

Research Study Results

Fitness Motivation

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Background Research Analysis

The research that I did on our problem space was mainly focused on fitness motivation and social networks. The research paper I read, *“When Fitness Meets Social Networks: Investigating Fitness Tracking and Social Practices on WeRun”*, was fascinating and gave me a lot of insight into this. The paper gave a clear indication and association of social networks with fitness motivation, as well as an analysis of the features users liked and disliked about fitness apps in general. The people interviewed in the paper strongly preferred the WeRun plugin to any other app, mainly because of its ease of use, as well as the companionship and camaraderie that comes with a friendly competition to get as many steps as possible in a day.

User Research Analysis

The user research I did were two one hour long interviews with two people I knew from my own social network. Questions asked involved their fitness status, their preferred workout arrangements (with friends/alone, type of workout, place of workout), their motivation level, as well as their opinion on several different types of motivation devices. Below is a summary of their results.

First Interviewee: Fitness Amateur

The first interviewee was a young woman who is currently in her first year in university. She is an amateur in fitness and working out, and although she has good lower body strength, she is trying to workout more to gain more upper body strength. The interviewee was hesitant to workout, especially alone, at the free gyms provided by her university, mainly because she felt uncomfortable due to the gyms being usually filled with very fit people. She much prefers working out with friends and buddies, mainly because of the accountability that motivates her to not miss a gym date, and the fun and interactivity that comes with working out with friends. Procrastination is a real issue for her, as she feels discouraged by the lack of immediate visible progress from working out once, and thinks that “missing one workout will be okay in the grand scheme of things”. Although not yet comfortable enough to go to the gym to workout/do strength training, she has found solace in other types of activities such as Zumba, a fun workout made better by attending with her friends. In terms of motivation, she thinks that some of the best ways to motivate herself would be encouragement and friendly competition with her existing social network of friends, as well as a system where she can gain instant gratification from working out.

Second Interviewee: More Fit, Regular Workouts

The second interviewee was a young man currently in his third year of university. He is much more of a gym person and has been consistently working out for at least a year. He agrees that having someone beside him while working out is good motivation, but he doesn’t have a preference for working out alone or with others. He is very organized with his workouts, putting it into his schedule and

sticks with it; The only time he does procrastinate is when school work gets into the way, and he agrees that he needs to time manage better. Finding people to work out with is not a problem for him, as he has an established group of friends whom he works out with. If he wants to meet new fitness friends, he would choose to join a sports club and meet people that way. For someone who is already quite fit, they are able to stick with their workout schedule much better, primarily due to the fact that their progress is quite visible already, and they have developed a steady routine.

Summary of research

The main goal of my research was to look into the correlation between fitness motivation and social practices such as friends and social networks. After doing careful background research into relevant research papers and user research through interviews, my belief that the social aspect is one of the biggest factors in our problem space was reaffirmed. We are social by nature, and being in a group is always a big motivator in doing any task, especially when the group contains people who are more social than ourselves.

Through my research, I found that people were much more inclined to workout if their friends were involved, and they were open to finding new compatible buddies whom they could workout with as well. This means that, whatever our proposed solution comes out to be, needs to have a strong social factor, preferably built on existing social networks, that users can use to connect with their friends and motivate each other with.

For the less fitness-oriented, our goal should be getting them started in a regular fitness routine, and give them motivation to not quit halfway. This can be done with a social network of friends all striving towards the same goal, for accountability and for added fun factor into a hard process, as well as rewards for achieving goals, in order to gain gratification.

For the people who are already gym rats, we should strive to help them connect to more people, and enhance the social experience of working out. This may be done by the introduction of social groups into our solution, where new and existing sports/fitness clubs can expand and thrive.

By connecting with existing social networks, we should also allow users to share their progress with their friends on those networks, for more encouragement, and more widespread acknowledge of our solution. Given this, we also need to be careful with how much data we are sharing to the users' social network, so as not to spur panic about oversharing and data collection.

Overall, I think the results from my research will be very beneficial to our solution, and we will be able to incorporate a lot of these features into our solution.

