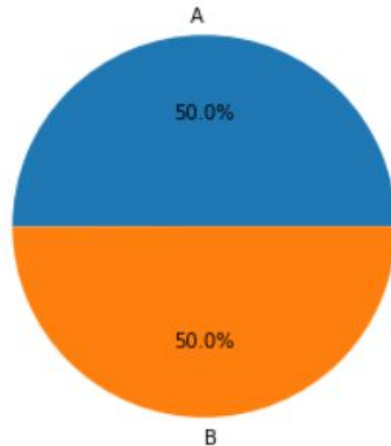# MuscleHub A/B Test

Codecademy Pro Intensive Final Project
Submitted by: Kyle Smith

A/B Test - What Happened

- For the MuscleHub A/B test we wanted to find out if administering a fitness test hurts or helps gaining new gym members
- Group A were given the test, while Group B were not
- Both groups were split very evenly across 5004 visitors to the gym:

A/B Test - Who Applied?

- We determined that, with a Chi-square test p-value of 0.001, more visitors applied to the gym if they were NOT given a fitness test
    - Chi square tests are used throughout, as we have two categorical values for which we want to compare significance of association
- Conversion rates for both groups were:
    - Group A: 10
    - Group B: 13%

Apps Completed Dependent on Fitness Test
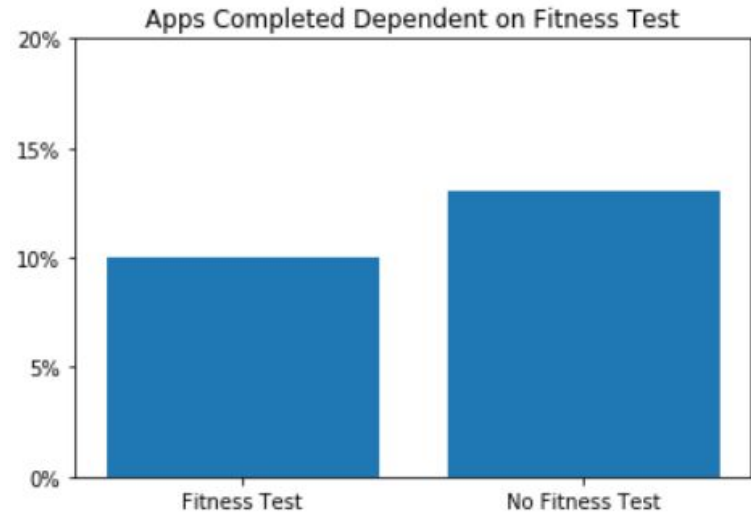
A/B Test - App-to-Member Conversion

- The conversion rate of applications to new gym members was similar between the two groups
    - Group A: 80%
    - Group B: 77%

App-to-Member Conversion Rate per Group
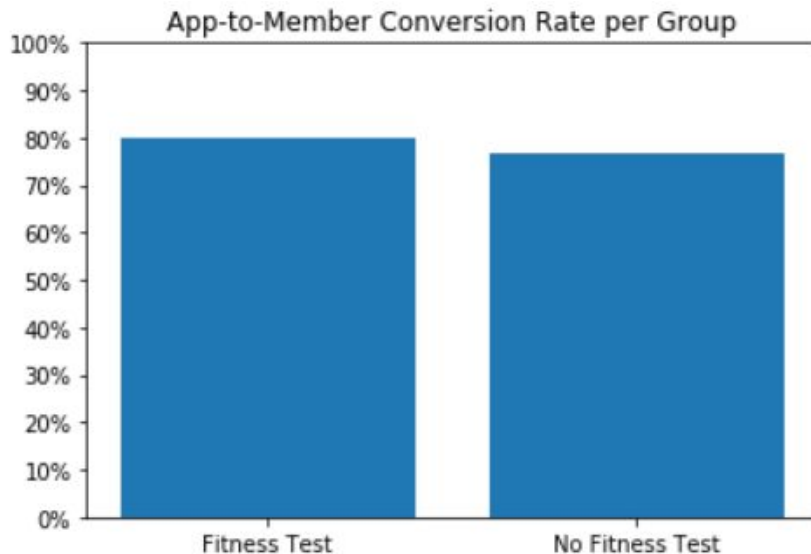
A/B Test - Full Conversion

- Our Chi-square p-value of 0.01 gives us confidence at the 99% interval that our conversions are significantly higher if visitors are NOT given a fitness test
- These results were confirmed by interviews with visitors, who seemed to enjoy not feeling intimidated or pressured by our gym

Overall Purchase Percentages Dependent on Test Taken
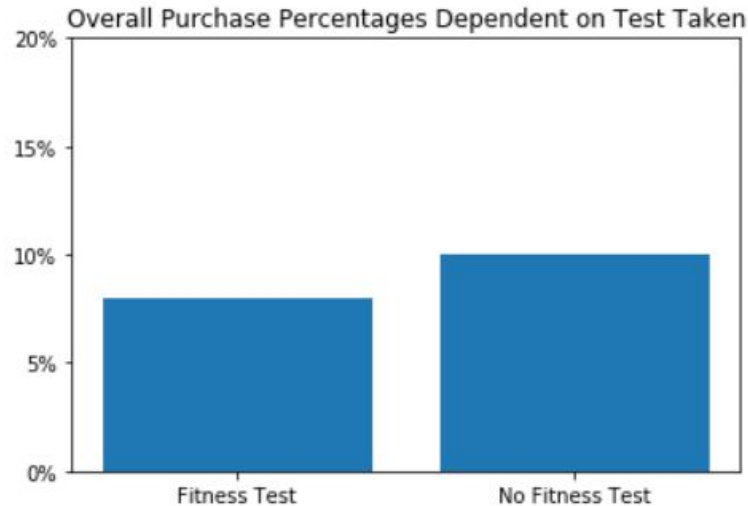
Recommendation

My recommendation to MuscleHub would be to make the fitness test optional, so that visitors do not feel pressured or intimidated when their important first impressions are forming of the gym.