

Target Telemarketing – Causal Analysis Solution

1. Which variables would the firm be interesting in manipulating? What could they change?

The firm can only realistically manipulate month and day_of_week. The other characteristics are specific to the individual, and cannot be changed by the firm.

2. Of those variables, what could bias the observed effects?

We need to think about things that would be related to the month and whether or not people say yes to the offer. Here are some potential factors:

- a. Different employees work in winter, and they are better at getting 'yes' answers. Perhaps the best employees work year round, while less qualified employees work during the summer.
- b. Perhaps the call center is calling consumers in some prespecified order that we don't observe. What if the call center starts calls in September with those customers with the highest assets? If people with a large amount of assets are more likely to say yes, that could explain the relationship.

3. What can the firm conclude with confidence?

- a. I think you would need to confirm the details above before you could conclude that winter months are better for calling. If the call center does not use a special ordering, and does not have systematically different employees in winter, then they should be able to conclude that the winter months are the best time to offer this account.