Interview Raw Data

Interview with Angela Bi, January 23rd, 2019 over Facebook Messenger

(1) Before we get to the interview, I need to confirm with you that you have signed the consent form giving consent to today's interview being used for research, and I also need to inform you that this interview will be recorded for our information, are you okay with that?

Yes

(2) Can you tell us your name, age, and occupation?

Name: Angela Bi

Age: 18

Occupation: Full Time Student

(3) On a scale from one to five, one being very weak and five being very fit, what is your current fitness level?

3

(4) Do you want to increase that level?

yes

(5) What is your goal fitness level? Describe what that would look like, in terms of body image, or quantitative information like weight or body fat percentage, or just generally in terms of amount of exercise.

- exercise at least twice a week, and gain more upper-body strength

(6) What are you doing right now to get to that stage? This can be a diet, exercising, lifestyle habits, etc.

Going to Zumba with friends whenever possible, usually once a week or once every two weeks

(i'm being serious and i'ts actually really fun)

- **Do you go to the gym to work out at all? Or just Zumba for now**
- **i did a little bit but it got too intimidating**
- **because my residence is next to Goldring, making it the most reasonable gym to go to but also the most intense**

(7) (If they say they work out) How do you work out? What kind of exercises do you usually do?

Because all my strength is lower body I tend to just run on the treadmill for half an hour, even though the whole point of going is to strengthen my upper body. But it's just way too intimidating, since I don't know how a lot of the machinery works and there are buff dudes everywhere

(8) How is your chosen method of fitness working out for you?

really well!

- (8-1) Do you think it is working?
- **Not significantly**
- Why do you say that?
- **I don't go regularly enough to have it do much of a noticeable difference**

(9) What do you want to do better in terms of fitness and exercising?

motivate myself more to carry out the actions needed for my goals

(10) Where do you work out (**Zumba**)?

Hart House or Athletic Centre

- (10-1) Do you need to pay for this?
- **no**
- (10-2) Would you rather work out somewhere else?
- **Yes, hart house gym**
 - (10-2-1) Why?
 - **according to friends, the environment is more welcoming than goldring since it's not geared towards athletes but rather regular students**

(11) What do you use to compliment your fitness (apps, devices)?

Nothing

(12) What is an app/a device that you've heard about, but you have never had the opportunity to try out?

FitBit

- (12-1) How did you hear about it?
- **Pop culture and friends**
- (12-2) What features of it do you think will benefit you?
- **the ability to monitor heart rate and steps**
- Why haven't you tried it yet?
- **The product is too expensive**

(13) Do you work out with other people?

Yes (zumba)

- (13-1) How fit do you think they are?
- **Around 2 (out of 5)**

- **Oof i feel mean**
- **but objectively they tire faster and take more breaks**
 - **(13-1-1)** (If they are a lot fitter) Do you find yourself intimidated by them?
 -

(14) Do you prefer working out by yourself or with others?

with others, if others depend on you to be there there's more motivation to go and the activity is more fun as a whole

(15) Do you do competitions/races?

Currently? No

this was a long time ago but i did a little volleyball, track and badminton towards the end of grade school. i dropped pretty much all physical activity in high school though

(16) Do you think companionship/competitiveness helps with your workout?

yes

(17) Do you have trouble finding someone who might want to workout with you?

Yes

Actually

sometimes

(18) How would you go about finding a workout buddy?

Friends, I have a friend who is similar to me in motivation so when our schedules work out we are usually pretty willing to go together.

(19) If you were to design something new to complement your fitness, what would you like it to have?

A tracker to monitor daily and weekly exercise, including smaller things like just walking, and compare it to the recommended average for adults and/or your own personal goals. It would also be nice if it had something that could suggest ways to fulfill your weekly goals, which would pair with your calendar to add events like "Zumba" or "quick jog" or "40 pushups" depending on your preferences and goals

It would also be great if it was more affordable than a fit bit

(20) Do you think you can achieve the goals you set out? Why or why not?

With my current level of motivation, no

It's less about not having time to do it, and more about being too lazy or discouraged to try

(21) Do you find yourself procrastinating/cheating on your fitness goals often?

yes

- **(21-1)** How do you combat this?

