

Project Capstone: MuscleHub A/B Testing

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Summary of MuscleHub Testing

- MuscleHub provides fitness tests for prospective members
- Trainers keep records of applications and memberships that are submitted
- Visitor interviews are used to identify the value they provide customers in order to identify new opportunities

Question: Does performing a fitness test lead to higher membership?

Description of Datasets

Information from the following resources were used

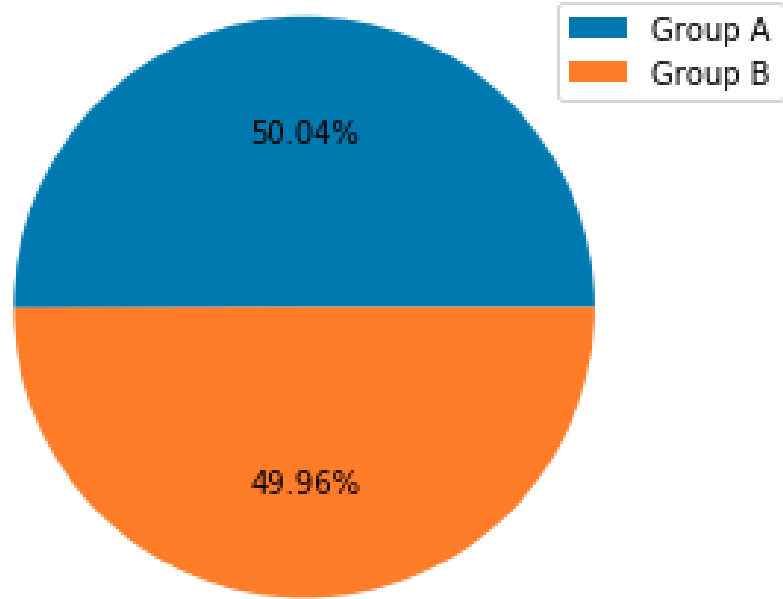
- List of people who visited the facilities
(names, dates, contact information...etc.)
- Catalog of participants in the fitness tests
(includes dates of fitness tests)
- Inventory of people who filled out an application
(dates of application submission)
- Records of payments from those who filled out an application
(dates of first payment received)

NOTE: Feedback forms from those who visited were not directly included, but, do provide subjective context for this analysis

Hypothesis Testing: Fitness Tests

First, we looked at the total number of visitors who took advantage of the fitness tests

Analysis: It looks as though there is an even split between visitors who take the test (“A”) and those who do not (“B”).

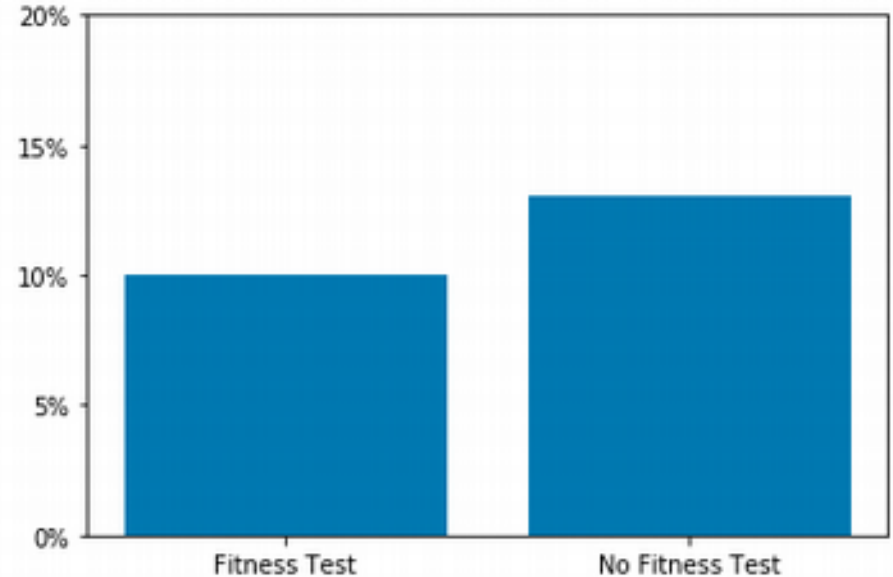


Who Picks Up a Membership Application?

We first want to know the % of visitors who fill out the membership application.

- Looked at all visitors who came into the club
- Includes those who filled out an application as well as those who did not
- Includes those that followed up with a payment as well as those who did not

Analysis: Performed a Chi² contingency test. The results (pval) indicate that difference is significant.

