ADEA TRENDS

IN DENTAL EDUCATION

2023-2024





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REVENUE SOURCES & EXPENDITURES OF U.S. DENTAL SCHOOLS

2021–22 Fiscal Year



Patient Care

Services

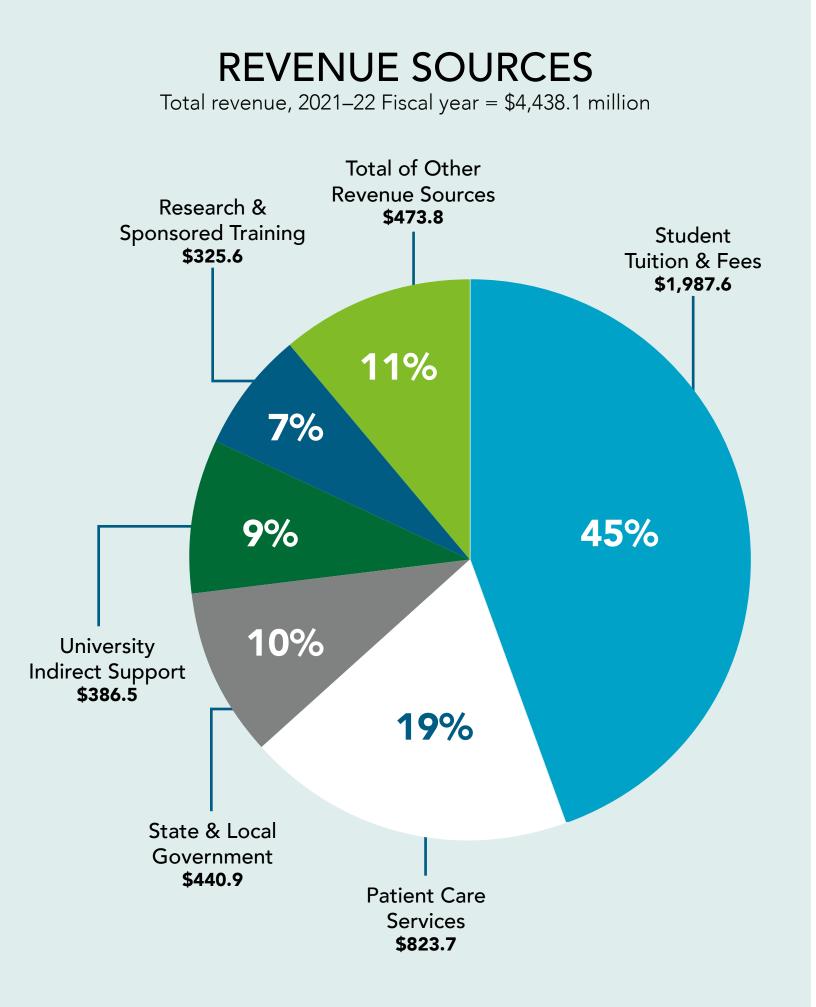
\$1,029.9

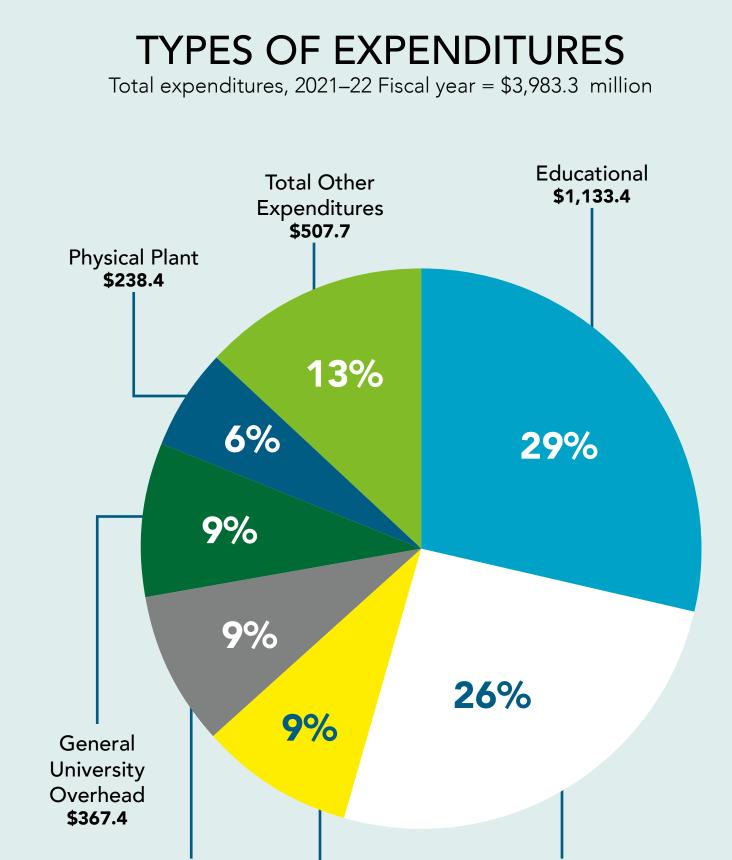
Student tuition and fees together with patient care

service revenue generated almost two thirds of

revenue for accredited







Dental School

Administration

\$351.1

Research &

Sponsored

Training

\$355.4

Notes: Percentages might not total to 100% due to rounding. "Total Other Revenue Sources" category includes continuing education revenue, graduate medical education revenue, gift revenue, endowment earnings, financial aid revenue, federal educational revenue and other. "Total Other Expenditures" category includes the following functional categories: continuing education, financial aid expenses, computer services, library and learning resources, major capital expenditures, and other costs.

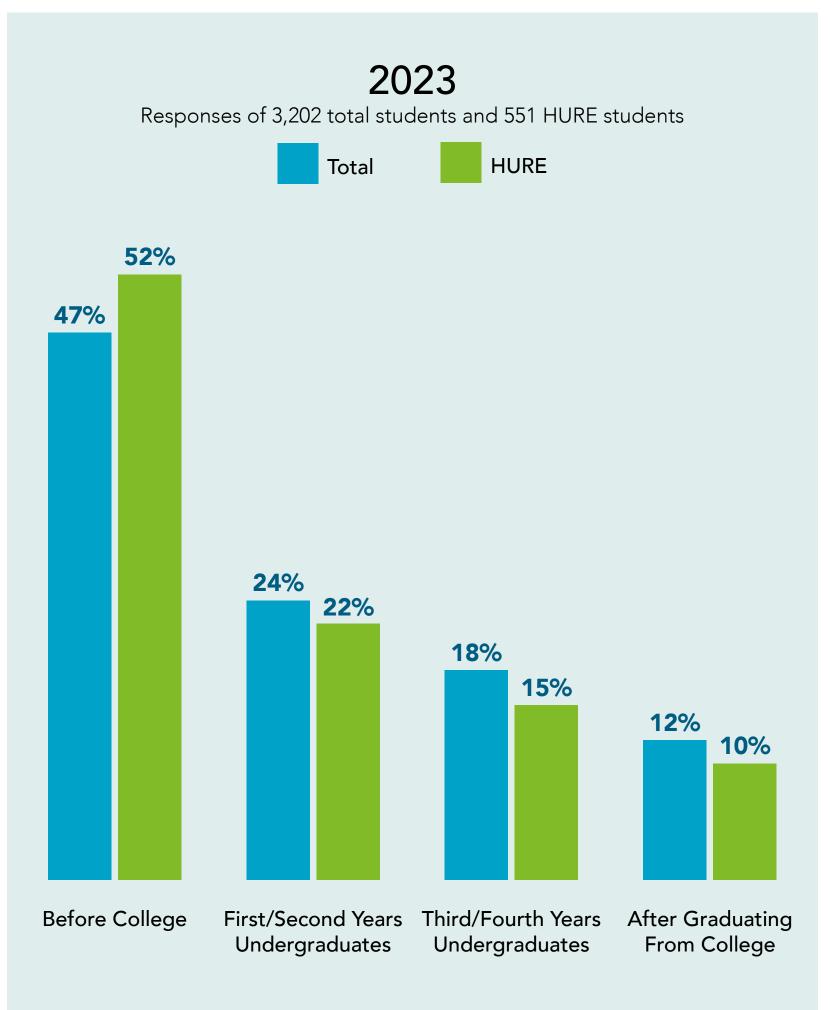
Source: ADEA analysis of American Dental Association, Health Policy Institute, 2021-22 Survey of Dental Education (Group III).

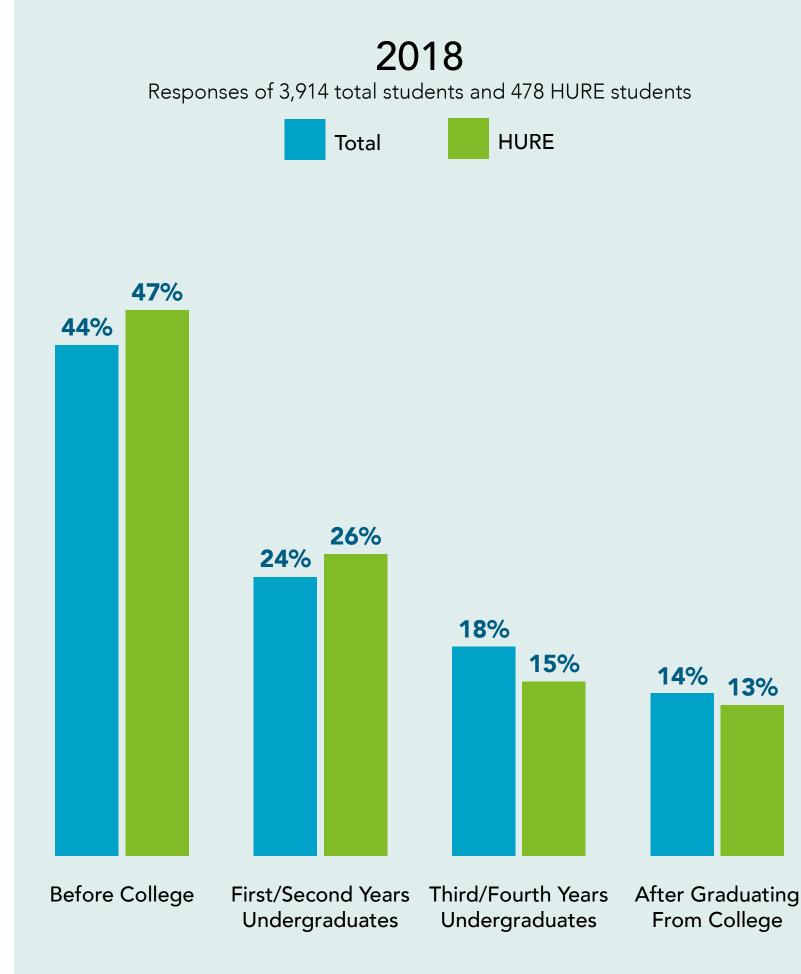
TIMING OF THE DECISION TO PURSUE A CAREER IN DENTISTRY



Almost half of the predoctoral senior students in the Class of 2023 who responded to the ADEA Survey of U.S. Dental School Seniors decided to become a dentist before going to college.







HURE includes the following four race and ethnicity categories: non-Hispanic African American, Hispanic or Latino of all races, non-Hispanic American Indian or Alaska Native and non-Hispanic Native Hawaiian or Other Pacific Islander. These four race and ethnicity categories are defined by the U.S. Department of Education for reporting data from higher education institutions. The HURE definition is based on the parity gap between the share among the U.S. population and the share among professionally active dentists for each of the race and ethnicity categories defined by the U.S. Department of Education for reporting data from higher education institutions.

Source: Istrate EC, Cooper BL, Singh P, Gül G, West KP. Dentists of Tomorrow 2023: An Analysis of the Results From the ADEA 2023 Survey of U.S. Dental School Seniors. American Dental Education Association (ADEA) Education Research Series.

TOP REASONS FOR CHOOSING A DENTAL SCHOOL



The top three reasons among all respondents for attending dental school were virtually a tie.

For HURE respondents to the 2023 ADEA Survey of Dental School Seniors, finding a community of students/faculty who are like the respondent and with whom they feel comfortable was the only reason included in the top five that was different from the overall respondents.

Responses of 3,196 total students and 550 HURE students.

All Respondents

\$ \quad \text{\$ \quad \text{\$}} \]

Less expensive than other schools (e.g., due to in-state tuition, financial aid, etc.)



