported more interviews or acceptances than submissions were excluded prior to analysis.

TABLE 65. INTERVIEW AND ACCEPTANCE RATES (%)

	<i>n</i>	<i>M</i>	<i>M (T)</i>	<i>Mdn</i>	<i>SD</i>
Interview rate	5,301	52.9	52.2	50.0	29.5
Acceptance rate	5,301	35.2	30.7	25.0	30.0

Interview rates were calculated by dividing student reports of the number of programs granting interviews by the number of programs applied to. *Acceptance rates* were calculated by dividing student reports of the number of programs at which they were accepted by the number of programs applied to. Zeroes and respondents who reported more interviews or acceptances than submissions were excluded.

TABLE 66. COST OF APPLYING TO PA SCHOOL

	<i>n</i>	<i>%</i>	<i>% (Cum.)</i>
No cost (\$0)	267	4.8	4.8
\$1 to \$499	1,146	20.7	25.5
\$500 to \$999	1,334	24.1	49.7
\$1,000 to \$1,499	1,052	19.0	68.7
\$1,500 to \$1,999	674	12.2	80.9
\$2,000 to \$2,499	443	8.0	88.9
\$2,500 to \$2,999	183	3.3	92.2
\$3,000 to \$3,499	185	3.3	95.5
\$3,500 to \$4,999	105	1.9	97.4
\$5,000 to \$5,499	67	1.2	98.6
\$5,500 to \$5,999	16	0.3	98.9
\$6,000 to \$6,499	19	0.3	99.3
\$6,500 to \$6,999	7	0.1	99.4
\$7,000 or more	33	0.6	100.0
Total	5,531	100.0	-

Students were asked to estimate how much they had spent applying to PA school, including fees and cost of interviews, for the current year. Students were asked to exclude costs from campus visits that were not associated with an interview, other non-mandatory expenses (e.g., interview clothes), prerequisite coursework, or the cost of applying to PA school in previous years.

Note: "% (Cum.)" refers to the cumulative percentage of respondents.

TABLE 67. IMPORTANCE OF PROGRAM ATTRIBUTES IN APPLYING TO PROGRAMS

	<i>n</i>	% Considered	<i>M</i>	<i>SD</i>	<i>Mdn</i>
High PANCE pass rates	5,497	97.7	4.6	0.7	5.0
Good program reputation	5,502	98.8	4.4	0.7	5.0
Many opportunities to gain clinical experience (e.g., rotations)	5,495	98.0	4.4	0.7	5.0
Good faculty reputation	5,491	96.5	4.3	0.7	4.0
Quality program facilities (e.g., labs and equipment)	5,495	98.0	4.3	0.8	4.0
Desirable program location	5,496	96.9	4.1	0.9	4.0
Program mission consistent with personal values	5,499	95.5	4.1	0.9	4.0
Rigorous clinical curriculum	5,501	92.5	3.8	0.8	4.0
Small class size/student-faculty ratio	5,502	93.1	3.8	0.9	4.0
Affiliated with a hospital or clinic system	5,496	87.3	3.7	1.0	4.0
High likelihood of admission	5,498	87.7	3.5	0.9	3.0
Low tuition	5,488	89.0	3.4	0.9	3.0
Program offers scholarships and financial aid	5,494	82.3	3.4	1.0	3.0
Diverse faculty	5,492	78.4	3.4	0.9	3.0
Diverse student body	5,494	80.0	3.4	0.9	3.0
Dual degree offered (PA plus MPH)	5,491	45.1	2.6	0.9	2.0

Note: "n" refers to all students who responded to each item. "% Considered" indicates the proportion of respondents who considered each attribute when deciding which PA program to apply to. Those who did consider a factor rated its importance on a 4-point scale, where 1 = "Not important" and 4 = "Essential." Items are ordered by their average importance.

TABLE 68. EXPERIENCES INFLUENCING CHOICE TO ATTEND CURRENT PA PROGRAM (%)

	<i>n</i>	Made Student NOT Want to Attend	No Influence	Made Student WANT to Attend	Did Not Experience
Conversations with program faculty and staff	5,501	1.6	6.7	85.9	5.9
Program interview experience	5,502	2.1	7.5	84.2	6.2
Conversations with current students	5,501	1.5	9.4	80.5	8.6
Conversations with program alumni	5,498	1.2	13.7	56.4	28.6
Program admissions outreach/recruitment efforts	5,503	1.5	27.5	46.6	24.4

10. EOPS: EXPERIENCES IN PA SCHOOL

The following questions were drawn from the Psychological Sense of School Membership Scale. Respondents were asked to rate each statement on a 5-point scale, where 1 = “Not at all true” to 5 = “Completely true.”

Goodenow C. The Psychological Sense of School Membership among adolescents: scale development and education correlates. *Psychology in the Schools*. 1993;30(1):79-90. doi: 10.1002/1520-6807(199301)30:1<79::AID-PITS2310300113>3.0.CO;2-X

A composite Psychological Sense of School Membership Score was obtained by reverse-scoring the negatively phrased questions, then averaging all items. On average, students scored 4.1 (*SD* = 0.9, *Mdn* = 4.2).

