UT Southwestern Medical School Admissions Analysis

David Puelz

March 14, 2026

Abstract

This supplement presents summary statistics and figures for MCAT, GPA, and science GPA across race and gender among medical school applicants, using data from the 2021 and 2022 admission cycles. The analysis proceeds in two parts: (1) conditional distributions and summary statistics for admitted students only, and (2) the full applicant pool with a logistic regression of admission on race, gender, MCAT, and GPA. Results are reported in tables and figures throughout.

1.   Admitted sample

- Admitted students are those with status variable equal to: "Offered Admission - Matriculated", "Offered Admission - Deferred Accepted", "Offered Admission - Declined", and "Declined Admissions Offer".

- The total number of applicants with these admissions statuses equals 724.

- The following race categories were aggregated: "Black or African American" converted to "African American", "Asian; White" converted to "Asian", and "White" converted to "White/Caucasian".
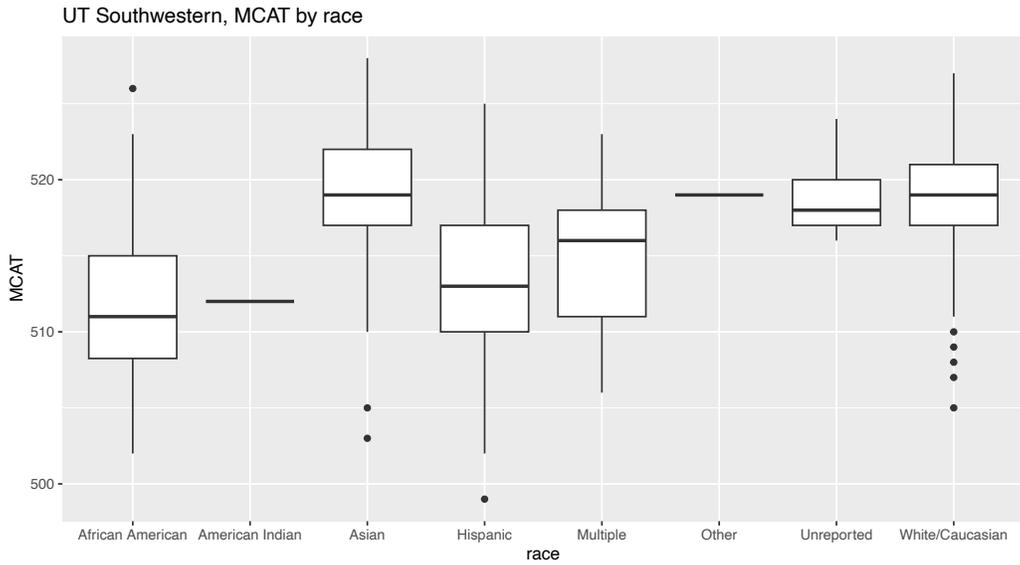
Figure 1. MCAT score by race. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.
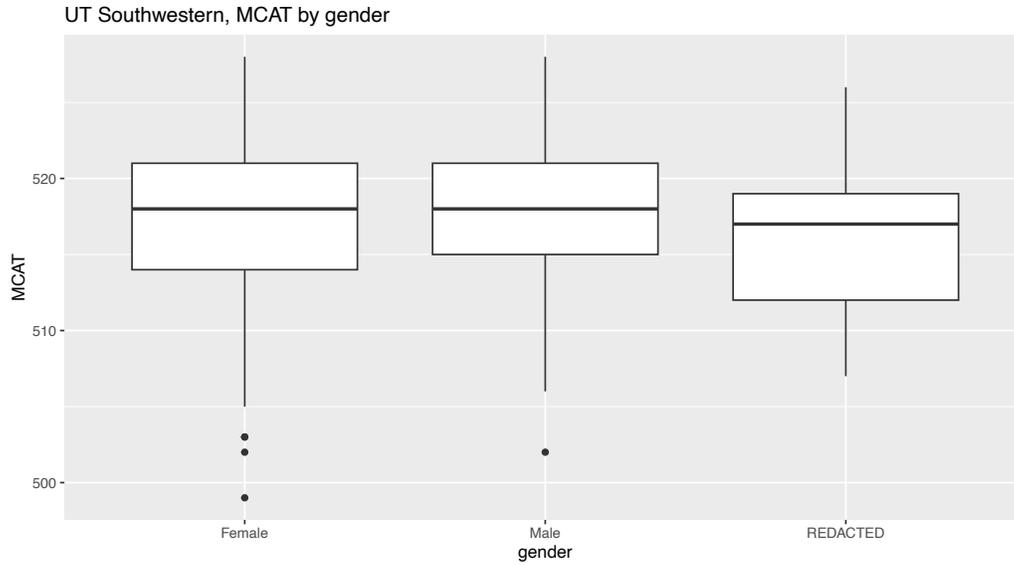
Figure 2. MCAT score by gender. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.
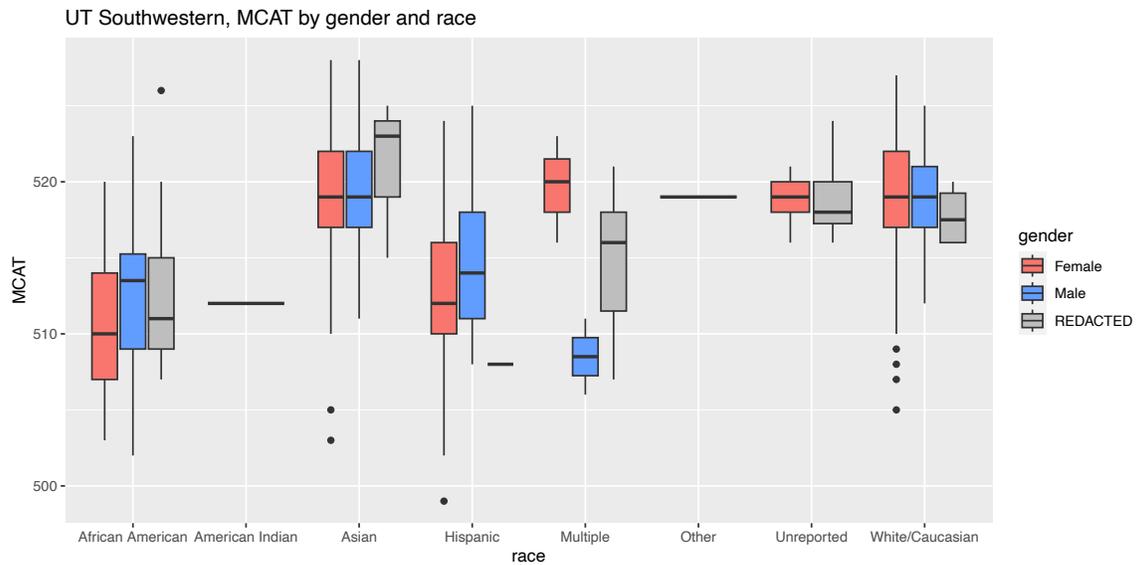
Figure 3. MCAT score by gender and race. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.

