

The Effect of the Graduate Record Examination on Minority Applications

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The Facts:

- Overwhelming majority of PA students are Caucasian¹
- Non-white matriculants fell to 19% in 2010 and returned to 24% in 2011 ¹
- What is expected regarding the US population:
 - Decline in Caucasians²
 - Rise in African Americans, Asians and Hispanics²

1. Lane S, Scott C. Twenty-seventh annual report on physician assistant educational programs in the United States, 2010-2011. Physician Assistant Education Association; May 2013.

2. US Census Bureau, 2004, Projected population of the United States by race and Hispanic Origin: 2000-2050.

The Graduate Record Examination

- As of 2010, the GRE was an admissions requirement in 55% of PA programs.³
 - 38.5% were complying with ETS guidelines
 - 61.4% were using the GRE incorrectly
- Its suggested the GRE is a predictor of academic success including success on PANCE.
- Is it?

3. Hocking JA, Piepenbrock K. Predictive ability of the graduate record examination and its usage across physician assistant programs. J Physician Assist Educ 2010; 21(4):18-22.

What Do We Know?

- Higgins et al, GRE verbal and quantitative scores were predictive of PANCE scores in only two of six programs studied.⁴
- Two papers published in 2003:
 - Success in the program was demonstrated to be almost five times more vital in predicting PANCE performance than students' previous educational backgrounds.⁵
 - Despite lower admitting GPAs and GRE scores the in program GPA increase was parallel to that of the students admitted with higher GRE and GPAs ⁶

4. Higgins R, Moser S, Dereczyk A, Canales R, Stewart G, Schierholtz C, et al. Admission variables as predictors of PANCE scores in physician assistant programs: A comparison study across universities. *J Physician Assist Educ* 2010;21(1):10-17.

5. Parkhurst DC. Development of a self-study evaluation system. *Perspectives on Physician Assistant Education* 2003;14(4):235-239.

6. Danielsen R, Croll J, Cannon JD. Educating American Indian physician assistant students via interactive video: A two year experience. *Perspectives on Physician Assistant Education* 2003;14(3):168-173.

Minorities and the GRE

- Minorities are known to have lower standardized test scores than Caucasians on both the GRE and SAT. ^{7,8}
- Some allied health programs have determined that the GRE was an admissions barrier for minorities
 - Benefit as an academic predictor did not outweigh the negative effect it had on minority applications.⁹

7. National College Board SAT 2011 College Bound Seniors, Total Group Profile Reoprt.http://professionals.collegeboard.com/profdownload/cbs2011_total_group_report.pdf
8. GRE General Test Score Information by Ethnicity/Racial Groups, 2009-2010.
http://www.ets.org/s/gre/pdf/gre_general_test_score_information_by_ethnicity_2009_2010.pdf
9. Katz JR, Chow C, Motzer SA, Woods SL. The graduate record examination: Help or hindrance in nursing graduate school admissions? Journal of Professional Nursing 2009;25(6): 369-372.

Purpose

- The purpose of this study was to determine if requiring the GRE had an effect on minorities submitting applications to NYIT's PA program.

Methodology

- Minorities who applied between the years 2008-2011 were identified by self-identification at CASPA submission
 - Two application cycles before and after the GRE made an entrance requirement
- A report was generated identifying each ethnicity's percent of the total CASPA pool as well as each ethnicity's percent of NYITs application pool
- Descriptive statistics and percent change were used

