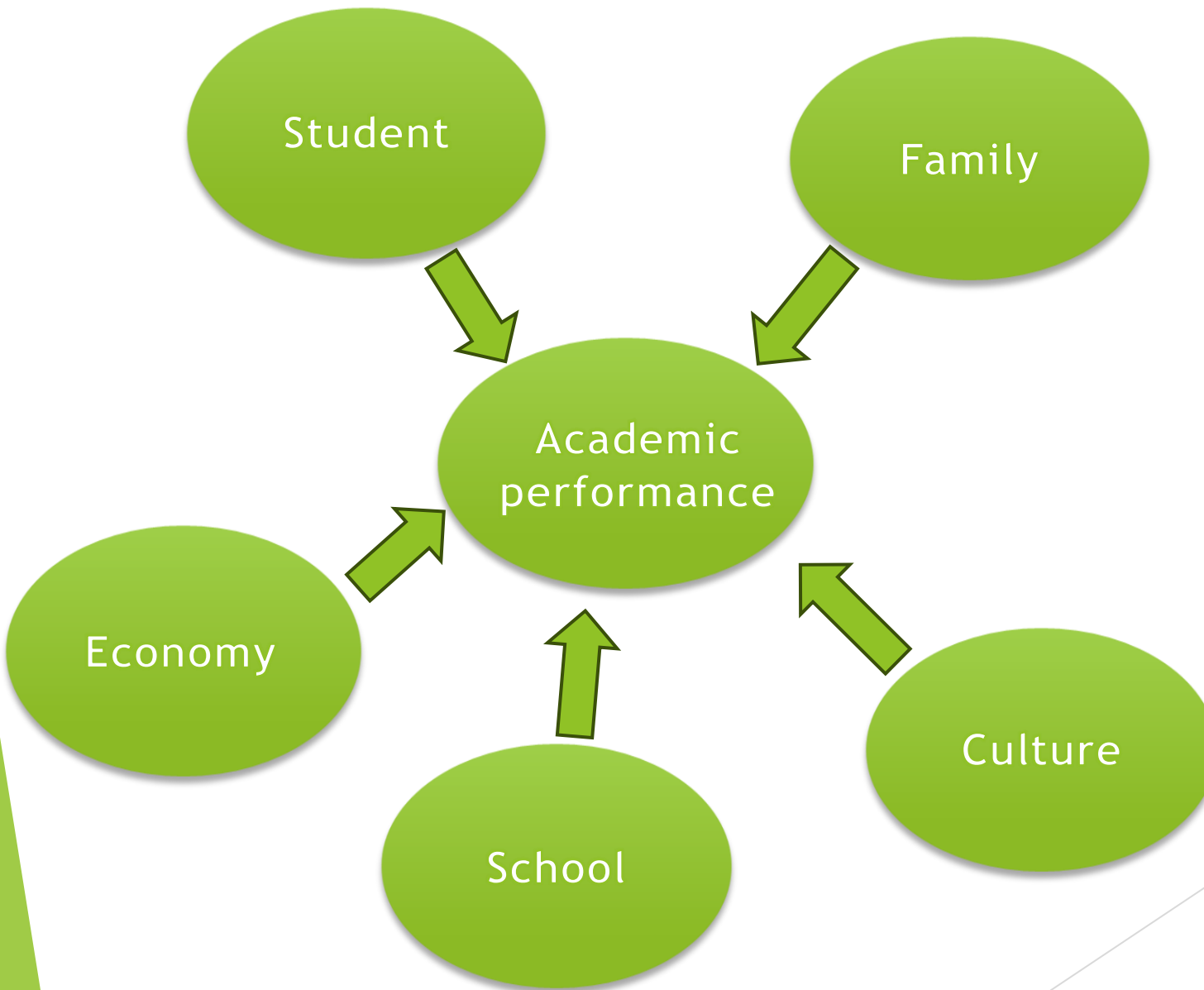


STUDENTS' ACADEMIC PERFORMANCE





Data summary...

