

MuscleHub Membership Analysis

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Impact of Fitness Test on Prospective Members

The current process for acquiring membership at MuscleHub constitutes:

- 1) **Taking a fitness test**
- 2) **Submitting an application**

In an effort to determine whether the fitness test intimidates prospective members, an **A/B test** was conducted to examine whether eliminating the step would make prospective members more likely to purchase a membership. The following presents an in-depth analysis of the membership acquisition funnel and the impact of the fitness test on each stage.

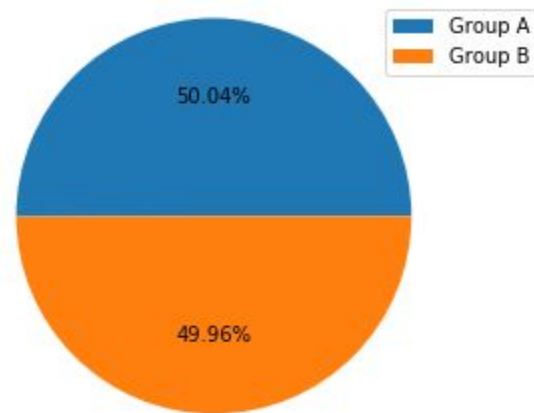
A/B Test Parameters

Visitors to MuscleHub between 7/1/2017 and 9/9/2017 were randomly assigned to two different test groups.

Group A was asked to take the fitness test.

Group B was asked to proceed directly to the application.

A total of **5,004 visitors** were included in the A/B Test.



A/B Test Datasets

Dataset 1 examines the number of visitors in each test group that submitted an application for membership. The data shows that **10% of visitors in Group A** applied while **13% of visitors in Group B** applied -- providing a preliminary hypothesis that Group B visitors are more likely to submit an application.

Dataset 2 examines the number of visitors who submitted an application (applicants) in each test group that proceeded to purchase a membership. The data shows that **80% of applicants in Group A** purchased while **77% of applicants in Group B** purchased -- providing a preliminary hypothesis that Group A visitors are more likely to purchase a membership.

Dataset 3 examines the number of visitors in each test group that ultimately purchased a membership. The data shows that **8% of visitors in Group A** purchased while **10% of visitors in Group B** purchased -- providing a preliminary hypothesis that Group B visitors are more likely to purchase a membership.

Visitors	Applied	Did Not Apply
Group A	250	2254
Group B	325	2175

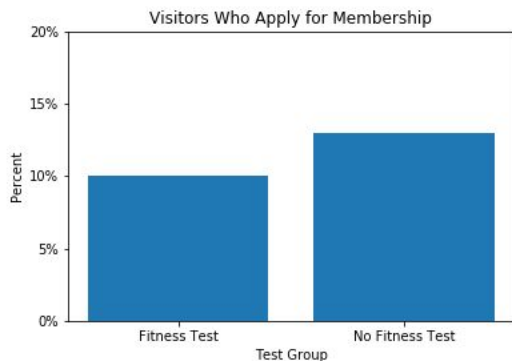
Applicants	Purchased	Did Not Purchase
Group A	200	50
Group B	250	75

Visitors	Purchased	Did Not Purchase
Group A	200	2304
Group B	250	2250

Hypothesis Test Findings on A/B Test Datasets

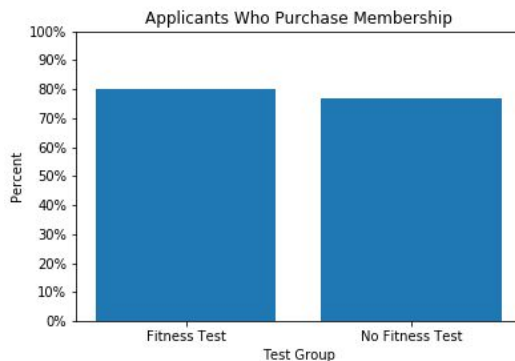
To determine the validity of the preliminary hypotheses, a **Chi Square Test** was conducted on each dataset to evaluate whether the difference between Group A that took the fitness test and Group B that didn't is statistically significant. The Chi Square Test was chosen for it is best used to compare two or more categories (i.e. Purchased vs. Did Not Purchase).

Dataset 1 hypothesis test confirms that the difference between test groups is **significant** -- more visitors in Group B apply than in Group A.



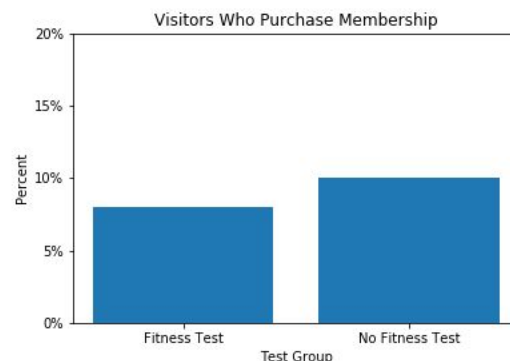
P-value = 0.00096478

Dataset 2 hypothesis test shows that the difference between test groups is **not significant** -- number of applicants who then purchased a membership is the same.



P-value = 0.43258646

Dataset 3 hypothesis test shows that the difference between test groups is **significant** -- more visitors in Group B purchased than in Group A.



P-value = 0.0147241146

Prospective Members Interview Summary

In addition to analyzing datasets, interviews were also conducted with visitors during the A/B Test to provide more color on the statistical findings. Although one of the visitors did find the fitness test “super helpful”, all the others were intimidated or deterred by the step in the process describing it as “too much” or something they regretted participating in.

These interviews support the findings from the A/B test that demonstrate though there is still a good percentage of people who take the fitness test that then proceed to purchase a membership, **even more visitors apply for and purchase a membership if they skipped the fitness test.**

Recommendation for Membership Process

In summary, the A/B test concludes that **visitors who do not take the fitness test are 3% more likely to apply for membership and 2% more likely to then purchase a membership.** Further analysis also confirmed that out of all who apply, those that take the fitness test are not more likely to purchase a membership -- indicating the applicant to membership conversion is the same for all visitors once they reach the applicant stage. Therefore, the source of discrepancy between the acquisition funnels must be at the visitor to applicant conversion stage -- the difference which can be attributed to the presence of the fitness test step.

We formally recommend that MuscleHub eliminate the requirement for prospective members to take a fitness test prior to submitting an application. Instead, a 1-1 pre-session or gym tour with a trainer should be offered as optional activities that the prospective member can choose to participate in. Both activities offer the individual care and customized experience that were qualities of the fitness test some visitors valued but eliminate the strict nature of assessments that many found too intimidating. With these adjustments, MuscleHub can expect to see a future increase in membership acquisition.