**Observations (Michael Doan):** 

Observation #1:

-Subject: Friend/Student

-Info: 174lbs, 5' 10", big build, observed at home/gym

-Observed habit: Gym routine

Because this is such a regular habit for my subject, I have observed over the course of 3 days

from 10/22 - 10/24 to make sure that my observations are consistent. From what I gathered, he

puts all of his gym equipment (i.e bottle, clothes, and backpack) out the night before, so

whenever he sees it, he can just immediately gather all his things and gets ready to go. Even on

the third day after a long, tiring day at school, he still managed to make it to gym. Everytime he

walks into his house, he sees his gym bag on the counter and seems to know that it's time for

business. I believe that this might be a "trigger mechanism" that he's ingrained in himself after

going to the gym consistently for so long. He sees his bag, and instinctively knows that he has

to go the gym. Another interesting thing that I noticed was that he wrote down exactly what he

was going to do at the gym at the beginning of the week. When he got into the gym, he knew

exactly what he was going to do, and spent little time in between workouts figuring out what to

do next. Having the workouts planned out made working out seamless and pass by very

smoothly. The subject went to the gym consistently for all three days observed. Habit seems to

be maintained consistently over the course of a long period of time.

Notable Observations:

-Planned out workouts for each day at the beginning of the week

-Sets out everything ahead of time

-Instinctively knew to go to the gym when he saw his gym bag

Observation #2:

-Subject: Friend/Student

-Info: 163lbs, 5' 8", above-average build, observed at home/gym

-Observed habit: Gym routine

Although the gym is also a regular habit for my second subject, there were some minor changes

in actions taken that made his habit inconsistent. This subject was observed over the course of

3 days from 10/25 - 10/28 to get consistent results. One thing that was consistent with the last

subject was that he put out all of his gym equipment (i.e clothes, bottle, duffel bag) ahead of

time. One difference that probably affected if he was going to the gym or not was where he put

out his gym equipment. On the first and third days, he put his bag on the counter, but on the

second day, he put his bag at the side of his bed. On the second day, he complained a lot about

how tired he was on his way home from school, and when he got home, fell immediately on the

couch and went to sleep. His negative attitude along with his inconsistency of where he put his

gym bag seemed to have made it harder for him to maintain a consistent habit. Another thing

that I observed was that he also planned out his gym routine ahead of time. On the two days

that he went to the gym, everything was very quick and seamless, and there were no

roadblocks along the way. My subject's observed habits weren't 100% consistent, but the

techniques he used seemed to be effective for the other two days that I had observed him.

Notable Observations:

-Planned out workouts at the beginning of the week

-Sets out everything ahead of time

-Inconsistency of where he put his bag prevented a consistent habit of going to the gym

-Negative attitude might have contributed to not going to the gym

# Interviews (Michael Doan):

### Interview #1 (same person as observation #1):

**Q:** When did you start making the gym a regular habit?

**A:** I started making the gym a serious part of my routine September of last year when I got my my gym membership at Gold's

**Q:** How regularly do you go to the gym?

**A:** I go to the gym 6-7 times a week

Q: What habits have you tried that enable you to regularly go to the gym?

**A:** Probably the easiest thing that I do is leaving out all of my stuff, so when I see it, I know immediately that I have to go to the gym. It's instinctual now, everytime I see my gym bag, I get the urge to go to the gym. It's like a real life reminder that you can't just blow off.

**Q:** What habit building technique have you tried that didn't end up working out?

**A:** The technique that didn't work out was planning big. Ironically, I got more done, the smaller the goals I made. For me, if I make a big plan, I often get really overwhelmed and end up not going through with it. It's easier to complete a bunch of small goals like "get dressed, grab your stuff, mix your protein drink, and then go to the gym", rather than simply, "get everything and then go to the gym". Even saying it like that is a lot better.

**Q:** What habit building technique do you think you could work on, or add?

**A:** I would like to try and work on making my techniques a lot more seamless. Sometimes I struggle with mustering the energy to put all of my clothes out. Basically, building a habit of keeping the habit.