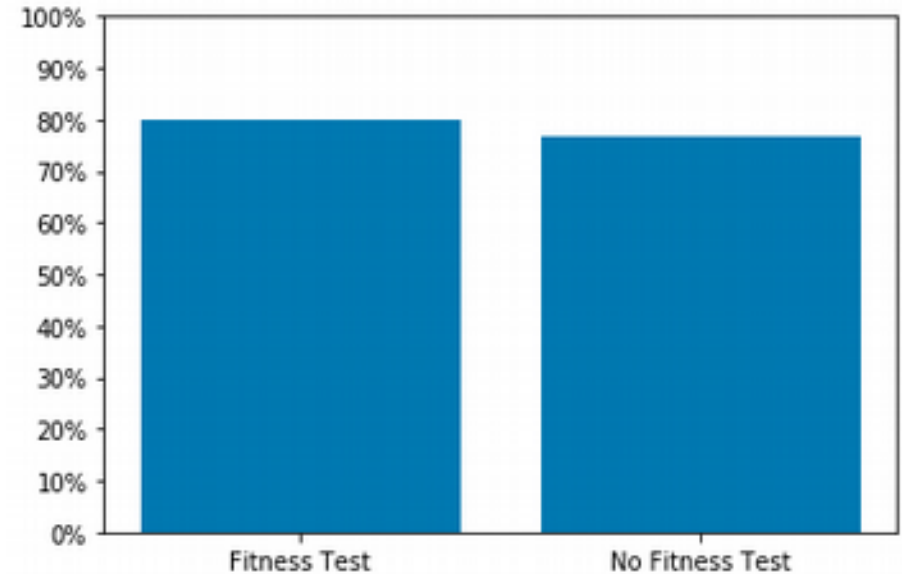


Who Purchases a Membership?

Next, we want to know the % of applicants who followed up with a monthly payment.

- Looked at just those who submitted an application

Analysis: Performed a Chi² contingency test, which shows that this was likely a statistical anomaly. A larger sample would be needed.

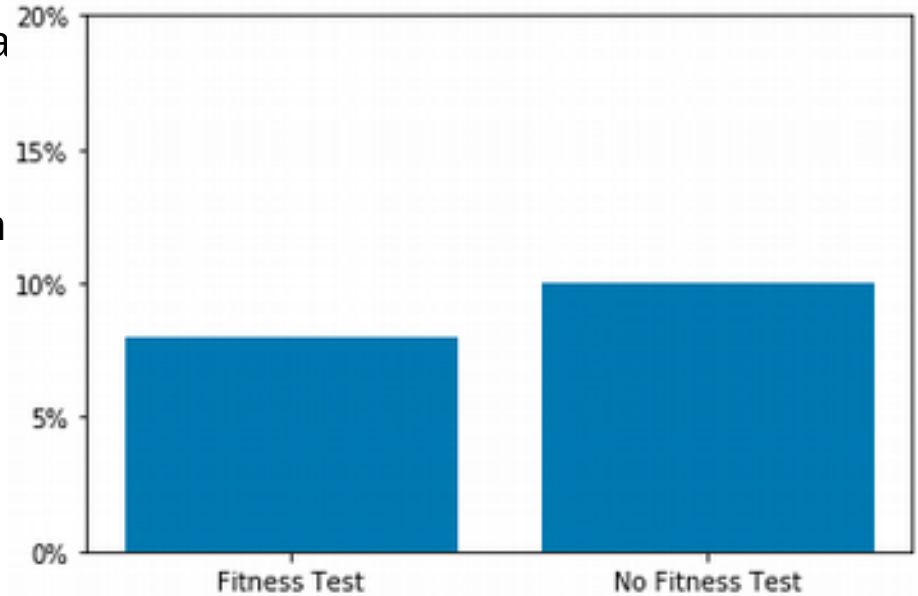


Membership Purchases For All Visitors

Finally, we looked at all of applications that lead to a paying membership

- Looked at just those who visited MuscleHub
- Includes everyone who submitted an application
- Includes everyone who never filled out the membership application

Analysis: Performed a Chi² contingency test, which shows that this is a significant difference between those who take a fitness test and those who do not.



Data Analysis

- “Chi Square” testing was used due to multiple conditions
 - Male/female participants
 - Applicant/non-applicant condition
 - Participation in fitness exams
- Visitors since 7-1-2017 were included
- 5004 visitors were cataloged
 - ~ 50/50 split between those who participated in the fitness tests and those who did not
 - ~ 10% of visitors became paying customers w/o a fitness test
 - ~ 8% of visitors who took a fitness test ended up as members

Recommendations

- Providing a membership application immediately after a fitness test cannot be proven to increase membership appreciably
- Performing fitness tests before an applicant makes an initial payment does not provide a bigger incentive for memberships
- Positive feedback regarding avoiding aggressive membership tactics by employees is mentioned in the interviews

Conclusion: Fitness tests are costly and likely have a negative impact on potential memberships. Resources would be better used in other areas to attract members.

Thank You!