



Muscle Hub Fitness Test Trials

Data analyst: Cassandra Terrell
Source: applications.csv



If visitors take a fitness test, are they...

...more likely to apply and become a member?

Pros:

- Visitors get to try the gym equipment
- Visitors get to experience sessions with a trainer

...less likely to apply and become a member?

Cons:

- Too intimidating for new gym goers
- Any out of service equipment may discourage them

The test

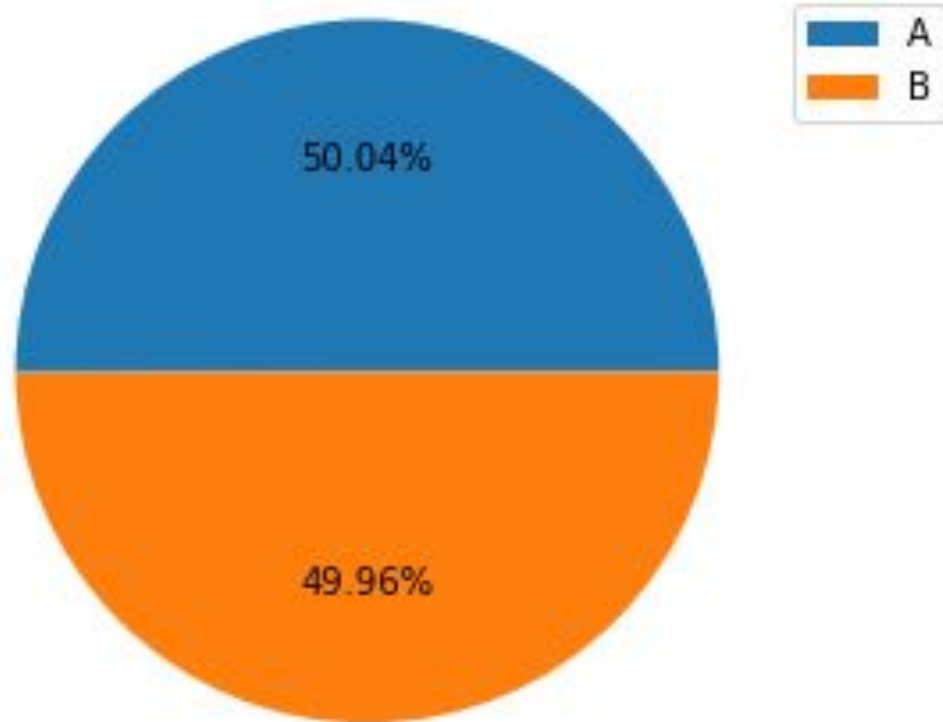
All visitors randomly assigned in Group A (Fitness Test) or Group B (No Fitness Test)

- What percent of each group of visitors completed an application?
- What percent of each group of applicants became a member?
- What percent of each group of all visitors became a member?

Is it significant enough that the test made a difference, or was it just chance?

A Chi Square test was completed to compare the two categorical (A and B) datasets for each percentage to test the statistical significance of the difference between groups A and B.

Percent of visitors in A/B Test Groups



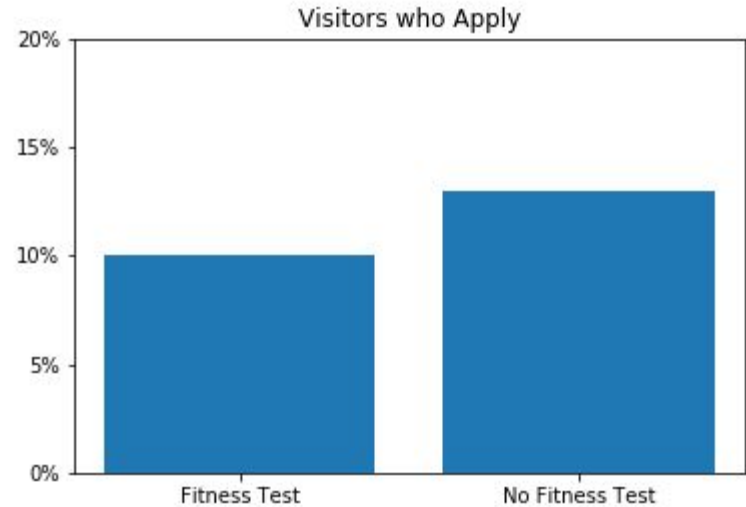
What percent of each group applied?