1. A data set of 1000 students in a US school.
2. Gender : Females and males
3. Race/ethnicity : Groups A, B, C, D and E
4. Parental level of education : some high school, high school, some college, associate's degree, bachelor's degree, master's degree
5. Type of lunch they receive at school: standard, free/reduced
6. Test preparation course: completed or none

	gender	race/ethnicity	parental level of education	lunch	test preparation course	math score	reading score	writing score
0	female	group B	bachelor's degree	standard	none	72	72	74
1	female	group C	some college	standard	completed	69	90	88
2	female	group B	master's degree	standard	none	90	95	93
3	male	group A	associate's degree	free/reduced	none	47	57	44
4	male	group C	some college	standard	none	76	78	75
...
995	female	group E	master's degree	standard	completed	88	99	95
996	male	group C	high school	free/reduced	none	62	55	55
997	female	group C	high school	free/reduced	completed	59	71	65
998	female	group D	some college	standard	completed	68	78	77
999	female	group D	some college	free/reduced	none	77	86	86

1000 rows × 8 columns

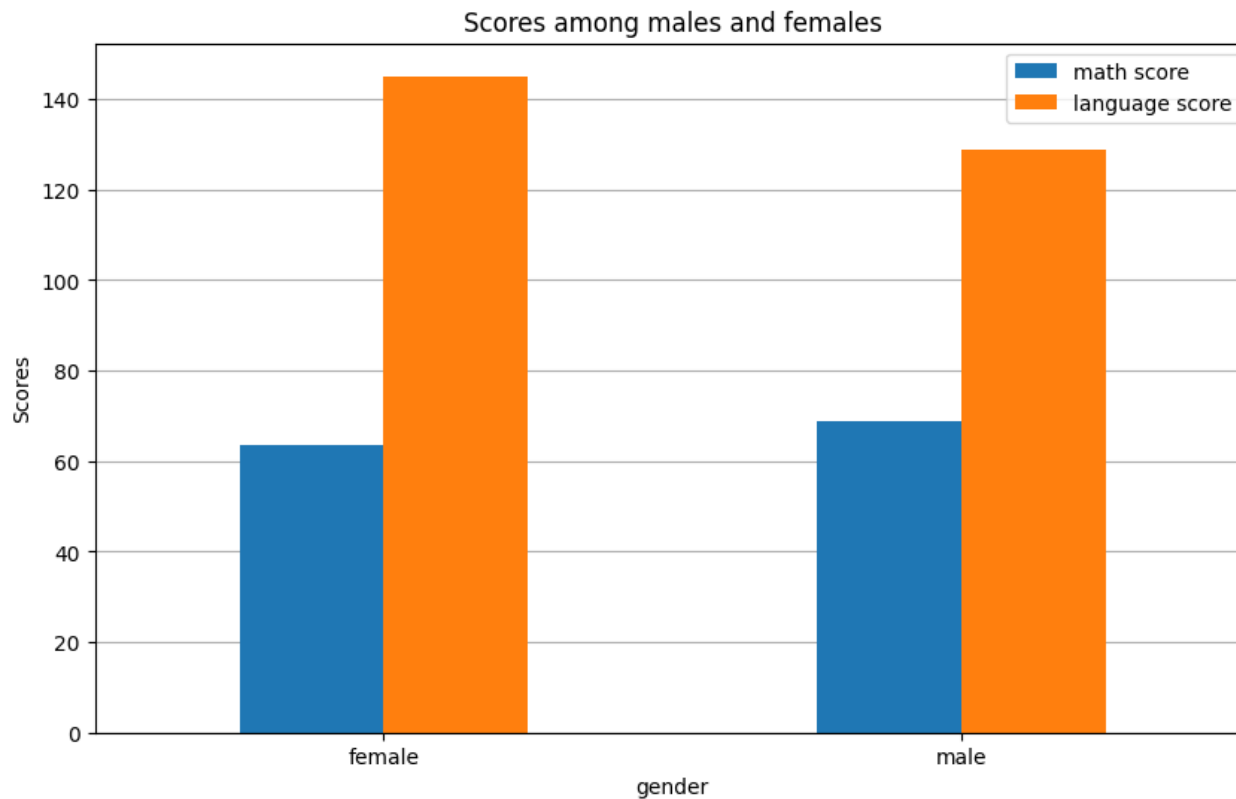


	gender	race/ethnicity	parental level of education	lunch	test preparation course	math score	language score
0	female	group B	bachelor's degree	standard	none	72	146
1	female	group C	some college	standard	completed	69	178
2	female	group B	master's degree	standard	none	90	188
3	male	group A	associate's degree	free/reduced	none	47	101
4	male	group C	some college	standard	none	76	153
...
995	female	group E	master's degree	standard	completed	88	194
996	male	group C	high school	free/reduced	none	62	110
997	female	group C	high school	free/reduced	completed	59	136
998	female	group D	some college	standard	completed	68	155
999	female	group D	some college	free/reduced	none	77	172

1000 rows × 7 columns

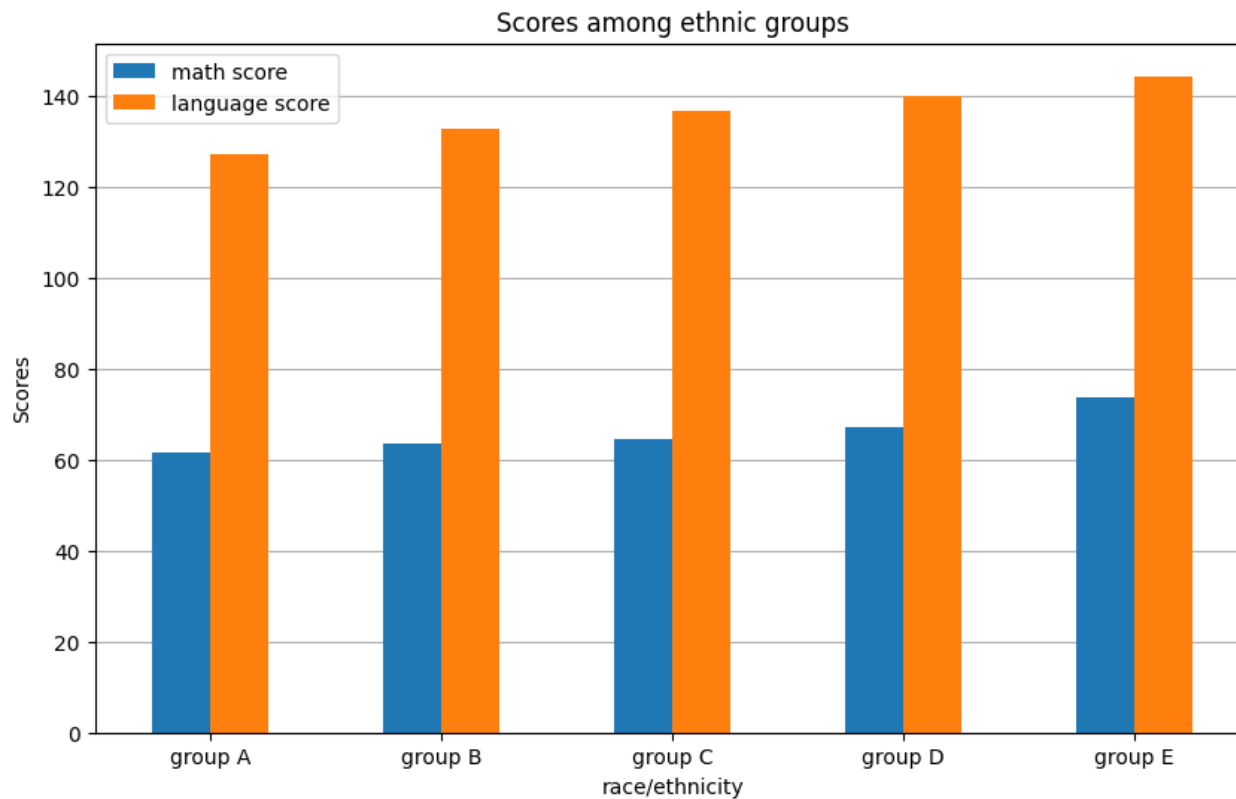
Hypothesis #1


Female students scored better than their male classmates.



