

Does the Activity Test Lead to More Signups for MuscleHub?

By: Jeff Hale



Current Process to Become a Member

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

1. Take a fitness test with a personal trainer
2. Fill out an application for the gym
3. Sign up and send in payment for first month's membership

Research Question

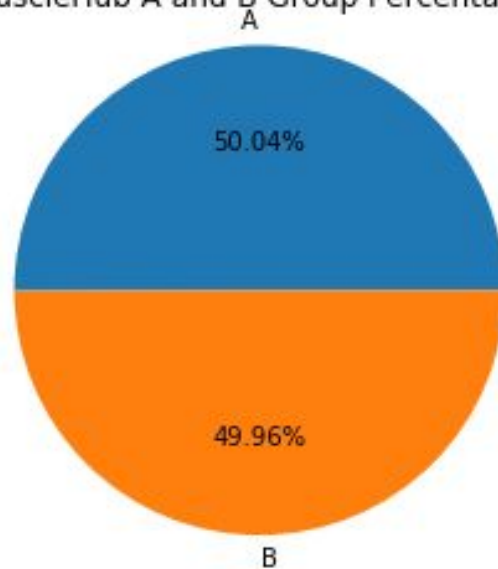
**Did the fitness test lead to more signups than the
absence of the fitness test?**

A/B Test

Visitors randomly assigned to one of two groups:

- Group A take fitness test
- Group B skip fitness test

MuscleHub A and B Group Percentages



Dataset Summary

5,004 visitors total during the test period.

We have data at the individual level on whether a person was in the treatment group, filled out an application, and ultimately signed up with MuscleHub.

Results - Hypothesis 1

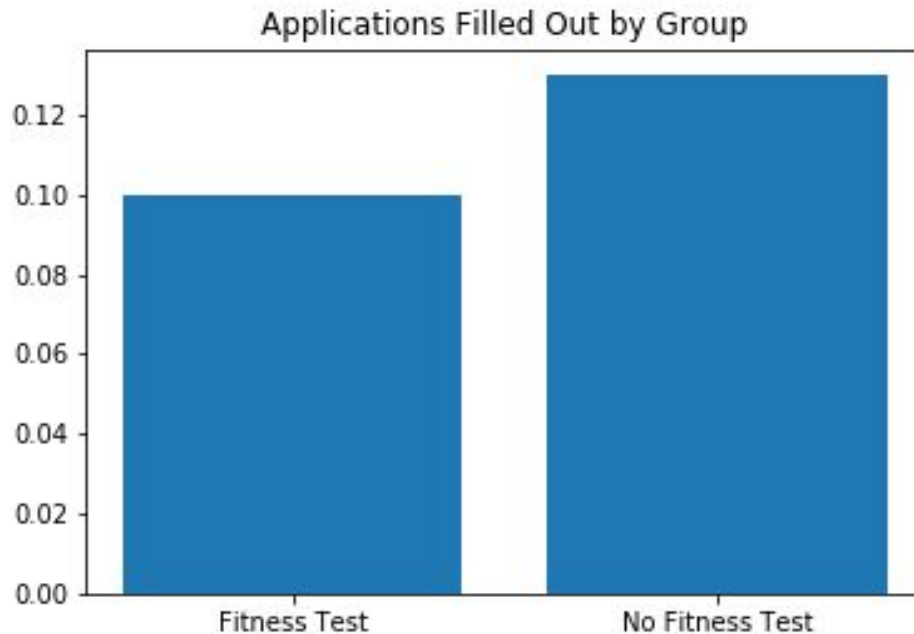
Null Hypothesis 1: There is no significant difference in likelihood of application between the group that took the fitness test and the group that did not take the fitness test.

AB Test Group	Applied	Didn't Apply	Total	% with App
A	250	2,254	2,504	10.0%
B	325	2,175	2,500	13.0%

Used ChiSquare test because categorical data, p-value = .003. We can reject the null hypothesis that there is no statistically significant difference between the groups.

More people from Group B turned in an application. Speculation: maybe because they felt pressured to do so with a personal trainer present. This doesn't say anything about whether the fitness test made someone more or less likely to become a member.