TABLE 69. PSYCHOLOGICAL SENSE OF SCHOOL MEMBERSHIP

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
I am treated with as much respect as other students in my PA program	3,821	4.4	1.0	5.0
I can really be myself in my PA program	3,819	4.1	1.1	4.0
Sometimes I feel as if I don't belong in my PA program	3,882	2.0	1.2	1.0
I wish I were in a different PA program	3,822	2.0	1.2	1.0

Note: 1 = “Not at all true” to 5 = “Completely true.”

SATISFACTION WITH PROGRAM

TABLE 70. OVERALL SATISFACTION WITH PROGRAM AND CAREER CHOICE

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
I would recommend the PA career to others.	3,824	4.6	0.7	5.0
If I could revisit my career choice again, I would attend school to become a PA.	3,821	4.4	0.9	5.0
Overall, I am satisfied with the quality of my PA education.	3,825	4.2	0.9	4.0
If I could revisit my program choice again, I would attend the same program.	3,822	3.9	1.1	4.0

Note: 1 = “Strongly disagree” to 5 = “Strongly agree.”

TABLE 71. SATISFACTION WITH PROGRAM ATTRIBUTES

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
PANCE pass rates	3,528	4.5	0.7	5.0
Class size/Student-faculty ratio	3,814	4.3	0.9	4.0
Program mission consistent with personal values	3,785	4.2	0.9	4.0
Rigor of clinical curriculum	3,814	4.1	0.8	4.0
Program reputation	3,740	4.1	1.0	4.0
Opportunities to gain clinical experience (e.g., rotations)	3,820	4.0	1.0	4.0
Faculty reputation	3,786	4.0	1.0	4.0
Quality of program facilities (e.g., labs and equipment)	3,811	3.9	1.1	4.0
Diversity of student body	3,771	3.7	1.1	4.0
Diversity of faculty	3,750	3.7	1.0	4.0
Affiliation with a hospital or clinic system	3,475	3.7	1.1	4.0
Dual degree offered (PA plus MPH)	1,638	3.4	1.1	3.0
Scholarships and financial aid	3,482	3.0	1.1	3.0
Tuition	3,796	2.9	1.2	3.0

Note: 1 = “Very dissatisfied” to 5 = “Very satisfied.” “N/A” responses were excluded prior to analysis.

TABLE 72. UTILIZATION OF INSTITUTIONAL STUDENT SUPPORT SERVICES (%)

	<i>n</i>	Accessed	Not Accessed	Not Offered
Admissions office	3,586	91.7	7.9	0.3
Business office	3,581	74.5	21.8	3.6
Campus security	3,584	86.2	13.4	0.4
Counseling/Mental health center	3,577	63.8	34.6	1.6
Faculty advising	3,580	96.8	3.0	0.2
Financial aid	3,575	91.1	8.6	0.4
Health center	3,571	78.3	15.9	5.8
Institutional computing (technology)/help desk	3,578	86.2	13.2	0.5
Library/Learning resource center	3,581	94.1	5.4	0.5
Registrar	3,574	86.5	13.1	0.4
Student activities	3,572	77.8	20.9	1.2
Student success center/ADA office	3,575	62.2	34.5	3.2

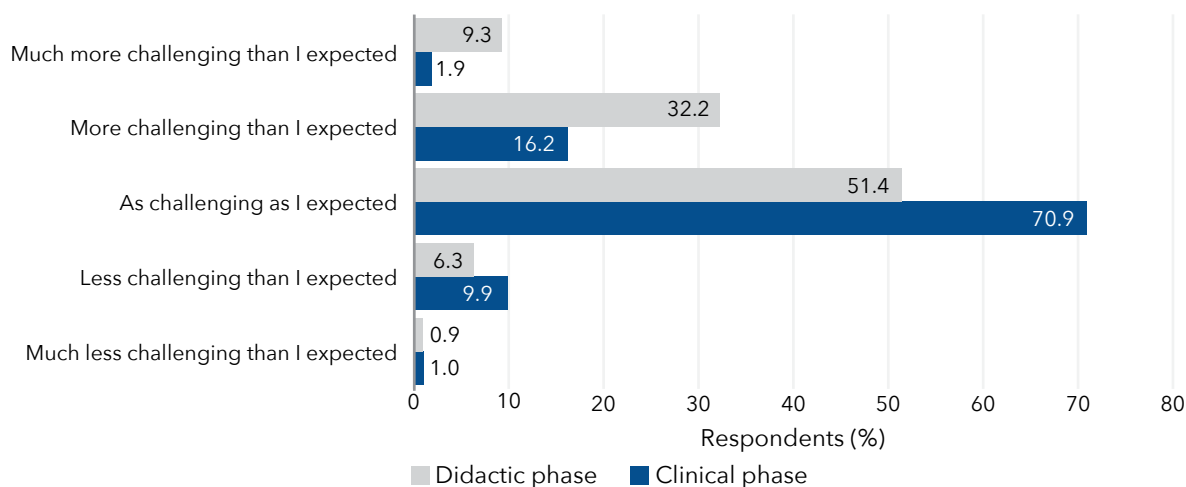
Note: "Accessed" represents the proportion of respondents who had utilized a service and rated their satisfaction with it. "Not Accessed" represents the proportion of respondents who reported that their school offered that service but that they did not utilize it. "Not Offered" represents the proportion of respondents who reported that their school did not offer that service.