Proximity to family/friends



Academic reputation



The only school that offered me a place



Community of students/faculty who are like the respondent and whom they feel comfortable around



The culture at the school/program (e.g., size, social opportunities)



The only school that offered me a place

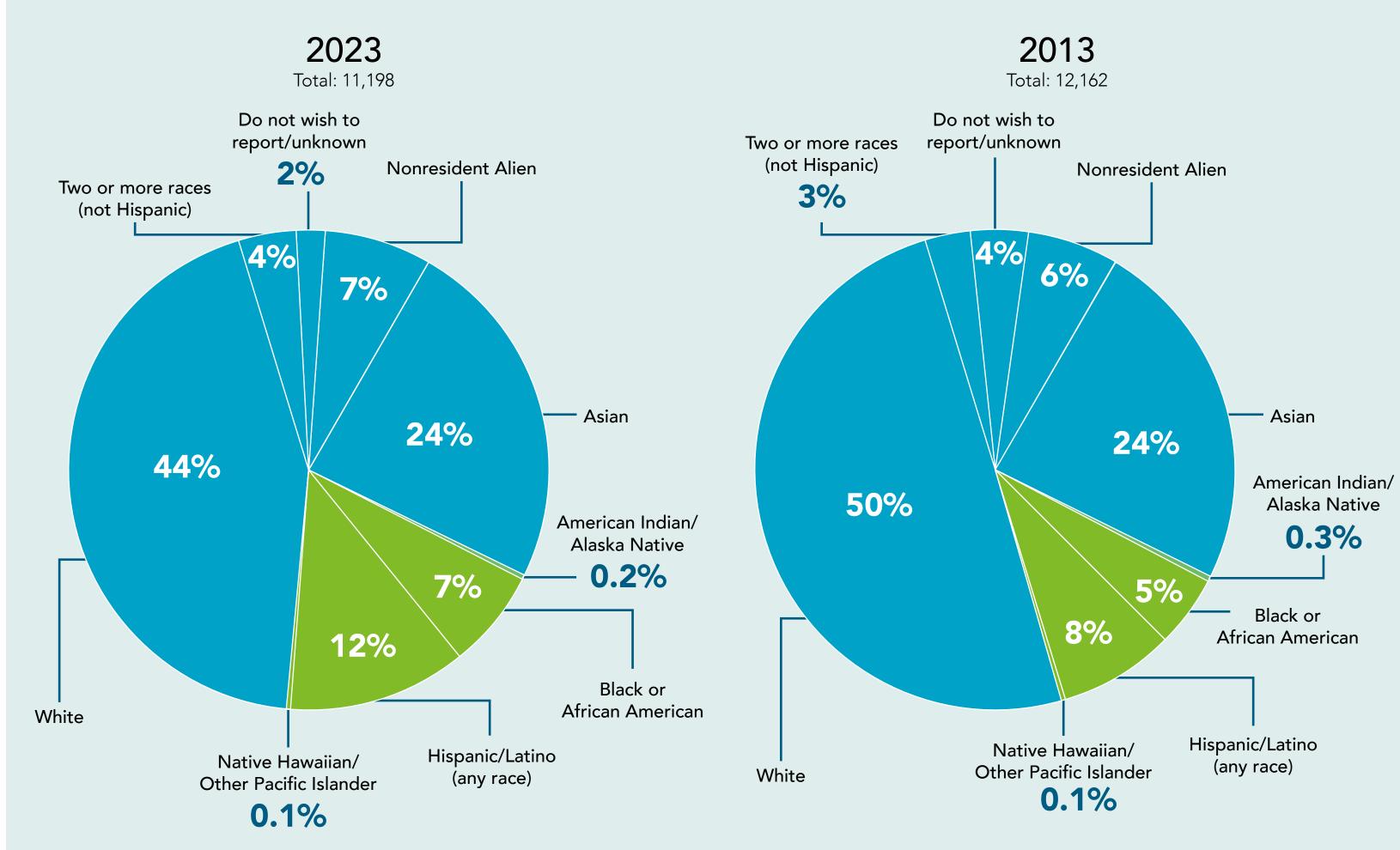
HURE includes the following four race and ethnicity categories: non-Hispanic African American, Hispanic or Latino of all races, non-Hispanic American Indian or Alaska Native and non-Hispanic Native Hawaiian or Other Pacific Islander. These four race and ethnicity categories are defined by the U.S. Department of Education for reporting data from higher education institutions. The HURE definition is based on the parity gap between the share among the U.S. population and the share among professionally active dentists for each of the race and ethnicity categories defined by the U.S. Department of Education for reporting data from higher education institutions.

DIVERSITY AMONG PREDOCTORAL DENTAL APPLICANTS



HURE students expanded their representation among predoctoral applicants. In 2023, this group represented 19% of applicants, an increase from 13% a decade earlier.





Notes: Applicants are individuals who applied for entry into a predoctoral program at one or more U.S. dental schools in a given year.

HURE includes the following four race and ethnicity categories: non-Hispanic African American. Hispanic or Latino of all races, non-Hispanic American Indian or Alaska Native and non-Hispanic Native Hawaiian or Other Pacific Islander. These four race and ethnicity categories are defined by the U.S. Department of Education for reporting data from higher education institutions. The HURE definition is based on the parity gap between the share among the U.S. population and the share among

Source: Singh P, Lawton KB, Istrate EC, Gul G, West KP. U.S. Dental School Applicants and Enrollees, 2023 Entering Class. Washington, DC: American Dental Education Association, January 2024.

professionally active dentists for each of the race and ethnicity categories defined by the U.S. Department of Education for reporting data from higher education institutions.

PREDOCTORAL DENTAL APPLICANTS & FIRST-TIME, FIRST-YEAR ENROLLEES IN U.S. DENTAL SCHOOLS



First-time, first-year predoctoral enrollment continued to increase in 2023, maintaining the rising trend of the past decade.

Five schools accepted their first class of predoctoral students between 2013 and 2023 and other existing schools increased their class sizes.

At the same time, the number of applicants to predoctoral programs fluctuated over the past

decade; however, all below the 2013 level. As a result, the ratio of applicants to first-time, first-year enrollees reached 1.71, the lowest level since 2013.



Notes: Applicants are individuals who applied for entry into a predoctoral program at one or more U.S. dental schools in a given year. First-time, first-year enrollees are matriculated individuals for the first time at a U.S. dental school in a given year. ADEA calculates the "first-time, first-year enrollees" indicators based on an analysis of ADEA Associated American Dental Schools Application Service (ADEA AADSAS®) and Texas Medical & Dental Schools Application Service (TMDSAS) data.

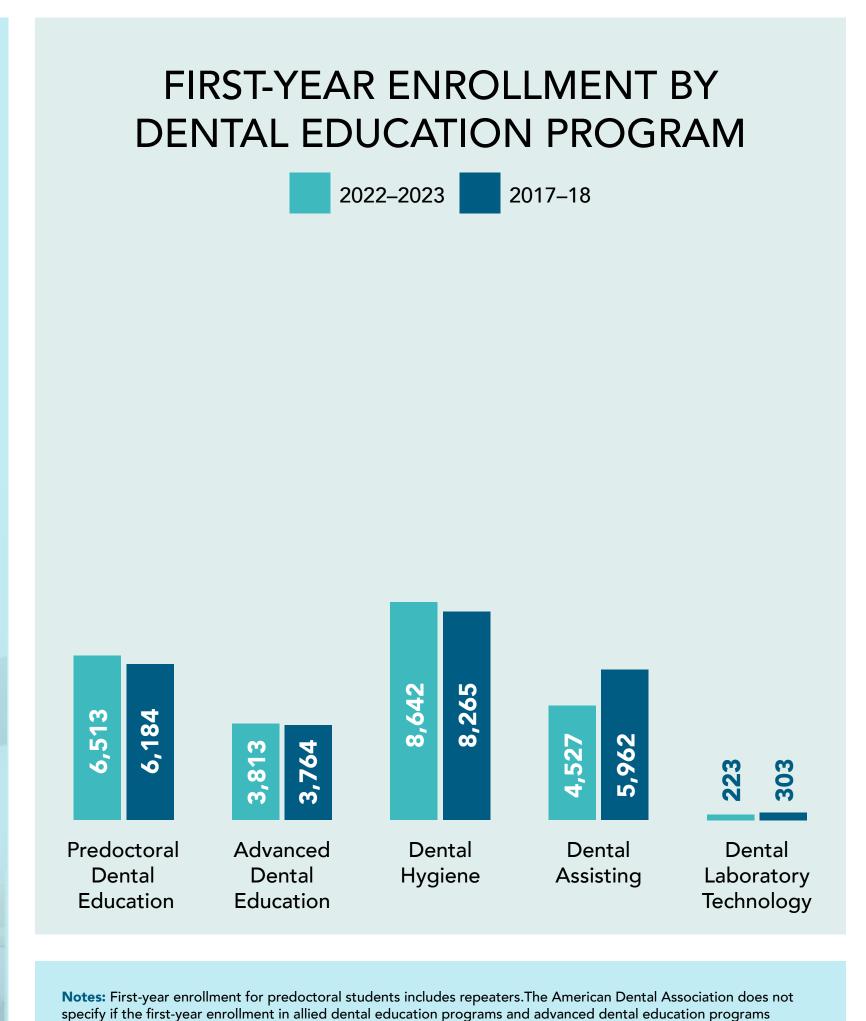
FIRST-YEAR & TOTAL ENROLLMENTS BY DENTAL EDUCATION PROGRAM



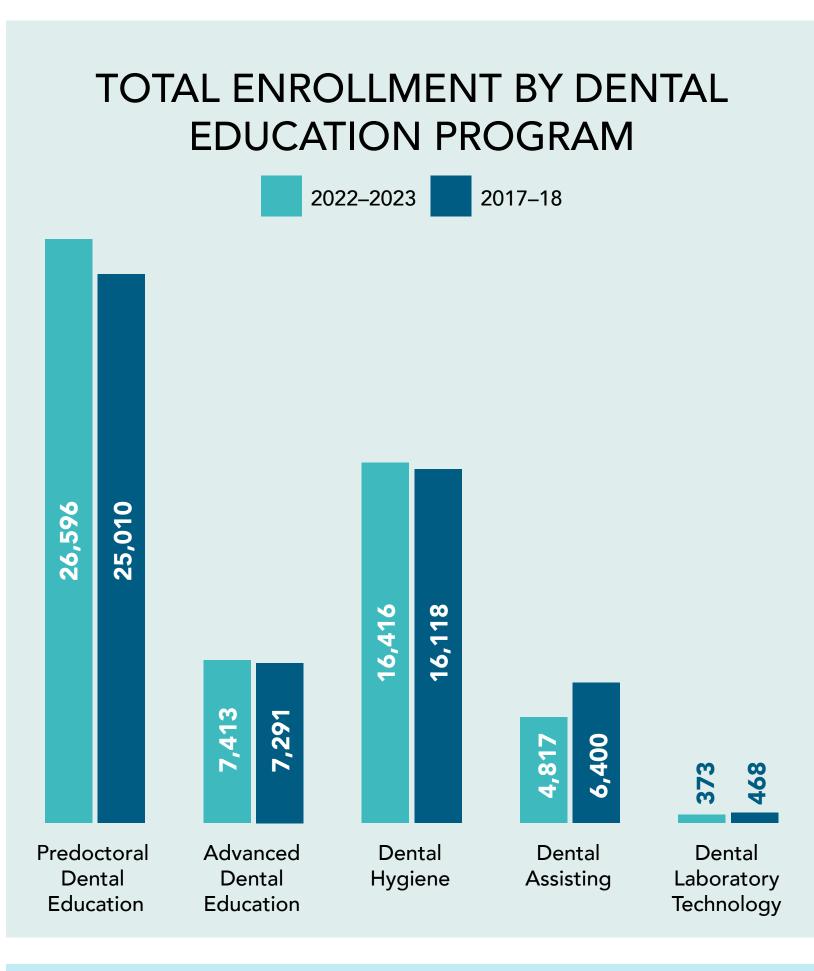
The overall enrollment in accredited dental education programs increased by 1% from five years before, driven by the rise in predoctoral enrollment.

The first-year enrollment mirrors this situation, with accredited predoctoral dental, advanced dental and dental hygiene recording rises from five years before and accredited dental assisting and dental laboratory technology programs witnessing plummeting rates.

