

1) 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.

- The above scenario has Contextual bias. Because the experiment is being conducted in different times(months here).
- Since most of the people start buying bathsuits in the beginning of summer i.e May, an email sent in May has probability of getting more number of clicks than the one sent in Feb.
- Hence there is a contextual bias in this scenario. This experiment has to be conducted at the same time for both versions of the email.

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

- Above scenario has sampling or selection bias.
- Patients who visit the clinic which treats anxiety obviously visit to cure their anxiety levels and hence we can say that this sample(of patients) has bias(difference) from the population.

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

- Above scenario has “Bias due to assignment to condition”.
- Loyalty program is usually offered for long term customers. No change in the customer visits to websites for the first week could be due to product/website/application is too new that it does not have any customers who met the loyalty criteria.

- Launching the loyalty program after some period may lead to different results.

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

- There is a chance of bias if the billboards are not launched equally in all areas. This bias is of type “assignment to conditions”.

