

MuscleHub A/B Test

(Capstone Option 1)

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Overview

Recommendation: Do not require prospective members to take a fitness test prior to completing an application and purchasing a membership

Objective

- To understand if the fitness test intimidates some perspective MuscleHub members

Hypothesis

- Visitors skip the fitness test and proceed directly to the application will be more likely to purchase a membership to MuscleHub

Process

- Analyze the results of the A/B test setup by Janet, the manager of MuscleHub

Results

- Prospective members that do not take a fitness test are more likely to purchase a membership than potential members who are required to take a fitness test prior to purchasing a membership

Current process vs Test

Current process

Currently, when a visitor to MuscleHub is considering buying a membership, he or she follows the following:

Step

1. Take a fitness test with a personal trainer
2. Fill out an application for the gym
3. Send in their payment for their first month's membershipTo understand if the fitness test intimidates some perspective MuscleHub members

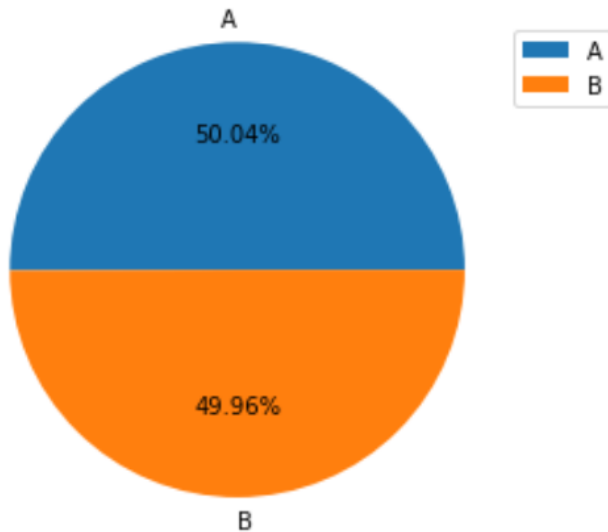
A/B analysis

Janet thinks that the fitness test intimidates some prospective members, so she has set up an A/B test.

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

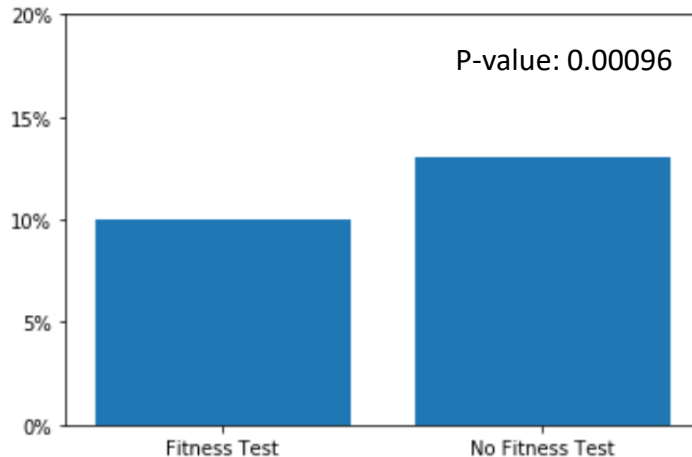
Population



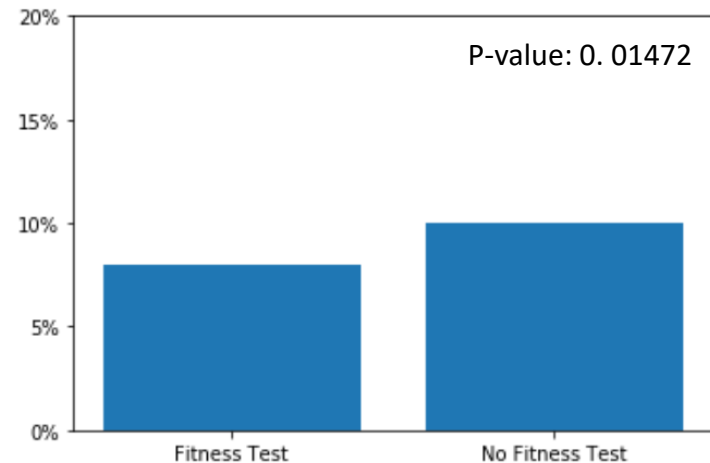
A total population of 5,004 potential members was utilized for the A/B test split 50.04% vs. 49.96% in group A vs. B, respectively

Summary of A/B test results

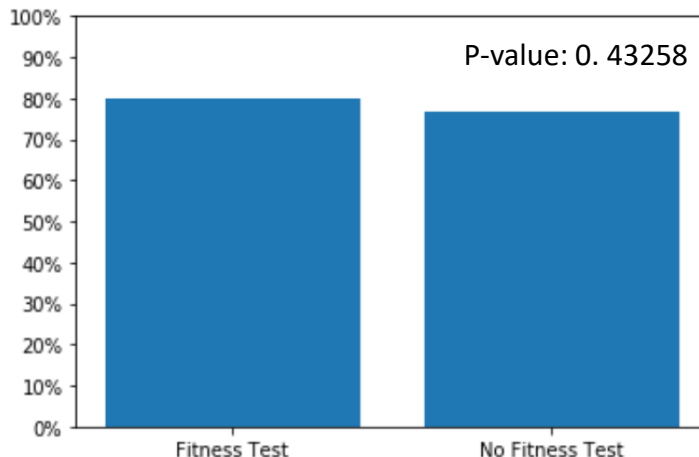
Percent visitors who apply



Percent visitors who purchase



Percent applicants who purchase



- Visitors who do not take a fitness test are more likely to complete an application than those who take a fitness test
- There is no meaningful difference for applicants who take a fitness test and do not take a fitness test to purchase a membership
- Visitors who do not take a fitness test are more likely to purchase a membership than those who take a fitness test

Testimonials

“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

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

- Sonny "Dad Bod", 26, Brooklyn

Data sources

- 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: Information about any potential customers (both "Group A" and "Group B") who filled out an application
- Purchases: Information about customers who purchased a membership to MuscleHub