While enrollment in accredited predoctoral dental, advanced dental and dental hygiene programs rose, accredited dental assisting and dental laboratory technology programs saw drops of 25% and 20%, respectively.



represents only first-time enrollees or includes repeaters. There were three CODA accredited dental therapy programs



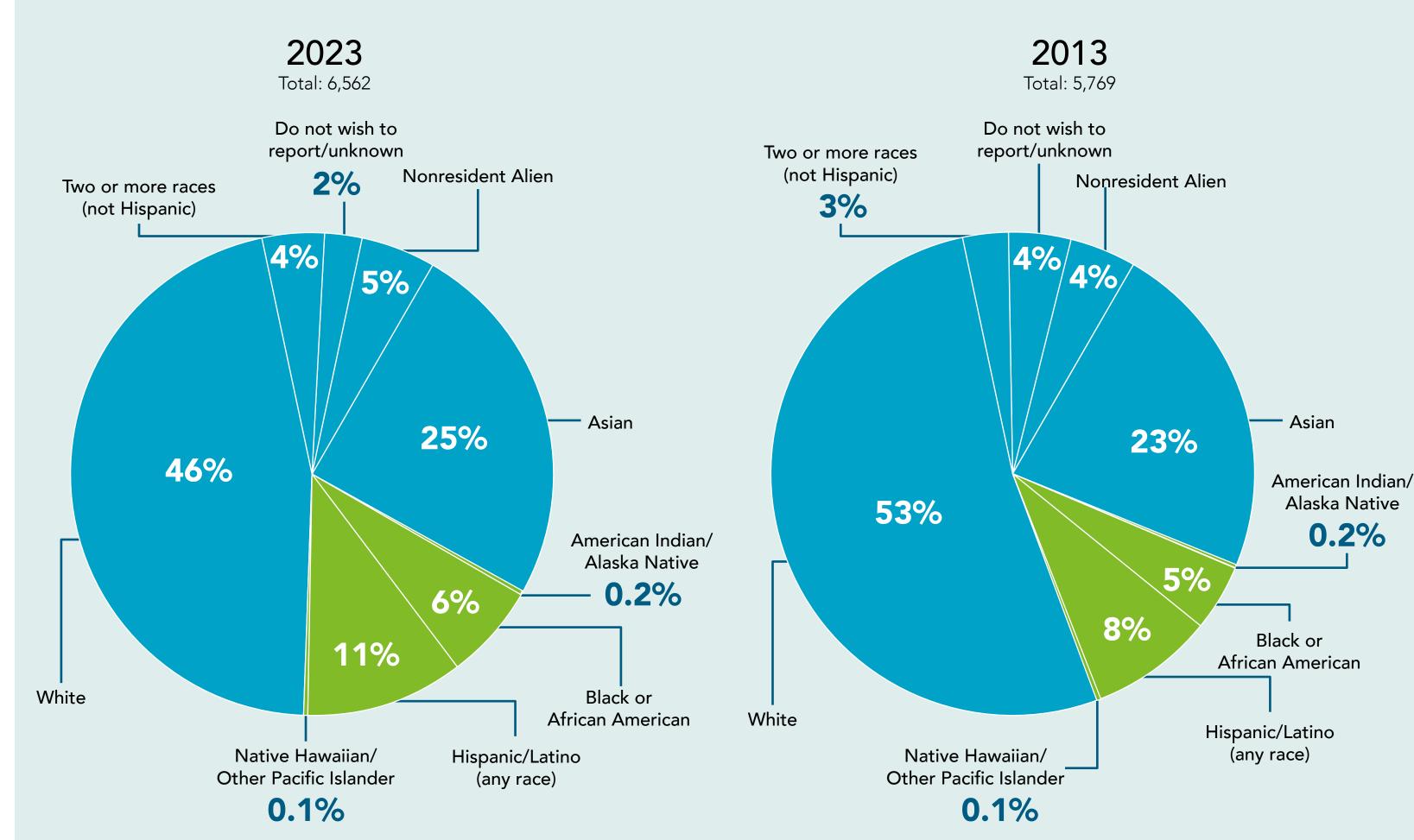
Notes: There were three CODA-accredited dental therapy programs as of December 2023.

DIVERSITY OF FIRST-TIME, FIRST-YEAR ENROLLEES



HURE students represented 17% among first-time, first-year enrollees in 2023, an increase from 13% in 2013.





Notes: First-time, first-year enrollees are matriculated individuals for the first time at a U.S. dental school in a given year. ADEA calculates the "first-time, first-year enrollees" indicators based on an analysis of ADEA Associated American Dental Schools Application Service (ADEA AADSAS®) and Texas Medical & Dental Schools Application Service (TMDSAS) data. HURE includes the following four race and ethnicity categories: non-Hispanic African American. Hispanic or Latino of all races, non-Hispanic American Indian or Alaska Native and non-Hispanic Native Hawaiian or Other Pacific Islander. These four race and ethnicity categories are defined by the U.S. Department of Education for reporting data from higher education for reporting data from higher education institutions.

Source: Singh P, Lawton KB, Istrate EC, Gul G, West KP. U.S. Dental School Applicants and Enrollees, 2023 Entering Class. Washington, DC: American Dental Education Association, January 2024.

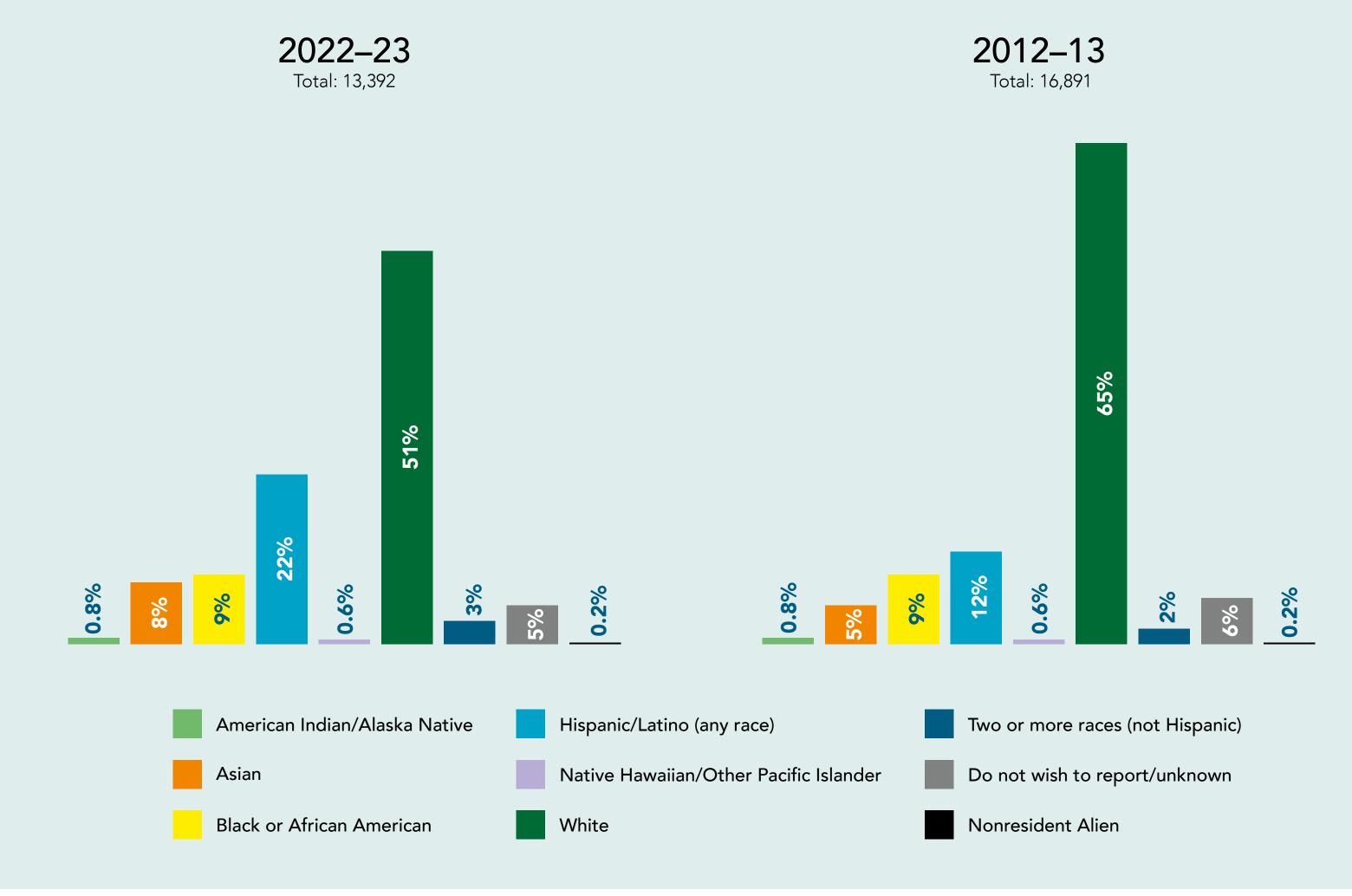
DIVERSITY OF FIRST-YEAR ALLIED DENTAL ENROLLEES



Entering classes in accredited allied dental education have increasingly diversified.

Accredited allied dental programs expanded the most among Hispanic or Latino students, followed by Asian and multiracial students. Over the same period, the share of white first-year allied dental enrollees tumbled by more than 13 percentage points to 51%.





Notes: These figures reflect only the accredited allied dental programs in the specified year and with entering classes. Three dental therapy programs were accredited as of December 2023.

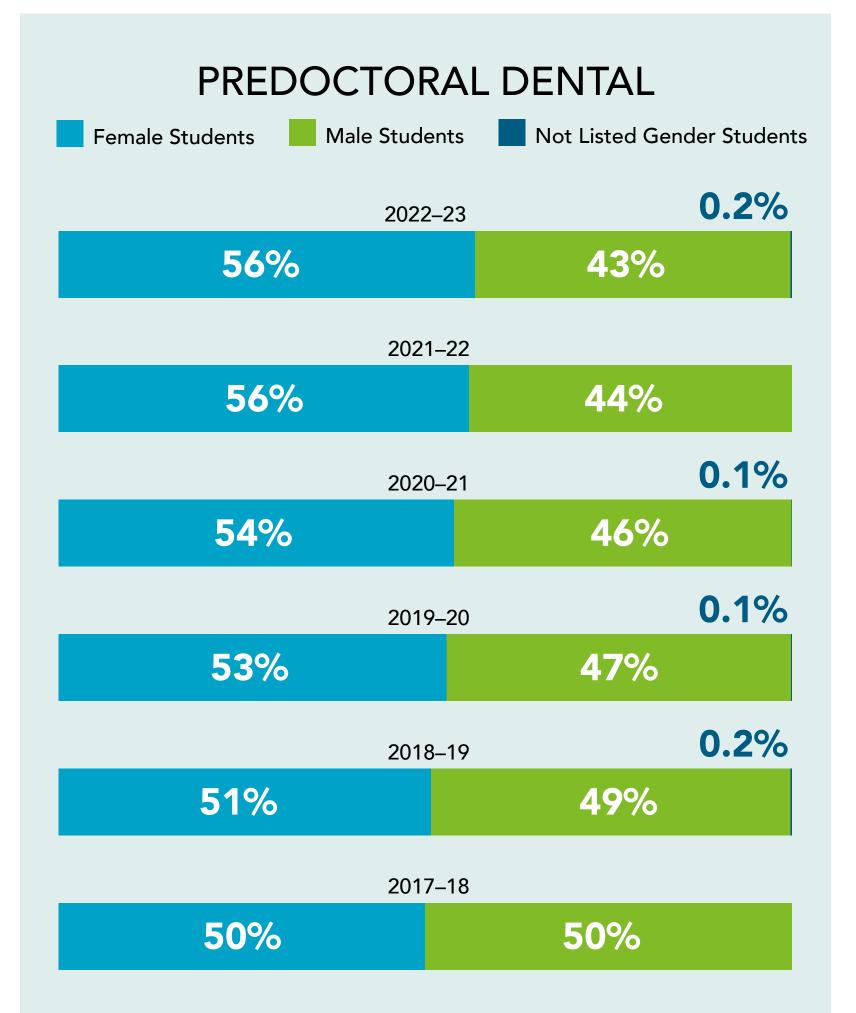
Source: Applysis of American Dental Association, Health Policy Institute, Surveys of Dental Hydrona Education Programs, Surveys of Dental Association Programs, Surveys of Dental Association Programs.