Figure 4. GPA by race. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.
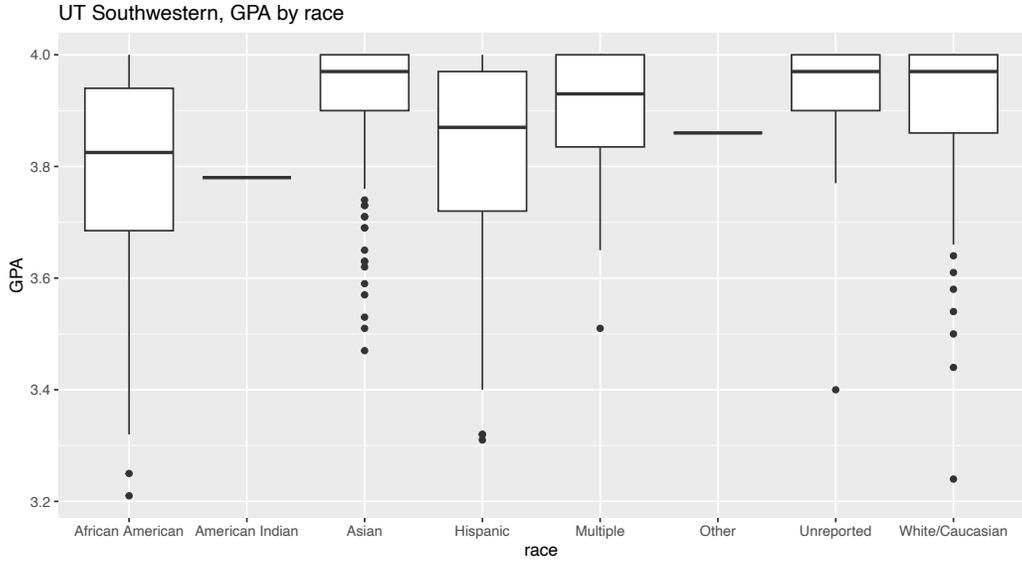

