

December 19 2015

Good morning, Melissa - now that we have the critique of our FITW evaluation plan, which overall looks strong, here are my comments on this review:

1. Assignment to the intervention or control groups will be determined by a cut-off score (forcing variable) from the College Student Inventory (CSI) assessment used to identify non-cognitive factors associated with whether a student is "at-risk" for college success.

2. Given that group assignment is based upon cut-off score (forcing variable), we will use Regression Discontinuity Design (RDD) to identify the impact of the intervention. RDD meets the WWC standard with reservations (see attached). Note that we will NOT use propensity score matching.

3. Although a reviewer suggested random assignment to groups in order to meet the higher WWC standard without reservation, because we are identifying students who are at risk, random group assignment would mean that some who need the intervention would not receive "treatment," while some who do not need treatment received it, e.g., "treatment status noncompliance."

4. The RDD will indicate "average effect of intervention," at the point of discontinuity, which is a randomized effect (see attachment) albeit for a smaller sample of only those near the cut-off point. Yet this does not diminish the use of RDD. There are some statistical techniques such as including outliers that provide great strength.

5. See below from WWC on RDD:

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at: [http://ies.ed.gov/ncee/wwc/pdf/reference\\_resources/wwc\\_rd.pdf](http://ies.ed.gov/ncee/wwc/pdf/reference_resources/wwc_rd.pdf)

- Assessing Whether a Study Qualifies as an RD Study • A study qualifies as an RD study if it meets all of the following criteria:
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- Treatment assignments are based on a forcing variable; units with scores at or above (or below) a cutoff value are assigned to the treatment group while units with scores on the other side of the cutoff are assigned to the comparison group
- The forcing variable must be ordinal with a sufficient number of unique values.
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- This condition is required to model the relationship between the outcomes and forcing variable.

- - There must be no factor confounded with the forcing variable. The cutoff value for the forcing variable must not be used to assign students to interventions other than the one being tested.
6. The primary outcomes of interest are academic achievement (raw GPA as compared to adjusted GPA), and credit accumulation.
  7. Pre-test and post-test survey will be administered by enrollment management and academic advising.
  8. To establish baseline equivalency, we might use high school GPA, FAFSA, SAT and ACT test scores - Brian Williams can confirm data availability.