



# An A/B Test for MuscleHub

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# Scenario

MuscleHub is a fancy gym. Currently, the procedure to buy a membership consists of three parts:

- take a fitness test
- fill out an application
- send in payment for the first month's membership

The manager doubts that the fitness test may intimidate some prospective members and is thinking of getting rid of it. So, an A/B test is conducted to judge whether visitors without the fitness test are more likely to purchase a membership to MuscleHub.





# Results of Three Hypothesis Tests

1

The first hypothesis test compares the percent of visitors without the fitness test who pick up an application with that of the other visitors. The result shows that the visitors without the fitness test are more likely to apply.

2

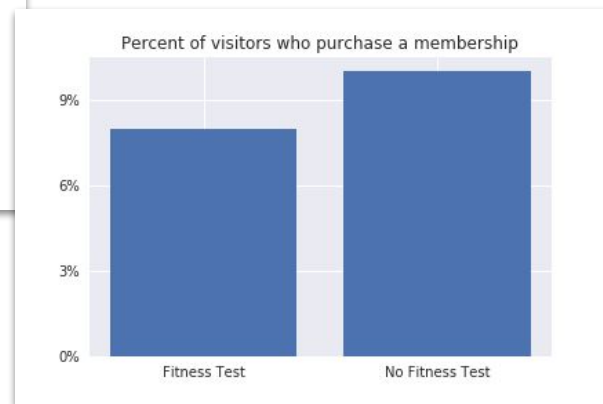
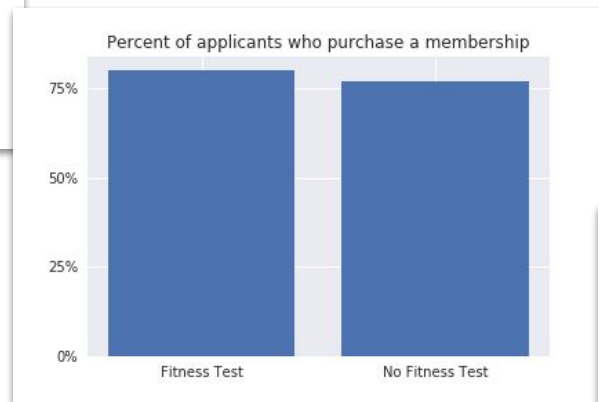
The second one compares the percent of applicants without the fitness test who buy a membership with that of the other applicants. The result shows no statistically significant difference between the two groups.

3

The third test compares the percent of all the visitors without the fitness test who buy a membership with that of the other visitors. The result shows that as a whole, the visitors without the fitness test are more likely to make a purchase.

4

Chi-square test is appropriate for all three cases because we are comparing two groups subjects with two outcomes, i.e., apply or not, buy or not (regarding applicants only or the whole visitors).





# Summay of Interview Responses

Among the four interviewed visitors, two of them complained about their bad experiences with LiftCity, the competitor of MuscleHub, because of its intensive fitness test, and one expressed regret about taking MuscleHub's fitness test. Only one interviewee who did not know how to start gave a positive comment on the introductory fitness test.





# Recommendation for MuscleHub

The A/B test shows that gym visitors without a fitness test are more likely to pick up an application and finally buy a membership. It also reveals that, for an applicant, taking the fitness test or not has no significant effect on membership decision. The interviews with a few visitors prove that, in general, fitness tests frustrate most of the prospective members or give them a poor impression.

In conclusion, I would like to suggest that MuscleHub remove its introductory fitness test from its business process.



# Thank you.