Group A - Fitness Test:

9.98% of visitors completed application

Group B - No Fitness Test:

13.0% of visitors completed application



Is it a significant difference?

YES, it is statistically significant that more visitors in who did not complete a fitness test did complete the application.

P-value 0.0009 is less than 0.05, therefore we reject the null hypothesis that the difference is due to chance.

What percent of applicants became members?

Group A - Fitness Test:

80.0% of applicants became members

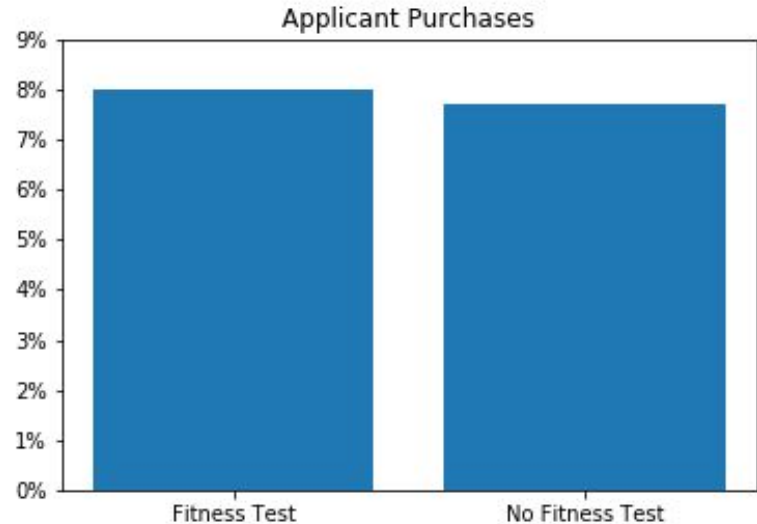
Group B - No Fitness Test:

76.92% of applicants became members

Is it a significant difference?

NO. More applicants who took a fitness test became members, but not a statistically significant amount - it may be due to chance.

P-value 0.43 is greater than 0.05, therefore we accept the null hypothesis that the difference may be due to chance.



What percent of all visitors became members?

Group A - Fitness Test:

7.99% of visitors became members

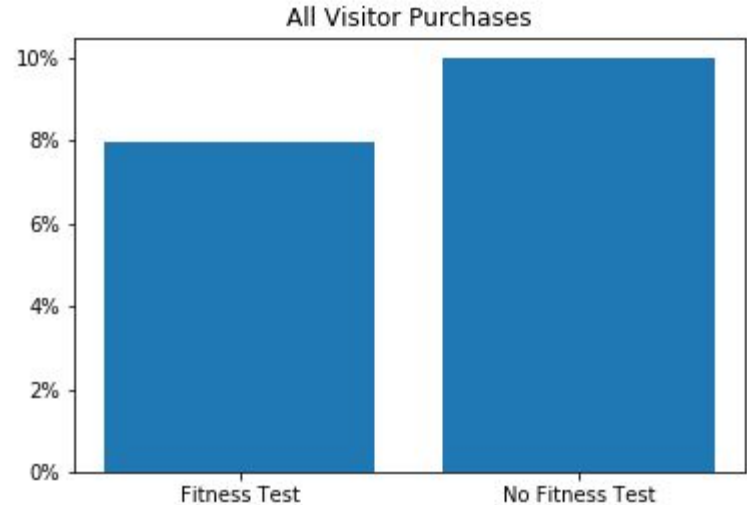
Group B - No Fitness Test:

10.0% of visitors became members

Is it a significant difference?

YES, it is statistically significant that more visitors in who did not complete a fitness test became members.

P-value 0.015 is less than 0.05, therefore we reject the null hypothesis that the difference is due to chance.



Summary and Recommendation

Statistically, those who **did not complete a fitness test** (Group B) were **more likely to complete applications** and **more likely to become members**.

Even though slightly more applicants became members, it was not a statistically significant difference. Therefore, the data does not suggest any membership benefits from the fitness test.

The recommendation is to not give a fitness test to prospective members. The data suggests that it deters applications and memberships.