TABLE 73. SATISFACTION WITH INSTITUTIONAL STUDENT SUPPORT SERVICES

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Admissions office	3,290	4.1	0.8	4.0
Business office	2,669	3.9	0.9	4.0
Campus security	3,089	4.1	0.8	4.0
Counseling/Mental health center	2,283	3.8	1.0	4.0
Faculty advising	3,467	4.0	1.0	4.0
Financial aid	3,256	3.7	1.1	4.0
Health center	2,797	3.9	1.0	4.0
Institutional computing (technology)/help desk	3,085	4.0	0.9	4.0
Library/Learning resource center	3,370	4.1	0.9	4.0
Registrar	3,091	3.9	0.8	4.0
Student activities	2,780	3.9	0.9	4.0
Student success center/ADA office	2,225	3.9	0.8	4.0

Note: Respondents who indicated that their school did not offer a service, or that their school offered a service but they did not utilize it, were excluded from this analysis. 1 = "Very dissatisfied" to 5 = "Very satisfied."

FIGURE 7. HOW CHALLENGING WAS PA EDUCATION



EXPERIENCES IN THE DIDACTIC PHASE

The following section presents data specific to students' experiences in, and satisfaction with, the didactic (classroom) phase of their program.

TABLE 74. HOW WELL DIDACTIC COURSES PREPARED STUDENTS FOR CLINICAL ROTATIONS

	<i>n</i>	% Reporting	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Anatomy	3,758	99.4	2.9	0.9	3.0
Biochemistry	1,623	43.2	2.5	0.9	2.0
Biostatistics/Epidemiology	2,381	63.5	2.5	0.9	2.0
Clinical experiences during the didactic portion of the curriculum	3,467	91.9	2.9	0.9	3.0
Clinical medicine*	3,754	99.3	3.3	0.7	3.0
Clinical/Technical skills	3,761	99.7	3.0	0.8	3.0
Ethics/Bioethics	3,679	97.6	2.8	0.9	3.0
Genetics	3,318	88.0	2.9	0.8	3.0
Interpretation of literature/Evidence-based medicine/Research	3,765	99.9	3.4	0.7	4.0
Lab interpretation/diagnosis	2,422	64.2	2.4	0.9	2.0
Microbiology	3,765	99.8	3.5	0.6	4.0
Neuroscience	3,723	98.6	2.9	0.9	3.0
Patient communication skills/History-taking	2,437	64.6	2.7	0.9	3.0
Pathology/Pathophysiology	2,396	63.6	2.6	0.9	3.0
Pharmacology	3,645	96.7	3.1	0.8	3.0
Physical examinations/Patient assessment	3,771	100.0	3.0	0.9	3.0
Physiology	3,609	95.7	3.0	0.8	3.0
Service learning	2,664	70.7	3.1	0.8	3.0

Note: Students who indicated that they did not take a course were excluded prior to analysis.

1 = "Not at all well" to 4 = "Extremely well."

* includes surgery, emergency medicine, peds, OB/GYN, and behavioral health

TABLE 75. EVALUATION OF DIDACTIC INSTRUCTION IN TOPIC AREAS (%)

	<i>n</i>	Received no instruction	Insufficient	Appropriate	Excessive
Culturally appropriate care for diverse populations	3,775	1.2	10.1	83.4	5.2
Diagnosis of disease	3,777	0.1	1.8	92.1	6.0
Disease prevention/Health maintenance	3,773	0.1	4.1	90.2	5.6
Management of disease	3,779	0.1	3.9	90.7	5.2
Oral health	3,769	4.1	27.9	64.6	3.4
Palliative/End of life care	3,773	3.4	28.2	66.7	1.7
Public health	3,773	2.3	17.9	77.0	2.9
Role of community health and social service agencies	3,775	3.4	21.2	72.7	2.7
Women's health	3,771	0.3	8.5	86.4	4.8
Social determinants of health	3,771	1.8	12.0	81.1	5.1

Note: Respondents were asked to consider both quality and quantity of instruction in their evaluations.

EXPERIENCES IN THE CLINICAL PHASE

The following section presents data specific to students' experiences in, and satisfaction with, their supervised clinical practice experiences as well as their level of preparedness for clinical practice. Students were asked to evaluate the following rotations:

- Emergency medicine
- Extended primary care or rural track
- Family medicine
- General internal medicine
- General pediatrics
- General surgery
- Hospital medicine
- Obstetrics/Gynecology/Women's health
- Psychiatry/Behavioral medicine

Students also had the option of reporting about their experiences in up to 5 rotation electives.

TABLE 76. NUMBER OF CLINICAL ROTATIONS TAKEN

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Number of elective rotations	2,991	1.8	1.0	2.0
Total number of rotations	3,734	8.4	0.8	9.0

Note: Respondents who reported taking fewer than the 6 required electives were excluded prior to analysis. Respondents had the option of reporting up to 5 elective rotations; those who reported zero rotations were excluded from the elective rotations analysis.

