Unit 1 – Lesson 4

Drill – Why am I biased?

1. Testing adversarial emails for a bathing suit company and one version is tested in February and the other in May.

* Assumptions: no other differences between e-mails or the groups that they were sent out to. This means that the e-mail content different only in the types of add included and not other aesthetic things that may drive preference. Also, the two groups receiving the e-mail were selected without selection bias.
* Potential bias in this experiment: it seems like this experiment would suffer from contextual bias and also bias in the testing method. The fact that one group received adds in a winter month, while the other group received adds in the summer time introduces bias. It may be possible that people in general think about bathing suits during summer months, so that may drive the behavior to engage with the e-mail instead of the adds that are in the e-mail.

1. You open a clinic to treat anxiety and find that the people who visit show a higher rate of anxiety than the general population.

* Here there is a high likelihood of selection bias. It would make sense that people suffering from anxiety would be more likely to visit an anxiety clinic than people not suffering from anxiety. Therefore, it would also make sense that these folks have a higher anxiety rate than the general population. This confirms the fact that the clinic draws folks suffering from anxiety.

1. You launch a new ad billboard based campaign and see an increase in website visits in the first week.

* It may be possible that the placement of the billboard introduces selection bias into the study. For example, if the add is placed in a more affluent area or area particularly associated with a specific cause that that would drive website traffic. To eliminate the possibility of the bias, the adds would have to be places randomly over a geographic area or web traffic tracked based on address of origin.

1. You launch a loyalty program but see no change in visits in the first week.

* Here the outcome may be driven by the size of the sample of people who have become aware of the loyalty program. For example, if the loyalty program can only be discovered by visiting the location, then it would take a lot longer to drive change, because only the visitors exposed to it would know that it exists.