

MuscleHub A/B Testing



An analysis of MuscleHub's customer recruitment efforts: Too much pain for too little gain?

The MuscleHub dilemma

MuscleHub is one of the premier fitness clubs in the greater Sacramento area. Several leading body-builders got their start at the gym.

Yet mounting anecdotal evidence suggests shifting attitudes toward fitness tests among the company's target customer base.

Conflicting views

Pro-fitness test

“MuscleHub’s introductory fitness test was super helpful for me!”

- Cora, 23, Hoboken

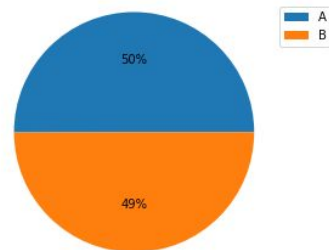
Anti-fitness test

“I took the MuscleHub fitness test because my coworker Laura recommended it. Regretted it.”

- Sonny "Dad Bod", 26, Brooklyn

The A/B analysis

2,504 visits are in Group A and 2,500 visitors are in Group B.



Data tables used in this analysis

Visits and Fitness_tests

“Visits”: Information about potential gym customers who have visited MuscleHub

“Fitness_tests”: Information about potential customers in ‘Group A,’ who were given a fitness test.

Applications

“Applications” contains information about visitors (groups ‘A’ and ‘B’) who applied.

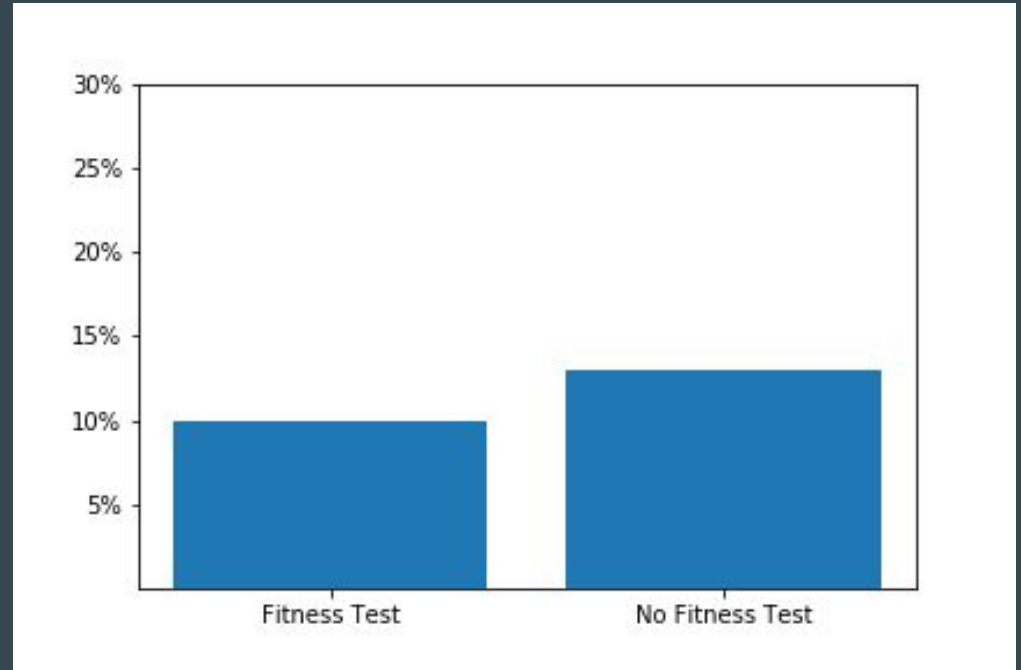
Purchases

“Purchases” contains Information about customers who purchased a MuscleHub membership.

Which visitors were the most likely to apply?

9.98% of people in Group A (fitness test) and 13% of people in Group B (no fitness test) completed an application.

