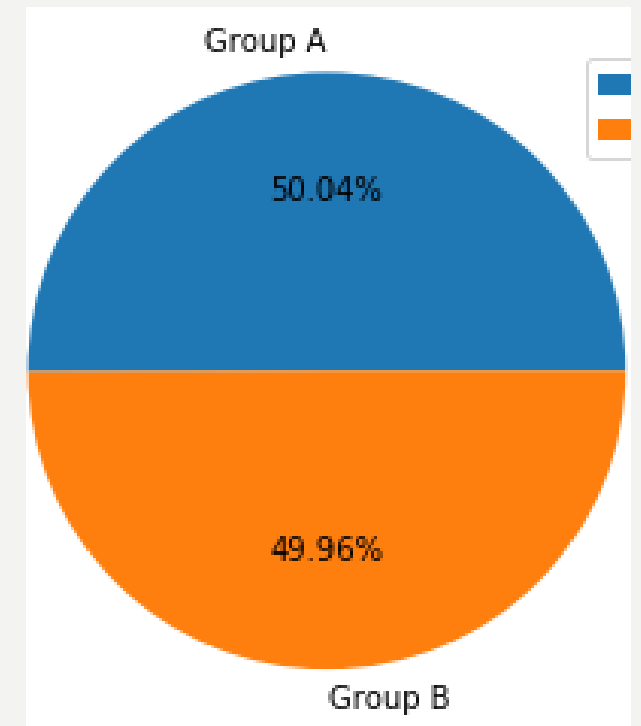


FITNESS TESTS: IMPACT ON SALES FUNNEL

ARE THEY WORTHWHILE OR NOT?

DESCRIPTION OF A/B TEST

- We are trying to determine whether or not having a prospective customer complete a fitness test before going through the application process at our gym makes it more or less likely for them to become a paying customer. The hypothesis posed by the manager of the gym is that a fitness test intimidates visitors, making them less likely to sign up.
- In order to do this, we designed an A/B test where visitors would be randomly assigned to two groups of similar sizes (2504 people vs 2500 people):
 - Visitors in Group A are asked to take a fitness test with a personal trainer before going through the application process.
 - Visitors in Group B proceed directly to the application process.



DATASET SUMMARY AND BACKGROUND

- Our dataset consists of information we collected from the visitors to our gym during the A/B testing period, broken down into 4 tables. These included:
 - ‘*visits*’ : information about potential gym customers who visited the gym
 - ‘*fitness_tests*’ : information about potential customers in Group A, those who were given a fitness test
 - ‘*applications*’ : information about any potential customers who filled out an application
 - ‘*purchases*’ : information about customers who purchased a membership to our gym
- By combining and running calculations on these datasets, we were able to investigate the results of the A/B test, and visualize the effect that requiring potential customers to take a fitness test had on our sales funnel.

