



Yale University
School of Medicine

CASPA Applicant/Matriculation Trends 2007-2021: Race, Ethnicity, Gender, and Economically Disadvantaged Status

Sobia Shariff Hussaini, MHA¹; Bettie Coplan, PhD, PA-C²; Chris Gillette, PhD¹;
Gregory B. Russell, MS³; M. Jane McDaniel, MS, MLS(ASCP)SC⁴



Yale University
School of Medicine

¹Wake Forest University School of Medicine Department of PA Studies
²Northern Arizona University Department of PA Studies
³Wake Forest University School of Medicine Department of Biostatistics
⁴Yale School of Medicine Physician Assistant Online Program

Purpose

- As Physician Assistant/Physician Associate (PA) programs strive to improve diversity, equity and inclusion and streamline admissions processes, a review of previous applicant and matriculant data is essential.
- Prior analyses of CASPA data show stagnation in student diversity.
- This study examines CASPA data over the first 20 years, focusing on applicant and matriculant race, ethnicity, gender, and economically disadvantaged status.
- Findings have the potential to inform admissions practices that promote increased diversity in PA programs nationwide.

Methods

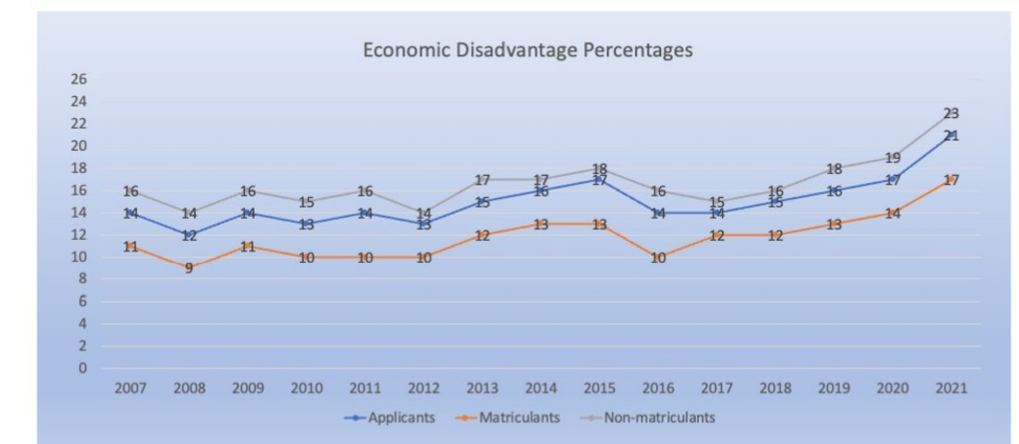
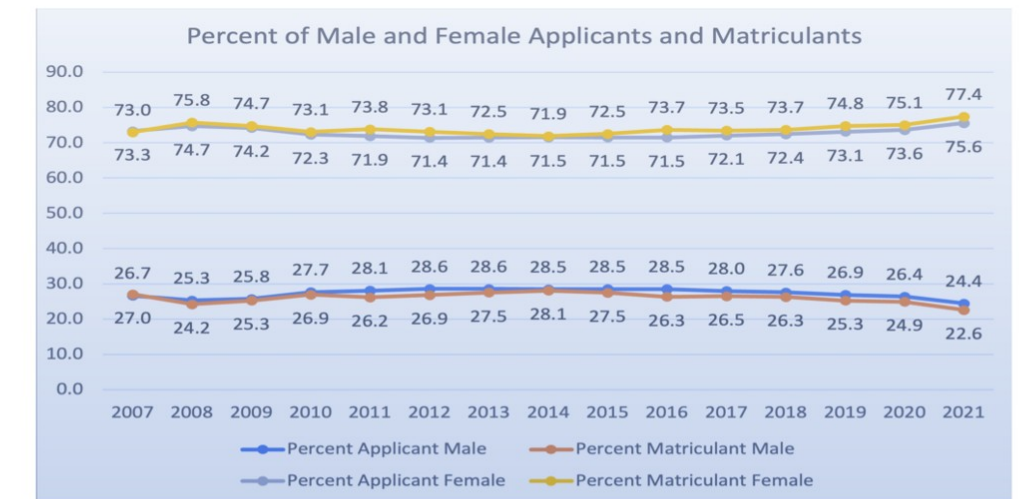
- This is a retrospective analysis of CASPA data from all CASPA participating programs from 2007 to 2021.
- Beginning in 2007, the online CASPA Admissions Portal linked matriculant and applicant data.
- Trends in both applicants and matriculants in the areas of race, ethnicity, gender, and economically disadvantaged status were analyzed using descriptive statistics.
- Logistic regression models will be used to assess factors that may be associated with odds of matriculation among diverse applicants.

Results

- Examining race and ethnicity, between 2007 and 2021, the percentage of applicants and matriculants who identified as non-Hispanic white declined from 70.34% to 55.09% and from 76.40% to 66.92% respectively.
- Black/African American applicants and matriculants decreased from 2007 to 2016 but saw a steady increase from 2017 to 2021, with the percentage of matriculants increasing slightly from 3.1% to 4.51%.
- Hispanic/Latino applicants and matriculants increased from 6.94% to 13.42% and 5.79% to 9.71% respectively.
- White matriculants exceeded the percentage of white applicants each year; the opposite occurred for all other races/ethnicities.
- From 2010 to 2018, an increasing percentage of applicants did not report race or ethnicity, with a significant decrease in non-reported data starting in 2019.
- In the analysis of applicant and matriculation trends in gender, the percentages of male and female applicants and matriculants remained relatively constant from 2007-2021.
- There was a slight increase in female applicants and matriculants and a slight decrease in male applicants and matriculants in the 2019-2021 application cycles, which was statistically significant.
- Between 2007 and 2021, the percentage of applicants who reported economic disadvantage increased, with the highest percentage increase in 2021.
- Each year, the percentage of matriculants who reported economic disadvantage was lower than the percentage of applicants reporting economic disadvantage; and the percentage of non-matriculants who reported economic disadvantage was higher than the percentage of applicants reporting economic disadvantage.
- These results suggest that, while more individuals who reported economic disadvantage were applying to PA school, economic factors were a barrier to matriculation.

