Trading Off Equity and Effectiveness: A Gender and Education Experiment

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This vignette experiment examines how the public is willing to tradeoff three dimensions of overall school performance – the overall pass rate for standardized tests, the pass rates for boys versus girls, and the cost of education. The 3 x 3 x 3 factorial within subjects design will present evidence on a hypothetical school district (see materials below).

Treatment 1. Effectiveness
The effectiveness treatment will randomly assign an overall pass rate of 75, 80, or 85 and be told the statewide pass rate is 80%.

Treatment 2. Equity
The second treatment on equity will provide data on the pass rates of boys and girls. They will be manipulated so that either the boys score six points higher than the girls, the boys and girls score the same score, or the girls score six points higher than the boys. These differences at set so that they are consistent with the first treatment.

Treatment 3. Efficiency
The third treatment is the cost of education per student that is experimentally set at $10,572, $9950, and $9328.

After the vignette subjects will be asked to evaluate the school district on validated scales for effectiveness, equity, and efficiency. Background information including demographics and information on partisanship and anti-public sector bias will be collected as well as manipulation checks (see materials below).

The specific hypothesis for the treatments:

H1. Assessments of effectiveness with be positively associated with Treatment 1.

H2. Assessments of equity will be positively associated with treatment 2 where boys and girls scores are equal.

H3. Assessments of equity will be symmetrical, that is, it will not matter if boys or girls score higher only that the scores are different.

H3a. Female respondents will not negatively rate equity when girls outscore boys.

H3b. Male respondents will not negatively rate equity when boys outscore girls.

H4. Assessments of efficiency will be negatively associated with the costs of education.

H5. Treatment 1 and Treatment 2 will interact to affect assessments of effectiveness and equity. Higher values on treatment 1 should enhance the impact of treatment 2.

H6. Treatment 3 will not interact with the other two treatments in assessments on efficiency.

H7. Motivated reasoning. Partisan motivated reasoning will reduce the impact of the equity treatment for Republicans and increase the impact of the cost treatment for Republicans.

The experiment will recruit 1600 subjects using Mturk.

The experiment will be submitted to the Institutional Review Board at American University for approval.

Materials Used. Actual study designed in Qualtrix

You are asked to participate in a study that examines public reactions to organizational characteristics in the K-12 education sector. Your participation will involve reading about a hypothetical organization and then evaluating it. The purpose of the study is to better understand how public attitudes are shaped by organizational characteristics. This study will take approximately 5-10 minutes of your time. The risks associated with this study are not greater than risks ordinarily encountered in daily life. You will receive $0.50 for completing this survey.

This study is confidential. All data collected will be stored securely on a password protected computer. People who have access to this information include the principal investigator and research personnel. Your responses will not be linked to any identifying information about you in any publications. All identifying information about you (account ID and IP address) will be destroyed once data collection is completed. The researcher retains the right to use and publish non-identifiable data.

Your participation is voluntary. You may withdraw at any time. Financial compensation is dependent on completing the survey in accordance with Amazon policy.

If you have questions or concerns during the time of your participation in the study or after its completion, please contact:

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Questions about Your Rights as a Research Subject

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Giving of Consent

I have read this consent form and I understand what is being requested of me as a participant in this study. I freely consent to participate. I certify that I am at least 18 years of age.

Greenwood Public School System

Greenwood Public School System is a school district that manages the public schools of Greenwood County. It operates under the supervision of an elected, eight-member Board of Education. The board includes a student member who has voting rights. The district operates 72 schools: 40 elementary schools, 18 middle schools, 11 high schools and 3 special education schools/education centers. The system stresses both college preparation and vocational training for the job market. As a public school system it must comply with all state laws and regulations on curriculum, testing, and teacher qualifications. As of September, they have a total 56,000 students enrolled. The table below provides information about the performance of this school district.

	State Average	Greenwood School District
Boys Pass Rate	80	${e://Field/boys}
Girls Pass Rate	80	${e://Field/girls}
Expenditures Per Student	9950	${e://Field/efficiency}

Please, assess the following statements in terms of what you believe characterizes the school district described? (on a 7-point scale, from 1 ("does not fit at all"), to 7 ("fit very well"))

The school district provides services efficiently
The school district is effective
The school district has a high level of burdensome administrative rules and procedures
The school district is genuinely interested in the well-being of the students
The school district delivers services to students in a fair and impartial way
The school district makes the most of its monetary and human resources
The school district is effective in accomplishing its core mission
A high level of administrative procedures negatively affects the school district's effectiveness
The school district acts in the interest of students
Every student, irrespective of race, gender, religion, or income, gets the same quality of service
The school district is not wasteful
The school district is effective in delivering a very good service
Persons of any race, gender, religion or income have an equal chance of receiving adequate services from this school district
The school district resources are well spent
The school district provides outstanding quality of care.
The school district ensures excellent quality of life for its students.
The school district ensures a clean, safe, home-like and comfortable environment.
If you were in need of a new school district, how comfortable would you be placing your child in Greenwood School District?
Very comfortable
Somewhat comfortable

Neutral
Somewhat uncomfortable
Very uncomfortable

Boys Pass Rate is
85, above the state average
80, the same as the state average
75, below the state average
Don't recall

Girls Pass Rate is
85, above the state average
80, the same as the state average
75, below the state average
Don't recall

The Expenditures Per Student is
10572, above the state average
9950, the same as the state average
9328, below the state average
Don't recall

What benefits or costs are associated with an education?

Age (years)

Gender
Man
Woman
Non-binary
Other

Race
White
Black or African American
American Indian or Alaska Native
Asian
Native Hawaiian or Pacific Islander
Hispanic or Latino
Other

Education
Less than a high school diploma
High school degree or equivalent (e.g. GED)
Some college, no degree

Associate degree (e.g. AA, AS)
Bachelor's degree (e.g. BA, BS)
Advanced degree (e.g. MA, JD, PhD)

Party Affiliation
Democrat
Republican
Independent\No Party Affiliation
Other

Income
Less than $20,000
$20,000 to $34,999
$35,000 to $49,999
$50,000 to $74,999
$75,000 to $99,999
Over $100,000

State

Would you describe where you live as urban, rural or suburban area?
Urban
Rural
Suburban
Don't know

Have you or members of your immediate family (parents, spouses, or children) had previous experience working at or attending a public school?
Yes
No
Don't know

Please indicate whether you agree with the following statements.
Many government activities could be produced both better and cheaper by private providers.
We should, to a larger degree, contract out government services to private companies or nonprofits (such as child care, elderly care, and hospital treatments).
The government is best at providing public services.