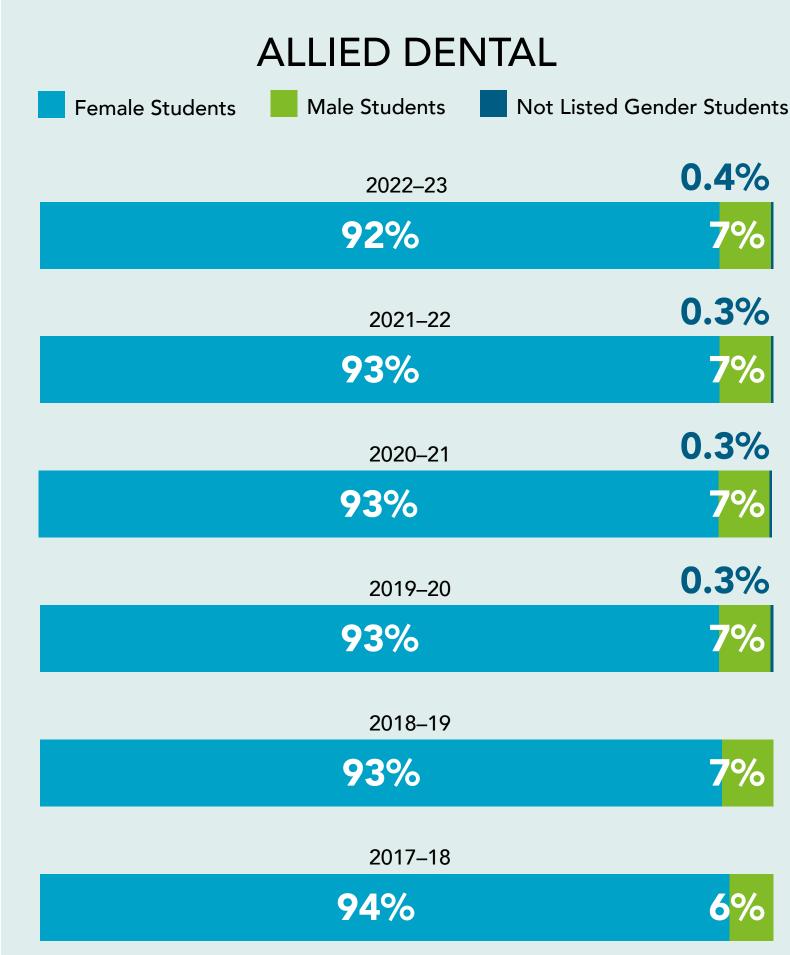
Source: Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2012-13

GENDER DISTRIBUTION OF FIRST-YEAR PREDOCTORAL & ALLIED DENTAL STUDENTS



The number of first-year enrollees in predoctoral programs who identified as women exceeded that of men in 2022–23, a trend that has continued since 2017-18. Allied dental first-year enrollees remained overwhelmingly female over the analyzed period.





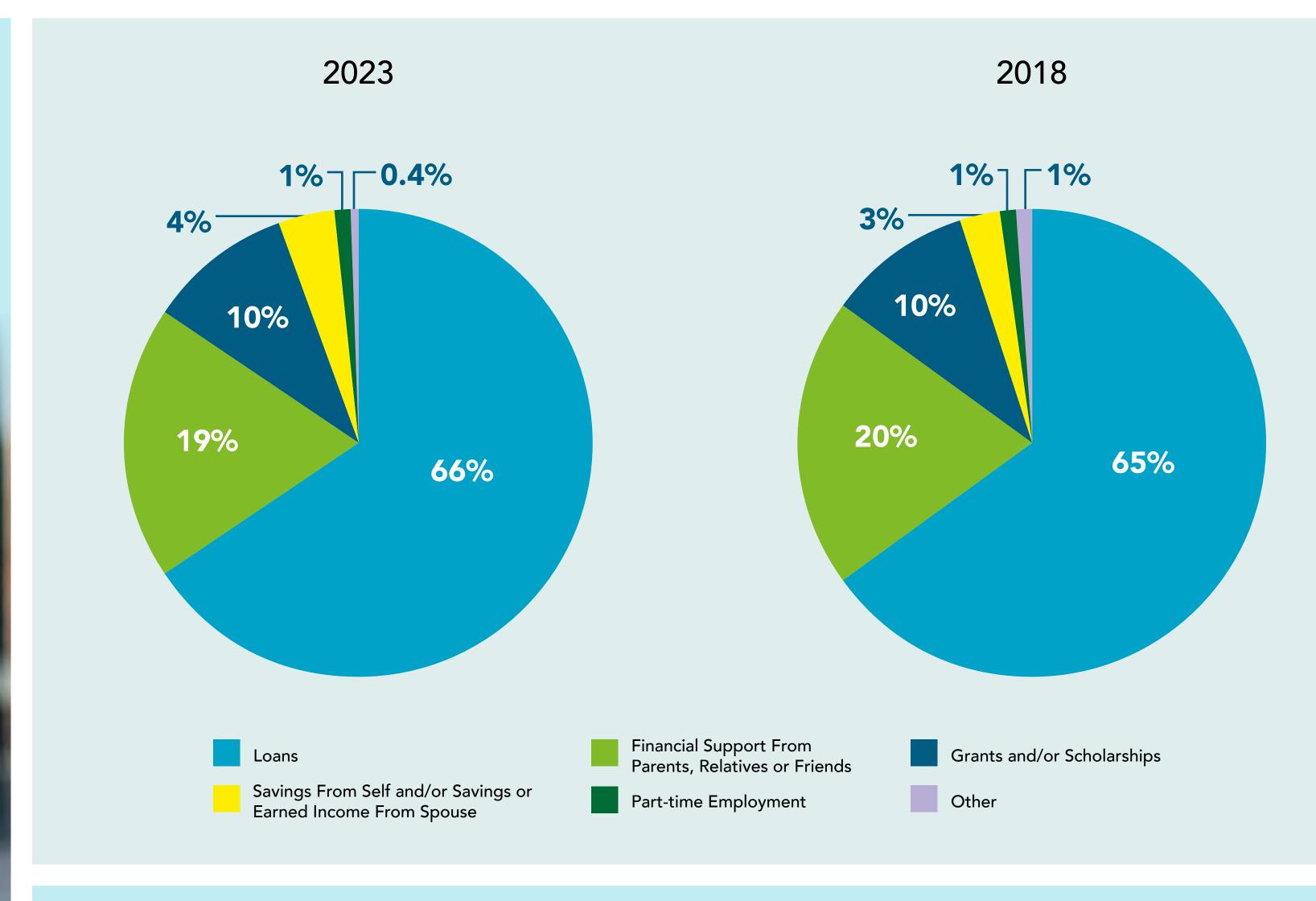
Notes: Percentages may not total 100% because of rounding. The American Dental Association (ADA) does not specify if the first-year enrollment in allied dental education programs represents only first-time enrollees or includes repeaters. ADA First-year enrollment for predoctoral students by gender includes repeaters. ADA introduced an "Other" gender category for reporting of first-year enrollment by gender for predoctoral students in 2015-16 and for allied students in 2019-20. This category collects responses for those who prefer not to report gender, do not identify as either male or female, or whose gender is not available. ADEA calls this category "not listed" gender.

Source: ADEA Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Education, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2017-18 to 2022-23.

STUDENT SOURCES OF FUNDING FOR A PREDOCTORAL DENTAL DEGREE



The senior predoctoral students of the Class of 2023 responding to the ADEA Senior Survey are funding their dental education with loans and using grants and scholarships at about the same rate as the Class of 2018.



Source: Istrate EC, Cooper BL, Singh P, Gül G, West KP. Dentists of tomorrow 2023: An analysis of the ADEA 2023 survey of U.S. Dental School Seniors. J Dent Educ. 2023;1-14. https://doi.org/10.1002/jdd.13392

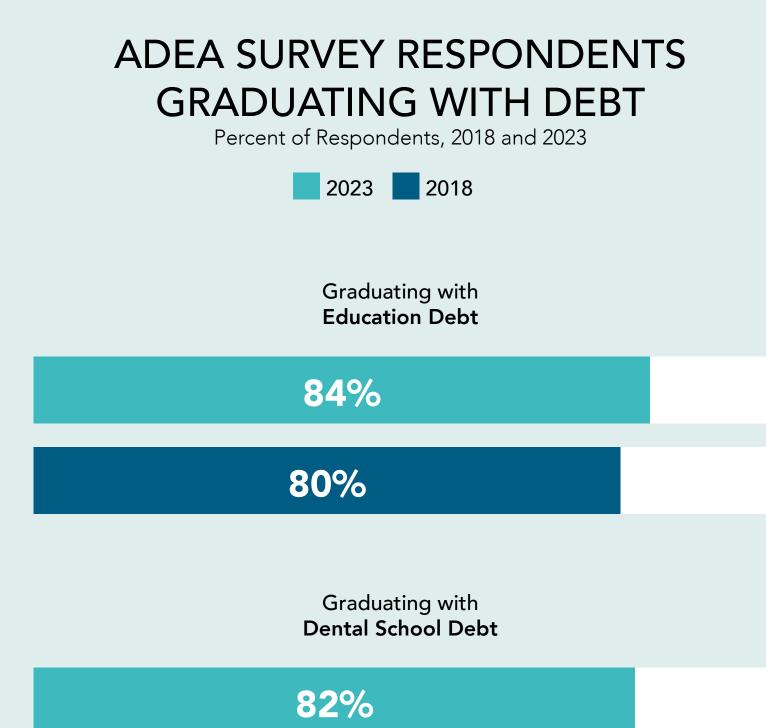
A LOOK AT EDUCATION DEBT



A higher percentage of predoctoral senior students responding to the ADEA Senior Survey graduated with debt in 2023 than five years before.

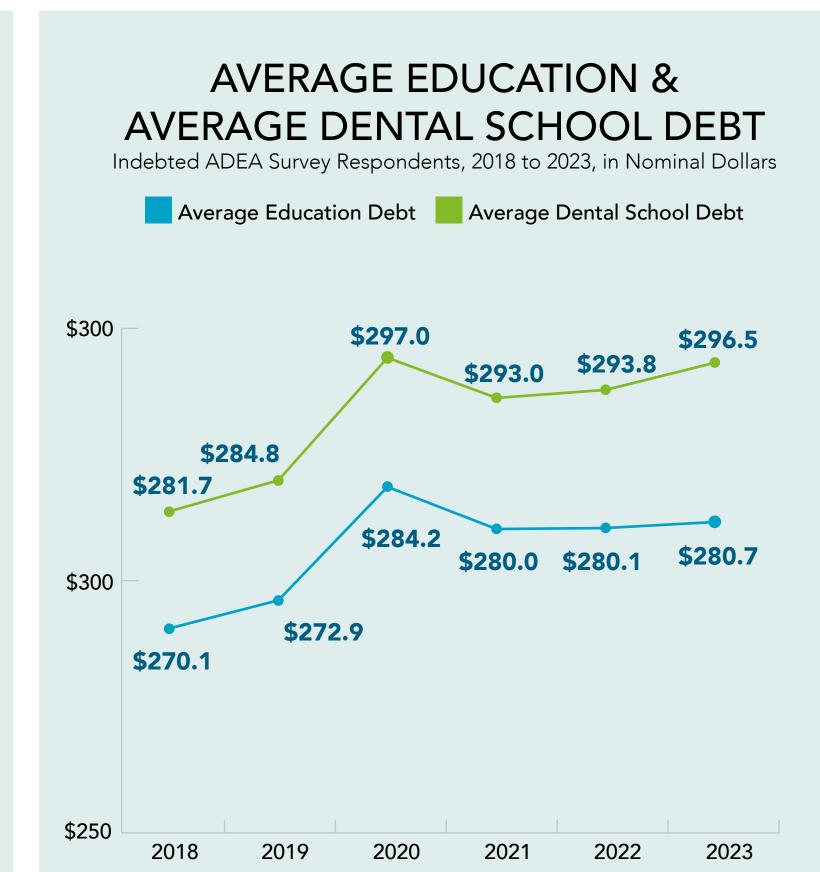
Average education debt of the indebted predoctoral senior students responding to the ADEA Senior Survey was \$296,500 in 2023.





Notes: The number of respondents expecting to graduate with dental school debt was 2,518 in 2023 and 3,213 in 2018. The number of respondents expecting to graduate with education debt (dental school debt and /or predental education debt) was 2,591 in 2023 and 3,288 in 2018.