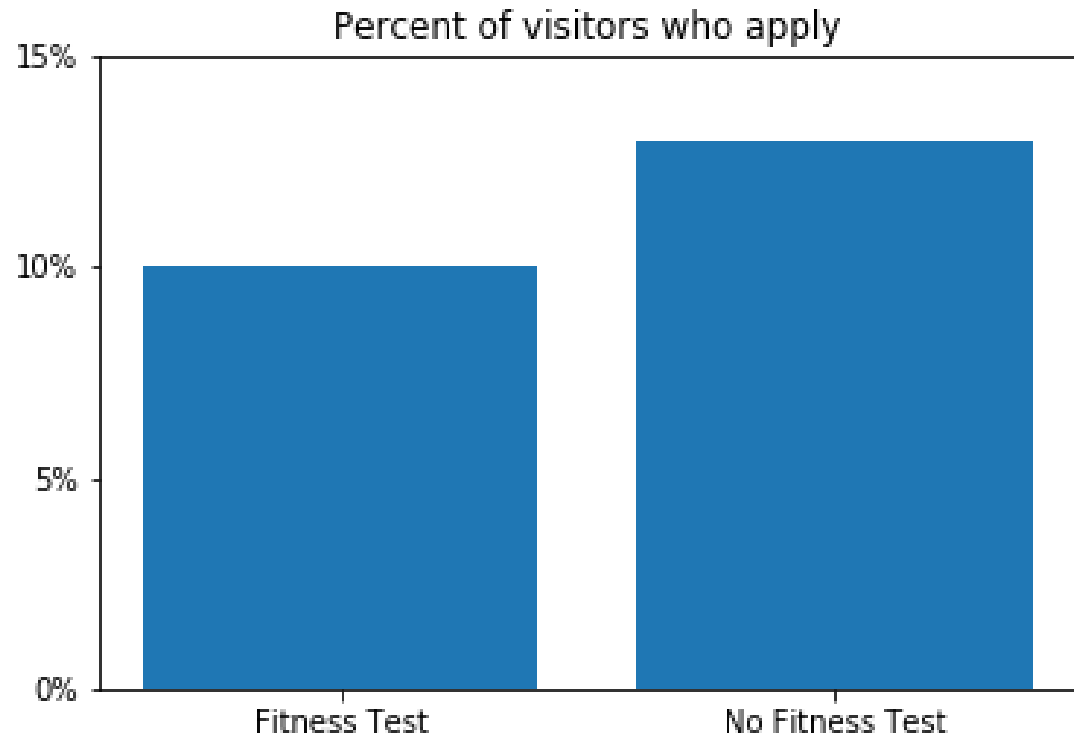
HYPOTHESIS TESTING RESULTS

- Our goal was to determine whether or not requiring a fitness test of our potential customers had a statistically significant impact on our customer conversion rate. In order to accomplish this, we ran a chi-squared test on three sets of data, with the null hypothesis being that the fitness test had no impact. We chose the chi-squared test because we were working with two separate datasets in each case.
- Test 2: “Who purchases a membership?”

TEST 1: “WHO PICKS UP AN APPLICATION?”

13% of visitors in Group B picked up an application, while 10% didn't.

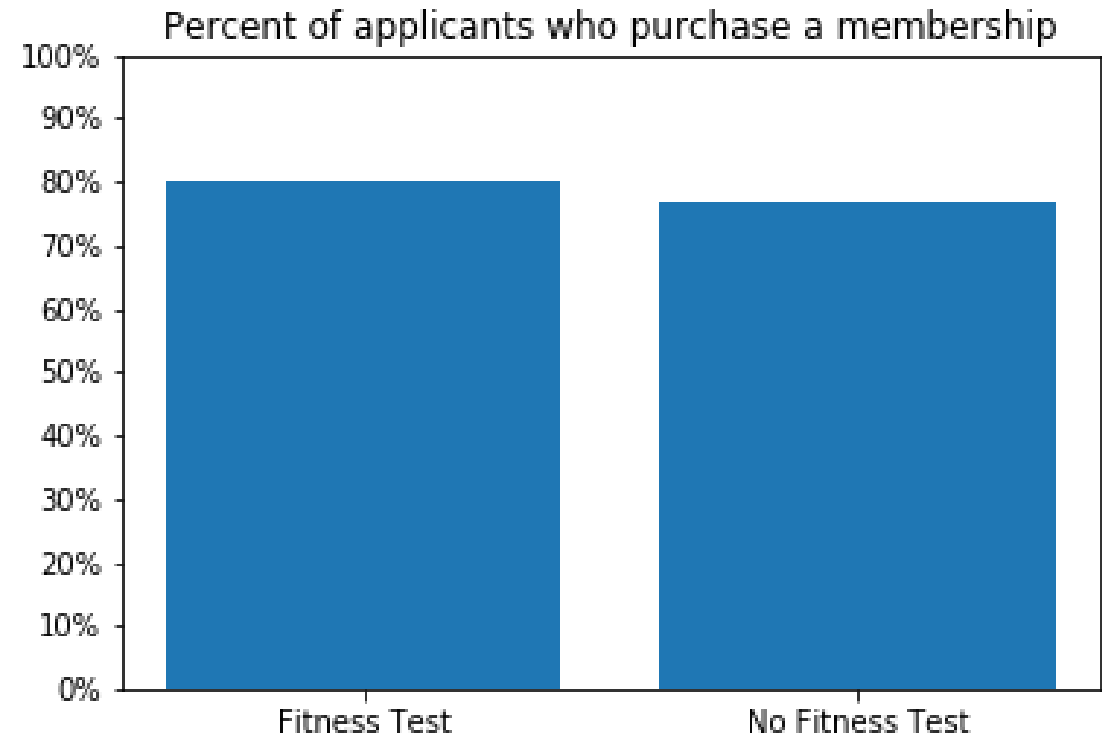
The chi-squared test returned a $p\text{-val} < 0.05$, indicating that the difference was significant.