**Q:** What is the hardest part of maintaining a habit?

**A:** The hardest part is probably remaining consistent. It's really hard to not break the chain, and slack off.

### Interview #2 (same person as observation #2):

**Q:** When did you start making the gym a regular habit?

**A:** I started making the gym a serious part of my routine at the beginning of 2018 as a New Year's Resolution.

**Q:** How regularly do you go to the gym?

**A:** I go to the gym 4 - 6 times a week. I'm usually busy with work and school.

**Q:** What habits have you tried that enable you to regularly go to the gym?

**A:** The thing that I do to make the gym a habitual thing for me is by making the task seem fun. The gym is not always the most enjoyable thing to do, especially after a hard day of school or work, but if I see it as a fun thing to do, I'm more likely to do it.

**Q:** What habit building technique have you tried that didn't end up working out?

**A:** The technique that didn't work out for me was staying consistent. A lot of my friends told me that consistency is key, but it doesn't work for me because of how busy I am. It's hard staying consistent, and most importantly, motivated. When you have no willpower left later in the day, you don't feel like doing a single thing.

**Q:** What habit building technique do you think you could work on, or add?

**A:** I feel like if I'm able to stay consistent, then this whole thing would be a lot easier for me. Maybe if I set more reminders on my phone, telling me what I still have to do, then I'd be more willing to do it. Sometimes it's a lack of motivation, sometimes I forget, and sometimes I'm just a bit lazy.

**Q:** What is the hardest part of maintaining a habit?

**A:** The hardest part of maintaining a habit is probably staying consistent. Like I said before, it's something I would really like to work on. I believe that staying consistent is the key to building a habit, but it's just so hard to stay focused and on track.

### Observation 1 (Michael Ren): Friend A

- Object Info: Senior Female, Female, 125 lbs, 5'7
- Observed Habits: Studying with repetitive music

#### Report:

I observed Friend A's study habits over the course of the last two weeks, monitoring how she prepared for each exam as she had 3 recently. Whenever she began studying for exams, she would take out the notes she had taken from each class, as well as her laptop. In addition to this, she would pull out her phone and would spend approximately 30 minutes to an hour each session on social media before beginning to actually browse notes on the course, indicating that her study habits integrated social media. I'm not sure if it indicates poor habits or if it is just her relaxing before beginning intensive studying.

After the social media, however, she would put in her headphones and listen to one song on repeat, citing that it was to help her focus in on the studying - by playing one song on repeat she would drown out any noise outside as well as what she was hearing through her headphones. Following note taking, she would also play relevant chapters' video recordings to gain further insight on the professor's lectures. Throughout the study sessions, friend A rarely, if ever, looked at her phone, ignoring all messages and other types of notifications that popped up.

However, I noted that as the study session approached 2.5 hours or more, she would begin to doze off and clearly become less focused, even though there were no observable distractions on her laptop, phone, or actions. This indicates that she became less productive, and perhaps study breaks are required in between to help keeping the brain better focused.

### Interview 1 (Michael Ren): Friend A

Q: When did you start using your headphones to drown out noise?

A: Freshman or Sophomore of college - initially I started listening to music because I saw everyone else do it (even though I never really felt like I needed it). I realized that I would get distracted by it and so I decided to use one song so I could drown it out, and I guess that became a habit.

Q: When do you usually start preparing for the exam?

A: Depends on the class. For an easy class, I usually only prepare an hour in advance. For a medium difficulty class, I usually start preparing 2 days before. If a class is exceptionally difficult, I'll start preparing a week and a half to two weeks in advance.

Q: What habits do you have when you prepare for an exam?

A: I look over the notes so I have a better understanding, and since I'm an IPHY major I usually write things down to help me with memorizing. I usually try to remember concepts more than details, but it's rare for my major.

Q: What studying techniques did you try that didn't work out?

A: I learned that I need a very specific location/environment to study in or else I'll get distracted.

I also learned that using lecture capture doesn't help unless it's very specific stuff. The biggest help for me was just going to class.

Q: What study habits did you find to be successful?

A: I figured out how to block out sounds, distractions, and I found that if I put my phone somewhere I can't see it or purposefully running the battery out on it helped me a lot with being able to focus.

Q: Have you tried any habit building techniques?

A: It's usually self motivation. I think about how the habit's really good for you so that it won't just be something impulsive. I usually convince myself that I really need it and that's how I keep it up.