78%



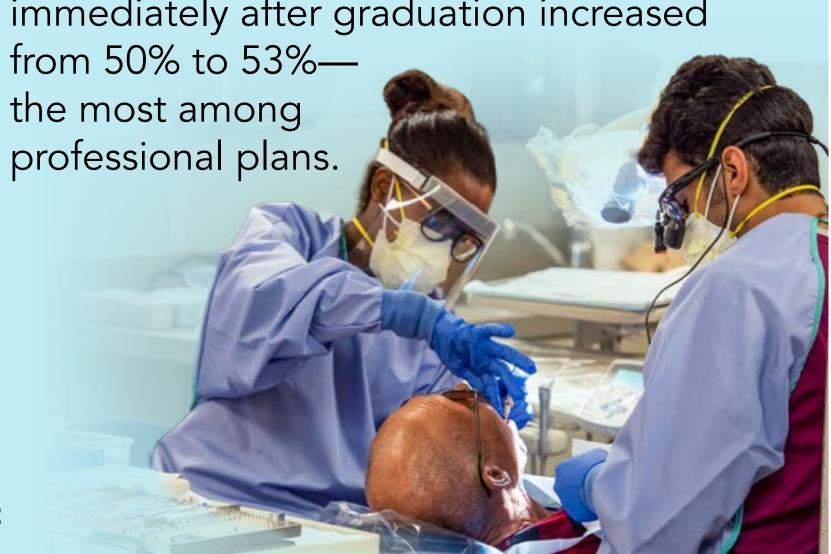
Notes: The response rates for this survey question vary between 37% in 2020 and 65% in 2018. A response rate reflects the number of respondents for the debt question relative to the senior student population in that academic year. Education debt is a combination of the dental school debt the senior students graduate with from dental school (the loans contracted to finance partially or all of the cost of the doctoral degree) and their predental education debt, which is the outstanding education debt the senior students had when they entered dental school. Debt values are nominal, as reported by the students in the specific survey year.

PREDOCTORAL DENTAL STUDENTS' IMMEDIATE PROFESSIONAL PLANS UPON GRADUATION

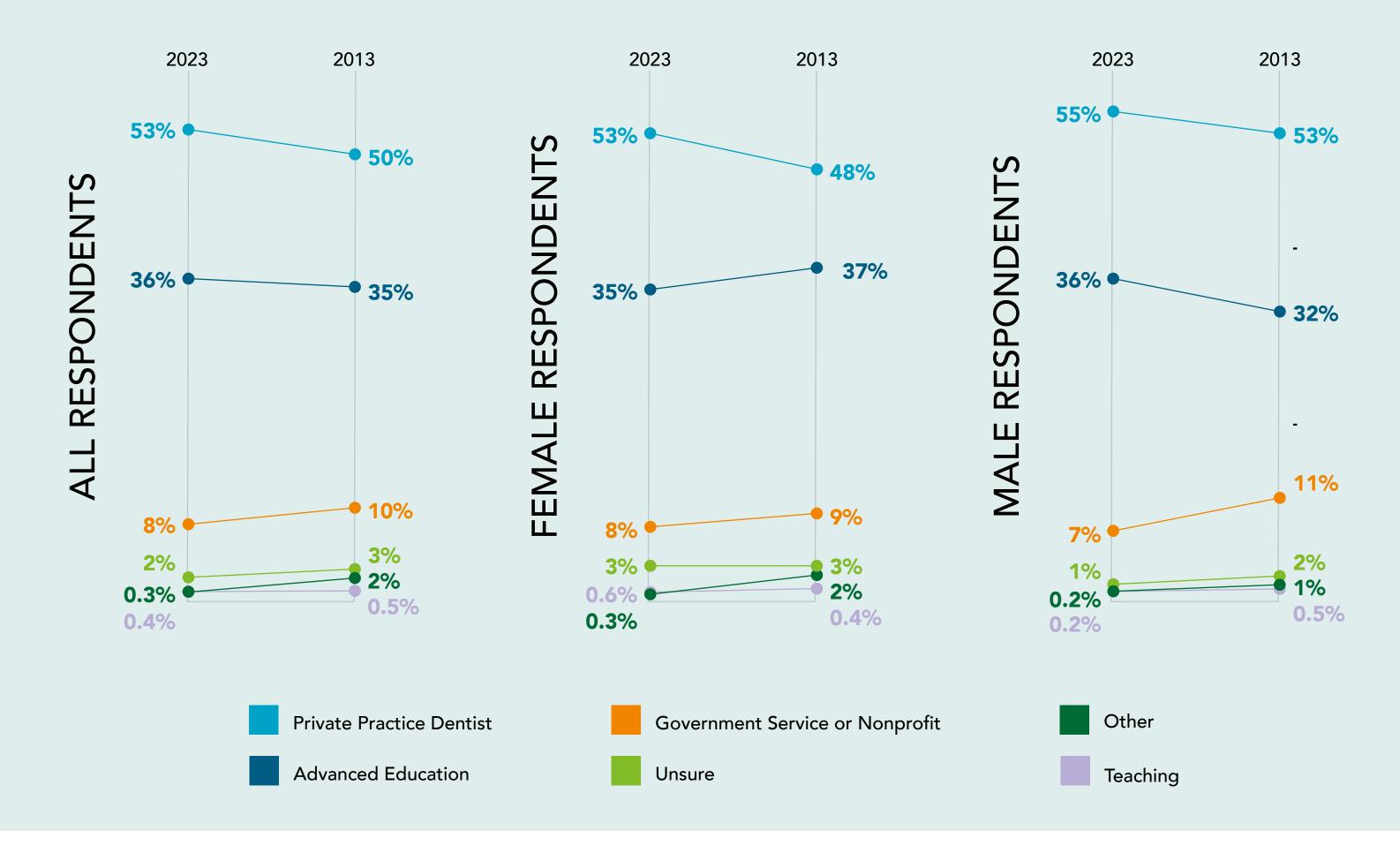


Senior predoctoral students responding to the 2023 ADEA Senior Survey were **more likely** to join a private practice upon graduation than their 2013 counterparts.

Between 2013 and 2023, the share of survey respondents who expressed interest in working in a private practice immediately after graduation increased



The total number of respondents who provided information about their immediate plans after graduation is 3,048 total, (1,255 for men and 1,711 for women) in the 2023 ADEA Survey and 4,216 total (2, 111 for men and 2,014 for women) in the 2013 ADEA Survey.

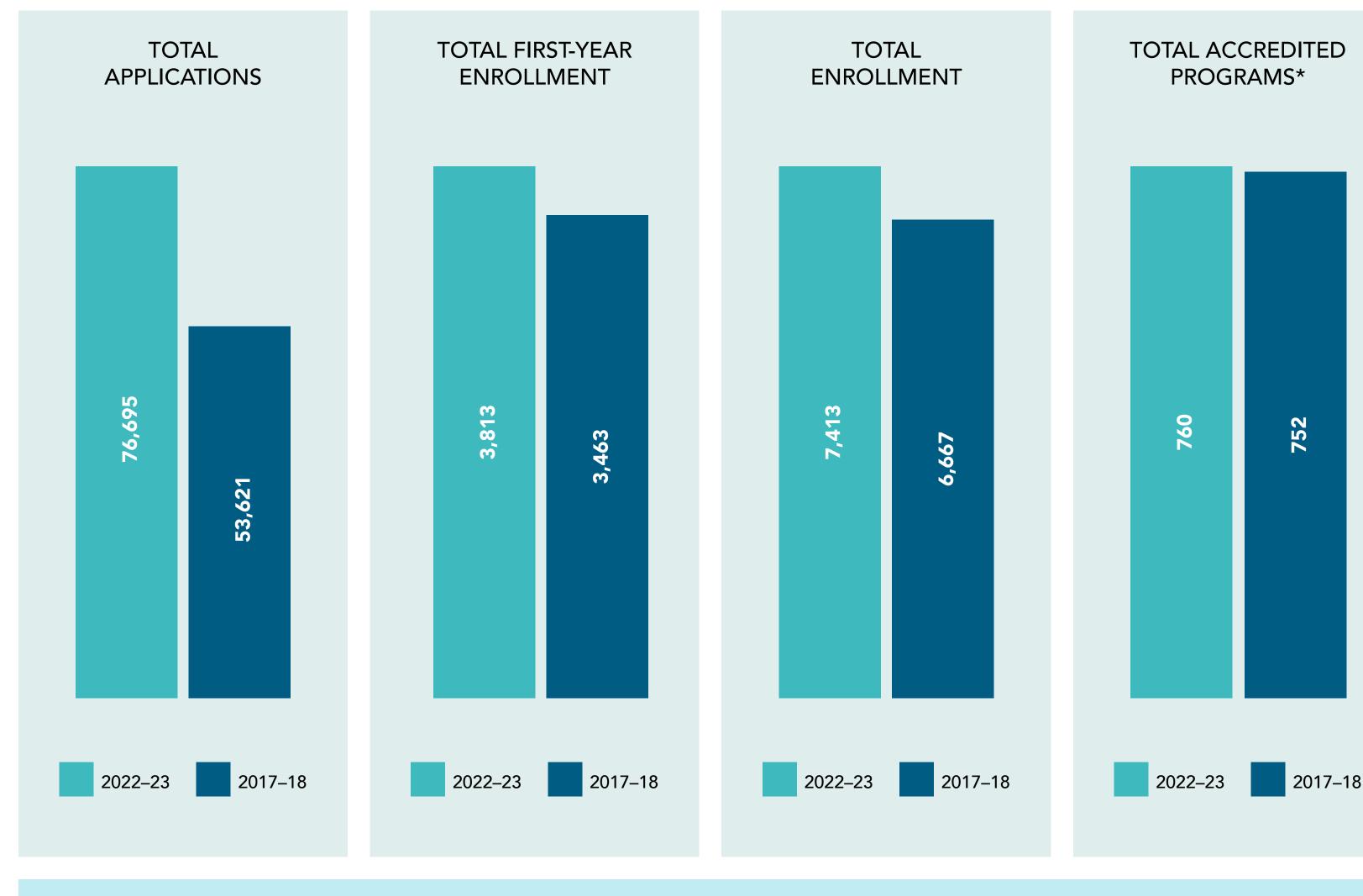


Notes: Percentages may not total 100% because of rounding. The difference between the total number of respondents and the sum of men and women respondents is represented by senior students that identify with other genders or did not wish to report their gender identity. The "Other" category includes working in another position related to dentistry, but not those mentioned in the chart and working in a position not related to dentistry. The 2013 ADEA survey did not ask about plans to practice dentistry in a nonprofit setting; therefore the "government and nonprofit" counts for 2013 reflect only government professional plans. Photo courtesy of the University of Missouri-Kansas City School of Dentistry.

OVERVIEW OF APPLICATIONS TO AND ENROLLMENTS IN ACCREDITED ADVANCED DENTAL EDUCATION PROGRAMS







Notes: Application figures represent the total number of applications examined by all programs, and counts applicants more than once if they applied to multiple programs.

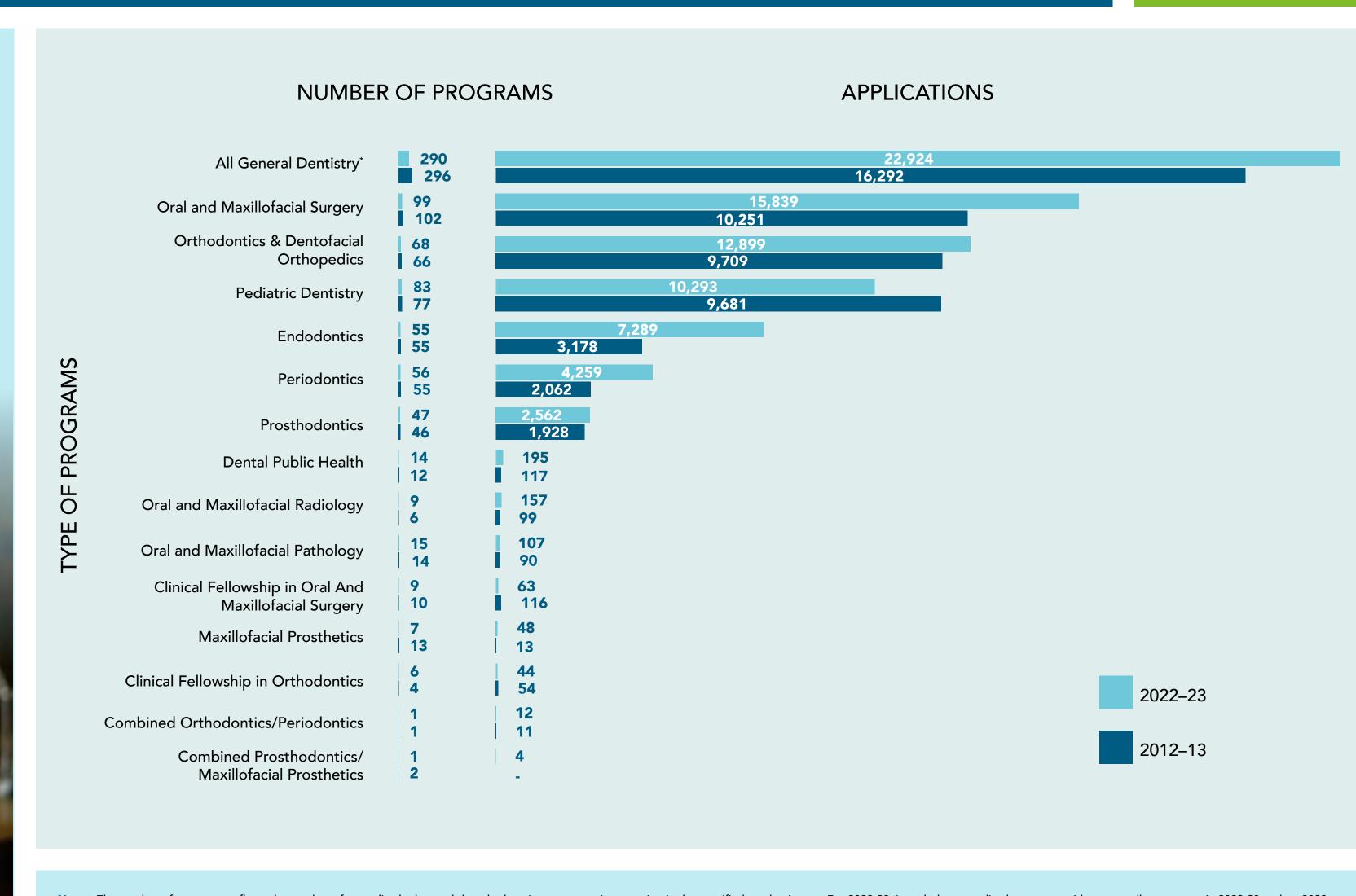
Source: ADEA analysis of American Dental Association, Health Policy Resources Center, Surveys of Advanced Dental Education 2012-13 and 2022-2023.

