MUSCLEHUB A/B-TEST

An analysis of two strategies for attracting more visitors to become purchasing members

Visitor experience

Standard procedure (A)

- Take a test with a personal trainer

- Fill in an application to the gym

- Send payment for first month's membership

Suggested procedure (B)

- Fill in an application to the gym

- Send payment for the first month's membership

Hypothesis: Visitors in group B will be more likely to purchase a membership

The dataset

Visits	Fitness test	Applications	Purchase
■ First name	■ First name	■ First name	■ First name
■ Last name	■ Last name	■ Last name	■ Last name
■ Email	■ Email	■ Email	■ Email
■ Gender	■ Gender	■ Gender	■ Gender
■ Visit date	■ Fitness test date	■ Application date	■ Purchase date
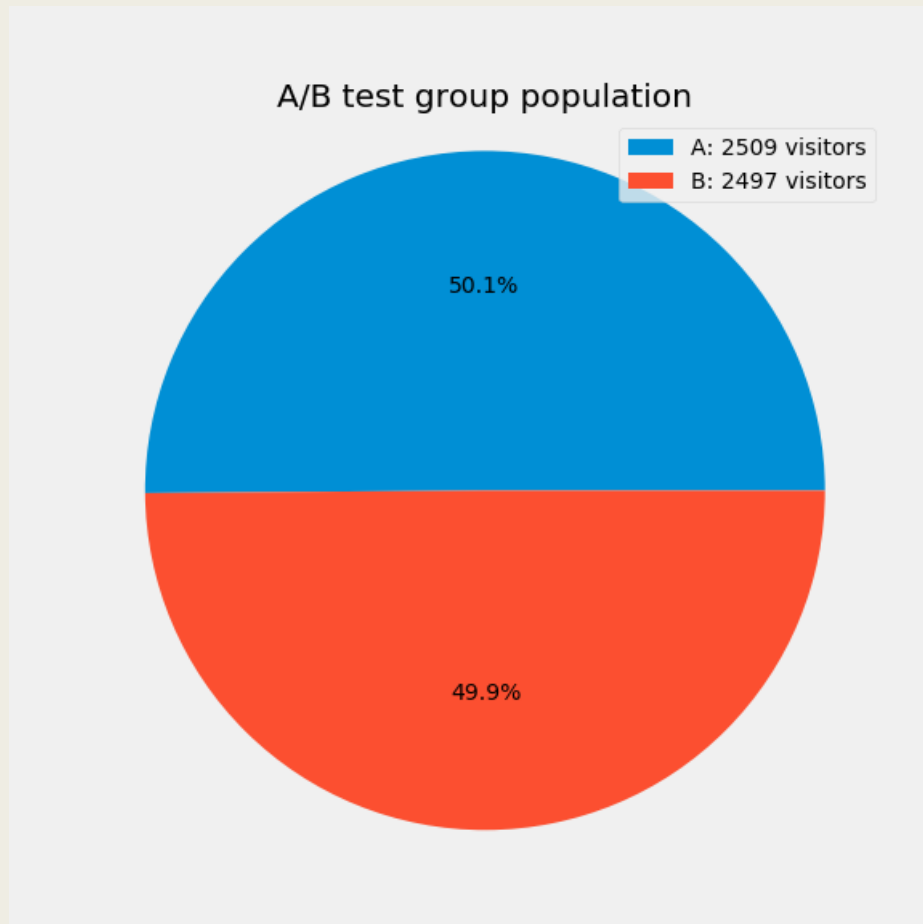
POPULATION DISTRIBUTION

Percentage of visitors who filled in application
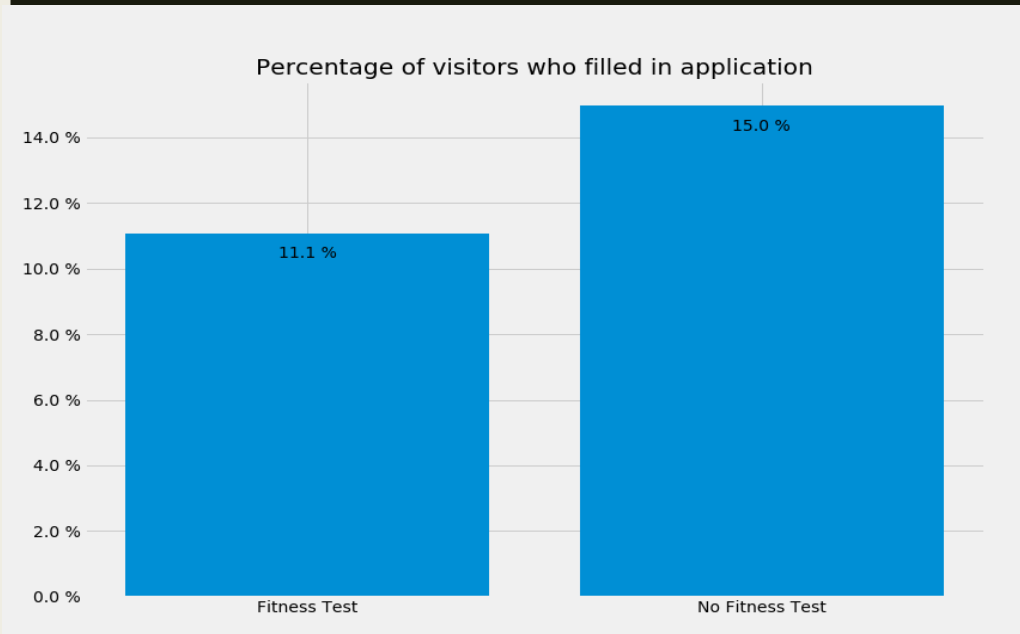
TEST 1:
VISITORS WHO FILL IN APPLICATION

Group A: 11.1 %
Group B: 15.0 %

Chosen test: Chi-squared with 95 % significance level. Used because the data is categorical

P-value: 0.0029

Conclusion: There is a significant difference in the amount of visitors who fill in an application.

