

Survey Data Analysis Summary and Identification of Problem Areas

Matthew Lawrence Christy

Vandana Srinivasan

Drexel University: College of Computing and Informatics

INFO-890-901 - Capstone I / Winter Term 2022-2023

Dr. Troy Abel

Revised: 24 February 2023

I. Introduction

In our efforts to identify problem areas related to "gymtimidation," our team deployed a survey by leveraging both frequent social media posts and by hanging a flyer in a bodega in the East Falls area of Philadelphia, a non-affiliated fitness center, and at Drexel's CCI. The survey ran for two weeks, receiving 53 completed responses. This survey was designed to collect quantitative and qualitative data about people's experiences at fitness centers. In the following sections, we highlight statistics, and common themes observed, identify possible user segments based on our analysis, and define a problem and an area of focus for ideation.

II. Survey Statistical Data Summary (Quantitative)

As mentioned in the introduction, we received 53 completed responses over two weeks. From these responses, we gathered the following quantitative data points:

- 62.26% of the total participants currently have a fitness routine, and 37.74% do not have a fitness routine.
- 50.9% of participants use a fitness center for their fitness routine.
- 11.32% of participants do not use a fitness center for their fitness routine.
- 34% of participants do not have a fitness routine but have had one or want to have one.
- 45.32% of the total participants don't use a fitness center for their fitness routine, have had a fitness routine, or want a fitness routine.
- 43.43% of participants have used a fitness center in the past, and 1.99% have not used a fitness center.

- 32.1% of participants want to use a fitness center, and 13.22% do not wish to use a fitness center.
- 83% of participants use a fitness center or want to use one, and 73.57% felt that they would have a better experience if they had more knowledge about exercises or equipment.
- 67.92% of total participants have experienced "gymtimidation," 9.43% were not sure if they experienced "gymtimidation," and 18.87% have not experienced "gymtimidation."
- 58.49% of participants have had it affect their decision to work out at a fitness center, and 9.43% of total participants have not.
- 77.35% of participants have experienced the or were not sure if they shared the following emotions associated with "gymtimidation":
 - 32.73% reported feeling self-conscious.
 - 25.45% reported feeling embarrassed.
 - 25.45% reported feeling anxious.
 - 16.36% reported feeling shame.
- 3.8% of total participants were removed due to not having a fitness routine and not wanting a fitness routine.

Our quantitative analysis demonstrates that people experience "gymtimidation" in public fitness centers, and those who were not sure indicated that they experienced feelings associated with "gymtimidation."

III. Open-Ended Response Analysis (Qualitative)

Our survey also included areas to capture qualitative data in the form of open-ended questions. These questions were focused on workout settings and "gymtimidation" and allowed the participants to let us know how they felt in their own words. We then arranged their responses on a Miro board by forming what appeared to be the most natural groupings. This helped us identify common themes of emotions, problems, etc., among all participants. The logic of how and when open-ended questions were displayed to participants was based on quantitative questions they had answered previously. Full logic can be found in Appendix A.

The following is the list of open-ended questions that were used, and their associated common themes identified within each:

A. Q1: In your own words, please describe how you feel while working out in a public gym or fitness center.

50 of 53 participants were directed to give feedback on this question.

- 20 of 50 participants reported Positive Feelings:
 - Four participants described feelings of feeling "good."
 - Four participants described feelings of feeling focused.
 - Eight participants described feelings of increased confidence, empowerment, and motivation.
 - 4 participants described feelings of feeling comfort and relaxation.

- 25 of 50 participants reported Negative Feelings:
 - Nine participants described feelings of feeling self-conscious.
 - Eight participants described feelings of feeling anxious.
 - Nine participants described feelings of not knowing what to do.
 - Six participants described feelings of discomfort with the facility.

- 3 of 50 participants reported a vague mix of positive and negative feelings that could not be specifically categorized.

- 2 of the 50 participants left ambiguous comments that could not be categorized.

We found that a significant amount of positive and negative feelings were experienced by the participants. It is worthwhile noting that about a little over half of them highlighted their negative experiences over their positive experiences while working out in fitness centers.

