Analysis and Result Summary

(Table 3)

The table 3 titled OLS and Tobit Estimates of the Effects of the Vouchers on ICFES Scores reports the summary statistics drawn from all applicants to ICFES with a valid ID, ages from 9 to 25 with test scores greater than zero (0) for column 1 and censored at 1% for column 2 sample. The estimator used for the regression models in both columns is Ordinary Least Squares. The independent or explanatory variables include the Voucher Status (vouch0), the Male Name, and the Age (age) and the dependent variables are math score (math), math score censored at first percentile (mathcens1), language score (read), and language score censored at first percentile (readcens1) variables.

As a study result, the mean and the standard errors estimates for Language score variable in the full sample are respectively evaluated to 47.4 and (5.6) for score greater than zero whereas the result for the same estimates are respectively 37.3 and (8.0) when censored at first percentile. The Language score means and standard deviation for girls' sample are respectively evaluated to 47.0 and (5.7) for scores greater than zero and 37.6 and (8.1) when censored at first percentile whereas they are respectively estimated to 47.8 and (5.5) when scores are greater than zero and 37.0 and (7.9) when censored at first percentile for boys' sample.

the mean and the standard deviation estimate for Math score variable in the full sample is respectively evaluated to 42.5 and (4.9) for score greater than zero whereas the result for the same estimates is respectively 35.7 and (5.8) when censored at first percentile. The math score means and standard deviation for girls' sample are respectively evaluated to 42.3 and (4.8) for scores greater than zero and 35.9 and (5.8) when censored at first percentile whereas they are respectively estimated to 42.8 and (5.0) when scores are greater than zero and 35.4 and (5.7) when censored at first percentile for boys' sample.

Gender and age are controlled in the models to evaluate the effect of winning a voucher on the language and math scores for scores greater than zero, recorded in column 1, and the effect on the same scores when censored at first percentile in column 2. Using Language score as explained variable, it turns out that the estimated coefficients for the variable Voucher winner in our regression models are respectively 0.70, 0.74, 0.66 for the full, girls, and boys' samples when censored at first percentile. Using Math score as explained variable, it turns out that the estimated coefficients for the variable Voucher winner in our regression models are respectively 0.40, 0.18, 0.70 for the full, girls, and boys' samples whereas they are estimated to 0.79, 0.62, 0.95, respectively for full, girls' and boys' samples when censored at first percentile.

The coefficient estimate of Voucher winner equals 0.70 in column 1 and row 3 from models with gender and age controls can be interpreted as: it is expected that the vouchers winners score approximately 0.7 point higher on language test, holding all other variables (gender and age of the applicants) fixed.