Race and Ethnicity as a Percentage of Total Applicants and Matriculants (2007-2021)

Year of Collection	American Indian/ Alaska Native %	Asian %	Black %	White %	Pacific Islander %	Hispanic %	Other %	No Response %
2007								
Applicant	0.75	9.59	7.30	70.34	0.23	6.94	3.01	1.98
Matriculant	0.70	8.20	4.19	76.40	0.14	5.79	2.60	1.98
2008								
Applicant	0.76	9.48	5.95	70.83	0.28	7.38	3.04	2.45
Matriculant	0.71	7.34	3.42	77.17	0.23	5.97	2.38	2.78
2009								
Applicant	0.70	10.57	6.73	69.12	0.22	7.70	2.62	2.50
Matriculant	0.64	7.37	3.19	77.83	0.18	6.17	2.11	2.50
2010								
Applicant	0.47	11.82	7.12	68.59	0.07	8.79	2.17	5.98
Matriculant	0.29	8.69	3.18	73.40	0.02	6.91	1.67	5.83
2011								
Applicant	0.46	11.72	6.77	69.90	0.09	8.91	2.38	5.38
Matriculant	0.47	8.16	2.98	73.41	0.04	6.41	2.44	6.09
2012								
Applicant	0.32	11.83	6.81	66.45	0.05	7.41	3.15	3.99
Matriculant	0.23	8.67	3.04	74.89	0.05	6.13	3.09	3.90
2013								
Applicant	0.28	11.81	6.36	66.32	0.10	7.74	3.67	3.72
Matriculant	0.21	8.22	2.86	75.39	0.06	6.64	2.99	3.63
2014								
Applicant	0.33	11.81	6.17	65.73	0.14	8.14	4.01	3.67
Matriculant	0.36	8.03	2.94	75.45	0.10	6.25	3.13	3.74
2015								
Applicant	0.21	12.15	6.06	64.94	0.12	8.40	3.77	4.36
Matriculant	0.15	9.47	3.03	72.66	0.09	7.18	3.18	4.24
2016								
Applicant	0.29	11.32	6.30	60.90	0.25	9.21	3.59	8.13
Matriculant	0.26	8.13	2.94	69.03	0.18	7.51	3.51	8.44
2017								
Applicant	0.32	13.60	7.44	55.75	0.32	10.03	4.16	8.38
Matriculant	0.24	9.11	3.10	67.24	0.19	8.31	3.79	8.02
2018								
Applicant	0.31	13.42	7.58	56.15	0.33	10.98	4.13	7.11
Matriculant	0.25	10.28	3.20	67.60	0.31	8.04	3.78	6.54
2019								
Applicant	0.30	14.21	8.58	56.55	0.34	11.56	4.70	3.76
Matriculant	0.11	10.97	3.37	68.58	0.27	8.94	4.04	3.60
2020								
Applicant	0.35	14.68	8.31	55.98	0.23	12.37	5.24	2.85
Matriculant	0.17	10.79	4.09	69.26	0.21	8.70	3.95	2.83
2021								
Applicant	0.24	14.33	8.72	55.09	0.27	13.42	5.56	2.38
Matriculant	0.21	12.29	4.51	66.92	0.21	9.71	4.33	1.81



Conclusion

- The PA profession continues to face challenges recruiting underrepresented minorities, male applicants, and economically disadvantaged applicants to the profession, which has implications for caring for and treating diverse populations.
- This twenty-year comprehensive analysis will benefit the profession by providing historical information that faculty and policymakers can use as a basis for developing and evaluating future admissions policies and practices.

References

- McDaniel MJ, Hildebrandt CA, Russell GB. Central Application Service for Physician Assistants Ten-Year Data Report, 2002 to 2011. *J Physician Assist Educ.* 2016;27(1):17-23.
- Yuen CX, Honda TJ. Predicting physician assistant program matriculation among diverse applicants: the influences of underrepresented minority status, age, and gender. *Acad Med.* 2019;94(8):1237-1243. doi:10.1097/ACM.0000000000002717.
- Honda T, Henry TD, Mandel ED, Quella A, Rodríguez JE, Najmabadi S, Valentin VL. Maximizing Black applicant matriculation in US PA programs: associations between the number of submitted applications and likelihood of matriculation. *BMC Med Educ.* 2021;21(1):1-7.
- Ruback T, Coombs J, Keck M, McDaniel MJ, Barwick T, Kang S, Liang, M. Central Application Service for Physician Assistants: five-year report. *J Physician Assist Educ.* 2007;18(3):52-59.
- Hussaini SS, Coplan B, Gillette C, Russell GB, McDaniel MJ. Central Application Service for Physician Assistants Fifteen-Year Data Report 2002-2016 [published online ahead of print, 2023 Aug 15]. *J Physician Assist Educ.* 2023;10.1097/JPA.000000000000518. doi:10.1097/JPA.000000000000518