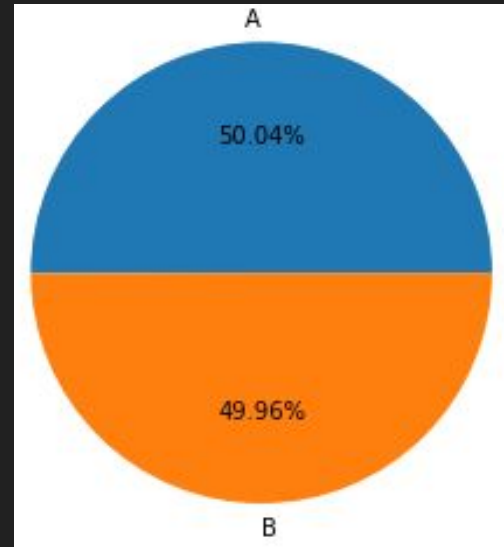


# Does the fitness test help or hurt MuscleHub?

Roshan Kern

# What happened in this A/B test

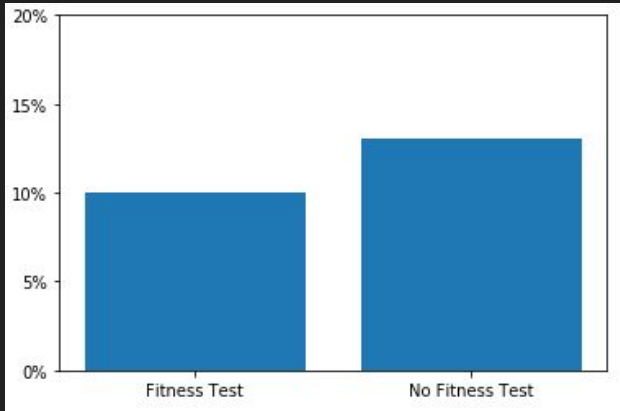
- Group A's 2504 participants took a fitness test with a personal trainer.
  - Of the original 2504 participants, only 250 applied for a gym membership.
  - 200 of the 250 applicants became members.
- Group B's 2500 participants skipped the fitness test and proceeded straight to the fitness test.
  - Of the original 2500 participants, 325 applied for a gym membership.
  - 250 of the 325 applicants became members.



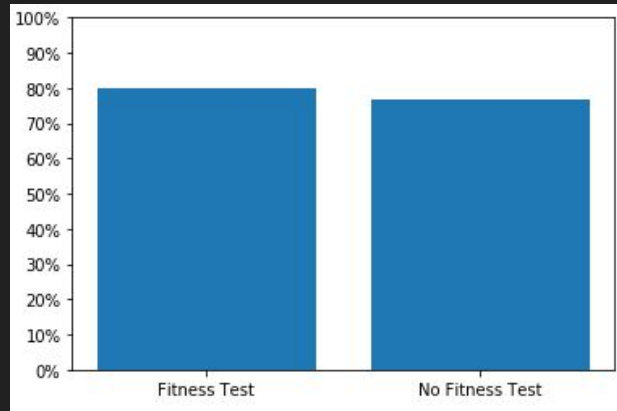
Percent of visitors in groups A and B

# Results of the MuscleHub A/B test

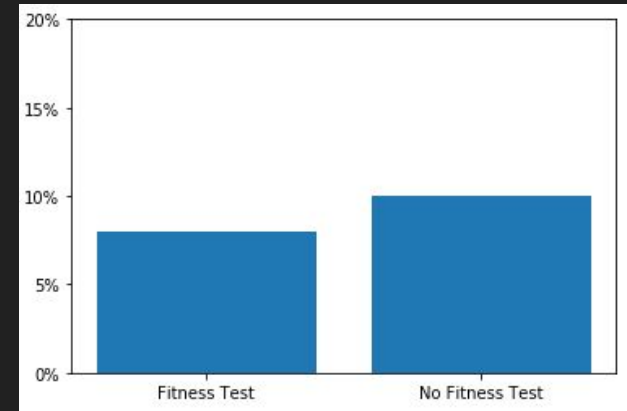
Percent of visitors that applied.



Percent of applicants that became members.



Percent of visitors that became members.



- Only 50% of visitors who took the fitness test stated in an interview that they were glad they took the test.
- 100% of visitors in group B were glad they did not take the test.

# The significance of the results

At each step in the process, a Chi Square test was used to determine if the differences in the results for groups A & B were significant. The Chi Square test was used in this case because two categorical datasets are being compared. For this hypothesis testing, a p-value of less than 0.05 indicates that the results from the A/B test are significant. The results of the Chi Square test are as follows:

- Number of visitors who applied: 0.00096
- Number of applicants who became members: 0.43258
- Number of visitors who became members: 0.01472

## A summary of the qualitative data

In conclusion, the only statistically significant results show that visitors were more likely to apply for a membership if they were not first given the fitness test by a personal trainer. Similarly, visitors were more likely to become members if they did not first perform the fitness test. Statistically insignificant data conversely shows that applicants were more likely to become members if they took the fitness test before they applied for a membership.

# My recommendation for MuscleHub

Interviews of visitors who did and did not complete the test shows that most visitors prefer not to take the test before they apply for a membership. Statistically significant data shows someone is more likely to become a member of the gym if they are not first given the fitness test. While only about 7.99% of visitors became members if they were given the fitness test, exactly 10.00% of visitors who did not first take the fitness test ended up becoming members of the gym. All significant data points to the fact that MuscleHub should not give a visitor a fitness test before the visitor applies to become a member of MuscleHub.