

Increasing MuscleHub Membership: To Fitness Test or Not Fitness Test

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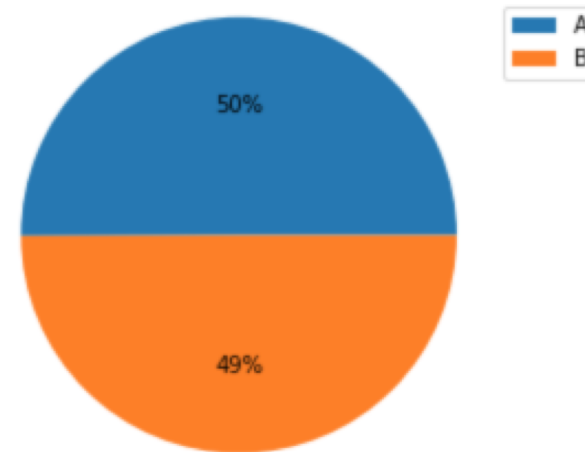
The A/B Test

Visitors to MuscleHub from 1 July 2017 to 9 September 2017 were randomly selected into to (almost) equally distributed test groups:

- Visitors who were asked to take a fitness test with a personal trainer (Group A)
- Visitors who skipped the fitness test and proceeded directly to the application process (Group B)

The data was subsequently analyzed to determine whether the completion of the fitness test significantly influenced whether a prospective member to MuscleHub applied for gym membership and also whether or not they ended up making a final purchase.

AB Test Counts: 'Almost' Equally Distributed



The Data

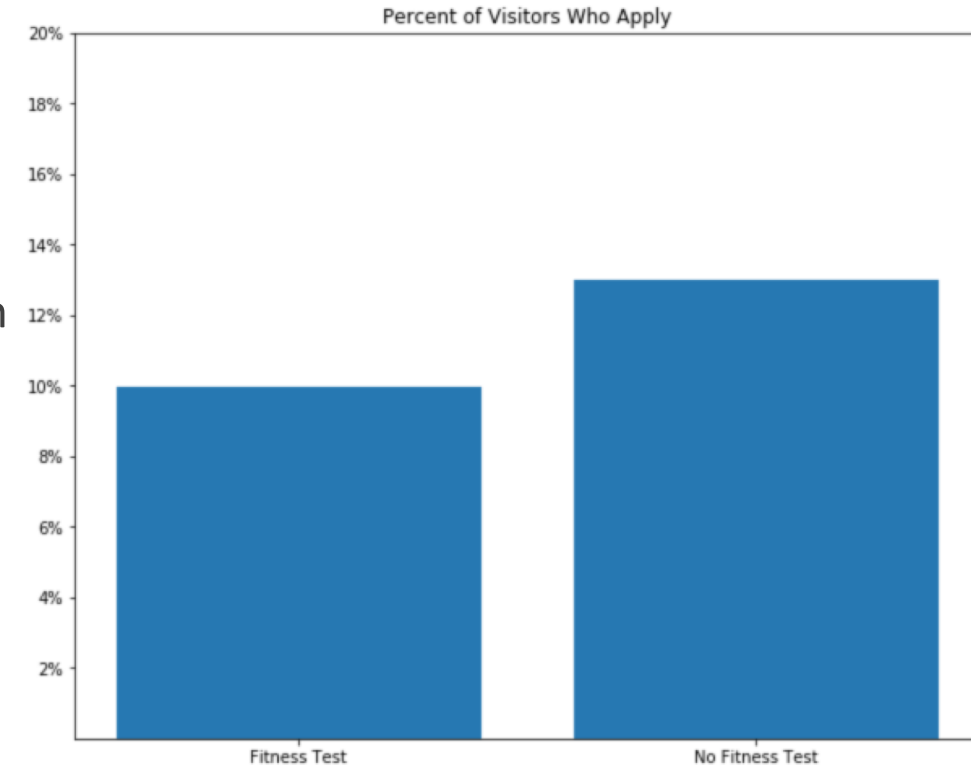
The MuscleHub ownership track their visitors, applicants, and those who end up purchasing a membership in an SQL dataset. The information is broken down by name, email, gender, and date of activity. For the purposes of the A/B test, information whether a visitor was provided (or not provided) a fitness test was also tracked. In total, 5004 visitors were tracked for the the A/B test.