Figure 5. GPA by gender. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.

Figure 6. GPA by gender and race. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.
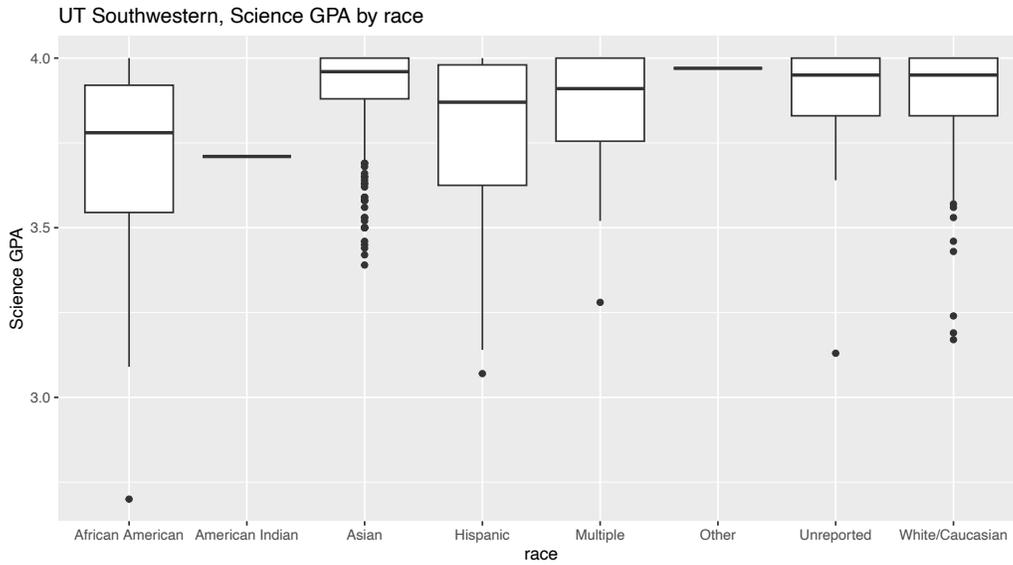
Figure 7. Science GPA by race. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.
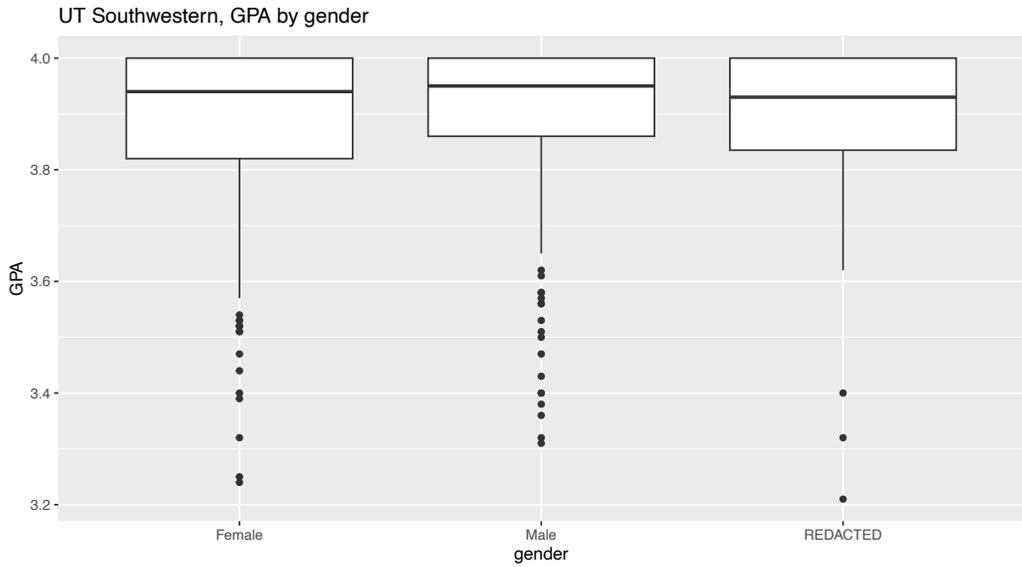
Figure 8. Science GPA by gender. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.
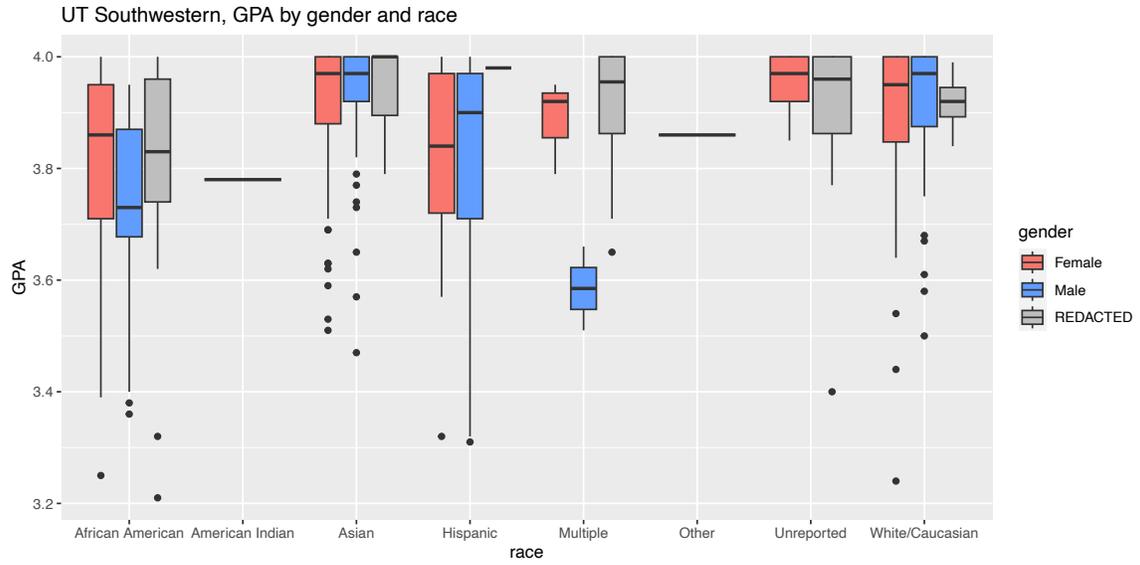

