

DRILL: Am I Biased?

For each of the following scenarios, call out the potential biases in the proposed experiment. Do your best to try to discover not only the bias, but the initial design. There is plenty of room for interpretation here, so make sure to state what assumptions you're making.

You're testing advertising emails for a bathing suit company and you test one version of the email in February and the other in May.

This approach is problematic because the e-mails are being sent out during different time frames. To reduce bias, both versions should be tested at the same time amongst similar samples.

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

Assuming observers are measuring anxiety levels, there should be concern for observer bias. Because it makes sense that those visiting a clinic to treat anxiety would be more anxious, it's plausible that observers are unwittingly confirming these results in their measurements.

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

There's no way of tying the visitors responsible for your website visit increase to those who saw the new ad billboard. Therefore you can't conclude that the billboards were the reason for the spike in website visits. To measure the efficacy of a new ad campaign, I would advise selecting a digital medium where viewers of the content can be traced to those visiting the website.

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

A week may be too short to measure the true impact of a loyalty program. It would be too soon to suggest that loyalty programs incur marginal impact in business visits – before drawing that conclusion, visits be measured over a greater period of time.