#### Conclusion:

- Habits integrated into study routines don't necessarily have the impact desired
- Some habits are created without specific purpose

### Observation 2 (Michael Ren): Friend B

- Object Info: Junior Male, 155 lbs, 5'10
- Observed Habit: Gaming

### Report:

I observed a friend attempt to climb the League of Legends ranked ladder over the course of 3 days.

He had a daily routine in which he would get up, stretch, and put his headsets in. Instead of playing the game, he would first open up Reddit as well as Pokemon Showdown, and spend approximately 15-20 minutes just browsing the web. After, he would open up the practice tool as warm up, and practice last hitting minions (testing out mechanical skills) for a bit before going into the ranked ladder. While he practiced, he would also open up Razer Synapse (a macro settings software) and test out various dpi and keymaps to his liking.

While in loading screen, I observed friend A to put his legs up against the desk, but always when the game started he would set himself into proper posture - straight back, sitting up, left hand on keyboard and right hand on mouse. He would constantly keep himself busy, hitting the tab menu to always check stats centered around other players, and rapidly click on

the map when he wasn't doing something important in the game. After the game ended, he always spent 5 minutes overlooking stats from all players and considering what to improve. Conclusion:

- Friend B felt he would perform poorly if he did not continuously keep his mind occupied,
   indicating that habits have a factor in helping players succeed (even if placebo effect)
- Friend B had the same starting ritual every day, indicating that habits could be built up without any intention of doing so

# Interview (Michael Ren): Friend B

Q: When did you build up your pregame ritual?

A: I honestly never thought of it as a ritual, I guess it just became a habit after I discovered Reddit. I'm usually playing games to destress, and I like to just sit there and mindlessly browse the internet for a bit before I start playing games, and I guess it just became a habit off of that.

Q: Why do you keep your mouse so active when you play games?

A: I just like keeping myself warmed up at all times, so I figured that when I wasn't trying to accomplish anything I'd just keep my mind occupied with keeping track of enemy stats, locations, etc and click everywhere so I'd have faster reaction times.

Q: What's the point of changing your posture?

A: I feel like I'm able to focus better when I sit straight up, it just feels like I'm doing something important I guess. Nothing really important.

Q: Have you tried any habit building techniques?

A: I have, and honestly I'm not too good at it. The habits I build up are usually by accident, whenever I try to create one on my own it usually just falls apart after a bit. It's hard for me to stay focused on my goal long enough for the habit to integrate into my life.

### Observation #1 (Lei Teng):

- Observation object: friend A
- Object info: a senior student, male, weighted 154 lbs, 1.78 meters tall
- Observed habit: good eating habits
- Report:

I observed A's eating habit in C4C dining center 4 days in a roll. And I found some great eating habit A has.

First of all, I observed that when he walks in to the dining center, he will use the hand soap near the entrance to clean his hands every time, which means that he is a health-conscious person. I think this is the beginning of some good eating habits.

When he gets the plates, I noticed that he only gets one plate and one small bowl for salad. And the first dining section he goes to is the salad area. He usually gets some vegetables but except carrots. And he will add two half-cut boiled eggs. The dressing he usually adds is the Black Pepper Vinaigrette, which is a low calorie one. After getting salad, he goes to the American grill section. I thought he would get some burgers or chicken nuggets or some fried food. But he gets two pieces of plain chicken breast, which provide 170 calories, 1 gram of carbohydrate, 11 grams of fat, and 15 grams of protein. Finally, he will get two sushi rolls which contain carbohydrate. And sometimes he will get a burrito. These are the foods A grabs usually. I think they are really healthy.

What's more, I noticed that there are 1~2 days per week, he will eat some foods which contain high calorie. And on that day, he will go to the rec center to work out. I think this is the reason why he eats high calorie food.

Thus, I think his good eating habit is highly related to his habit of work out.

### Interview #1 (Lei Teng):

Interview object: friend A

Q: How long have you kept this kind of good eating habit and what makes you insist on it?

A: I have kept the good eating habit for 2 years. When I first entered college, I was an obese

person. I usually ate fired and unhealthy food. You know Boulder is a high-altitude area. At that

time, my physical body condition was very poor. Exercise was my weakness. I usually

exhausted after a few steps. Since them, I made up my mind to have a healthy diet and

exercise more and I keep on doing this until today.