Figure 9. Science GPA by gender and race. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.
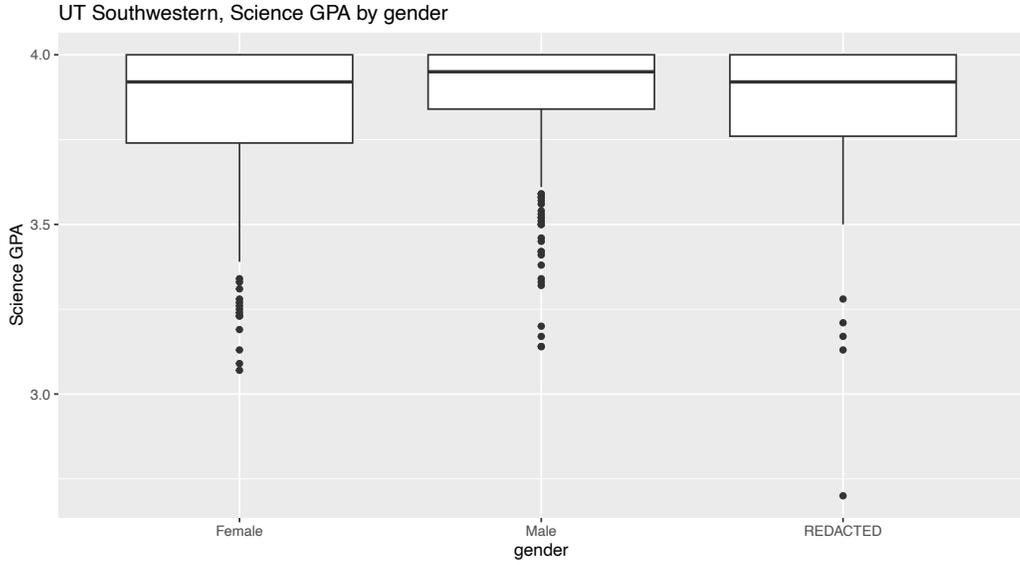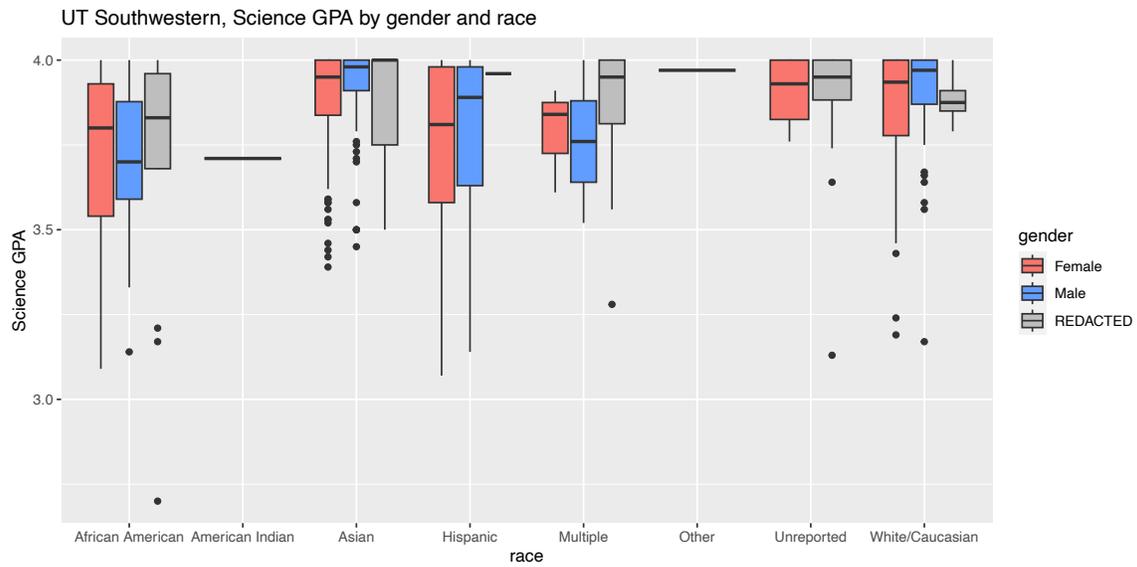
race	mean	median	sd	size
African American	511.89	511	4.70	82
American Indian	512.00	512		1
Asian	519.26	519	3.67	286
Hispanic	513.74	513	4.90	119
Multiple	514.89	516	4.98	27
Other	519.00	519		1
Unreported	518.80	518	2.12	25
White/Caucasian	518.83	519	3.61	183

Table 1. MCAT score summary statistics by race.

gender	mean	median	sd	size
Female	516.93	518	5.10	380
Male	517.90	518	4.49	281
REDACTED	515.92	517	4.90	63

