

# The Musclehub fitness test

Keep it or drop it?

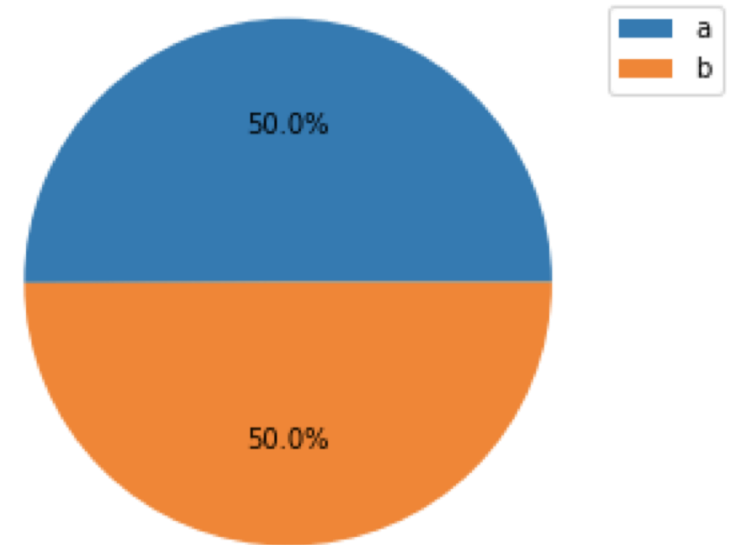
# Description of the A/B test

- Currently, when a visitor to MuscleHub is considering buying a membership, he or she follows the following steps:
  - Take a fitness test with a personal trainer
  - Fill out an application for the gym
  - Send in their payment for their first month's membership
- As the fitness test might intimidate some prospective members, an A/B test has been set up starting 7-1-2017
  - Visitors will randomly be assigned to one of two groups:
    - Group A will still be asked to take a fitness test with a personal trainer
    - Group B will skip the fitness test and proceed directly to the application
- The hypothesis to test is that visitors assigned to Group B will be more likely to eventually purchase a membership to MuscleHub

# Summary of the dataset

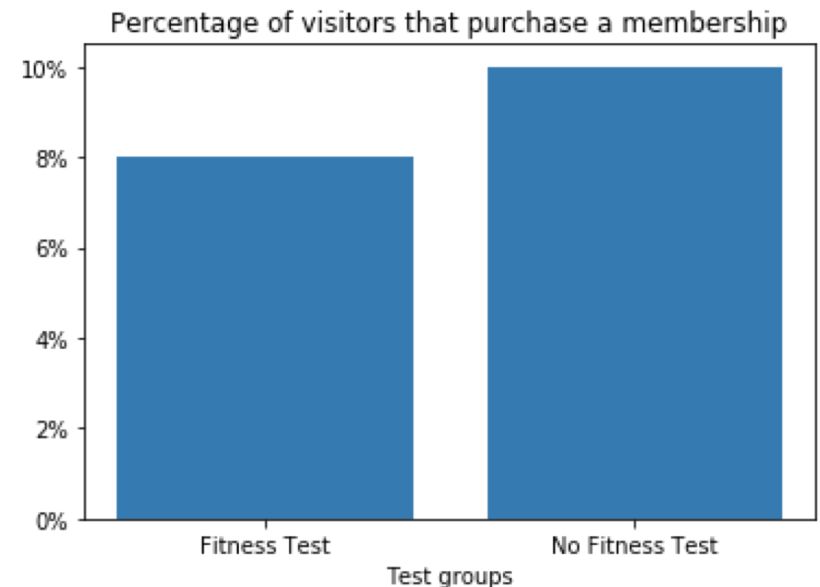
- Data of 5004 Musclehub visitors was analyzed
- The visitors were randomly assigned to group A (fitness test) or group B (no fitness test)
- The visitors were split over the two groups equally – see graph

