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**Outline**

- An A/B test was performed on 5004 visitors
- Testing membership rate when a visitor does or does not take a fitness test on their first visit
- Results indicate significant level proving greater number of memberships results from no fitness test

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## Numbers

- 5004 visitors
  - 2504 visitors – undertook fitness test (**group A**)
  - 2500 visitors – no fitness test (**group B**)
    - 250 from group A filled out application
    - 325 from group B filled out application
- 200 visitors from group A become members
- 250 visitors from group B become members

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## Chi-Square Test

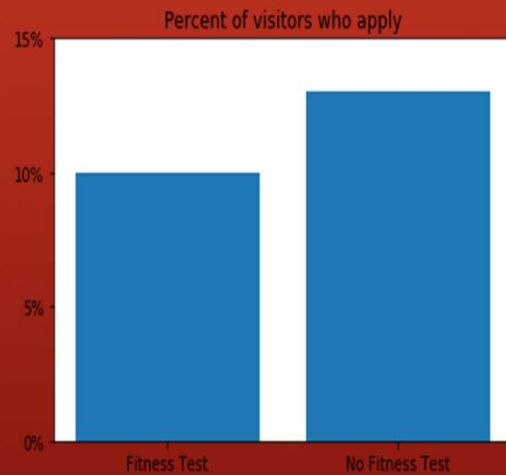
- Used for categorical data
- Two hypotheses are:
  - $H_0 \rightarrow$  Fitness test's increase memberships
  - $H_1 \rightarrow$  Fitness test's do not increase memberships
- Significance level of 5% - if p-value is less than 5%, results are not random.
  - Where p-value  $< 0.05$ , reject  $H_0$
  - Where p-value  $\geq 0.05$ , reject  $H_1$

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## Percent of visitors who apply

- $p\text{-value} = 0.001$
- More visitors apply when they do not need to take a fitness test

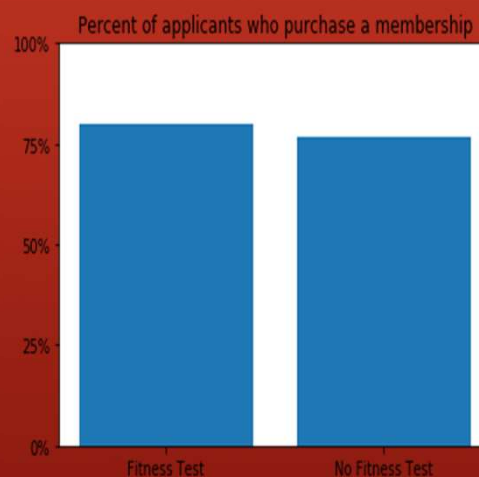


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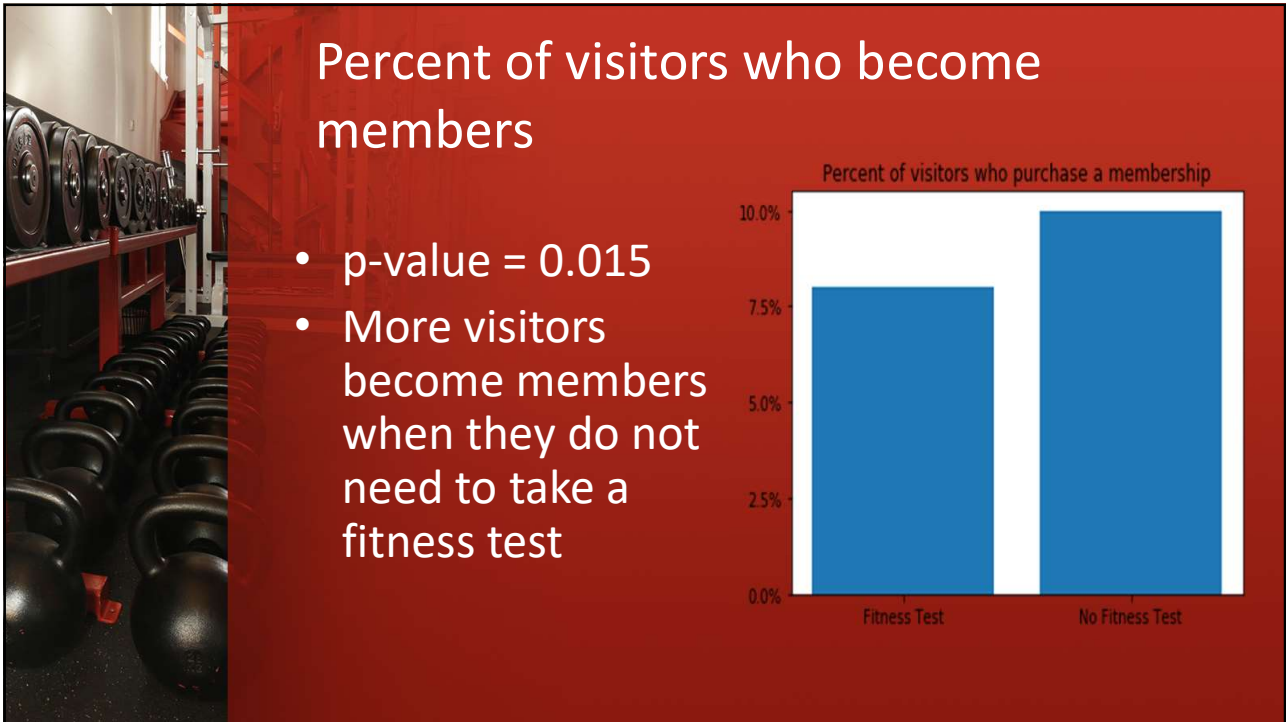


## Percent of applicants who purchase membership

- $p\text{-value} = 0.433$
- Results from this test are inconclusive



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## Conclusion

- The A/B test and p-values indicate more memberships result from no fitness test.
- It is recommended that MuscleHub do not force visitors to undertake a fitness test.
  - Give visitors the option to perform test if they would like to.

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