^{*} The number of programs reflects the number of accredited advanced dental education programs in operation in the specified academic year. For 2022-23, it excludes accredited programs with non-enrollment status in 2022-23 and no 2022 graduates

APPLICATIONS TO ACCREDITED ADVANCED DENTAL EDUCATION



More than half of the 15 disciplines of accredited advanced dental education programs added new programs and most of them received a significantly higher number of applications over the past decade.



Notes: The number of programs reflects the number of accredited advanced dental education programs in operation in the specified academic year. For 2022-23, it excludes accredited programs with non-enrollment status in 2022-23 and no 2022 graduates (n=10). Application figures represent the total number of applications examined by all programs, and counts applicants more than once if they applied to multiple programs.

Source: ADEA analysis of American Dental Association, Health Policy Resources Center, Surveys of Advanced Dental Education 2012-13 and 2022-2023.

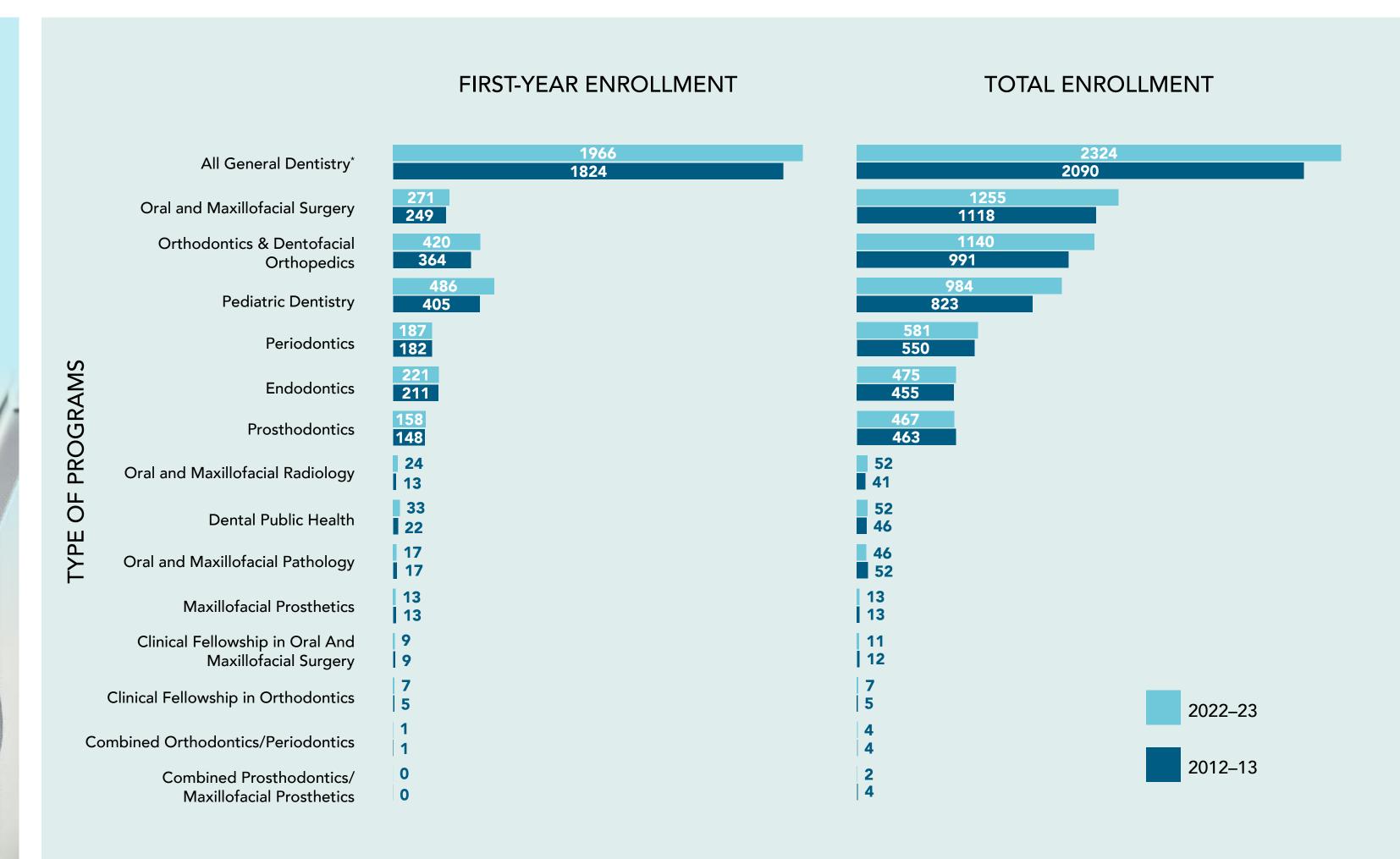
^{*} All General Dentistry includes General Practice Residency, Advanced Education in General Dentistry, Dental Anesthesiology, Orofacial Pain, and Oral Medicine.

FIRST-YEAR ENROLLMENT IN ACCREDITED ADVANCED DENTAL EDUCATION



All the 15 advanced dental education program disciplines analyzed registered larger or similarly sized entering classes in 2022–23 relative to 2012–13.

Program disciplines, such as oral and maxillofacial radiology, dental public health, and clinical fellowship in orthodontics, expanded their first-year classes by more than 40% over the period analyzed.



Notes: The number of programs reflects the number of accredited advanced dental education programs in operation in the specified academic year. For 2022-23, it excludes accredited programs with non-enrollment status in 2022-23 and no 2022 graduates (n=10).

^{*} All General Dentistry includes General Practice Residency, Advanced Education in General Dentistry, Dental Anesthesiology, Orofacial Pain, and Oral Medicine.

Source: ADEA analysis of American Dental Association, Health Policy Resources Center, Surveys of Advanced Dental Education 2012-13 and 2022-2023.

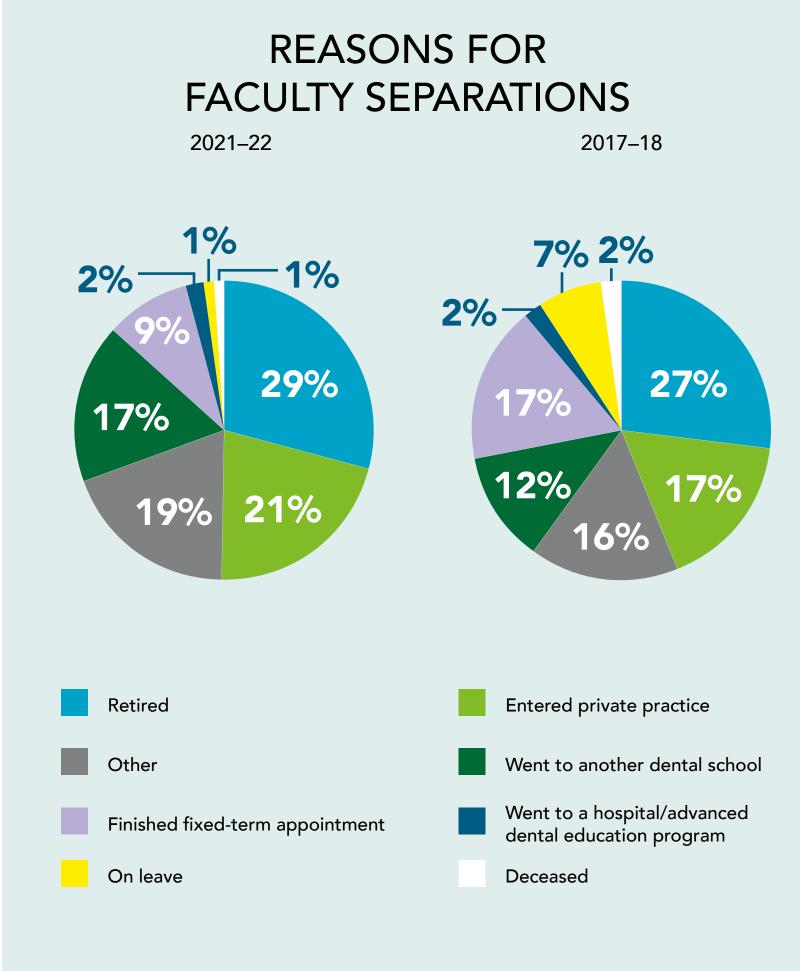
DENTAL SCHOOL FACULTY: SEPARATIONS & NEW HIRES

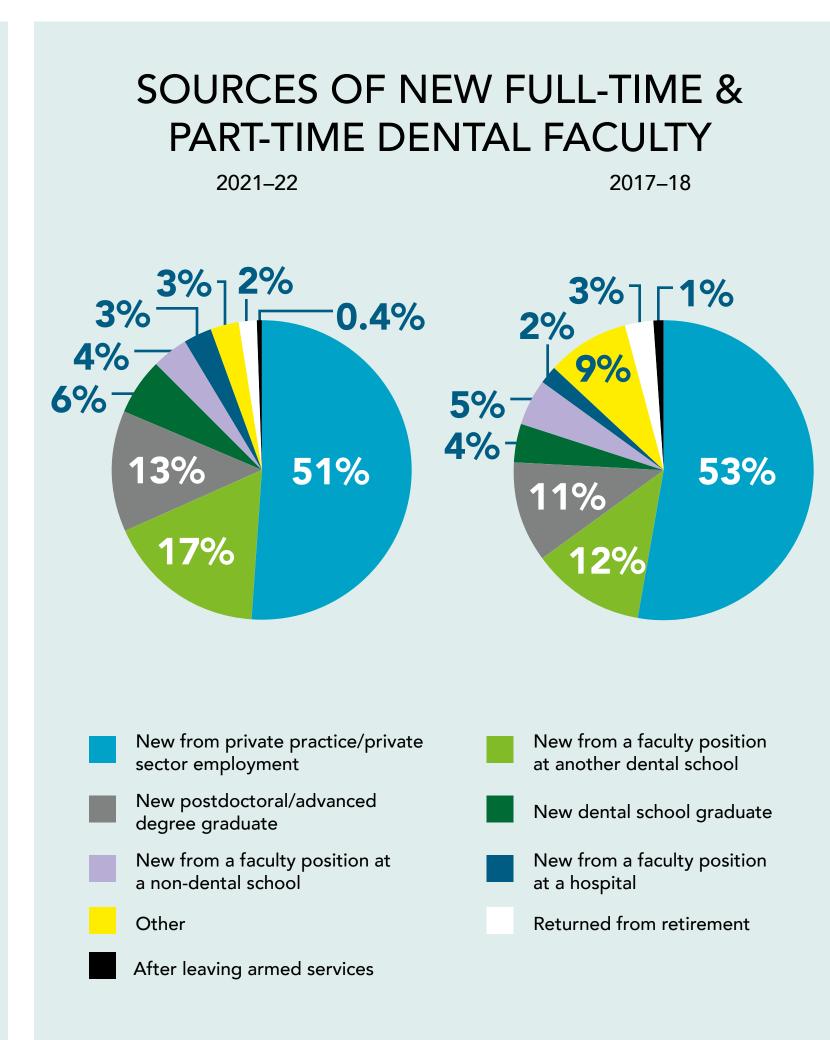


Leaving for a position at another dental school saw the highest growth as a source of faculty separations, followed by entering private practice.