B. Q2: In your own words, please describe why you prefer working out in a private setting rather than a public gym or fitness center.

8 of 53 participants were directed to give feedback to this question:

- 5 out of 8 participants described feelings of convenience.
- 5 out of 8 participants described feelings of fear of judgment.

C. Q3: In your own words, please describe your experience of "gymtimidation."

35 out of 53 participants were directed to give feedback to this question:

- 19 out of 35 participants experienced "gymtimidation" based on feelings of not knowing what to do.
- 17 out of 35 participants experienced feelings of self-consciousness.
- 5 out of 35 participants experienced feelings of apathy and demotivation.
- 7 out of 35 participants experienced discomforts such as staring, crowded facilities, and gym culture.
- 1 out of 35 participants left ambiguous comments that could not be categorized.

It is worth noting that a few of the participants felt "gymtimidation" when first starting a routine in a fitness center but no longer experienced those feelings. A majority of the participant feedback indicates it's an ongoing experience.

D. Q4: In your own words, tell us how you think you could reduce or eliminate any of the emotions you previously selected (self-consciousness, embarrassment, anxiety, or shame).

40 out of 53 participants were directed to give feedback to this question:

- 12 out of 40 participants identified personal growth (such as discipline, mindfulness, and self-confidence) as a way to reduce any negative feelings.
- 9 out of 40 participants identified gaining more knowledge about equipment and exercises as a way to reduce negative feelings.
- 12 out of 40 participants identified personal training as a way to reduce any negative feelings.

- 4 out of 40 participants identified improvements in gym facilities (such as privacy, community, equipment, and gym culture) to reduce negative feelings.
- 6 out of 40 participants left ambiguous comments that could not be categorized.

E. Q5: Is there anything else about your experiences with your fitness routine, either privately or in a gym or fitness center, that you would like to tell us?

For this question, we summarized responses as follows:

- Improvements with facilities surrounding privacy, spaces for women, and equipment.
- Gaining more knowledge of equipment or exercises via training or other methods.
- Participating in activities that promote socialization, such as fitness classes or promoting positive gym culture.
- Personal growth, self-motivation, and mindfulness.

One of the primary findings that deserve emphasis here is that 73.57% of the participants felt that they would have a better experience if they had more knowledge about exercises or equipment—combined with the fact that the feeling of "not knowing what to do" was one of the most predominant negative feelings that our participants in a gym space experienced. When the survey specifically converged onto the concept of "gymtimidation," 19 out of 35 participants felt that "not knowing what to do" was one of the leading causes (for some, this was combined with self-consciousness and discomfort with facility) of their "gymtimidation."

IV. User Segment Identification

There were various demographics of participants that took part in this survey. Twenty participants were within the age group of 18 to 24 years, 18 participants were within the age group of 25 to 34 years, 11 participants were within the age group of 35 to 44 years, and there were 4 participants of 45 years and above. Twenty-seven participants identified as male, 25 participants identified as female, and 1 participant chose not to disclose. Twenty-seven participants identified as Asian or Pacific Islander, 21 participants identified as Caucasian, 2 participants identified as Black or African American, 1 participant identified as Latino or Hispanic, 1 participant identified as Multiracial or Biracial, and 1 participant chose not to disclose.

From our analysis, we determined three primary user segments of interest:

1. **The Independent Exercisers:** Those participants who do not want to go to a fitness center and prefer to work out on their own. These participants may have experienced "gymtimidation" or struggled with insecurities and prefer the freedom of working at

home without judgment. The number of participants categorized in this segment was low (13.22%).

2. **The Fitness Gurus:** Those participants who are happy working out in a fitness center who haven't experienced "gymtimidation" and have high confidence in exercises and using gym equipment. The number of participants categorized in this segment was also low (13.21%).
3. **The Fitness Help-Seekers:** Those participants who work out in a fitness center or want to work out in a fitness center, who have experienced feelings associated with "gymtimidation" that need more help and education regarding fitness exercises or fitness equipment. The majority of participants fell into this category (73.57%).