Percentage of visitors per test group



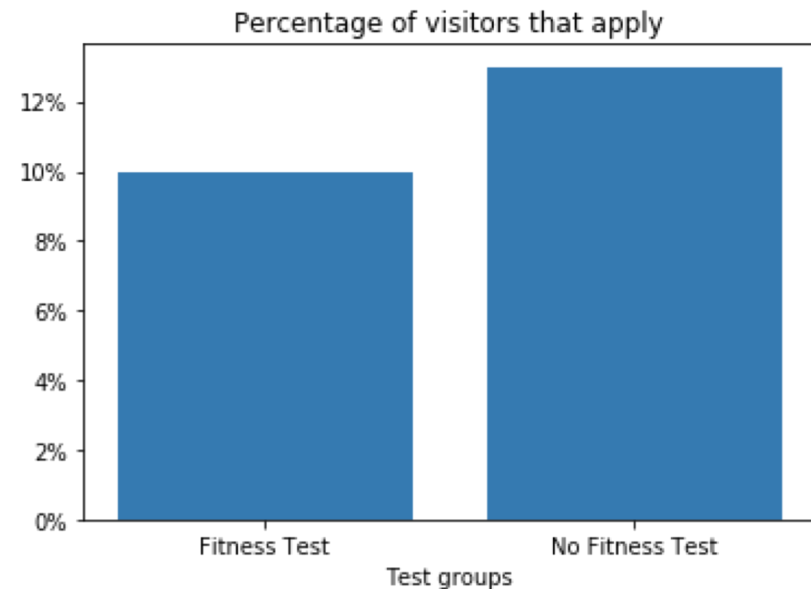
# More subscriptions in group with no fitness test

- The main analysis showed that visitors that were assigned to Group B (no fitness test) did in fact sign up more frequently: 250 times, vs. 200 signups in Group A
- This difference was significant as calculated with a Chi-square test; the p-value was  $< 0.05$
- The Chi-square test was the correct test to use, because two categorical datasets are being compared (group A vs. group B)



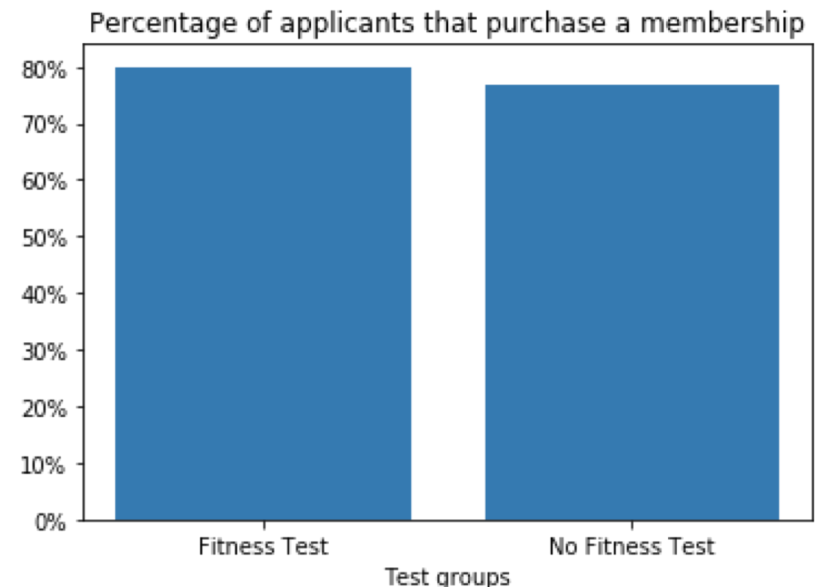
# More membership applications in group with no fitness test

- Breaking the main analysis up into two steps, it becomes clear that visitors that were assigned to Group B also applied for a membership more frequently: 325 times vs. 250 applications for Group A
- This difference was significant as calculated with a Chi-square test; the p-value was  $< 0.05$
- The Chi-square test was the correct test to use, because two categorical datasets are being compared (group A vs. group B)



# No significant difference in subscription rate between test groups once people have applied

- Initially it seemed that applicants group A were slightly more likely to subscribe than applicants in group B (80% vs. 77%)
- However, this difference was not significant as calculated with a Chi-square test; the p-value was  $> 0.05$
- The Chi-square test was the correct test to use, because two categorical datasets are being compared (group A vs. group B)
- Note: the sample size might be too small given the supposedly small effect size; Group A and B contained only 250 and 325 people respectively



# A summary of the qualitative data

- When looking at the qualitative data, the impression arises that there seem to be two distinct groups of people:
  - People that are very positive about the fitness test and benefit from it greatly
  - People that are very negative about the fitness test and are scared off by it

*“...MuscleHub’s introductory fitness test was super helpful for me! After taking the fitness test, I had to sign up and keep coming back...!”*

*- Cora, 23, Hoboken*

*“...The whole sign-up process took a matter of minutes. I tried to sign up for LiftCity last year, but the fitness test was way too intense. This is my first gym membership EVER, and MuscleHub made me feel welcome.”*

*- Shirley, 22, Williamsburg*

# A recommendation for MuscleHub

- Recommendation 1: Drop the mandatory fitness test, since it seems to scare off more people than it attracts
- Recommendation 2: Run another test, to see if perhaps subscriptions would increase even more if visitors were allowed to choose themselves whether to do a fitness test or not
  - Group A: No fitness test/no choice
  - Group B: Visitor's choice between fitness test and no fitness test