### Conclusion:

cultivation of a good habit may have relation to another good habit

people may insist on doing one thing to keep a good status on other activities 0

usually there has to be a thing/experience/event which motivates people to build good

habit

#### Observation #2 (Lei Teng):

Observation object: my roommate B

Object info: my roommate who is a senior student

Observed habit: keep reciting words to improve vocabulary

Report:

Since B is preparing for the GRE test, he said he would like to build a habit of reciting new

words every day. So, I made an observation from 10/22 to 10/28.

On first two days, he was busy on his homework and midterms. He only took less than 30

minutes to recite new words. I noticed that B used a smart phone app as a beginning, he

downloaded an app called 'Le Ci' which assist to recite words. This app develops a unique

English word forgetting algorithm, scientific adjustment, and customized English word review

plan based on the Ebbinghaus memory curve, and focus on the Chinese students' learning habits. What's more, this app has a function of reminder, it will keep remind user to start work on new words.

Start from the third day, B took an hour every day but sometimes he would forget to do it. (or maybe he is not willing to do it for some reason). At this time, the app did a great job on reminding/forcing him to do it.

Moreover, he uses a method called 'spaced repetition', which means he periodically reviews the data in the word library and repeat it in a distance. I think that's a good habit for reciting words.

And it also can be applied on build/reinforce other habit.

This observation lasts 6 days, and for the time being, I don't think he has completely built the habit. I will keep observing him on his process of building habit.

### Interview #2 (Lei Teng):

Interview object: My roommate B

**Q:** Do you think keep reciting new words every day is a hard/easy process? Do you have any difficulty during this process? What did you do to overcome it?

A: I think it's definitely an extremely hard process to keep reciting new words and make it become a habit. I think the biggest problem is the time controlling. I have huge amount of academic works every day and when I back to home and start play video games or enjoy my leisure time, there is a voice appeared, and asking me to improve my vocabulary. That makes me feel awful. But after doing the vocabulary works for few days, I am getting used to it a little bit. Especially when I think about the GRE test, I think that it is indeed an important thing to recite words. What's more, that phone app did help me a lot and the function of the app is great. I think that's one of the most critical things that help me overcome the negative attitude.

# Conclusion:

We can use some other assist phone App to help user focus on some specific habit

Use 'spaced repetition' method to reinforce user's habit

#### Part 2:

- Our findings do agree with each other for the most part. We found out that two of the
  most important factors for building up a good habit are consistency/repetition, and strong
  motivation. We also found that planning ahead have helped a lot of people, as well as
  having a "ritual" that you do regularly before/after the thing you do.
- Based on all of the data that we gathered, we could add in a lot of features that make people have to think less about when building a habit. If we send them reminders, and quotes of encouragement throughout the day, it would help them do better. We could also add in small footnotes that give reminders of effective/proven methods of building good habits. If we make building a habit into something that you want to do, rather than something that you have to do, then it would encourage a lot more people to not only use our app, but build habits of their own as well.
- Although the interviews gave a very in depth knowledge of different strategies used by each person in their attempts to maintain their habits, they are simply just recollected accounts. In other words, interviews are merely stories, and not technically tangible data. This makes it less effective than the our observation method because seeing how people interact with their habit building methods gives a more precise account. Seeing the actual method in action gives you a sense of how effective it really is.
- More data is always better and helps us create a more accurate app. If we were to do another data method, we would pick the survey, as it's a lot more general, and we can get a wider understanding for what people use to help build their habits. Seeing how popular each method is would give us a better idea of which ones to focus on while we're creating our app.
- Meeting time was 12 PM on October 28 on Google Docs. Everyone was present.

## Part 3 (Sample questions to use):

- -When did you start making this a regular habit?
- -How regularly do you do your habit?
- -How long have you kept this habit?
- -What habits have you tried that enable you to regularly do your habit?
- -What habit building technique have you tried that didn't end up working out?
- -What habit building technique do you think you could work on, or add?
- -What is the hardest part of maintaining a habit?
- -Did you have any difficulties?
- -How did you overcome these difficulties?