Percentage of applicants who purchased membership

	Fitness Test	No Fitness Test
80.0 %		
76.9 %		

TEST 2:
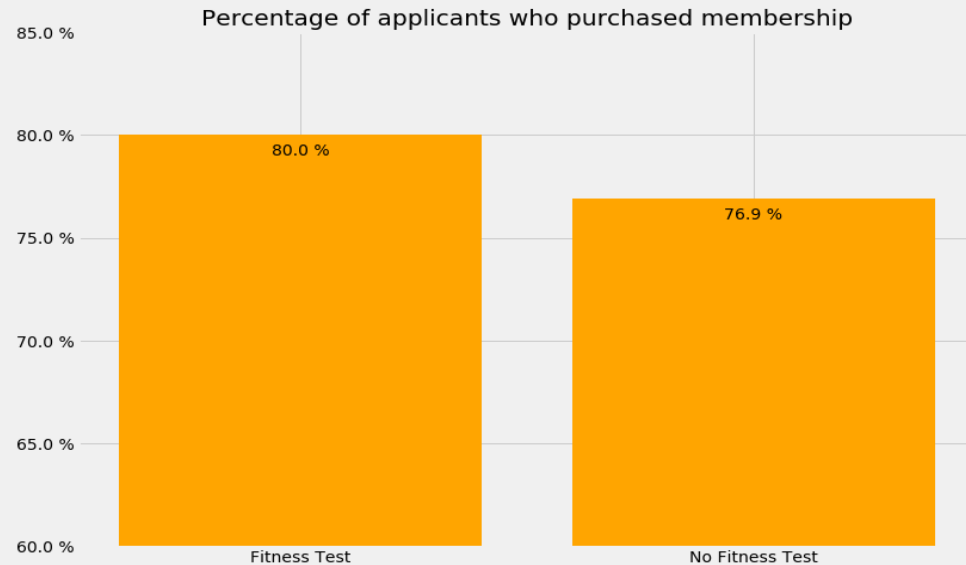**APPLICANTS WHO PURCHASED MEMBERSHIP**

Group A: 80.0 %
Group B: 76.9 %

Chosen test: Chi-squared with 95 % significance level. Used because the data is categorical

P-value: 0.54

Conclusion: There is no significant difference in the amount of visitors who purchased a membership after filling in an application.

Percentage of visitors who purchased membership

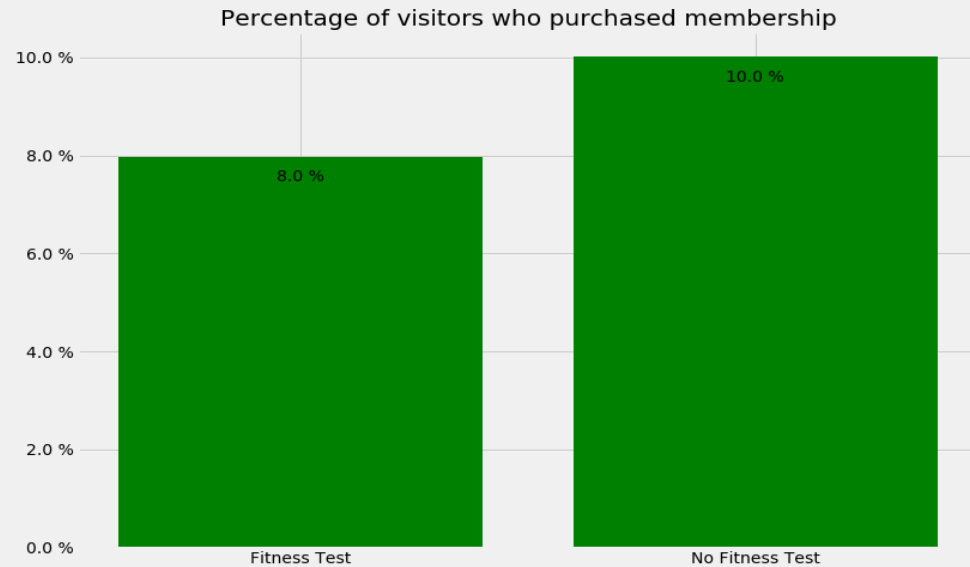**TEST 3:**
VISITORS WHO PURCHASED MEMBERSHIP

Group A: 8.0 %
Group B: 10.0 %

Chosen test: Chi-squared with 95 % significance level. Used because the data is categorical

P-value: 0.024

Conclusion: There is a significant difference in the amount of visitors who purchased a membership

Summary

Visitors who fill in an application

- Group A: 11.1 %
- Group B: 15.0 %
- P-value: 0.0029
- Best procedure: No fitness test

Applicants who purchase membership

- Group A: 80.0 %
- Group B: 76.9 %
- P-value: 0.54
- Best procedure: No significant difference

Visitors who purchase membership

- Group A: 8.0 %
- Group B: 10.0 %
- P-value: 0.024
- Best procedure: No fitness test

RECOMMENDATION

Since 2/3 tests indicate that test B was more successful than test A, and the remaining test did not indicate a significant difference, my recommendation is to implement procedure B: No fitness test should be required before visitors fill in an application

SUGGESTIONS FOR FURTHER ANALYSIS

Were there significant differences between the genders in the two test groups?

Are there significant differences considering the time taken between first visit, fitness test, application and purchase?