Approaches to TIF Program Evaluation
Regression Discontinuity Design

RDD estimates program impact by comparing outcomes of similar participants on either side of a cut-off point that determines whether the participant participates.

RDD Approach to TIF Bonus Policy

Teachers in high needs schools receive a bonus based on evaluation ratings. Only teachers rated above a cut-off receive a bonus. Based on rationale that teachers close to the cut-off are similar in their likelihood of retention, the difference in outcomes of teachers on either side of the cut-off is attributed to the bonus. The effect is estimated by comparing the outcomes of teachers close to the cut-off point who received and did not receive a bonus.

Intervention evidence is indicated when teachers close to the cut-off point have different outcomes.

Control — Treatment
Retention Outcome / Evaluation Rating
• Teacher
· · · · Cut-off
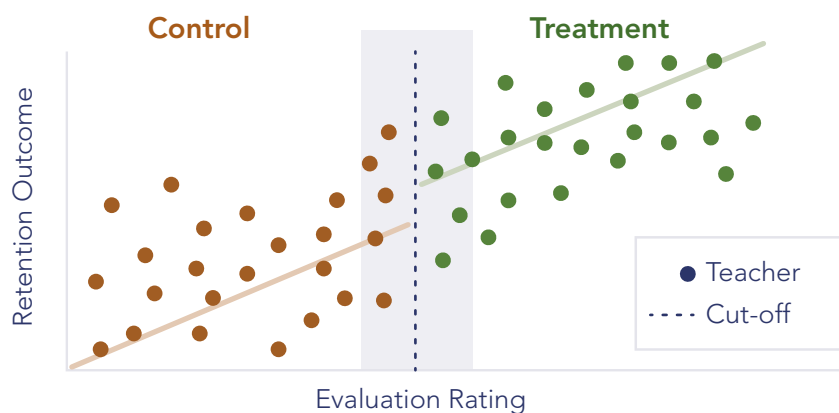
Challenge

Providing evidence that a TIF intervention had an effect on an outcome of interest when the intervention was not assigned at random.

Question

Do seemingly similar participants have different outcomes due to a treatment? For example, to what extent does a $10,000 bonus affect the retention of high-performing teachers in high needs schools?

Requirement

A continuous assignment variable based on a TIF policy cut-off point to assign different groups and data on the outcome of interest; in this example, teacher evaluation ratings and retention data.

Solution

Grantees can use the RDD design to identify an effect when there is a fixed cut-off point that divides participants into groups that did and did not receive the intervention.

Analysis

There is evidence for an effect if the level of the outcome is substantially different on either side of cut-off. The design works best when there is a substantial number of cases close to the cut of point.

Result

RDD can provide estimates of program impact, in this case, the effect of a bonus program on teacher retention, such as, teachers receiving a bonus are 30% more likely to remain in a high needs school.

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