Table 2. MCAT score summary statistics by gender.

race	gender	mean	median	sd	size
African American	Female	511.14	510.0	4.15	49
Asian	Female	518.94	519.0	3.70	168
Hispanic	Female	512.95	512.0	4.86	61
Multiple	Female	519.67	520.0	3.51	3
Unreported	Female	518.86	519.0	1.77	7
White/Caucasian	Female	518.73	519.0	4.26	92
African American	Male	513.15	513.5	5.15	20
Asian	Male	519.68	519.0	3.57	115
Hispanic	Male	514.68	514.0	4.81	57
Multiple	Male	508.50	508.5	3.54	2
White/Caucasian	Male	518.98	519.0	2.85	87
African American	REDACTED	512.77	511.0	5.72	13
American Indian	REDACTED	512.00	512.0		1
Asian	REDACTED	521.00	523.0	5.29	3
Hispanic	REDACTED	508.00	508.0		1
Multiple	REDACTED	514.82	516.0	4.67	22
Other	REDACTED	519.00	519.0		1
Unreported	REDACTED	518.78	518.0	2.29	18
White/Caucasian	REDACTED	517.75	517.5	2.06	4

Table 3. MCAT score summary statistics by race and gender.

race	mean	median	sd	size
African American	3.77	3.83	0.20	82
American Indian	3.78	3.78		1
Asian	3.93	3.97	0.10	286
Hispanic	3.83	3.87	0.17	119
Multiple	3.89	3.93	0.13	27
Other	3.86	3.86		1
Unreported	3.92	3.97	0.13	25
White/Caucasian	3.91	3.97	0.12	183

Table 4. GPA summary statistics by race.

gender	mean	median	sd	size
Female	3.89	3.94	0.14	380
Male	3.90	3.95	0.14	281
REDACTED	3.88	3.93	0.16	63

Table 5. GPA summary statistics by gender.

race	gender	mean	median	sd	size
African American	Female	3.80	3.86	0.19	49
Asian	Female	3.92	3.97	0.10	168
Hispanic	Female	3.83	3.84	0.15	61
Multiple	Female	3.89	3.92	0.09	3
Unreported	Female	3.95	3.97	0.06	7
White/Caucasian	Female	3.90	3.95	0.13	92
African American	Male	3.72	3.73	0.18	20
Asian	Male	3.94	3.97	0.09	115
Hispanic	Male	3.83	3.90	0.18	57
Multiple	Male	3.58	3.58	0.11	2
White/Caucasian	Male	3.93	3.97	0.11	87
African American	REDACTED	3.76	3.83	0.25	13
American Indian	REDACTED	3.78	3.78		1
Asian	REDACTED	3.93	4.00	0.12	3
Hispanic	REDACTED	3.98	3.98		1
Multiple	REDACTED	3.91	3.96	0.11	22
Other	REDACTED	3.86	3.86		1
Unreported	REDACTED	3.90	3.96	0.15	18
White/Caucasian	REDACTED	3.92	3.92	0.06	4

Table 6. GPA summary statistics by race and gender.

race	mean	median	sd	size
African American	3.70	3.78	0.28	82
American Indian	3.71	3.71		1
Asian	3.91	3.96	0.14	286
Hispanic	3.78	3.87	0.24	119
Multiple	3.84	3.91	0.19	27
Other	3.97	3.97		1
Unreported	3.88	3.95	0.19	25
White/Caucasian	3.89	3.95	0.16	183

Table 7. Science GPA summary statistics by race.

gender	mean	median	sd	size
Female	3.84	3.92	0.20	380
Male	3.88	3.95	0.18	281
REDACTED	3.83	3.92	0.26	63

Table 8. Science GPA summary statistics by gender.

