# Goodbye, Fitness Tests?

Does MuscleHub need fitness tests to bring in new members?

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# The A/B Test

- The normal application process
  - Fitness Test, Application, Initial Membership Payment
- Does MuscleHub get more members with or without fitness tests?
  - Group A = Required Fitness Test prior to Member Application
  - Group B = No required Fitness Test

# Quantitative Data

- Datasets logged after July 1$^{st}$, 2017
  - Visitors
  - Applications
  - First month membership payments

# The Data

- Visitor Data + Interview Data
  - From this info, we want to
- Do fitness tests intimidate visitors?
  - Some interviews indicate that potential members will not join a gym due to their fitness test
  - For example, an interview from a dissatisfied visitor:
  - "I took the MuscleHub fitness test because my coworker Laura recommended it. Regretted it." - Sonny "Dad Bod", 26, Brooklyn

# The Data

- But do they really intimidate visitors?
  - Three of the four interviews indicate that the visitors preferred MuscleHub's fitness tests over other gyms
  - For example: "I saw an ad for MuscleHub on BookFace and thought I'd check it out! The people there were suuuuuper friendly and the whole sign-up process took a matter of minutes. I tried to sign up for LiftCity last year, but the fitness test was way too intense. This is my first gym membership EVER, and MuscleHub made me feel welcome." - Shirley, 22, Williamsburg

- LET'S TEST!

# Hypothesis Test 1

- Do fitness tests affect how many visitors submit applications?
- Group A – Fitness Tests
  - 250 applied, 2254 did not
  - 9.84% of the group applied
- Group B – No Fitness Test
  - 325 applied, 2175 did not
  - 13% of the group applied
- Results: More visitors applied in Group B

# Hypothesis Test 1

- Are the results significant or random?
- Check with Chi square test to test A/B conditions
  - Null hypothesis = no difference between A and B datasets
- A dataset = Fitness Tests
- B dataset = No Fitness Tests
- Test results
  - Pval = .000964
  - Since Pval < .05, null hypothesis is false
- The results are significant!
- Conclusion: More visitors will apply without a fitness test.

# Hypothesis Test 2

- Do fitness tests affect how many visitors applied and also made an initial membership payment?
- Group A – Fitness Tests
  - 200 applied and paid, 50 did not
  - 80% of the group applied and paid
- Group B – No Fitness Test
  - 250 applied, 75 did not
  - 76.92% of the group applied
- Results: More visitors applied in Group A

# Hypothesis Test 2

- Are the results significant or random?
- Check with Chi square test to test A/B conditions
  - Null hypothesis = no difference between A and B datasets
- A dataset = Fitness Tests
- B dataset = No Fitness Tests
- Test results
  - Pval = .4325
  - Since Pval < .05 is false, null hypothesis is true
- The results are NOT significant.
- Conclusion: Removing tests does not clearly increase or decrease applications and initial memberships.

# Hypothesis Test 3

- Do fitness tests affect how many of ALL visitors made an initial membership payment?
- Group A – Fitness Tests
  - 200 paid, 2304 did not
  - 7.98% of the group paid
- Group B – No Fitness Test
  - 250 paid, 2250 did not
  - 10% of the group applied
- Results: More visitors applied in Group B

# Hypothesis Test 3

- Are the results significant or random?
- Check with Chi square test to test A/B conditions
  - Null hypothesis = no difference between A and B datasets
- A dataset = Fitness Tests
- B dataset = No Fitness Tests
- Test results
  - Pval = .01472
  - Since Pval < .05, null hypothesis is false
- The results are significant!
- Conclusion: More visitors without fitness tests paid for the initial membership

# Qualitative Data

- Analysis of the Interviews:

- Only one interview (Sonny) was starkly against MuscleHub's fitness test

- Two of the four interviews (Jessie, Shirley) offer evidence that some members prefer the fitness tests over other gyms

- Three of the interviews (Jessie, Shirley, Cora) said that they didn't approve of the strenuous training of other gyms – This does NOT mean that they specifically disapproved of the fitness tests

# The Interviews

- "**I took the MuscleHub fitness test because my coworker Laura recommended it. Regretted it.**" - Sonny "Dad Bod", 26, Brooklyn

- "I saw an ad for MuscleHub on BookFace and thought I'd check it out! The people there were suuuuuper friendly and the whole sign-up process took a matter of minutes. **I tried to sign up for LiftCity last year, but the fitness test was way too intense**. This is my first gym membership EVER, and MuscleHub made me feel welcome." - Shirley, 22, Williamsburg

# The Interviews

- "I always wanted to work out like all of the shredded people on the fitness accounts I see on Instagram, but I never really knew how to start. **MuscleHub's introductory fitness test was super helpful for me**! After taking the fitness test, I had to sign up and keep coming back so that I could impress my trainer Rachel with how much I was improving!" - Cora, 23, Hoboken

- "When I walked into MuscleHub I wasn't accosted by any personal trainers trying to sell me some mumbo jumbo, which I really appreciated. **Down at LiftCity they had me doing burpees 30 seconds after I walked in the door and I was like "woah guys slow your roll, this is TOOOO much for Jesse!"** I still ended up not signing up for a membership because the weight machines had all those sweat stains on them and you know, no thanks." - Jesse, 35, Gowanes

# Conclusions

- The Quantitative Data shows that removing fitness tests would increase membership.

- The Qualititave Data shows that the fitness tests do not intimidate ALL potential members. The training intensity seems to affect them more

# Next Steps

- I recommend exploring the following 3 hypothesis tests:

1. Would new members continue to pay for memberships if they don't take the fitness test?

   - Why?: Fitness tests gauge how serious and focused a potential gym member will be

   - How?: Record member payments over a period of time for the original A/B customers

   - If the non-fitness test members leave faster than the fitness test members, removing the fitness tests would not be advisable in the long term

# Next Steps

2. Would optional fitness tests increase new membership payments?

- Why?: This would cater to members who value the test.

- How?: Check membership retention of those who take the test (A) and those who don't (B)

- Results would show if members who take the test remain with the gym longer than those that do not

# Next Steps

3. Would potential members prefer a two-tiered membership system?
   - Why?: MuscleHub should cater to both hardcore and casual members
   - How?: Test membership retention for hardcore (A) and casual (B) membership tiers
   - Tier 1: Condition A – Members who pass an optional fitness test
     - More intensive, guided training
   - Tier 2: Condition B – Members who opt-out or fail the fitness test
     - Less guided and more relaxed
   - The tiers can be kept at the same membership price, but further tests can be done to test:
     1. Tier 1 = base membership charges, Tier 2 = discounted
     2. Tier 1 = increased, Tier 2 = base membership charges