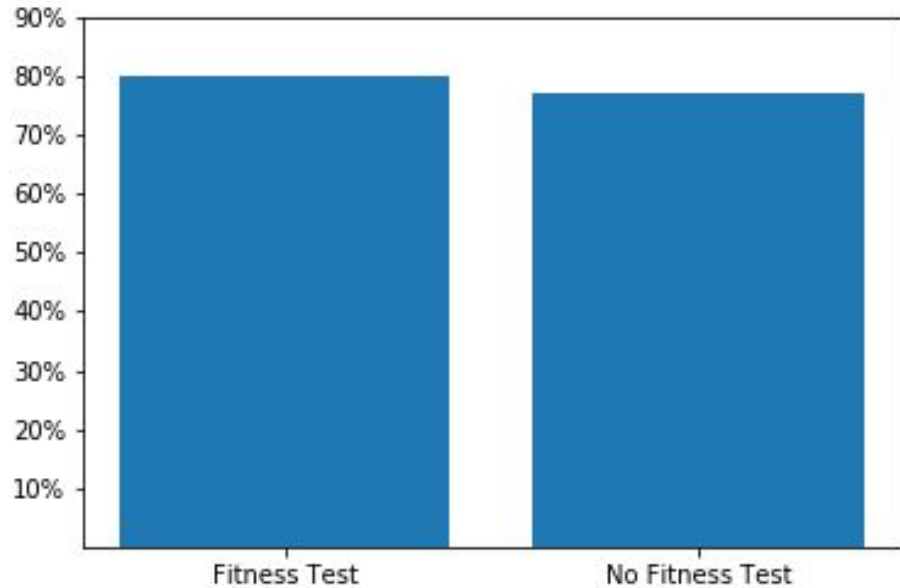
A Chi Square test determined that the difference between the two percentages is significant. This was the most appropriate test because our analysis involved a comparison of two datasets.



Which applicants were most likely to buy a membership?

Eighty percent of the applicants in Group A and 76.9 percent of Group B purchased a membership.

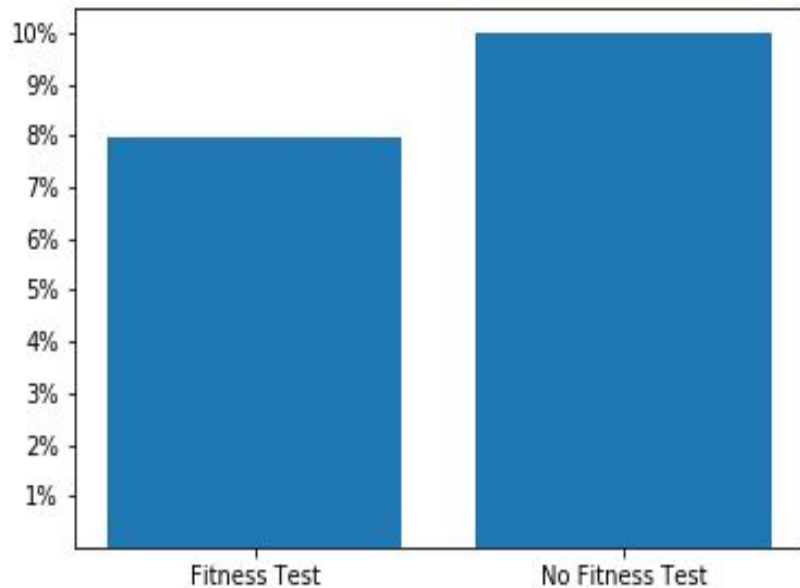
A Chi Square test determined that the difference between the two percentages is not significant. We cannot reject the null hypothesis that there is no difference between the means of these two datasets. This was the most appropriate test because our analysis involved a comparison of two datasets.



Which visitors were most likely to ultimately purchase a membership?

Almost 8 percent of Group A visitors and 10 percent of Group B visitors ultimately purchased a membership.

A Chi Square test determined that the difference between the two percentages is significant. We can reject the null hypothesis that there is no difference between the means of these two datasets. This was the most appropriate test because our analysis involved a comparison of two datasets.



Summary of the qualitative data

Finding 1

Visitors to MuscleHub who don't take a fitness test are more likely to complete an application.

Finding 2

It's impossible to say if a fitness test makes an applicant more likely to buy a membership.

Finding 3

Among all MuscleHub visitors, those who don't take a fitness test are more likely to ultimately purchase a membership.

Finding 4

MuscleHub has a loyal customer base and retains strong brand identity, but...

Hear me now and believe me later...

To maintain its current market share and improve the recruitment of customers, MuscleHub management needs to end the gym's visitor fitness test program.

Fitness tests instead should be reserved for MuscleHub visitors or customers who actually want them.