TABLE 77. QUALITY OF CLINICAL ROTATION EDUCATIONAL EXPERIENCES (%)

	<i>n</i>	% Reporting				
		Poor	Fair	Good	Excellent	
Emergency medicine	3,750	99.8	1.8	6.4	26.4	65.2
Family medicine	3,731	99.3	2.7	7.6	28.2	60.9
Extended primary care or rural track	2,449	65.2	1.3	4.7	20.3	38.9
General surgery	3,729	99.2	6.0	12.1	28.9	52.2
General internal medicine	3,613	96.3	4.5	11.5	3.3	49.9
General pediatrics	3,659	97.4	5.6	11.9	30.7	49.3
Obstetrics/Gynecology/Women's health	3,649	97.0	6.6	12.7	29.0	48.8
Hospital medicine	3,172	84.6	4.6	10.4	28.1	41.5
Psychiatry/Behavioral medicine	3,626	96.8	5.7	12.0	30.8	48.3

Note: Respondents who did not complete a rotation were excluded prior to analysis.

TABLE 78. EXPERIENCES WITH PRECEPTORS DURING CLINICAL ROTATIONS

	n	% Yes
Emergency medicine		
Observed by preceptor taking patient history	3,672	72.8
Observed by preceptor performing physical exam	3,650	76.4
Observed by preceptor performing technical procedures	3,638	94.2
Given mid-point feedback by preceptor	3,632	88.8
Extended primary care or rural track		
Observed by preceptor taking patient history	2,369	75.9
Observed by preceptor performing physical exam	2,355	79.3
Observed by preceptor performing technical procedures	2,329	88.6
Given mid-point feedback by preceptor	2,344	90.9
Family medicine		
Observed by preceptor taking patient history	3,651	73.7
Observed by preceptor performing physical exam	3,635	77.4
Observed by preceptor performing technical procedures	3,598	88.7
Given mid-point feedback by preceptor	3,618	89.7
General internal medicine		
Observed by preceptor taking patient history	3,528	70.4
Observed by preceptor performing physical exam	3,506	73.5
Observed by preceptor performing technical procedures	3,468	79.4
Given mid-point feedback by preceptor	3,487	88.3
General pediatrics		
Observed by preceptor taking patient history	3,571	71.7
Observed by preceptor performing physical exam	3,550	77.4
Observed by preceptor performing technical procedures	3,504	81.4
Given mid-point feedback by preceptor	3,538	87.1
General surgery		
Observed by preceptor taking patient history	3,644	67.0
Observed by preceptor performing physical exam	3,630	73.3
Observed by preceptor performing technical procedures	3,603	95.1
Given mid-point feedback by preceptor	3,608	85.2
Hospital medicine		
Observed by preceptor taking patient history	3,541	67.9
Observed by preceptor performing physical exam	3,521	70.7
Observed by preceptor performing technical procedures	3,476	76.9
Given mid-point feedback by preceptor	3,504	82.2
Obstetrics/Gynecology/Women's health		
Observed by preceptor taking patient history	3,560	71.9
Observed by preceptor performing physical exam	3,544	83.5
Observed by preceptor performing technical procedures	3,516	91.3
Given mid-point feedback by preceptor	3,523	85.8
Psychiatry/Behavioral medicine		
Observed by preceptor taking patient history	3,541	75.1
Observed by preceptor performing physical exam	3,509	71.5
Observed by preceptor performing technical procedures	3,452	68.6
Given mid-point feedback by preceptor	3,499	83.7

Note: "% Yes" refers to the proportion of respondents who indicated that they had each experience.

TABLE 79. CLINICAL ROTATION SETTINGS

	<i>n</i>	%
Community health center (CHC)	1,007	43.2
Medically underserved area (MUA), medically underserved population (MUP), or health professional shortage area (HPSA)	792	34.0
Department of Veterans Affairs (VA) medical facility	785	33.7
Other federally qualified health center (FQHC)	656	28.1
Critical access hospital (CAH)	583	25.0
Total	2,331	-

Note: Students were asked to indicate whether they had completed a rotation at any of these locations. Only students who selected at least one of these settings were included in this table. Percentages may sum to more than 100% because respondents could select multiple settings.

TABLE 80. PARTICIPATION IN MEDICATION-ASSISTED TREATMENT (MAT) WAIVER TRAINING DURING PA SCHOOL

	<i>n</i>	%
No, did not participate in any MAT waiver training	2,438	66.9
Yes, participated in MAT waiver training during PA school		
Completed MAT waiver training during PA school	704	19.3
Participated in some MAT waiver training during PA school and plan to complete training following graduation	392	10.8
Participated in some MAT waiver training during PA school and do not plan to complete the training	108	3.0
Subtotal	1,204	33.1
Total	3,642	100.0

MAT is the use of medications to treat persons with opioid use disorder. The 3 medications approved by the Food and Drug Administration for MAT are methadone, buprenorphine, and naltrexone.

EXPERIENCES WITH INTERPROFESSIONAL EDUCATION (IPE)

IPE was defined as “curricular activities where PA students had the opportunity to learn with students from different health professions programs.” 83.4% of students reported participating in required IPE, and 5.2% were unsure whether they had participated. Among the 11.4% of students who did not participate in required IPE, 55.6% indicated that they would have liked the opportunity to learn with students from different health professions programs.

Respondents who had IPE experiences were asked to report their agreement with the statement “The learning experience(s) with students from different health professions helped me gain a better understanding of the roles of other professions in patient care.” Overall, 78.7% of respondents agreed with the statement.

