

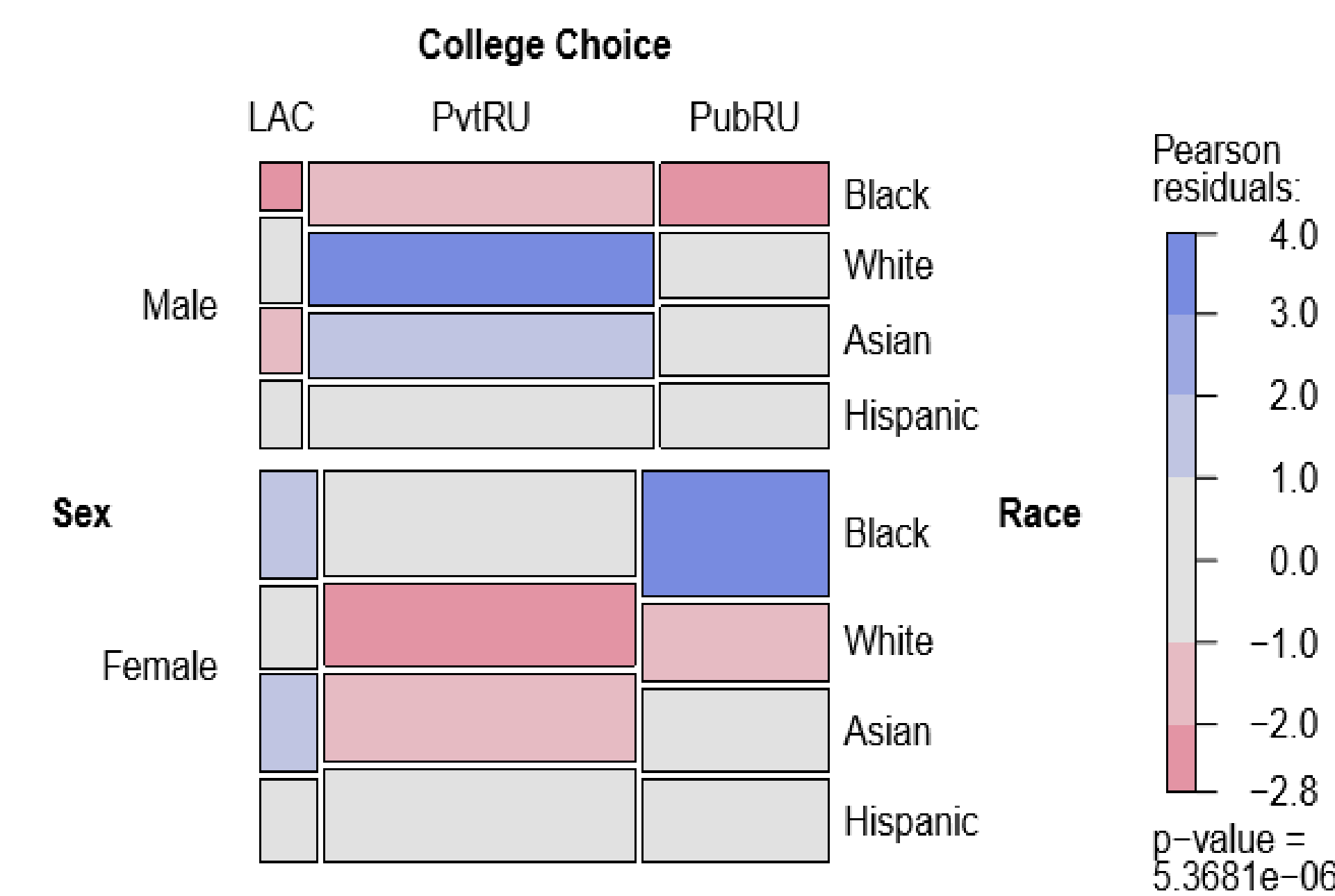
What Affects College Freshmen’s Outlook On Education Attainment?

By: Jackson Nahpi

Background

When deciding on the best way to raise a child what kind of parenting techniques should one choose? Depending on who you talk to, there may be a wide array of differing answers that will be given. I use data on incoming college freshmen to see what cultural capital and identifiers affect aspirations of Graduate degree attainment.

