

MuscleHub A/B Test

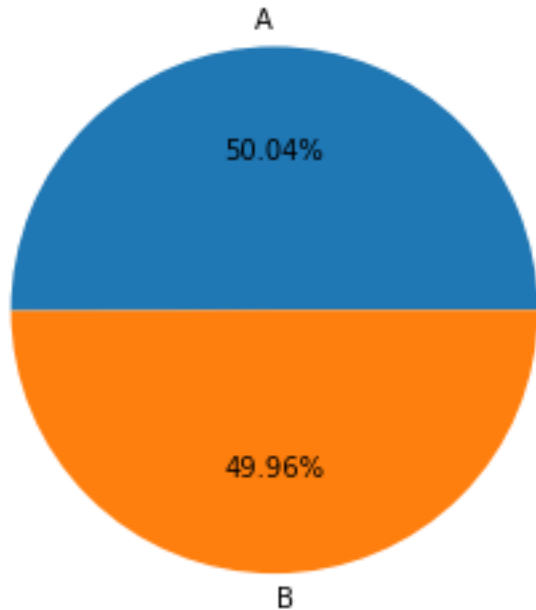
Capstone Project option 1
04/10/18



Objective

- The manager of MuscleHub believes that a fitness test may be intimidating to some prospective members
- We are trying to figure out whether or not forcing people to take a fitness test with a personal trainer impact the decision to purchase a membership
- We will use an A/B test in order to figure out the potential impact of the Fitness test on prospective members

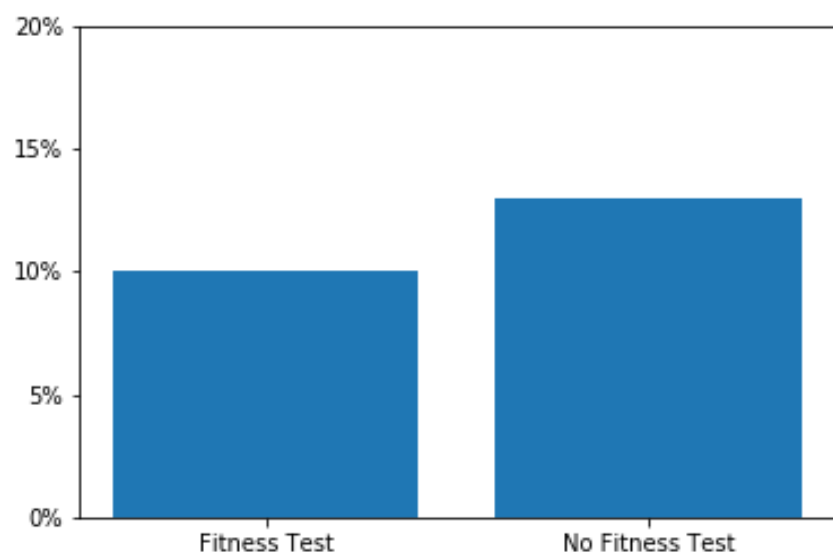
Observations from data



- Recall of sign-up process
 - Take a fitness Test with personal trainer (only Group A)
 - Fill out an application for the gym
 - Send in their payment for their first month's membership
- Group A Has to take the Fitness Test
- Group B can pick up the application instantly
- The number of people used in each group for our test is nearly identical

Results from Statistical Analysis

1-Who picks up an Application



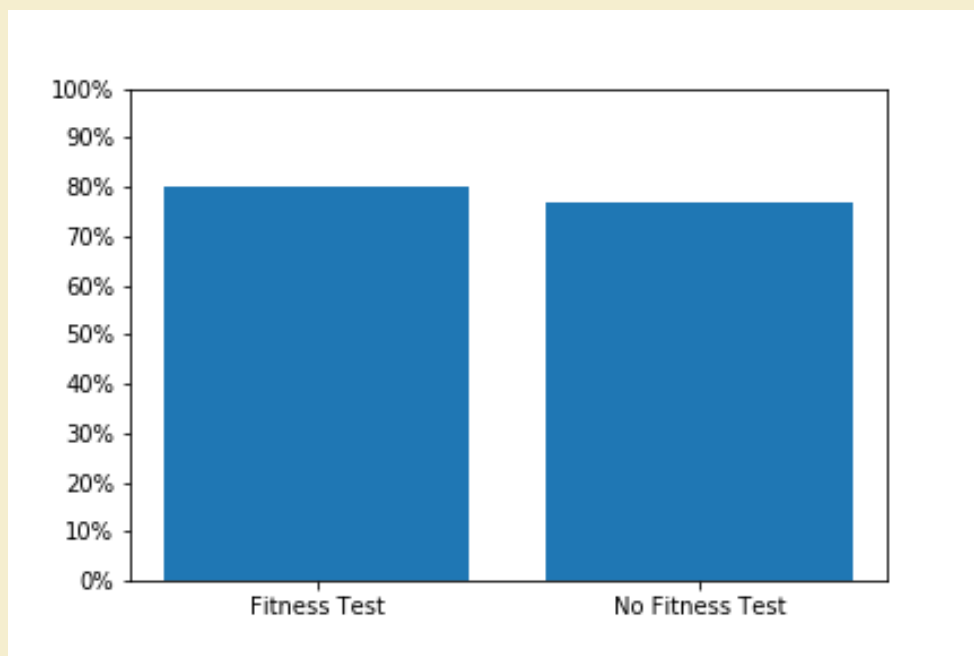
ab_test_group	Application	No Application	Total	Percent with Application
A	250	2254	2504	0.09984
B	325	2175	2500	0.13000