Further, respondents who had IPE experiences were asked to assess the amount of IPE experiences and interactions they had during their PA programs. 77.1% of respondents indicated that they had the right amount of IPE. 15.1% wanted more IPE, and 7.8% would have liked less.

TABLE 81. TYPES OF HEALTH PROFESSIONS STUDENTS INTERACTED WITH

	n	%
Allopathic Medicine (MD)	907	29.6
Anesthesia assistant	572	18.7
Art therapist	74	2.4
Athletic Training	449	14.6
Audiology/Speech-Language Pathology	701	22.9
Clinical/Counseling Psychology	729	23.8
Dentistry	598	19.5
Emergency medical technician (EMT)	749	24.4
Medical assistant	922	30.1
Nutrition/Dietetics	792	25.8
Occupational Therapy	1,420	46.3
Optometry	190	6.2
Orthotics/Prosthetics	234	7.6
Osteopathic Medicine (DO)	938	30.6
Pathology assistant	175	5.7
Pharmacy	1,775	57.9
Physical Therapy	1,977	64.5
Public Health	396	12.9
Radiology	615	20.1
Registered Nursing (BSN or ADN)	1,762	57.5
Registered Nursing (advanced practice, NP, CRNA, and/or midwife)	1,310	42.7
Respiratory Therapy	782	25.5
Social Work	1,168	38.1
Surgical technician/Surgical assistant	819	26.7
Veterinary Medicine	20	0.7
Other		
Genetic Counseling*	10	0.3
Clinical lab scientist*	13	0.4
Podiatry*	9	0.3
Medical Sonography*	19	0.6
Nuclear Medicine*	7	0.2
All other health professions	56	1.8
Total	3,065	-

*Note: Percentages may sum to more than 100% because respondents could select multiple types of health professional students. * indicates that these categories were added based on respondents' recoded "Other" write-in responses.*

TABLE 82. TYPES OF IPE ACTIVITIES

	<i>n</i>	%
Interprofessional student group	1,776	58.7
Patient-centered case problems (classroom or student setting)	1,539	50.9
Clinical simulations	1,216	40.2
Team skills training	1,109	36.7
Active engagement with patients (e.g., inpatient or ambulatory-based team rotation, longitudinal clinics, practice-based rotations)	1,022	33.8
Community projects or service learning activities	662	21.9
Stand-alone IPE course for credit	653	21.6
Lecture only, clinical subject (e.g., universal precautions, informed consent, advanced cardiac life support certification, population health)	600	19.8
Student-run clinic or volunteering at a clinic for the underserved	596	19.7
Lecture only, basic science	494	16.3
Lab only, basic science	252	8.3
Other	49	1.6
Total	3,023	-

Note: Percentages will sum to more than 100% because respondents could select multiple types of health professions students. "Lab only, basic science" was recoded from respondents' write-in "Other" responses.

CONFIDENCE IN PA COMPETENCIES

Respondents were asked to rate their confidence in their current abilities to implement the PA competencies in their practices. The PA competencies are as follows:

Medical Knowledge

Includes synthesis of pathophysiology, patient presentation, differential diagnosis, patient management, surgical principles, health promotion, and disease prevention

Interpersonal & Communication Skills

Encompasses verbal, nonverbal, written, and electronic exchange of information to patients, peers, and others

Patient Care

Includes patient- and setting-specific assessment, evaluation, and management

Professionalism

The expression of positive values and ideals as care is delivered and prioritizing patients' needs over one's own; includes ethical practice and cultural sensitivity

Practice-Based Learning & Improvement

Includes processes and practices through which PAs engage in critical analysis of their own practice experience, medical literature, and other resources to improve delivery of care

Systems-Based Practice

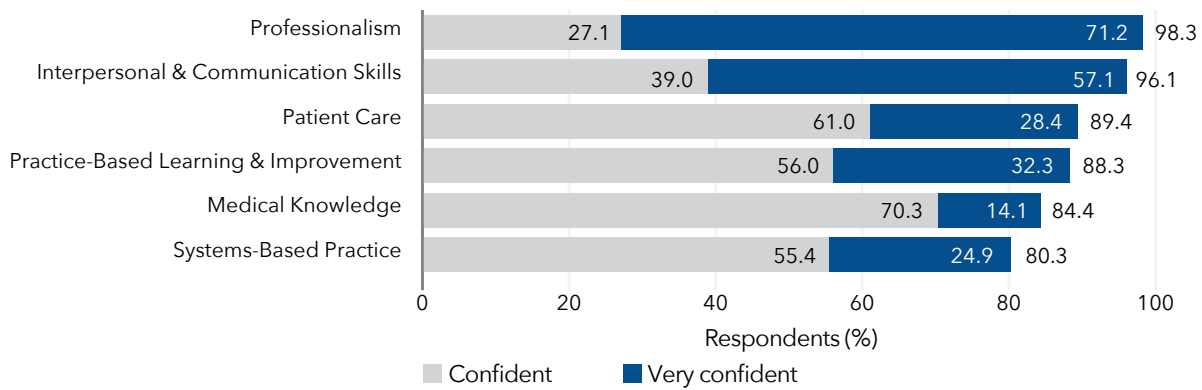
Awareness and responsiveness to the larger system of health care to provide patient care that balances quality and cost

TABLE 83. CONFIDENCE IN PA COMPETENCIES (%)

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Mdn</i>
Medical Knowledge	3,671	4.0	0.6	4.0
Interpersonal & Communication Skills	3,669	4.5	0.6	5.0
Patient Care	3,669	4.2	0.6	4.0
Professionalism	3,663	4.7	0.5	5.0
Practice-Based Learning & Improvement	3,667	4.2	0.7	4.0
Systems-Based Practice	3,673	4.0	0.8	4.0

Note: 1 = "Not at all confident" to 5 = "Very confident."

