MuscleHub A/B Fitness Test

Do Tests Make People Want to Spend Money?

What did we test?

Group A (Control Group): Visitors were still asked to fill out a fitness test before applying and then paying for a membership.

Group B: Visitors were not shown a fitness test and were sent directly to the application and then paying for a membership.

What data did we use?

Quantitative:

- Member's Personal Info
- Visit Date
- Test Date (Group A)
- Application Date
- Purchase Date

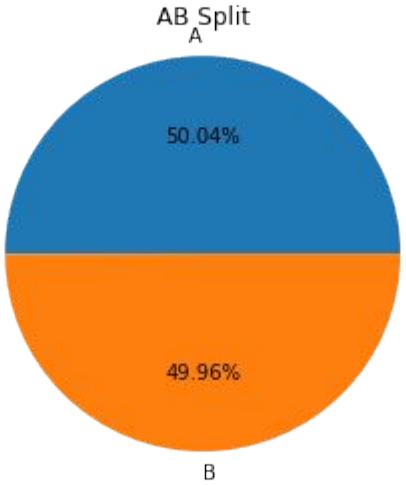
Qualitative:

- Testimonial Interviews

How was the A/B test distributed?

Visitors were randomly assigned to either Group A or Group B.

The distribution was confirmed to be almost a 50% split.



What was the hypothesis?

Visitors that DID NOT have to fill out a fitness test (Group B) would be more likely to purchase a membership.

What hypothesis tests did we run?

We ran Chi Square tests in three areas of the acquisition funnel.

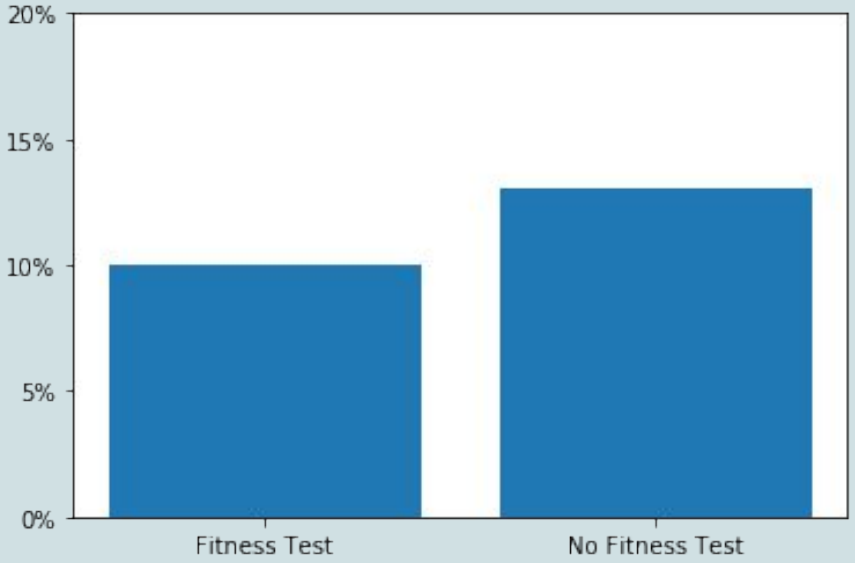
This was to compare two categorical datasets to determine the P-Value.

This P-Value tells us whether to reject the null hypothesis (nothing unusual) when comparing the datasets.

The following slides detail the three tests.

Number of Applicants

The percentage of applicants from Group B (No Fitness Test) appeared to be higher at 13% vs. 9%.



Number of Applicants

We performed a Chi Square test to determine if this was statistically significant.

In [30]:
```
from scipy.stats import chi2_contingency

contingency = [[250,2254], [325, 2175]]
chi2, pval, dof, expected = chi2_contingency(contingency)

print pval
```