- whenever there's an event like dance or zumba that i want to go to at some point, i immediately ask a friend. I'm much much more likely to go if i don't want to disappoint someone else by not going. I've also determined what are more realistic goals for me (i.e. i've learned from many failures that no matter who i persuade to come with me, i can't do morning gym sessions. i can't wake up early simply for the sake of exercise.)
 - So the fact that you have scheduled to workout with somebody else makes you less likely to miss a workout?
 - Yes
 - Unless it's early morning haha
- (21-2) Why do you think you procrastinate?
- mostly discouragement
- the thought that "i'm so far behind my goal that missing this one won't change much, if i go or not go it's not going to make a difference anyway"
 - But it adds up
 - yeah
 - but in the moment that's not what matters, because the short term reward is much more appealing

(22) Do you find it hard to set out goals with respect to your fitness?

it's easy to set them, but hard to act upon them

(23) Do you prefer to have a professional guiding you through workouts or do you prefer to go along by yourself?

i've never tried a professional but i think that would help

- (23-1) What kind of guidance from professionals/trainers do you think you would value the most?
- one-to-one classes or small training sessions, I'm most scared of being surrounded by jocks and judged lmaooo

(24) Would a social network of fitness friends and accountability from those friends motivate you to workout more?

yes

- (24-1) Do you want to be able to share your workout progress with your existing social group of friends?
- Yes
 - What kind of ways can this motivate you?

- **Because i'll be surrounded by people of a similar fitness level and unfamiliarity, it won't feel like i'm out of place and being lowkey judged. and it's more fun with friends! group motivation is very real, i run longer and faster when i'm with someone else if they don't stop because i don't want to be the first to stop - if that makes sense**
- **(24-2) Do you want to be able to share your workout progress with a new group of friends, and meet new friends through working out?**
- **yeah!**

(25) Would an XP system and achieving milestones in an app with tangible/intangible rewards motivate you to workout more?

it would give me more of a reason to go exercise, since i would get some sort of instant gratification (back to the craving for short-term rewards thing) which means i get to see something come out of my exercise

- **(25-1) What kind of rewards do you think will benefit you more? Tangible ones such as money which may require an upfront cost for you, or intangible, in-app rewards?**
- **Hmm**
- **i think both would work, intangible may be better seeing as people (myself included) are less likely to download an app or use a service if there is a price / the price is higher**
- **and if it were tangible a lot of people who exercise daily anyway could cheat the system**

(26) Would an easy system to find compatible workout buddies motivate you to workout more?

Yes

Actually

Maybe

i'm also more hesitant to exercise in front of strangers as a whole

- **(26-1) What kind of compatibility are you looking for? (Gender, age, music, fitness level, etc)**
- **fitness level and gender mostly**
- **age would be good too**

(27) Would tailored fitness content and guides motivate you to workout more?

Yes, something concrete would be nice

- **(27-1) What kind of guides are you looking for? (fitness, workout, food, lifestyle, etc.)**
- **workout mostly**

(28) Do you have any final comments or suggestions to add onto the information you have provided us today about our research?

Nope i think that's it

(29) And finally, do you plan on working out today?

does a lot of walking count because i walked a lot more than normal

Interview with Ray Kwan, January 25th, 2019 over Facebook Messenger

(1) Before we get to the interview, I need to confirm with you that you have signed the consent form giving consent to today's interview being used for research, and I also need to inform you that this interview will be recorded for our information, are you okay with that?

Yes

(2) Can you tell us your name, age, and occupation?

Lok To Kwan

20

Currently unemployed

(3) On a scale from one to five, one being very weak and five being very fit, what is your current fitness level?

4

(4) Do you want to increase that level?

Yes

(5) What is your goal fitness level? Describe what that would look like, in terms of body image, or quantitative information like weight or body fat percentage, or just generally in terms of amount of exercise.

I would say I look relatively fit. Last I weighed I was sitting at 146lbs and I try to exercise everyday

(6) What are you doing right now to get to that stage? This can be a diet, exercising, lifestyle habits, etc.

Trying to exercise everyday.

