Test-Optional Admission and Student Outcomes at the University of Pittsburgh: An Analysis

Abstract

This report analyzes the impact of the test-optional admission policy at the University of Pittsburgh, which started in fall 2021, on students' academic performance (measured by GPA) and retention rates. We aim to assess whether students who did not submit standardized test scores (SAT or ACT) performed similarly to those who did, while controlling for other factors known to influence these outcomes, such as low-income status, race, gender, high school GPA, and first-generation college student status.

Method

We used a dataset that includes one row for each student who started at the University of Pittsburgh in fall 2021. Each row contains information on the student's income status, race, gender, high school GPA, first-generation college student status, test score submission status, first fall and spring GPAs, and retention to the next fall term.

Our analysis involved running a linear regression for the GPA outcomes and a logistic regression for the retention outcome. The independent variables in the regressions included whether the student submitted test scores and the control variables.

Results

For GPA:

- Fall Term: The coefficient for 'Test Optional' is 0.2249, with a p-value of 0.000.
- Spring Term: The coefficient for 'Test Optional' is 0.1505, with a p-value of 0.000.

For Retention:

- The coefficient for 'Test Optional' is -0.1034, with a p-value of 0.489.

Discussion

For the GPA outcomes, our results suggest that submitting standardized test scores is associated with higher GPAs in both the fall and spring terms. This relationship is statistically significant, as indicated by the p-values, which are less than 0.05.

For the retention outcome, the negative coefficient suggests that submitting standardized test scores is associated with a lower likelihood of retention. However, the p-value is greater than 0.05, suggesting that this result is not statistically significant. Therefore, based on our analysis, we cannot conclude that the test-optional policy has a significant effect on retention rates.

It's important to note that our results only show correlation, not causation. There could be other factors not included in our analysis that influence these outcomes.

Despite these limitations, our results provide valuable insights into the potential impacts of the test-optional admission policy at the University of Pittsburgh. Further research is needed to continue exploring this important issue.

Conclusion

Our study provides an initial exploration of the potential impacts of the test-optional admission policy at the University of Pittsburgh. The findings indicate that students who submitted test scores achieved significantly higher GPAs in their first year compared to the students who didn't submit test scores. However, there was no statistically significant difference in retention rates between these two groups of students. These findings should be helpful for university administrators as they continue to refine their admission policies and practices to best support student success.

Note: please check "Data Evaluation of Test Optional - Coding Works.pdf" for more detailed information