Effects of Race and Gender on College Decisions



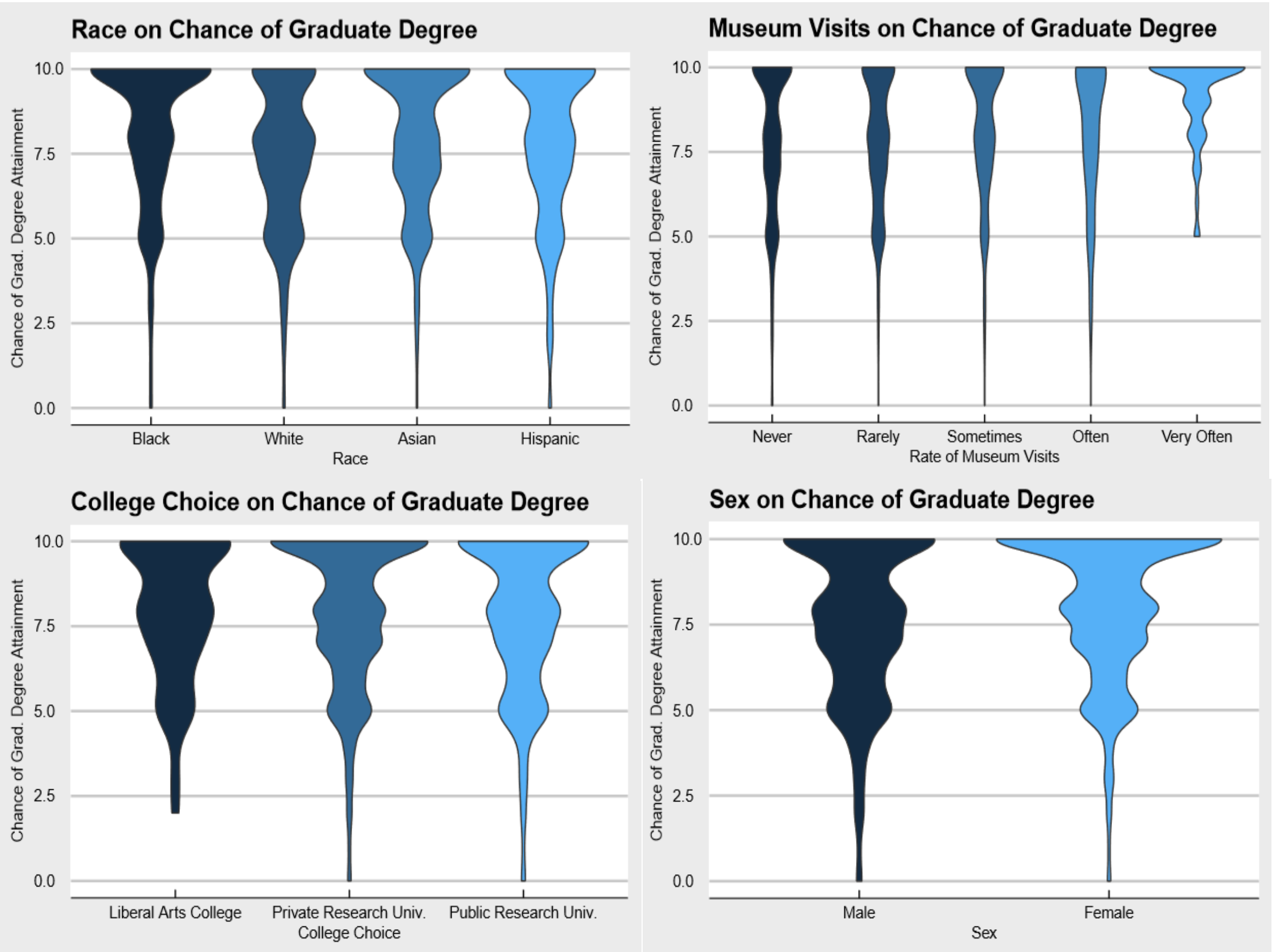
Figures: The above figure is a mosaic plot showing differences in distributions between sex, ethnicity, and college choice. Figures to the right are violin plots that all contain the same y-axis variable of perceived chance of obtaining a graduate degree. The violin plots vary in having sex, race, college choice, and museum visits as x-axis variables.

Data

The data used in this analysis is from the first wave of the National Longitudinal Study of Freshmen (NLSF). The first wave consists of base variables to get an initial analysis of the respondents in the study. The variables I gathered into a subset include sex, ethnicity, college attended, and various cultural capital variables (all cultural capital variables are from the respondent’s last year of secondary school).