FIGURE 8. CONFIDENCE IN PA COMPETENCIES



11. EOPS: EMPLOYMENT PLANS

TABLE 84. EMPLOYMENT STATUS

	n	%
I have not yet started my job search	450	12.3
I plan to apply for/have already applied for a PA residency	122	3.3
I have submitted job applications but have not yet received an invitation to interview	672	18.4
I have had at least one interview or invitation to interview but have not yet received a job offer	951	26.0
I have received at least one job offer but have not accepted a position	500	13.7
I have accepted a job offer	957	26.2
I do not plan to apply for a job as a PA	2	0.1
Total	3,654	100.0

39.9% of graduating PA students had either accepted or received at least one job offer.

Note: Respondents who did not plan to apply for a job as a PA were not asked further questions regarding their PA employment plans.

APPLICATIONS TO PA RESIDENCIES & JOBS

TABLE 85. RESIDENCY SPECIALTIES

	n	%
Emergency medicine	47	39.2
Critical care/Trauma	20	16.7
Surgery	18	15.0
Pediatrics	15	12.5
Acute care medicine	11	9.2
Family medicine	11	9.2
Cardiothoracic	10	8.3
Hospitalist	10	8.3
Internal medicine	9	7.5
Neonatology	9	7.5
OB-GYN	7	5.8
Psychiatry	7	5.8
Urgent care	6	5.0
Cardiology	5	4.2
Hematology/Oncology	4	3.3
Orthopedic surgery	4	3.3
Otolaryngology	3	2.5
Urology	2	1.7
Total	120	-

Respondents who indicated that they had applied to or planned to apply to a PA residency were asked to indicate the residency specialty/subspecialty. These specialties were drawn from a list of all PA residency programs available from the [Association of Postgraduate PA Programs](#) as of December 2018.

Note: Percentages may sum to more than 100% because respondents could select multiple residencies to apply to.

TABLE 86. FACTORS THAT INFLUENCED SPECIALTY CHOICE (%)

	<i>n</i>	Made Student NOT WANT to Choose Specialty	No Influence	Made Student WANT to Choose Specialty	Did Not Consider/ Experience
Advising/Mentoring from a faculty member	3,164	1.1	42.2	45.4	11.3
Advising/Mentoring from a preceptor	3,165	1.3	22.1	71.4	5.2
Availability of jobs in the specialty	3,166	4.5	33.5	56.4	5.6
Desire to fill a social need	3,162	1.1	45.4	42.0	11.4
Experience in clinical rotations	3,167	2.6	5.9	90.1	1.4
Family expectations	3,163	2.0	53.3	33.3	11.4
Fit with personality, interests, and skills	3,165	1.1	4.5	93.6	0.9
Future family plans	3,163	3.1	29.1	61.8	5.9
Income potential	3,167	2.4	25.9	68.1	3.6
Level of educational debt	3,165	3.3	45.8	41.4	9.6
Previous health care training or experience	3,164	3.0	24.5	65.6	6.9
Previous work/volunteer experience	3,167	2.5	27.3	63.0	7.3
Role model/Mentor/Adviser influence	3,165	1.1	25.4	66.9	6.6
Scope of practice within specialty	3,165	2.2	12.5	83.3	1.9
Specialty interest group sponsored panels and presentations	3,168	1.0	49.9	26.2	22.9

TABLE 87. NUMBER OF JOB APPLICATIONS SUBMITTED

	<i>n</i>	<i>M</i>	<i>M (T)</i>	<i>Mdn</i>	<i>SD</i>
Students who have not yet accepted a position	2,050	11.0	8.3	6.0	13.4
Students who have accepted a position	923	8.2	5.2	4.0	12.8

Students were asked to report the number of job applications they had submitted. Data are presented separately for students who had and had not already accepted a position at the time of survey completion.

ACCEPTED POSITIONS

Only graduating students who indicated that they had accepted at least one job offer responded to questions in this section. 98.0% of accepted positions were full-time. 46.5% reported that their accepted job was located at a site where they had completed a rotation.

