



MuscleHub A/B Test

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I always wanted to work out like all of the shredded people on the fitness accounts I see on Instagram, but I never really knew how to start.


MuscleHub's introductory fitness test was super helpful for me! After taking the fitness test, I had to sign up and keep coming back so that I could impress my trainer Rachel with how much I was improving!

– Cora, 23, Hoboken



I took the MuscleHub fitness test
because my coworker Laura
recommended it. Regretted it.

– Sonny "Dad Bod", 26, Brooklyn

A series of hexagonal icons in various shades of blue and cyan are arranged along the left edge of the slide. The icons include a lightbulb, a thumbs-up, a network diagram, a smartphone, a magnifying glass, a gear, and a speech bubble. A large, solid cyan hexagon is positioned in the center-left area, partially overlapping the text.

Main Question: Does
the fitness test
intimidate possible
members?



A/B test process

Investigation of Dataset

- What data is useful?
- Is any data missing?
- What data needs to be calculated?

Run Statistical Tests

- Chi square test
- For each step in the funnel
- Check if findings are significant

Divide data in group A and B

- Check how many people make it to the next step in the sign-up process
- → Acquisition funnel

Summarize the results in three charts

- Visualize the results for easier understanding



Dataset and useful information

What does the data tell us?



Dataset

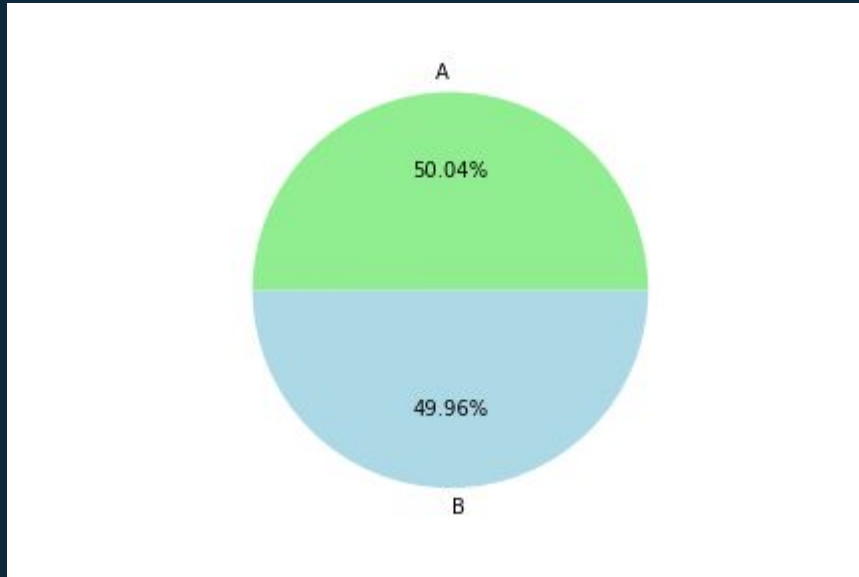
- ◇ Group A (fitness test) & Group B (no fitness test)
- ◇ Visitors, Applicants, Members
- ◇ Possibility to extract interesting insights

Calculating and regrouping information from the dataset helps gain insight in whether the fitness test is useful





Division group A and B





Hypothesis Tests

Chi Square Test

- Two categorical datasets
- Contingency table with different conditions as columns and different outcomes as rows

Chi Square is always recommended for A/B tests!

P-value tells us if a difference is significant or due to chance






Contingency tables

Test 1	Application	No Application
A	250	2254
B	325	2175

Test 2	Member	Not Member
A	200	50
B	250	75

Test 3	Member	Not Member
A	200	2304
B	250	2250





Results

Hypothesis Tests

Filling out an application

People in group B filled out an application more often than people in group A

$P < 0.05$

→ Significant

Purchasing a membership after application

People in group A purchased a membership more often after filling out application