NYIT's Application Pool Before and After the GRE was a Requirement

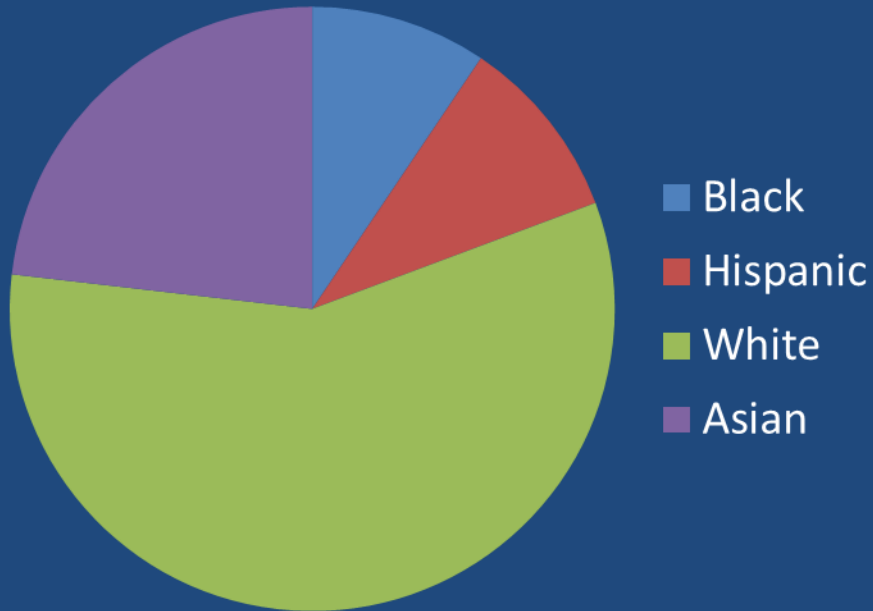
	% NYIT Applicants 2008	% NYIT Applicants 2009	Mean% NYIT Applicants Before GRE	% NYIT Applicants 2010	% NYIT Applicants 2011	Mean% NYIT Applicants After GRE	% Change
Black	8.78	8.43	8.60	4.92	4.71	4.81	- 44.06
Hispanic	8.79	9.25	9.02	9.53	9.56	9.54	+ 5.76
White	53.49	51.61	52.55	54.97	55.76	55.36	+ 5.34
Asian	21.09	21.24	21.16	21.15	21.65	21.40	+ 1.13

CASPA's Application Pool Before and After the GRE was a Requirement

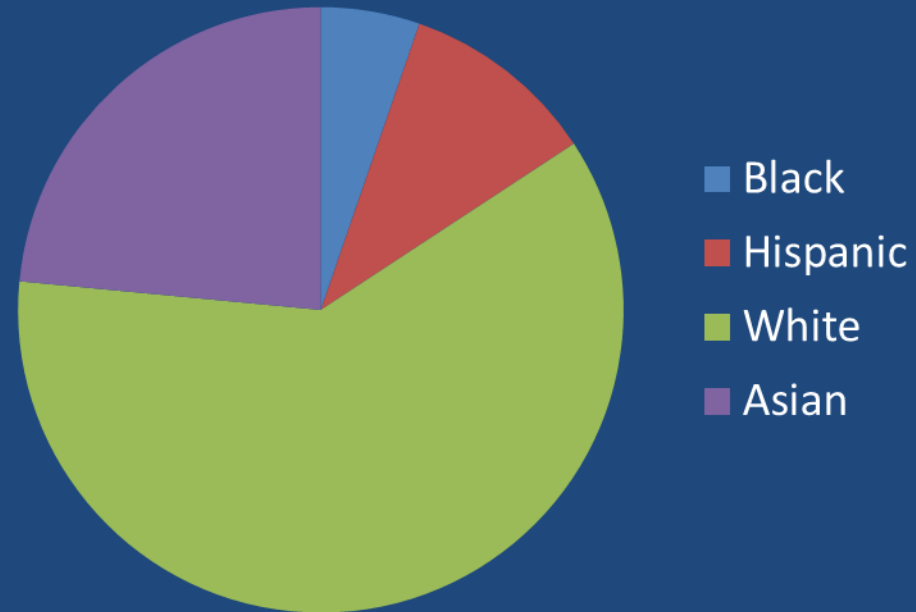
	% CASPA Applicants 2008	% CASPA Applicants 2009	Mean % CASPA Applicants Before GRE	% CASPA Applicants 2010	% CASPA Applicants 2011	Mean % CASPA Applicants After GRE	% Change
Black	6.73	6.87	6.80	6.55	6.24	6.39	- 6.02
Hispanic	7.51	8.26	7.88	8.43	9.16	8.79	+ 11.54
White	69.12	64.86	66.99	65.51	66.08	65.79	- 1.79
Asian	10.56	11.62	11.09	11.50	11.78	11.64	+ 4.95