The Results: Applicants

It was statistically more likely that visitors who were not assigned a fitness test submitted an application to MuscleHub.

To come to this conclusion, we calculated the total number of visitors from both Group A and Group B and compared those who submitted an application. Around 10% of visitors who were assigned a fitness test (Group A) submitted an application while around 13% of visitors who were not assigned a fitness test (Group B) submitted an application.

We used a chi-squared test comparing Group A and Group B to determine whether the results were statistically significant. As the resultant P-value was less than 5%, we rejected the null hypothesis and determined that there was a statistically significant difference between the two datasets.

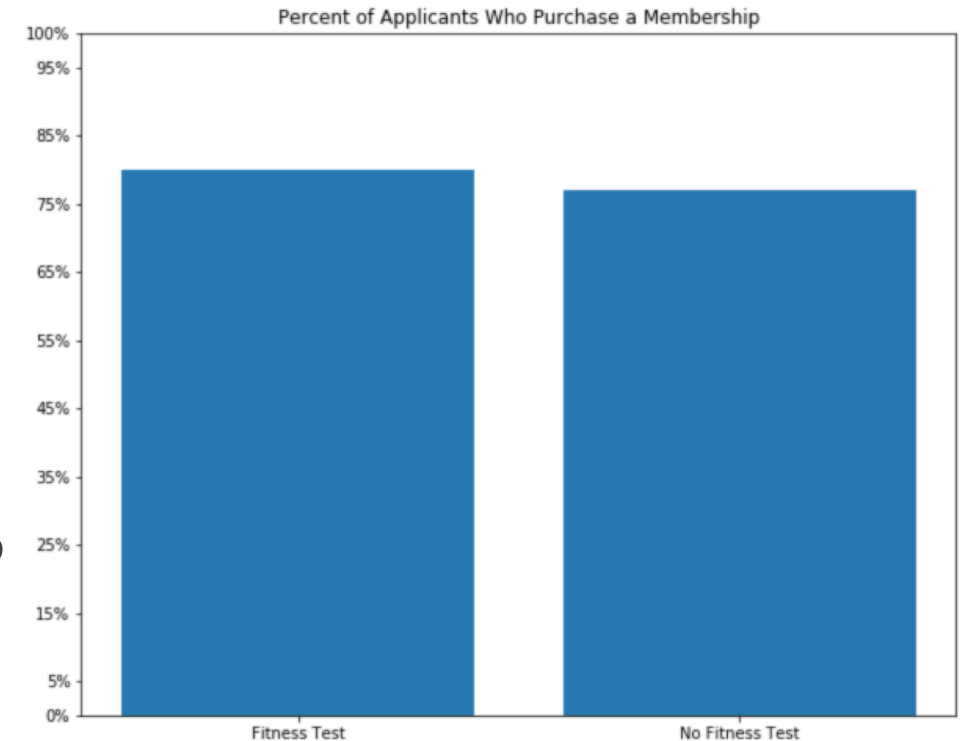


The Results: Applicants Who Purchased Membership

It was not statistically more likely that visitors who submitted an application to MuscleHub purchased a membership.

To come to this conclusion, we calculated the 575 applicants from both Group A and Group B and compared those who subsequently purchased a membership. Around 80% of these applications who were assigned a fitness test (Group A) purchased a membership while around 77% of visitors who were not assigned a fitness test (Group B) purchased a membership.

We used a chi-squared test comparing Group A and Group B to determine whether the results were statistically significant. As the resultant P-value was over 5%, we cannot reject the null hypothesis and determined that there was not a statistically significant difference between the two datasets.