race	gender	mean	median	sd	size
African American	Female	3.72	3.80	0.26	49
Asian	Female	3.89	3.95	0.15	168
Hispanic	Female	3.76	3.81	0.24	61
Multiple	Female	3.79	3.84	0.16	3
Unreported	Female	3.91	3.93	0.10	7
White/Caucasian	Female	3.86	3.94	0.18	92
African American	Male	3.68	3.70	0.24	20
Asian	Male	3.93	3.98	0.12	115
Hispanic	Male	3.80	3.89	0.23	57
Multiple	Male	3.76	3.76	0.34	2
White/Caucasian	Male	3.92	3.97	0.13	87
African American	REDACTED	3.67	3.83	0.40	13
American Indian	REDACTED	3.71	3.71		1
Asian	REDACTED	3.83	4.00	0.29	3
Hispanic	REDACTED	3.96	3.96		1
Multiple	REDACTED	3.86	3.95	0.19	22
Other	REDACTED	3.97	3.97		1
Unreported	REDACTED	3.87	3.95	0.21	18
White/Caucasian	REDACTED	3.88	3.88	0.09	4

Table 9. Science GPA summary statistics by race and gender.

2. Entire sample and initial regression results

In this section, we present preliminary analysis of both the admitted and rejected students. Figure 10 compares the admitted and rejected students' MCAT scores across the different race categories. Note that the far right distribution (rejected whites) is comparable to the far left distribution (admitted blacks).
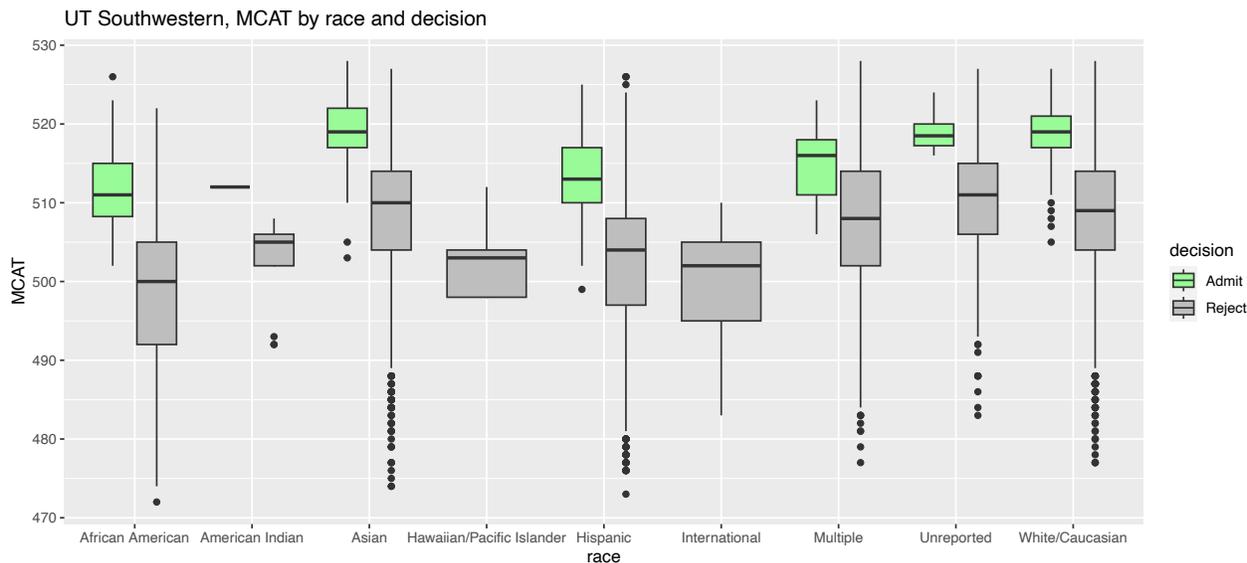
Figure 10. MCAT score by gender and admission decision. Boxes represent the inner-quartile-range (25th to 75th quantiles), and the solid black line represents the median.