Hypothesis 1 Pretty Chart



Results - Hypothesis 2

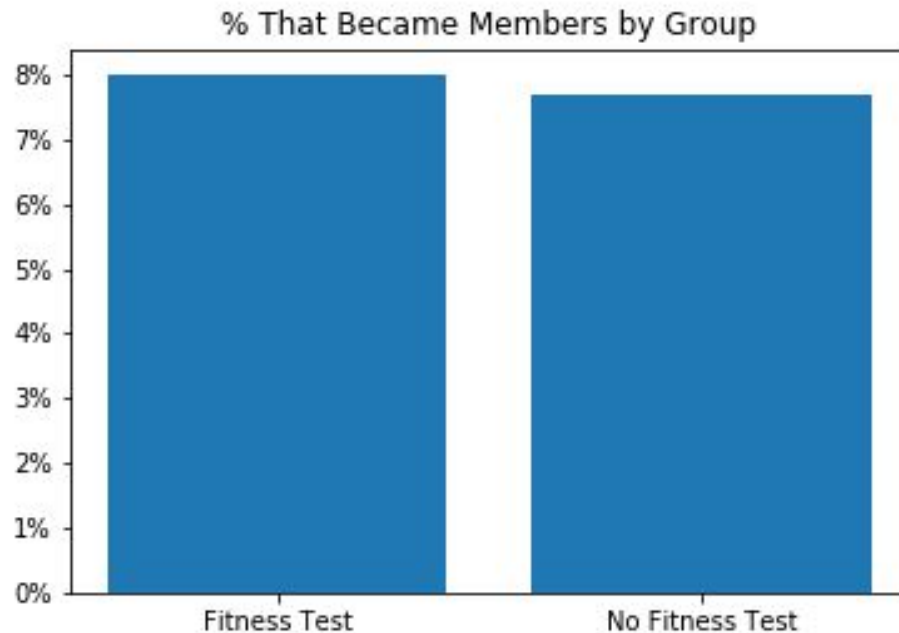
Null Hypothesis 2: Of those who picked up an application, taking the fitness test did not make them more likely to sign up for membership.

AB Test Group	Signed Up	Didn't Sign Up	Total	% Signed Up
A	200	50	250	80.0%
B	250	75	325	76.9%

Used ChiSquare test because categorical data, p-value = .806. This p-value is not significant, so we cannot reject the null hypothesis that there is a difference between the groups.

If you picked up an application your likelihood of signing up for a gym membership was not affected by whether you took the fitness test or didn't take the fitness test.

Hypothesis 2 Pretty Chart



Results - Hypothesis 3

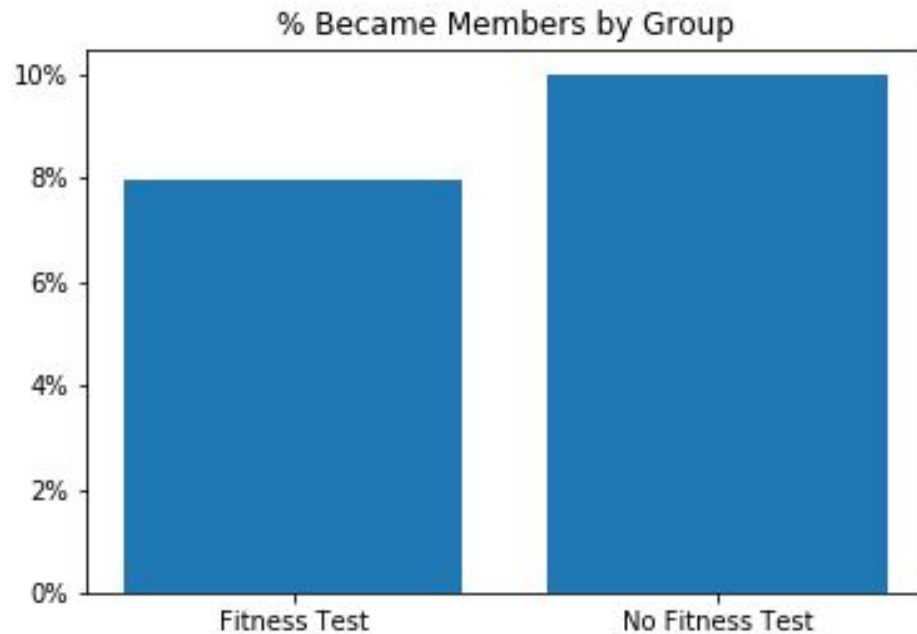
Null Hypothesis 3: Taking the fitness test did not make visitors more likely to sign up for membership.

AB Test Group	Signed Up	Didn't Sign Up	Total	% Signed Up
A	200	2,304	2,504	8.0%
B	250	2,250	2,500	10.0%

Used ChiSquare test because categorical data, p-value = .026. This p-value is significant, so we can reject the null hypothesis that there is not a difference between the groups.

If you took the fitness test you were less likely to sign up for a membership than if you skipped the fitness test.

Hypothesis 3 Pretty Chart



Verdict

Skip the fitness test.

Qualitative Data Summary

The qualitative data from the interviews with four customers who did the activity test consisted of only four responses and wasn't very generalizable. One person was motivated to keep coming back to impress the trainer. One, maybe two, people found the test too intense. Might be worth collecting more data with a less intense test for less active folks or let folks choose the intensity of the test.

Ideas for Improvements and Future Tests

- See if those who took the test and then joined stay for a longer duration of time. If they stayed for longer, it might make sense to keep having the fitness test.
- Try offering the fitness test after signup to see if it reduces churn.
- Increase cleanliness of the gym - in particular get rid of weird sweat marks on weight machines mentioned by one interview respondent.
- More qualitative data from folks who take a tour might be helpful for determining the factors that are driving conversions.

Conclusion

The data do not support continuing the activity test in its current form.

Senior management may want to try other variations of an activity test, after more qualitative research with potential customers. We'd be happy to analyze the data and provide MuscleHub insights after future A/B tests.

Thank you!

Jeff Hale