$P > 0.05$

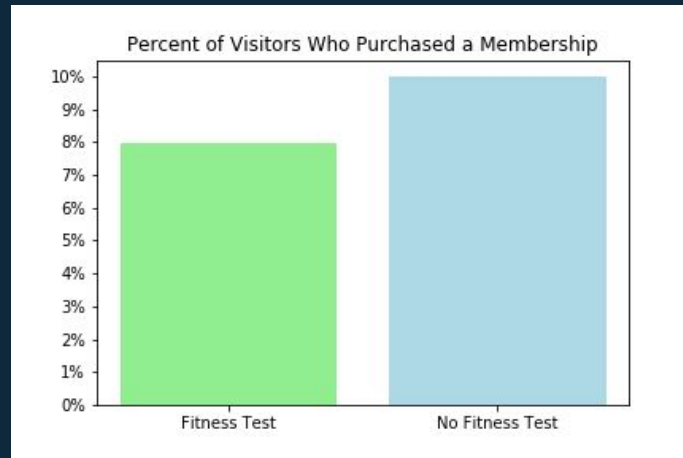
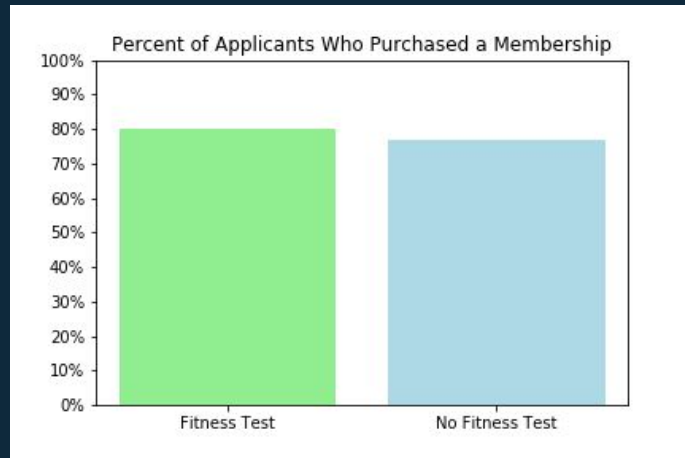
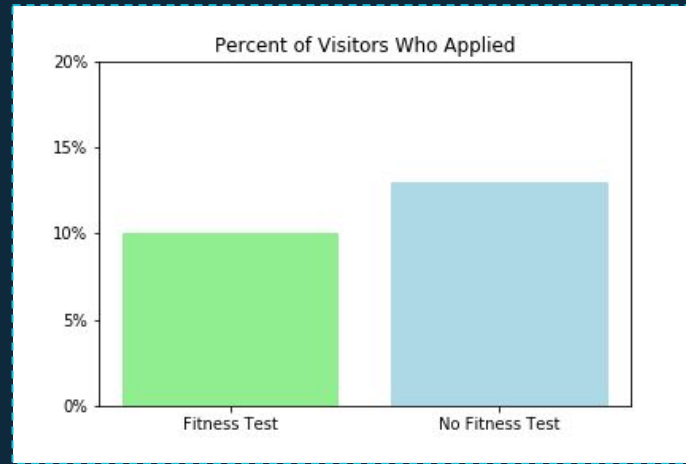
→ Not significant

Purchasing a membership in total

People in group B purchased a membership more often in total

$P < 0.05$

→ Significant





Acquisition Funnel

Visit

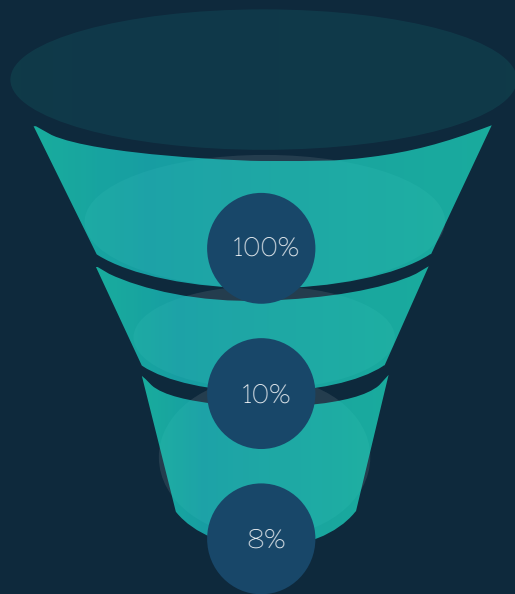
Application

Member

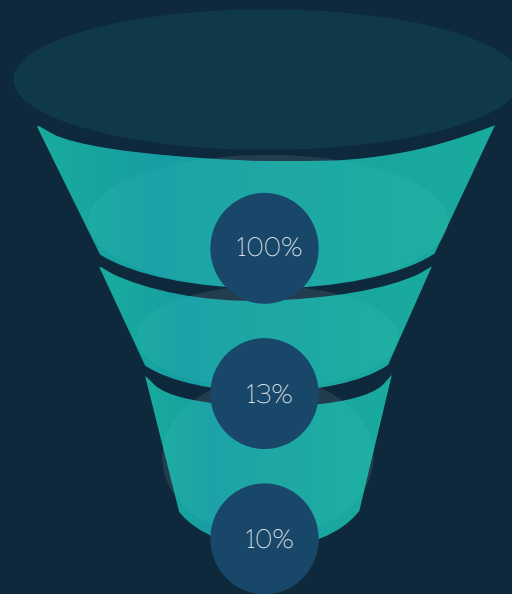




Group A funnel



Group B funnel



A decorative graphic on the left side of the slide consists of a large cyan hexagon in the center. Surrounding it are several smaller hexagons in various shades of blue and cyan. Some of these hexagons contain white icons: a lightbulb, a thumbs-up, a smartphone, a magnifying glass, a gear, and a speech bubble. There is also a small network-like icon with a central node and five connecting lines.

Advice

The fitness test does not yield good results for MuscleHub.
More people in group B, who did not take a fitness test, become a member of the gym.
Therefore the advice is to forget about the fitness test, make it optional or talk to customers again to get more insight in what has to change about the test.



Thanks!

Any questions?

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