As a final exercise, we fit a logistic regression model for the admission decision as a function of all other measured characteristics. Table 10 displays the model estimates and fit. The base categories for race and gender (incorporated into the intercept) are white males. The rows denote the different variables, the first number is the parameter estimate, and the second number is the estimate's standard error. These numbers are slope coefficients on a log-odds scale. Therefore, they can easily be converted to a "probability of admission" scale using the logistic cumulative density. A significant positive estimate indicates an increase in the odds of admission over the base categories (white and male).

	estimate (s.e.)
(Intercept)	$-138.07\ (4.83)^{***}$
genderDecline to Answer	$-11.98\ (262.03)$
genderFemale	$0.72\ (0.10)^{***}$
genderR	$-12.65\ (1455.40)$
genderREDACTED	$1.03\ (0.20)^{***}$
raceAfrican American	$3.06\ (0.19)^{***}$
raceAmerican Indian	$3.27\ (1.23)^{**}$
raceAsian	$0.57\ (0.11)^{***}$
raceHawaiian/Pacific Islander	$-9.61\ (599.85)$
raceHispanic	$1.83\ (0.15)^{***}$
raceInternational	$-10.73\ (336.50)$
raceMultiple	$0.38\ (0.25)$
raceUnreported	$0.13\ (0.26)$
MCAT	$0.24\ (0.01)^{***}$
GPA	$2.06\ (0.76)^{**}$
GPA_sci	$0.81\ (0.56)$
AIC	3636.65
BIC	3754.07
Log Likelihood	-180232
Deviance	3604.65
Num. obs.	11374

$^{***}p < 0.001;\ ^{**}p < 0.01;\ ^{*}p < 0.05$

Table 10. Logistic regression model of admission probability.

This model also provides a predicted probability of admission given a known set of variable values. We compute predictions for a "median male" applicant and show how they differ by race in Figure 11. "Median male" is defined as an applicant with median values of the MCAT score, GPA and science GPA. These medians are computed across the entire sample of applicants. A striking result is how much these predicted probabilities vary across race. However, this is not surprising, given the race categories' significant partial effects on the log-odds as displayed in Table 10.

Admission probability predictions for "median male"
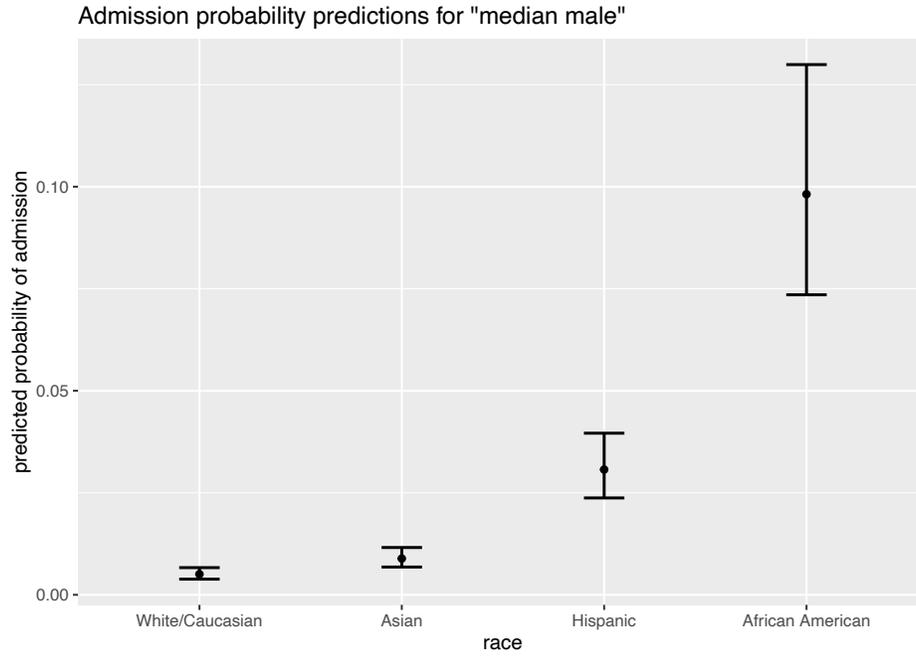
Figure 11. Predicted probability of admission for males with median MCAT, GPA, and science GPA. The lines represent the 95% uncertainty intervals about these predictions.