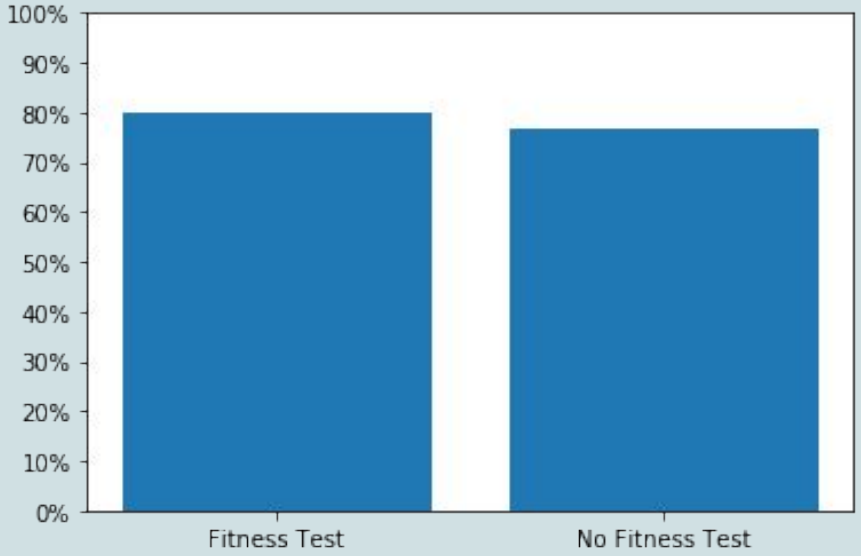
```
0.0009647827600722304
```

When comparing the number of applications between Group A and B we received a P-Value of 0.0009. This P-Value is so low that it shows EXTREME significance in the difference between the data.

Conclusion: Leaving out the fitness test increases the number of applications.

Number of Applicant Purchasers

The percentage of applicants who went on to purchase a subscription appeared to be higher in Group A (Fitness Test) as we moved further down the funnel.



Number of Applicant Purchasers

We performed a Chi Square test to determine if this was statistically significant.

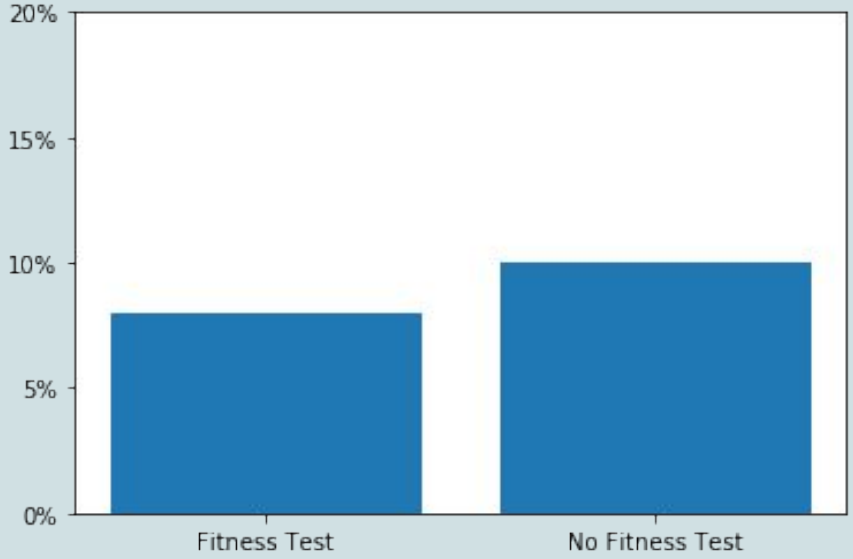
```
In [36]: contingency2 = [[200, 50], [250, 75]]
         chi2, pval, dof, expected = chi2_contingency(contingency2)

         print pval

         0.43258646051083327
```

When comparing the number of purchasers who applied between Group A and B we received a P-Value of 0.4325. This P-Value is so high that it shows no significance whatsoever in the comparison.

Conclusion: Those who apply are merely more motivated to continue the process. This is not changed by taking a fitness test or not.

Number of Overall Membership Purchasers

The percentage of overall purchasers from Group B (No Fitness Test) appeared quite a bit higher than Group A (Fitness Test).



Number of Overall Membership Purchasers

We performed a Chi Square test to determine if this was statistically significant.

In [38]:
```
contingency3 = [[200, 2304], [250, 2250]]
chi2, pval, dof, expected = chi2_contingency(contingency3)

print pval
```

```
0.014724114645783203
```

When comparing the number of overall purchasers between Group A and B we received a P-Value of 0.0147. This P-Value is low enough that it shows significance that Group B is indeed performing better.

Conclusion: Those who do not need to fill out a fitness test are more likely to purchase.

What did the interviews show us?

- People like outside motivation
- They dislike intimidation or being overwhelmed at the gym
- Someone regretted taking the fitness test
- The fitness test is intense

Conclusion: People want to feel good about themselves with minimal effort.

Recommendation

MuscleHub should no longer include the fitness test as a mandatory requirement for application and subscription.

It could be optional for:

- Extra credit
- Motivation to those who want the “Full Muscle” experience
- An engagement share to test your progress