(7) (If they say they work out) How do you work out? What kind of exercises do you usually do?

I enjoy doing simple body weight exercises, but I usually do weight lifting because its easier

(8) How is your chosen method of fitness working out for you?

Its going great I feel really healthy

- (8-1) Do you think it is working in terms of actually helping you achieve your fitness goals?
- **Yes**
- Why do you say that?
- **Because I have been working out at the gym and noticed a progressive decrease in body fat in one year of working out**

(9) What do you want to do better in terms of fitness and exercising?

I want to work out everyday (if not all at least for most days)

(10) Where do you work out?

Usually the Goldring or AC

- (10-1) Do you need to pay for this?
- **Nope**
 - (10-1-1) Are you okay with this cost?
 -
- (10-2) Would you rather work out somewhere else?
- **Nope**
 - (10-2-1) Why?
 - **Its convenient and I don't need to pay**

(11) What do you use to compliment your fitness (apps, devices)?

Nothing

(12) What is an app/a device that you've heard about, but you have never had the opportunity to try out?

Haven't heard of any apps

(13) Do you work out with other people?

Sometimes

- (13-1) How fit do you think they are?
- **I would say that they are not that fit. Probably a 4 on a 10 point scale**
 - (13-1-1) (If they are a lot fitter) Do you find yourself intimidated by them?
 - **Nope**

(14) Do you prefer working out by yourself or with others?

No preference

(15) Do you do competitions/races?

Nope

(16) Do you think companionship/competitiveness helps with your workout?

I think having someone beside you while working out is great motivation

(17) Do you have trouble finding someone who might want to workout with you?

Not really

(18) How would you go about finding a workout buddy?

I usually work out with the same people, but if I were to find a new workout buddy then I would probably just join some sports clubs

(19) If you were to design something new to complement your fitness, what would you like it to have?

Not really mainly because I tend to have my workout scheduled.

(20) Do you think you can achieve the goals you set out? Why or why not?

Yes because if other people can do it I can also do it

(21) Do you find yourself procrastinating/cheating on your fitness goals often?

Not really, but when it does occur its usually because of school work

- (21-1) How do you combat this?
- **Time manage better I guess**

(22) Do you find it hard to set out goals with respect to your fitness?

Not really

(23) Do you prefer to have a professional guiding you through workouts or do you prefer to go along by yourself?

Go along by myself

(24) Would a social network of fitness friends and accountability from those friends motivate you to workout more?

Nope

(25) Would an XP system and achieving milestones in an app with tangible/intangible rewards motivate you to workout more?

Nope

(26) Would an easy system to find compatible workout buddies motivate you to workout more?

Maybe

- (26-1) What kind of compatibility are you looking for? (Gender, age, music, fitness level, etc)
- **Perhaps fitness level (not entirely sure though)**

(27) Would tailored fitness content and guides motivate you to workout more?

Nope, but this may help people trying to start working out

(28) Do you have any final comments or suggestions to add onto the information you have provided us today about our research?

n/a

(29) And finally, do you plan on working out today?

Already did

Consent Form: Interviews for Adults Seeking Motivation to Get Fit

I hereby consent to participate in a research study conducted by Yufei Chen, Reece Martin, Louise Xia, Manuel Velarde, and Kyle Haas for an assignment in University of Toronto Computer Science course *CSC318 The Design of Interactive Computational Media*.

I agree to participate in this study the purpose of which is to obtain information and insight into people's needs and wants in novel interactive computational media to help them get fit.

I understand that

- The procedures to be used are a semi-structured half hour long interview.
- I will receive no compensation, but lots of gratitude from the researchers for my participation.
- I am free to withdraw before or any time during the study without the need to give any explanation.
- All materials and results will be kept confidential, and, in particular, that my name and any identifying or identified information will not be associated with the data.

PARTICIPANT

Name (please print) Angela Bi

Signature Angela Bi

Date 2019-01-23

INVESTIGATOR(s)

Name Yufei Chen

Signature 

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PARTICIPANT

Name (please print) Lok To

Signature 

Date Jan 25

INVESTIGATOR(s)

Name Yufei Chen

Signature 