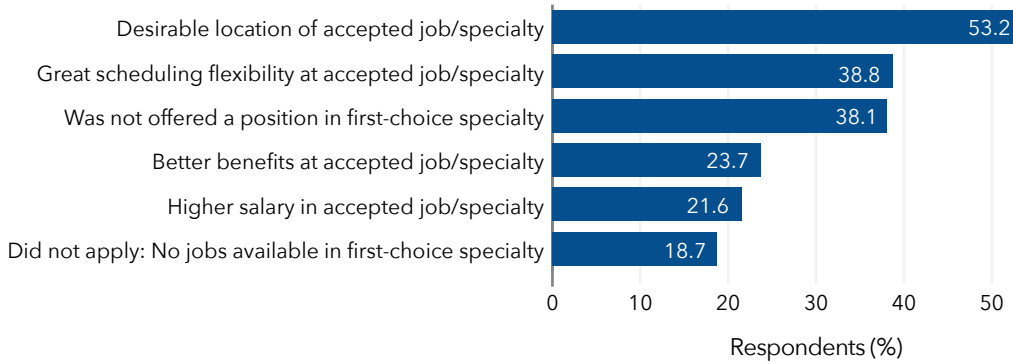
TABLE 88. SPECIALTY PRACTICE IN WHICH POSITION WAS ACCEPTED

	n	%
Emergency medicine specialties		
Emergency medicine (not urgent care)	156	14.4
Urgent care	61	5.6
Inpatient specialties		
Critical care	55	5.1
Hospitalist	64	5.9
Internal medicine subspecialties		
Cardiology	32	3.0
Endocrinology	8	0.7
Gastroenterology	16	1.5
Infectious disease	1	0.1
Nephrology	3	0.3
Oncology/Hematology	14	1.3
Rheumatology	3	0.3
Other internal medicine subspecialty	10	0.9
Primary care specialties		
Family/General medicine	163	15.1
General internal medicine	50	4.6
General pediatrics	28	2.6
Geriatrics	4	0.4
Obstetrics/Gynecology/Women's health	12	1.1
Surgical specialties		
Cardiovascular/Cardiothoracic	25	2.3
General surgery	40	3.7
Neurosurgery	31	2.9
Orthopedics	122	11.3
Plastic surgery	16	1.5
Urology	17	1.6
Other surgical subspecialty	53	4.9
Other specialties		
Correctional medicine	1	0.1
Dermatology	36	3.3
Interventional radiology	13	1.2
Neurology	11	1.0
Pain management	8	0.7
Palliative care	1	0.1
Pediatric subspecialty	13	1.2
Psychiatry/Behavioral medicine	40	3.7
Retail clinic	1	0.1
Other specialty	28	2.6
Total	1,080	-

Of the 1,108 students who reported the specialties/subspecialties in which they had accepted positions, 5.1% reported accepting positions in multiple specialties.

Note: Percentages may sum to more than 100% because respondents could select multiple specialties.

FIGURE 9. REASONS TO ACCEPT NON-FIRST-CHOICE SPECIALTY



The 16.1% of students who reported accepting a position that was not in their first-choice specialty were asked to indicate all the reasons why they accepted a job outside of their first-choice specialty.

Note: Percentages may sum to more than 100% because respondents could select multiple reasons.

POSITION FEATURES

The following tables and figures present data from the 94.9% of respondents who reported accepting a position in a single specialty.

TABLE 89. GEOGRAPHIC DISTRIBUTION OF ACCEPTED JOBS

	<i>n</i>	%
Northeast Region		
New England Division	71	7.8
Middle Atlantic Division	220	24.3
Subtotal	291	32.2
Midwest Region		
East North Central Division	132	14.6
West North Central Division	88	9.7
Subtotal	220	24.3
South Region		
South Atlantic Division	157	17.3
East South Central Division	44	4.9
West South Central Division	58	6.4
Subtotal	259	28.6
West Region		
Mountain Division	46	5.1
Pacific Division	89	9.8
Subtotal	135	14.9
Total	905	100.0

TABLE 90. SALARY OF ACCEPTED JOB

	<i>n</i>	%	% (Cum.)
\$49,999 or less	3	0.3	0.3
\$50,000 to \$59,999	18	2.1	2.4
\$60,000 to \$69,999	18	2.1	4.5
\$70,000 to \$79,999	29	3.3	7.8
\$80,000 to \$89,999	114	13.0	20.8
\$90,000 to \$99,999	267	30.5	51.3
\$100,000 to \$109,999	223	25.5	76.7
\$110,000 to \$119,999	113	12.9	89.6
\$120,000 to \$129,999	51	5.8	95.4
\$130,000 or more	40	4.6	100.0
Total	876	100.0	-

56.0% of respondents indicated that their salary was about what was expected. 27.0% expected a higher salary, and 17.0% expected a lower salary.

Note: "% (Cum.)" refers to the cumulative percentage of respondents. Only students who reported accepting a full-time position in one specialty were included in this table.

12. EOPS: NEGATIVE EXPERIENCES IN PA SCHOOL

This section presents students' reports of mistreatment, discrimination, and harassment that they had personally experienced or witnessed other students experience during PA school. 62.0% of respondents indicated that their programs had policies regarding the mistreatment of PA students while 34.5% were unsure whether policies existed.