V. Concluding the analysis: Problem Area of Focus

After identifying the three primary user segments, we determined that the third user segment (The Fitness Help-Seekers) would most benefit from an Augmented Reality solution to solve their problems with lack of knowledge and insecurities resulting in feelings associated with "gymtimidation." This can be supported by the fact that out of the 40 participants who were asked how their feelings related to "gymtimidation" could be eliminated, 21 participants indicated that these emotions could be eliminated by gaining more knowledge about equipment and exercises or through personal training. We also noticed that 12 participants emphasized personal growth, improving self-confidence, mindfulness, and discipline.

Moving on to the next phase of this project, ideation will be targeted to focus on education, training, and personal growth.

VI. Appendix A - Survey Questions and Question Logic

1) Do you currently have a fitness routine? (Y/N)

Y- Jump to Q2

N- Jump to Q1a

1a) Have you had or tried to have a fitness routine in the past, or do you want to have a fitness routine? (Click yes if either applies)

Y- Jump to 2a

N- Jump to Q19

2) For your fitness routine, do you utilize a gym or other fitness center? (Y/N)

Y- Jump to 4

N- Jump to Q2a

2a) Have you ever used a public gym or fitness center for your fitness routine?

Y- Jump to Q3

N- Jump to Q3

3) Do you want to use a gym or fitness center for your fitness routine?

Y - Jump to Q4

N - Jump to Q10

4) While working out at a gym or fitness center, what types of exercises have you performed in the past, currently perform, or would like to perform?

(Check all that apply)

Cardio

Strength Training

HIIT (High Intensity Interval Training)

HICT (High Intensity Circuit Training)

HIST (High Intensity Strength Training)

Power Building

Muscle Building/Bulking

Core workouts or Pilates

Yoga or Banded workouts

Please tell us what else you do that we missed:

5) What types of gym or fitness-center supplied equipment or services have you used in the past, currently use, or would like to use?

Cardio Machines (if cardio selected)

Weight Machines
Free Weights
Medicine Balls and/or Kettle Bells
Resistance Bands
Yoga Mats
Cable Machines
Smith Machines
Weight Benches

Let us know what else you use during your workout:

6) Please describe your level of knowledge when it comes to using the following:
(question 5 responses) 1-5 no knowledge to high level of knowledge

7) Would knowing more about how to use the following equipment correctly improve your
experience at the gym or fitness centers?

(question 5 responses) Yes/No

Y-

N-

Both Jump to Q11

10) In your own words, please describe why you prefer working out in a private setting rather
than a public gym or fitness center.(Open ended)

Jump to Q12

11)In your own words, please describe how you feel while working out in a public gym or fitness
center.(Open ended)

Jump to Q12

12)Experts use the term "gymtimidation" to describe how people can experience feelings of
anxiety or pressure when they try to use equipment or exercise at the gym, especially when
they first start exercising regularly. In other words, "gymtimidation" is what happens when
intimidation meets body image and confidence issues.

Have you ever experienced "gymtimidation" before?

Yes - Jump to Q14

No - Jump to Q16

Not Sure - Jump to Q15a

14) Has experiencing "gymtimidation" affected your decision to work out in a public gym or
fitness center?

Yes- Jump to 15

No- Jump to 15

15) In your own words, please describe your experience of "gymtimidation":

15a) Have you ever felt any of the following emotions while working out at a gym or fitness center?

Self-consciousness

Embarrassment

Anxiety

Shame

All of the above

None of the above

Jump to 15b

15b) In your own words, tell us how you think you could reduce or eliminate any of the emotions you have identified above:

16) Is there anything else about your experiences with your fitness routine, either privately or in a gym or fitness center that you would like to tell us? (open ended).

17) We would greatly benefit and appreciate any additional information we can gather for our study. Would you be open to a five minute interview via your preferred communication method?
All interview data will be kept anonymous.

Y- Jump to 18

N- Jump to 20

18) We are also seeking prototype testers at a later date. Would you be interested in testing a prototype and having a follow-up interview?

Y- Jump to 19

N- Jump to 20

19) Great! Please tell us how you'd like us to reach out to you for a follow-up interview or about participation in testing out prototype :

-Text Message: (box)

-E-mail: (box)

-Phone Call: (box)

20. Thank you (Exit Survey).