- People that do not take the Fitness test are more likely to pick up an application
- By using a Chi-square Test of independence we can infer that this difference is significant
- It seems that the mandatory Fitness Test has a negative impact on visitors from applying

Results from Statistical Analysis

2-Who purchases a Membership

a) People that already picked up an application



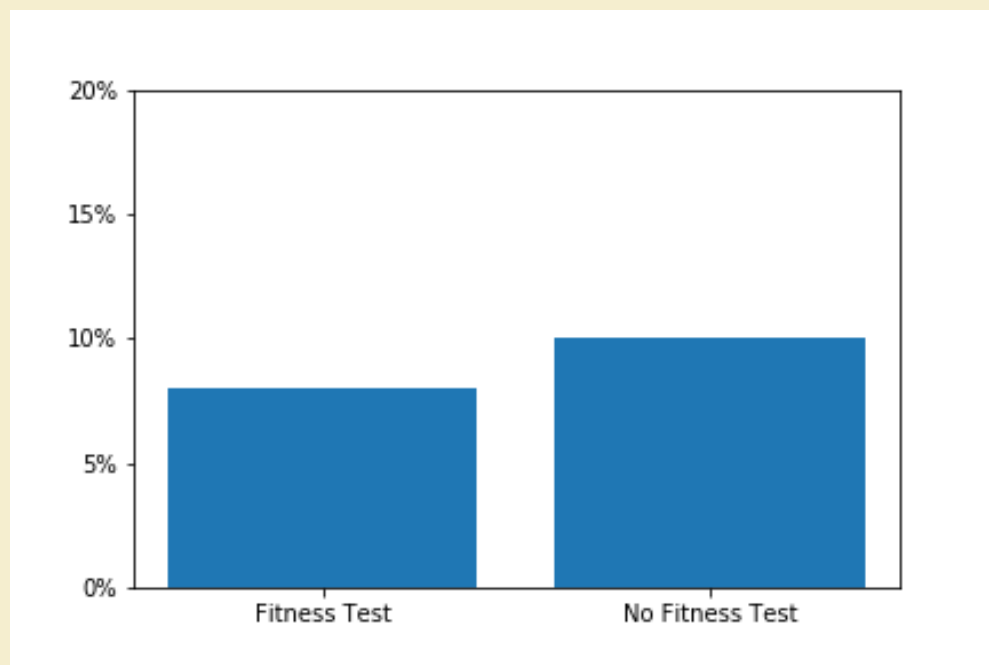
ab_test_group	Member	Not Member	Total	Percent Purchase
A	200	50	250	0.800000
B	250	75	325	0.769231

- The conversion rate from picking up an application to becoming a member is very similar from both test groups
- By using a Chi-square Test of independence we can infer there is no significant differences between the groups
- It appears that once people have picked up an application, whether they are from Group A or B, the conversion rate is similar

Results from Statistical Analysis

2-Who purchases a Membership

a) From all visitors



ab_test_group	Member	Not Member	Total	Percent Purchase
A	200	2304	2504	0.079872
B	250	2250	2500	0.100000

- People that do not take the Fitness test are more likely to become members
- By using a Chi-square Test of independence we can infer that this difference is significant
- It seems that the mandatory Fitness Test has a negative impact on visitors from becoming members

Results explained

- Statically speaking, forcing people to take the Fitness Test has a negative impact on prospective membership
- From the interviews we can see that some people like the fast membership process that comes without the mandatory Fitness test
- However it seems that some visitors find the introductory Fitness Test has helpful and a source of motivation

Recommendation

- Make the fitness test non mandatory but still propose it to visitors that may find it helpful
- Make a follow-up analysis of the time spent as a member from the same group used for the previous analysis
 - It could show that people that took the fitness test may be more motivated and inclined to continue as part of the gym

Thank You