Research Questions

- Are different demographics of students underrepresented at different types of institutions?
- Do students perception of their capabilities of completing a Graduate degree depend on different identifying characteristics?
- Are student’s perceptions of their capability of completing a Graduate degree dependent on different types of cultural capital placed upon students by adults in their household?



Methods

Given the categorical nature of my variables, I conducted visual analysis by running multiple scatterplots to search for trends. I created violin plots on the right and the mosaic plot in the middle. The visuals show how sex, ethnicity, college choice, and certain cultural capital aspects influence optimism in Graduate degree attainment. On the right, I conducted multivariable OLS regression to see what cultural capital variables are significant to perceptions Graduate degree attainment, while controlling for different identifier variables.

Findings

- As we can see in the mosaic plot, the differences come primarily from sex, where deficits or surpluses in male presence at these types of universities resonate into the opposite result for females.
- Significant relationships for African Americans, Women, and students whose parents took them to museums very often are more likely to believe in their ability of achieving a Graduate degree.
- Students perceptions of their capability of achieving a Graduate degree are significantly related to rewards for grades, museum visits, being female, and checking of the child's’ homework are all positively associated, whereas punishment of deviance is negatively associated.

What is Significant To Optimism in Graduate Degree Attainment			
	Model 1 (1)	Chance of Attaining a Graduate Degree Model 2 (2)	Model 3 (3)
Rewarded For Grades(2)	0.131 (0.112)	0.039 (0.056)	0.142 (0.107)
(3)	0.142 (0.109)	0.020 (0.055)	0.117 (0.104)
(4)	0.157 (0.120)	0.046 (0.061)	0.105 (0.115)
(5)	0.549*** (0.137)	0.179*** (0.069)	0.444*** (0.132)
Homework Gets Checked(2)	-0.118 (0.091)	0.033 (0.046)	-0.134 (0.088)
(3)	-0.076 (0.108)	0.032 (0.054)	-0.100 (0.103)
(4)	0.134 (0.138)	0.043 (0.070)	0.069 (0.133)
(5)	0.403** (0.178)	-0.058 (0.090)	0.333* (0.171)
Disobedience Punishment(2)	-0.139 (0.092)	-0.022 (0.046)	-0.149* (0.088)
(3)	-0.189* (0.107)	-0.055 (0.054)	-0.178* (0.102)
(4)	0.037 (0.137)	-0.012 (0.069)	0.038 (0.132)
(5)	0.127 (0.169)	0.069 (0.085)	0.097 (0.162)
Sex	0.439*** (0.074)	0.127*** (0.037)	0.336*** (0.071)
Ethnicity(2)	-0.758*** (0.103)	-0.161*** (0.052)	-0.713*** (0.099)
(3)	-0.099 (0.101)	-0.124** (0.051)	-0.113 (0.097)
(4)	-0.392*** (0.101)	-0.126** (0.051)	-0.280*** (0.097)
Museum Visits(2)	0.098 (0.088)	-0.028 (0.044)	0.123 (0.084)
(3)	0.371*** (0.108)	0.033 (0.055)	0.345*** (0.103)
(4)	0.305* (0.178)	-0.034 (0.090)	0.277 (0.171)
(5)	1.192*** (0.289)	0.215 (0.146)	1.116*** (0.277)
College Choice(2)	0.057 (0.126)	0.146** (0.064)	0.009 (0.121)
(3)	-0.126 (0.134)	0.105 (0.068)	-0.139 (0.128)
Chance Of Attaining Extra Education		0.921*** (0.009)	
Chance Of Finishing College			0.815*** (0.046)
Constant	7.764*** (0.165)	0.253** (0.111)	-0.102 (0.468)
N	3,649	3,649	3,649
R2	0.055	0.759	0.132
Residual Std. Error	0.050	0.758	0.126
F Statistic	2.142 (df = 3626)	1.081 (df = 3625)	2.054 (df = 3625)
	9.642*** (df = 22; 3626)	497.459*** (df = 23; 3625)	23.920*** (df = 23; 3625)
Notes:			
***Significant at the 1 percent level.			
**Significant at the 5 percent level.			
*Significant at the 10 percent level.			

Figure: Multivariable regression of variables containing significance. Models 1,2, and 3 have same base model. However, Models 2 and 3 have perceived chance of extra education and completing college involved.

Acknowledgements:
The NLSF dataset used in this analysis was obtained from Princeton University.