NYIT's Application Pool Before and After the GRE was a Requirement

Application Pool Before GRE

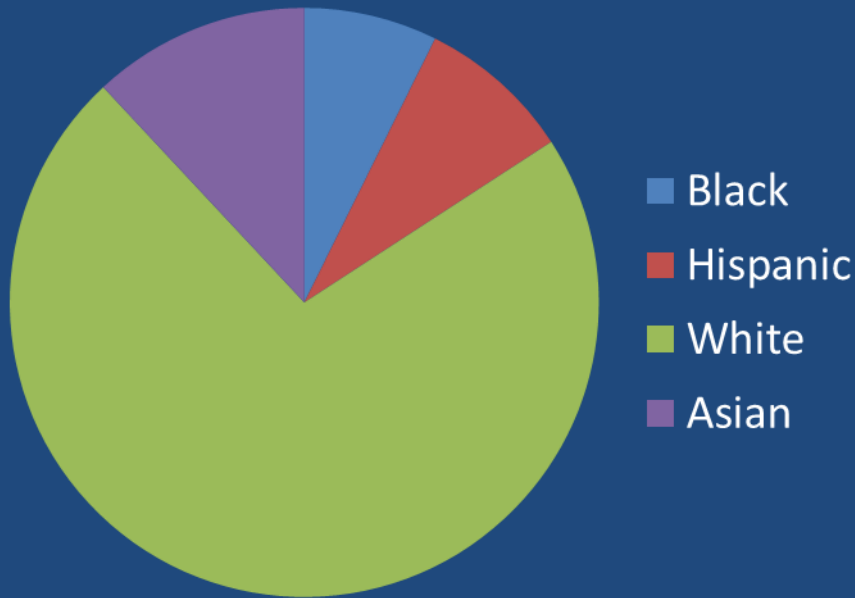


Application Pool After GRE

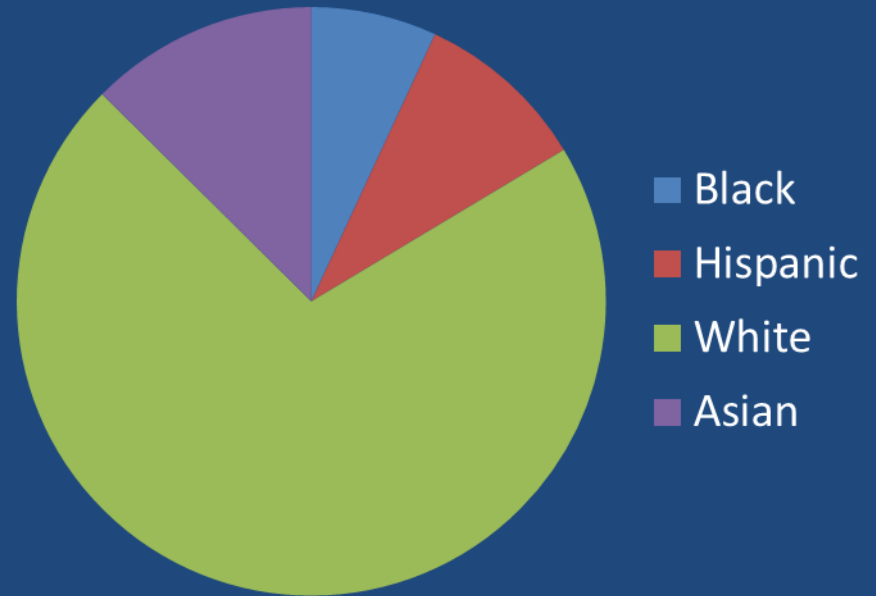


CASPA's Application Pool Before and After the GRE was a Requirement

Application Pool Before GRE



Application Pool After GRE



Results

- The CASPA pool of minority applicants remained stable.
- NYIT's pool of Black/African American applicants decreased substantially once the GRE was added to our admissions criteria.

Limitations

- Singular program
- 4 application cycles (2 and 2) but....
 - Consistency in CASPA's and NYIT's application pool from year to year before and after the GRE was instituted indicates a trend.
- American Indian, Alaskan Native, Native Hawaiian and Other Pacific Islanders not analyzed

Conclusion

- Adopting the GRE as part of our admissions criteria appears to have created an additional barrier for minority applicants, specifically Black/African American applicants.
- Using the GRE as part of the admissions process may result in greater ethnic disparity as more programs adopt its use.

Food For Thought.....