TEST 2: WHICH APPLICANTS PURCHASE A MEMBERSHIP?

Of the visitors who picked up an application, 80% who completed the fitness test went on to purchase a membership, and 77% did not.

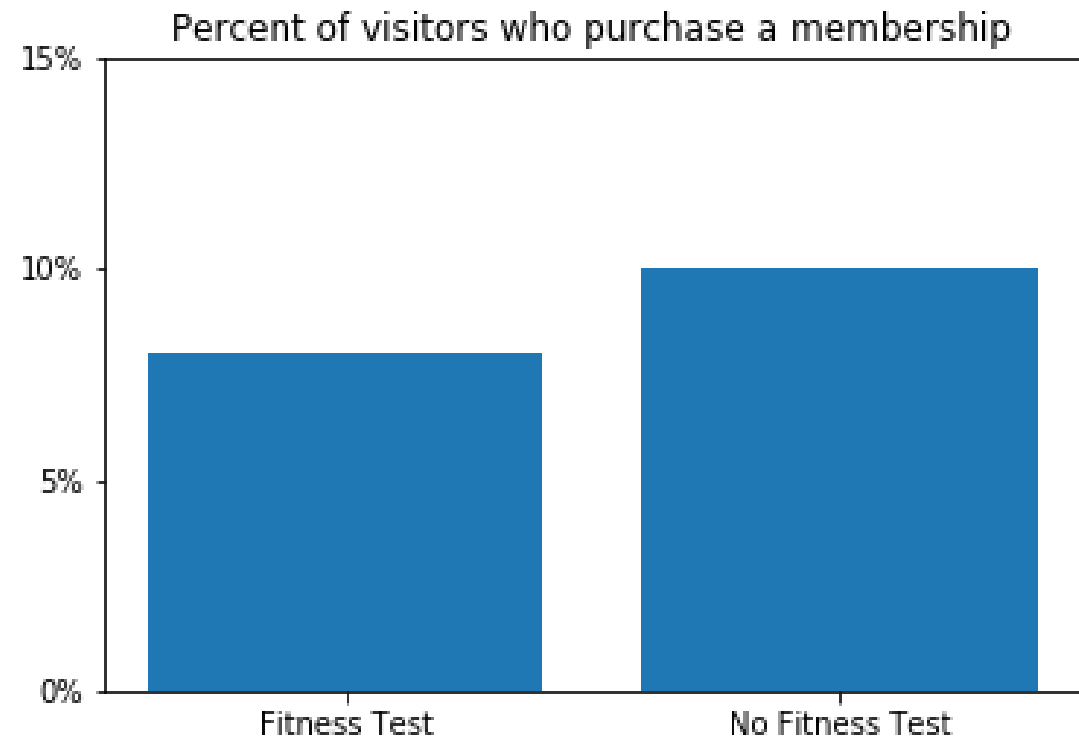
The chi-squared test returned a p-val of > 0.05 , indicating the results were not significant.



TEST 3: WHICH VISITORS PURCHASE A MEMBERSHIP?

Of the visitors who went on to purchase a membership, 8% were from Group A, having completed a fitness test, and 10% were from Group B.

The chi-squared test returned a p-val of < 0.05 , indicating the results were significant.



INTERVIEWS WITH VISITORS

- We also interviewed four visitors to the gym. While one visitor appreciated the fitness test, the other three either regretted having to take it, or appreciated not having to take it.
- One of our main competitors, LiftCity, also requires fitness tests, and according to these interviews, they are very intense and turn people away.



RECOMMENDATION FOR MUSCLEHUB

- We recommend discontinuing the fitness test as it's currently designed.
- However, there are other ramifications to consider, such as the lifetime customer value of the types of customers who appreciate the fitness test rather than those who don't. Continue tracking the payments of those customers in Group A and Group B, to see if there are any long term effects.
- We would also recommend trying out different types of fitness tests, with the goal of still making potential customers feel welcome, while showing them that you care about their health.