When it comes to new dental school faculty, private practice or private sector employment remained the largest source.







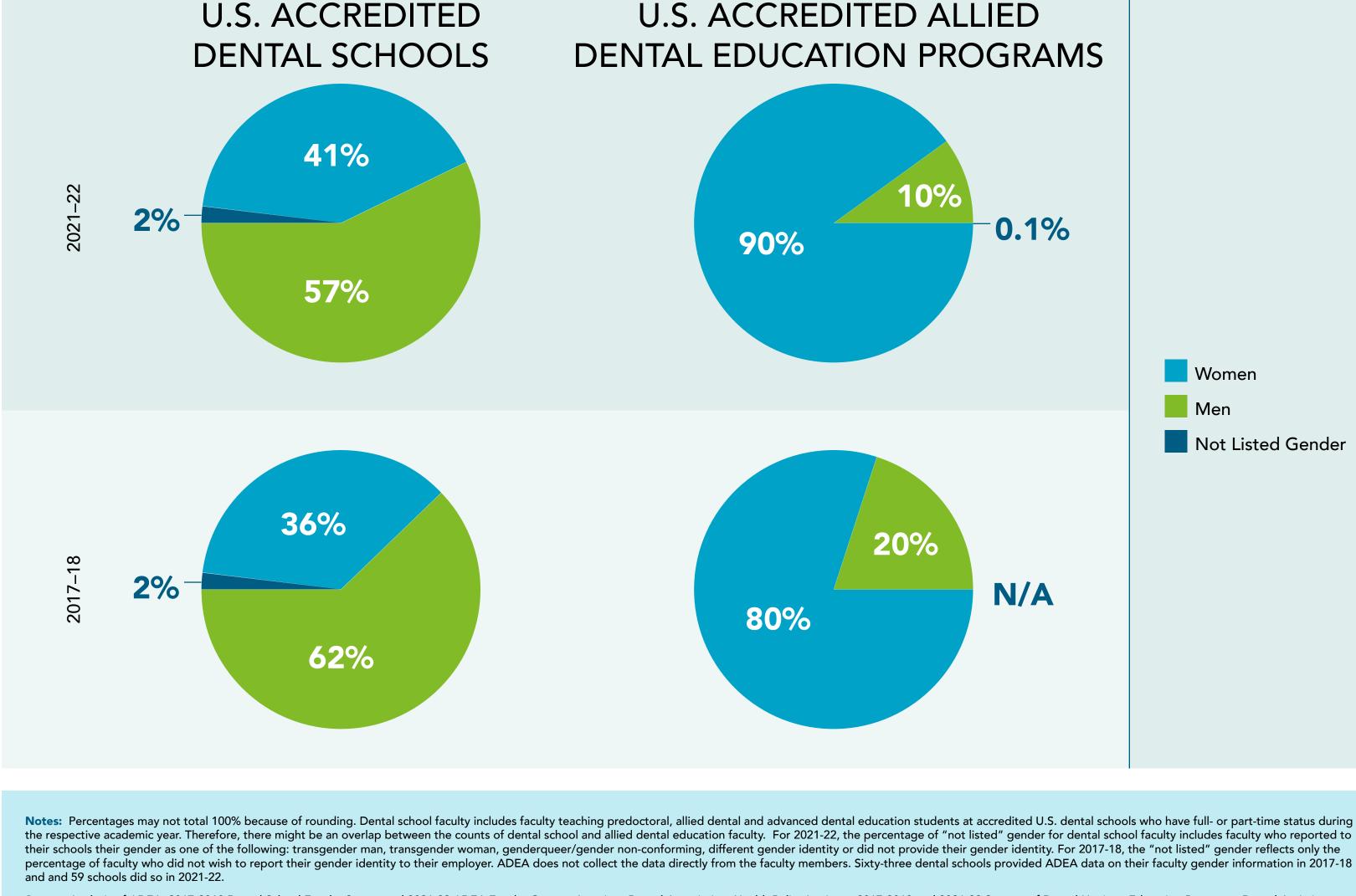
Notes: Percentages may not total 100 due to rounding. This analysis reflects full-time and part-time faculty vacancies for which accredited dental schools reported the source of the new faculty member. Sixty-four schools provided this information to ADEA for the 2017-18 academic year and 61 did so for 2021-22.

WOMEN FACULTY IN ACADEMIC DENTISTRY



Not Listed Gender

Women are increasingly a larger proportion of faculty in dental schools and accredited allied dental education programs. Faculty at accredited allied dental programs is majority women, increasing 10 percentage points since 2017–18.



the respective academic year. Therefore, there might be an overlap between the counts of dental school and allied dental education faculty. For 2021-22, the percentage of "not listed" gender for dental school faculty includes faculty who reported to their schools their gender as one of the following: transgender man, transgender woman, gendergueer/gender non-conforming, different gender identity or did not provide their gender identity. For 2017-18, the "not listed" gender reflects only the percentage of faculty who did not wish to report their gender identity to their employer. ADEA does not collect the data directly from the faculty members. Sixty-three dental schools provided ADEA data on their faculty gender information in 2017-18

Source: Analysis of ADEA, 2017-2018 Dental School Faculty Survey and 2021-22 ADEA Faculty Census; American Dental Association, Health Policy Institute, 2017-2018 and 2021-22 Surveys of Dental Hygiene Education Programs, Dental Assisting Programs, and Dental Laboratory Technology Programs.

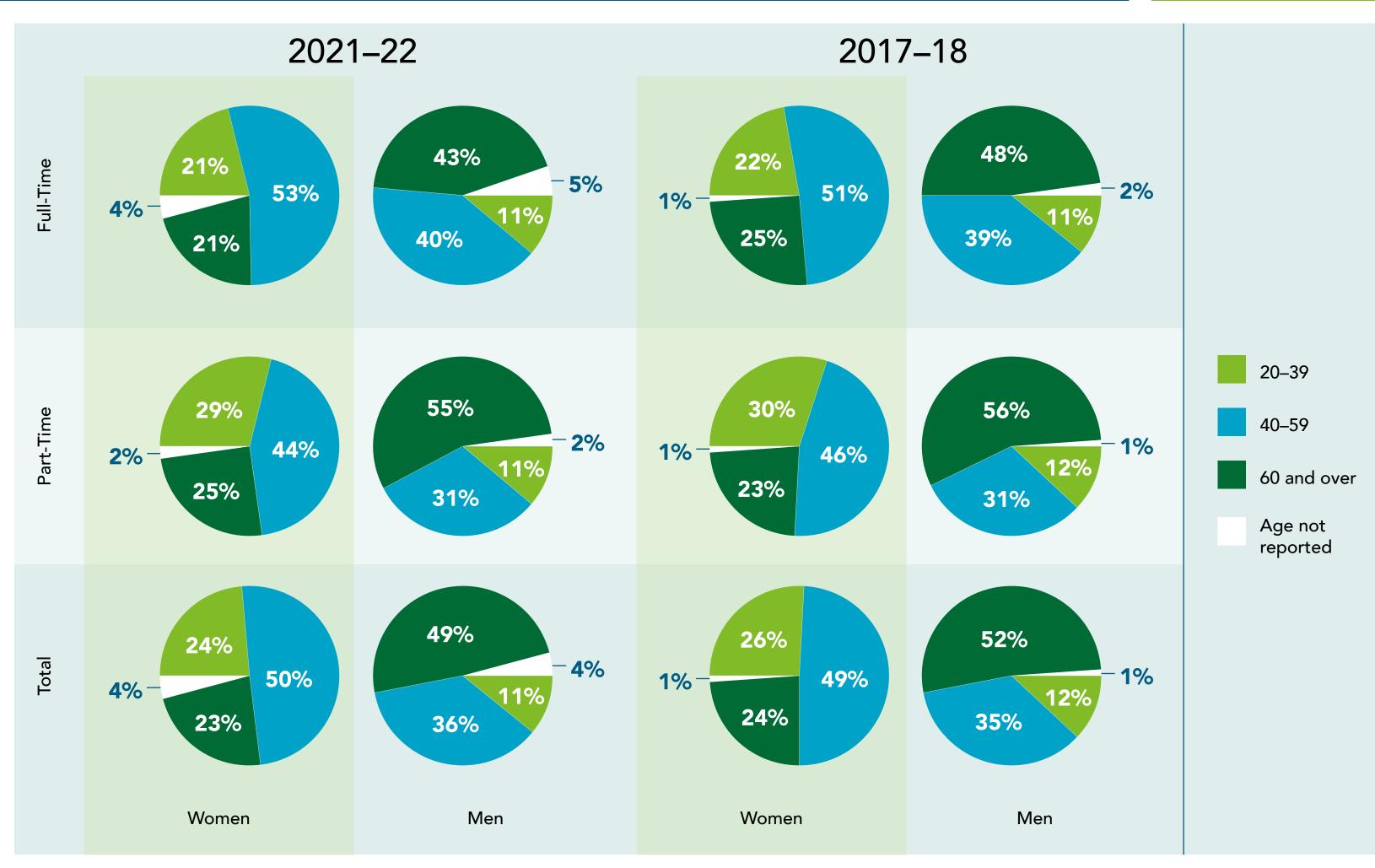
FULL-TIME AND PART-TIME FACULTY AT U.S. DENTAL SCHOOLS BY AGE & GENDER



The age distribution among men and women faculty **remained relatively steady** since 2017-18. The highest percentage of men faculty are age 60 or older (49%), and for women age

40 to 59 (50%).





Notes: Percentages may not total 100% because of rounding. For 2021-22, the percentage of "not listed" gender for dental school faculty includes faculty who reported to their schools their gender as one of the following: transgender man, transgender woman, genderqueer/gender non-conforming, different gender identity or did not provide their gender identity. For 2017-18, the "not listed" gender reflects only the percentage of faculty who did not wish to report their gender identity to their employer. Date of birth, which is used to calculate age, was a required field in 2017-18 and was optional in 2021-22. ADEA does not collect the data directly from the faculty members. Sixty-three dental schools provided ADEA data on their faculty gender and date of birth information in 2017-18 and 56 schools did so in 2021-22. Dental school faculty includes faculty teaching predoctoral, allied dental and advanced dental education students at accredited U.S. dental schools who have full- or part-time status during the respective academic year.