Hypothesis #2

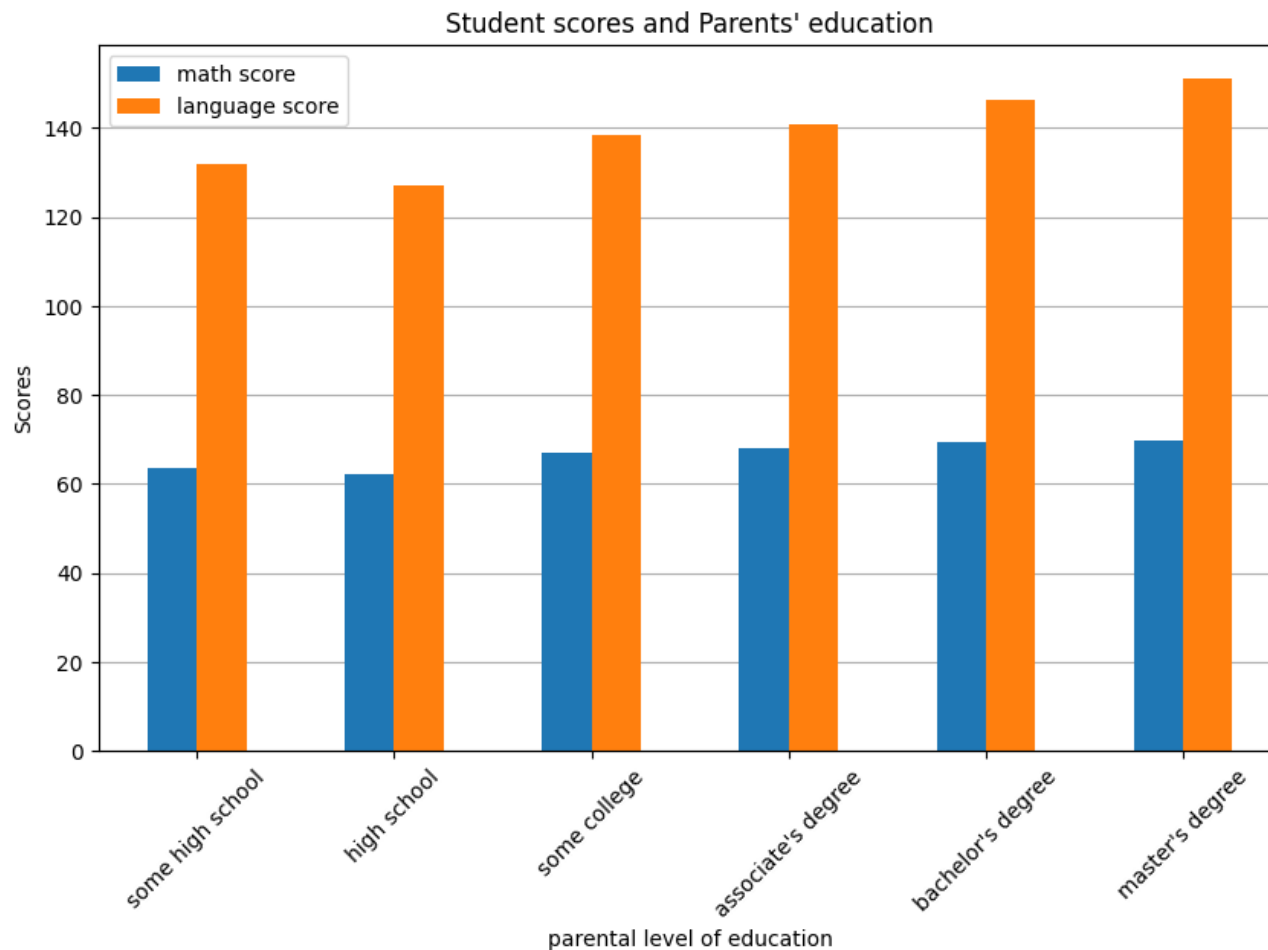
Students' ethnicity did not correlate with their scores.