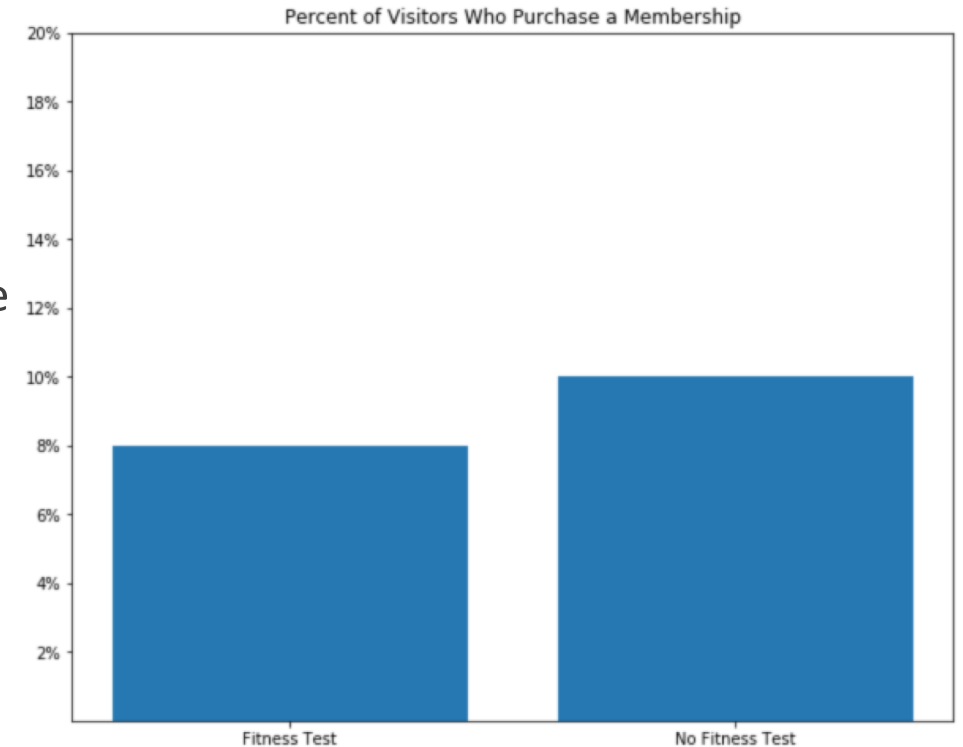


The Results: Visitors Who Purchased Membership

It was statistically more likely that visitors to MuscleHub who were not assigned a fitness test purchased a membership.

To come to this conclusion, we calculated the total number of visitors from both Group A and Group B and compared those who purchased a membership. Around 8% of visitors who were assigned a fitness test (Group A) submitted an application while around 10% of visitors who were not assigned a fitness test (Group B) submitted an application.

We used a chi-squared test comparing Group A and Group B to determine whether the results were statistically significant. As the resultant P-value was less than 5%, we rejected the null hypothesis and determined that there was a statistically significant difference between the two datasets.



The Qualitative Interviews

Four individuals between both Group A and Group B were interviewed regarding their opinions on MuscleHub's standard fitness test and whether it played a role in determining whether or not to purchase a gym membership.

One individual admitted that the test motivated her to sign up for a membership.

One individual who was assigned the fitness test was turned off by the experience.

One individual who was not tested was satisfied with not conducting a fitness test, but still did not purchase a membership.

One individual who was not tested was pleased with the ease of the application process and did end up purchasing a membership.

Recommendations

- ❖ MuscleHub should no longer assign fitness tests to prospective members
 - ❖ The results are statistically significant although further qualitative surveys are needed to determine why!
- ❖ Submitting an application is the key decision point to purchasing a membership
 - ❖ The majority of visitors who submitted an application purchased a membership!
- ❖ MuscleHub should conduct further research whether there is a difference in reactions to the fitness tests among gender
 - ❖ The data is already collected!