Source: American Dental Education Association, 2017-18 Survey of Dental School Faculty and 2021-22 ADEA Faculty Census

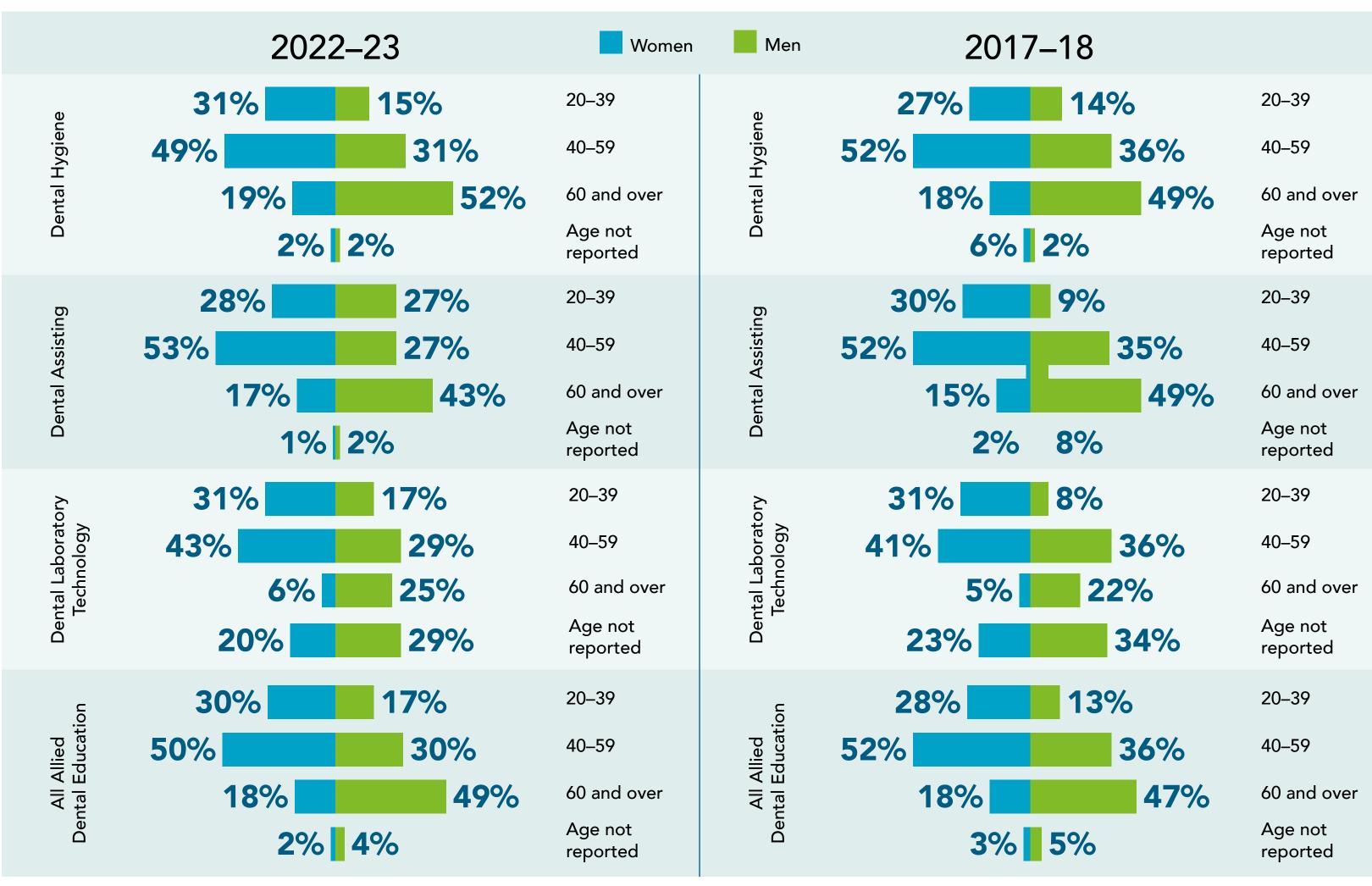
FACULTY AT U.S. ALLIED DENTAL EDUCATION PROGRAMS BY AGE & GENDER



Allied dental faculty saw larger numbers of young members coming into its fold.

The proportion of allied dental faculty younger than 40 years old recorded increases both among women and men. For women, it reached almost a third and for men it was close to one fifth.





Notes: Percentages may not total 100% because of rounding. This analysis does not report data on those who prefer not to report their gender, do not identify as either man or woman, or whose gender is not available because of the small count. Photo courtesy of the University of Louisville School of Dentistry.

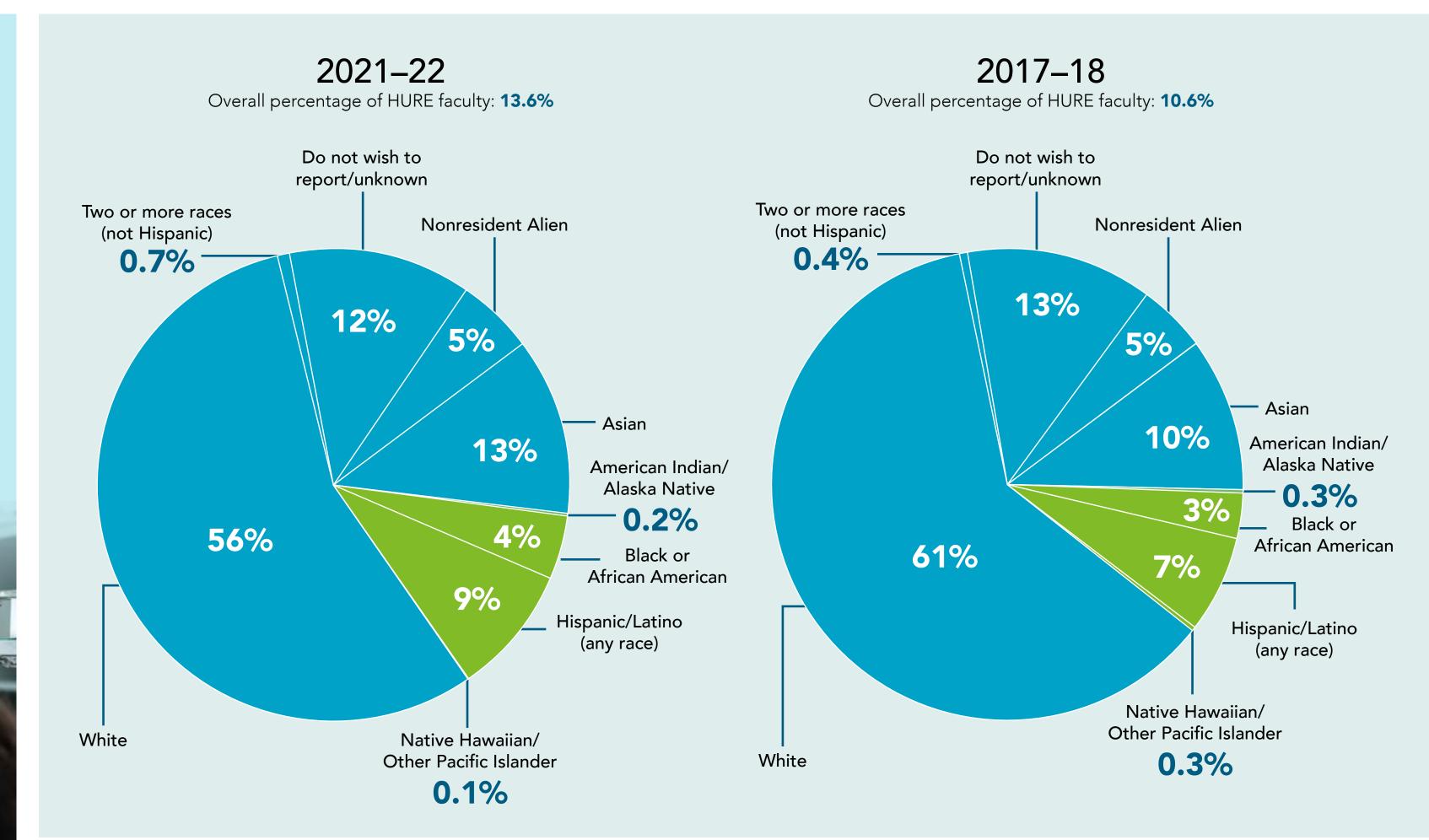
Source: ADEA Analysis of American Dental Association, Health Policy Institute, Surveys of Dental Education, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2017-18 and 2022-23

DIVERSITY IN DENTAL SCHOOL FACULTY



The overall percentage of HURE faculty members in dental schools increased by three percentage points.

This increase was driven mainly by the rise in the representation of Hispanic or Latino faculty and, to a lesser extent, African American faculty. Overall, white faculty represented fewer U.S. dental school faculty in 2021–22 than in 2017–18.

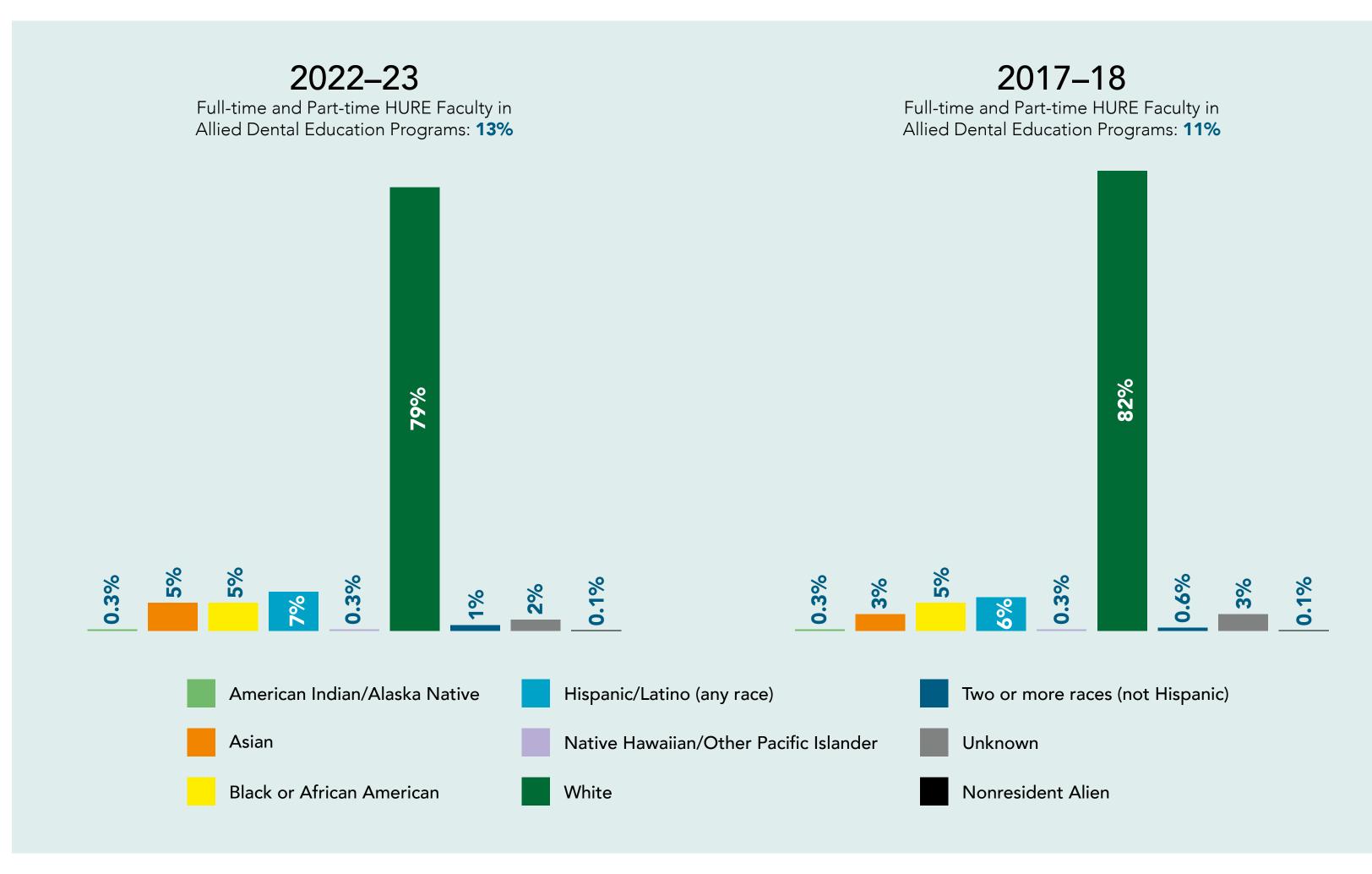


Notes: Percentages may not total 100% because of rounding. Dental school faculty includes full- and part-time faculty at accredited dental schools in the United States. Historically Underrepresented Race and Ethnicity (HURE) faculty includes the following four race and ethnicity categories: non-Hispanic American Indian or Alaska Native, non-Hispanic African American, Hispanic or Latino of all races, and non-Hispanic Native Hawaiian or Other Pacific Islander. These four race and ethnicity categories are defined by the U.S. Department of Education for reporting data from higher education institutions. The HURE definition is based on the parity gap between the share of the U.S. Department of Education for reporting data from higher education institutions. Dental schools report the race and ethnicity data for faculty members to ADEA, based on what the faculty provide them for the school's administrative records. ADEA does not collect the data directly from the faculty members. Only dental schools that reported race and ethnicity information in 2017-18 and 52 schools did so in 2021-22, respectively.

DIVERSITY IN ALLIED DENTAL EDUCATION PROGRAM FACULTY







Notes: Percentages may not total 100% because of rounding.

HURE includes the following four race and ethnicity categories: non-Hispanic African American, Hispanic or Latino of all races, non-Hispanic American Indian or Alaska Native and non-Hispanic Native Hawaiian or Other Pacific Islander. These four race and ethnicity categories are defined by the U.S. Department of Education for reporting data from higher education institutions. The HURE definition is based on the parity gap between the share among the U.S. population and the share among professionally active dentists for each of the race and ethnicity categories defined by the U.S. Department of Education for reporting data from higher education institutions.

Source: ADEA Analysis of American Dental Association (ADA), Health Policy Institute, Surveys of Dental Hygiene Education Programs, Surveys of Dental Assisting Education Programs, Survey of Dental Laboratory Technology Education Programs, 2017-