TABLE 91. PERSONALLY EXPERIENCED NEGATIVE EVENTS (%)

	<i>n</i>	Never	Once	More than once
Been publicly embarrassed	2,732	71.5	13.6	14.9
Been publicly humiliated	2,719	85.5	7.9	6.6
Been threatened with physical harm	2,720	97.4	1.8	0.8
Been physically harmed (e.g., hit, slapped, kicked)	2,722	98.7	0.9	0.4
Been required to perform personal services (e.g., shopping, babysitting)	2,721	96.4	2.3	1.3
Been subjected to unwanted sexual advances	2,718	93.9	3.1	3.0
Been asked to exchange sexual favors for grades or other rewards	2,721	99.8	0.1	0.1
Been denied opportunities for training or rewards based on my gender	2,721	94.6	2.4	3.1
Been subjected to offensive remarks/names based on my gender	2,721	88.6	4.7	6.7
Received lower evaluations or grades solely because of my gender rather than performance	2,721	97.5	1.4	1.1
Been denied opportunities for training or rewards based on my race or ethnicity	2,718	98.8	0.6	0.7
Been subjected to offensive remarks/names based on my race or ethnicity	2,720	96.2	1.9	1.8
Received lower evaluations or grades solely because of my race or ethnicity rather than performance	2,721	99.0	0.6	0.4
Been denied opportunities for training or rewards based on my sexual orientation	2,719	99.5	0.3	0.2
Been subjected to offensive remarks/names regarding my sexual orientation	2,720	98.8	0.7	0.5
Received lower evaluations or grades solely because of my sexual orientation rather than performance	2,722	99.8	0.1	0.1
Been denied opportunities for training or rewards based on my religion	2,718	99.2	0.6	0.2
Been subjected to offensive remarks/names regarding my religion	2,720	97.0	1.7	1.3
Received lower evaluations or grades solely because of my religion rather than performance	2,721	99.4	0.4	0.1

Note: Due to low frequencies, "occasionally" and "frequently" were combined into "more than once."

TABLE 92. WITNESSED NEGATIVE EVENTS (%)

	<i>n</i>	Never	Once	More than once
Publicly embarrassed	2,708	70.1	10.1	19.8
Publicly humiliated	2,701	82.9	6.1	11.0
Threatened with physical harm	2,697	98.4	1.0	0.6
Physically harmed (e.g., hit, slapped, kicked)	2,703	98.6	1.2	0.2
Required to perform personal services (e.g., shopping, babysitting)	2,709	96.6	1.6	1.8
Subjected to unwanted sexual advances	2,704	94.5	2.9	2.6
Asked to exchange sexual favors for grades or other rewards	2,703	99.8	0.1	0.0
Denied opportunities for training or rewards based on their gender	2,707	94.8	2.1	3.1
Subjected to offensive remarks/names based on their gender	2,707	93.3	2.4	4.3
Received lower evaluations or grades solely because of their gender rather than performance	2,704	97.9	0.8	1.3
Denied opportunities for training or rewards based on their race or ethnicity	2,707	98.0	1.1	1.0
Subjected to offensive remarks/names based on their race or ethnicity	2,706	95.1	2.4	2.5
Received lower evaluations or grades solely because of their race or ethnicity rather than performance	2,704	98.2	0.9	0.9
Denied opportunities for training or rewards based on their sexual orientation	2,698	99.3	0.4	0.3
Subjected to offensive remarks/names regarding their sexual orientation	2,708	98.2	0.9	0.9
Received lower evaluations or grades solely because of their sexual orientation rather than performance	2,705	99.6	0.2	0.1
Denied opportunities for training or rewards based on their religion	2,707	99.2	0.5	0.3
Subjected to offensive remarks/names regarding their religion	2,703	97.9	1.2	0.9
Received lower evaluations or grades solely because of their religion rather than performance	2,703	99.6	0.2	0.2

Note: Due to low frequencies, "occasionally" and "frequently" were combined into "more than once."

FIGURE 10. IDENTITY DISCRIMINATION OR HARASSMENT

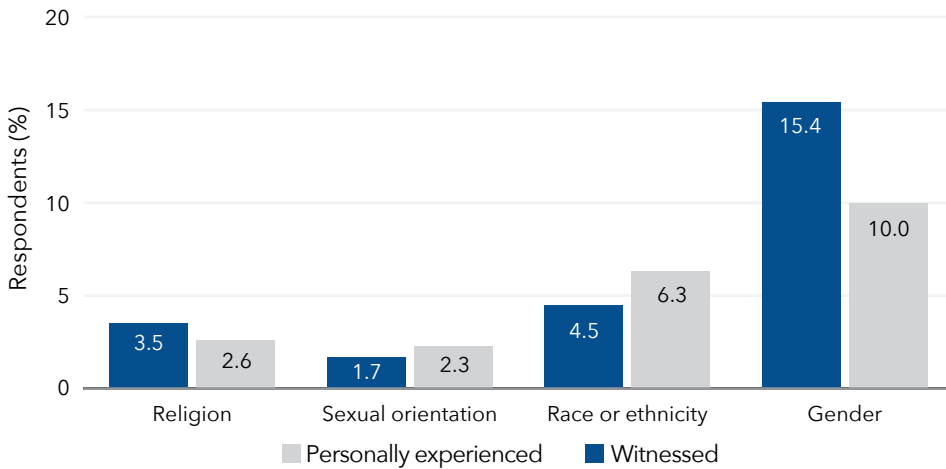


Figure 10 displays the proportion of responding students who reported either personally experiencing or witnessing other students being discriminated against or harassed based on facets of their identities. Reports of being discriminated against or harassed for each facet of identity were based on students' combined reports of any of the following experiences:

- Denied opportunities for training or rewards
- Subjected to offensive remarks/names
- Received lower evaluations or grades