- 
- ▶ Group A - White/Caucasian
 - ▶ Group B - Black/African American
 - ▶ Group C - Hispanic/Latino
 - ▶ Group D - Asian/Pacific Islander
 - ▶ Group E - Other/Multiracial

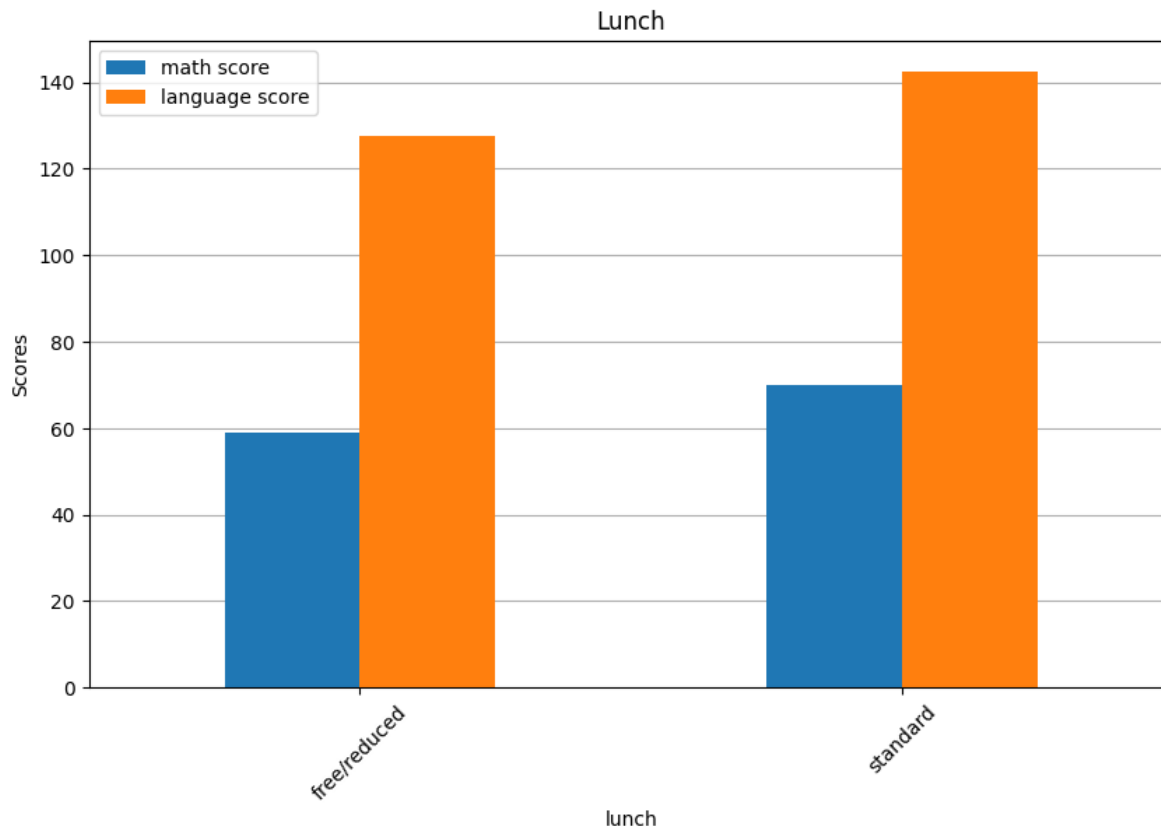
Hypothesis #3

Students whose parent held higher degrees obtained better scores



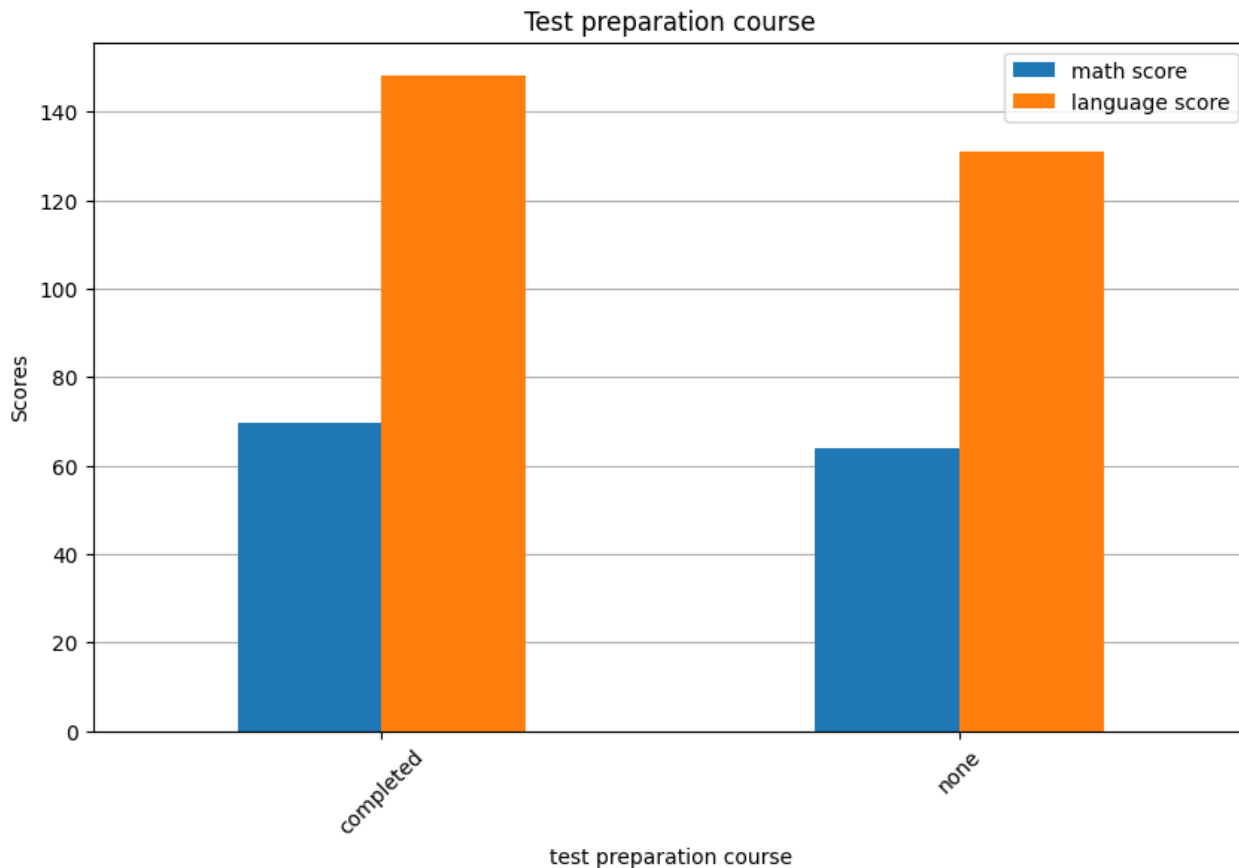
Hypothesis #4

students eating standard lunch scored better than those eating a free/reduced price one.



Hypothesis #5

Students who completed the “test preparation course” got higher scores



To sum up...

- ▶ **Demographic factors**
- ▶ **socioeconomic factors**
- ▶ **School and Institutional Factors**

Educators and policymakers design targeted interventions (i.e., test preparation course) to support students' learning outcomes.

The background features abstract, overlapping green geometric shapes, primarily triangles and polygons, in various shades of green, creating a modern and dynamic visual effect. The shapes are layered, with some appearing more prominent than others, and they extend towards the corners of the frame.

Thanks!