Clustering - Quiz

Question 1

1/1 point (graded)

What does clustered randomization means?

- (•) a. Randomizing across groups of units instead of individuals units ✔
- ( ) b. Randomizing within each region rather than within your entire sample
- ( ) c. Randomizing across individuals and not groups
- ( ) d. Repeating randomization until the control and the treatment are similar

Explanation

Clustering means to randomize across groups instead of individuals. For example, one might randomize the treatment across entire schools rather than to individuals within the school.

Submit You have used 1 of 2 attempts

✔ Correct (1/1 point)

Question 2

0/1 point (graded)

True or False: Any randomized experiment for which your assignment occurs at a level other than the individual level is a clustered randomized experiment.

- a. True ✖
- b. False

Explanation

If the unit of observation for your outcomes is the same unit across which you randomize, that is just a simple RCT where you have a different unit of interest. A clustered randomized experiment is one in which treatment is assigned at a more aggregate level than the observation unit for your outcomes.

Submit You have used 1 of 1 attempt

✖ Incorrect (0/1 point)

Question 3

1/1 point (graded)

Why would you want to randomize clusters? (Select all that apply)

- [ ] a. Helps power by reducing variance
- [x] b. When there are significant externalities within the cluster from treating individuals in the cluster
- [x] c. When it is not practical to randomize at the individual level
- [x] d. When the cluster is the natural unit of randomization

✔

Explanation

Clustering does not help power and in fact, it reduces power. However, if there are significant externalities ("spillovers"), then clustering may be necessary to ensure that treated individuals do not affect your control individuals. For example if you deworm at the individual level, the externality across kids within the same classroom will bias your estimates downwards.

Sometimes, it will be impractical to give an intervention to individuals within a cluster without giving the intervention to the whole cluster (for example if you give tablets to some kids within a class you may need to give them to all of them). The intervention you are interested in randomizing, might be

at the cluster level (for example, if your intervention in a teacher training program, all the children in the classes taught by this teacher will be affected), in which case your cluster might be the natural unit of randomization.

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✔ Correct (1/1 point)

Discussion
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