

1. Does a new supplement help people sleep better?

- a. 2 versions needed
 - i. Control version will be 1 group of test subjects that are not taking the supplement – a group without any modifications or enhancements – we will monitor their sleep
 - ii. Test version will be 1 group of test subjects that will be taking the new supplement – we will monitor their sleep
- b. Sample
 - i. We will separate our test group into 2 samples
 - ii. 1 group would be in an area where they take 1 dose of the supplement and then we monitor their sleep in a natural type of environment – with normal noise, etc.
 - iii. 2nd group would be in an area where they take 1 dose of the supplement and then we monitor their sleep in a white noise environment – where they are not exposed to normal noises
- c. Hypothesis:
 - i. The group in the white noise environment will sleep better than those sleeping in a normal noise environment.
- d. Outcome(s) of interest:
 - i. I expect that the test subject will sleep better and feel better resulted when sleeping in a white noise environment and taking dosage of the new supplement rather than the test subject who takes dosage of new supplement and sleeps in an environment with natural noise.
 - ii. Will monitor sleep waves and number of times subject wakes up or has interrupted sleep in both environments
- e. Other measured variables:
 - i. Could include age and sex of the test subjects, amount of time in test area, equal amounts of supplement dosage

2. Will new uniforms help a gym's business?

- a. 2 versions needed
 - i. Get new uniforms – 1 with Gym Logo on front and back, 1 with Gym Logo only on the front
- b. Sample
 - i. We will separate our test group into 2 samples – the 2 samples would be members of the gym that will be receiving different versions of the uniform
 - ii. 1 group would be provided the uniform with the logo on back and front
 - iii. 2nd group would be provided the uniform with the logo on the front only
- c. Hypothesis:
 - i. The uniform with the logo on back and front will generate more new memberships, than the ones with the logo on the front only
- d. Outcome(s) of interest:

- i. I expect that the gym uniforms with the logo on the front and back will generate more business for the gym as it allows people to have more exposure to the name of the gym
 - ii. We can measure new membership attributed to new uniforms by including question on the new membership form that asks if they had seen the new uniform – if so, we can ask them which one it was and mark that answer
- e. Other measured variables:
 - i. Duration of experiment – need to be equal duration for both versions of the gym uniform
 - ii. Gender of members wearing new uniforms – need to make sure there is equal representation

3. Will a new homepage improve my online exotic pet rental business?

- a. 2 versions needed
 - i. 1 original homepage
 - ii. 2 modified homepage that includes links to FAQs, rental process, etc.
- b. Sample
 - i. 2 samples needed
 - 1. 1 group would be provided URL for original homepage
 - 2. 2nd group would be provided URL for modified homepage
- c. Hypothesis:
 - i. A new homepage will generate more business as it is more informative and easier to use. It answers people's questions easier.
- d. Outcome(s) of interest:
 - i. I expect that the new website will generate more business because of the more "self-serve" type of nature. We can measure this by clicks on the webpage, duration of average view, and purchases attributed to new versus original homepage
- e. Other measured variables:
 - i. Subscription to mailing list via new versus original homepage
 - ii. Purchases made

4. If I put 'please read' in the email subject will more people read my emails?

- a. 2 versions needed
 - i. 1 email without 'please read' in the email subject
 - ii. 1 email with 'please read' in the email subject
- b. Sample
 - i. Randomly send 1 of the 2 versions to our list of subscribers
- c. Hypothesis:
 - i. Emails with 'please read' in the email subject will result in more people reading the emails

- d. Outcome(s) of interest:
 - i. We will measure the click rate based on each of the versions
- e. Other measured variables:
 - i. Consider gender and age of recipients
 - ii. Replies to email could be secondary outcome, as well as length of time spent reading email