Goal and Context

The purpose of this study was to gain insight into how to redesign the home cooking experience. Field studies observing home cooks revealed three key findings: home cooks maintained kitchen cleanliness, used time efficiently, and had issues with minimal counter space. This study will seek to uncover the motivations driving the findings, as well as uncover new pain points that home cooks face when using the kitchen. Furthermore, this study will help verify or reject the prioritization I set using results from the observations (see Appendix 1 for the prioritization rationale).

Three interviews were conducted for this study. To be eligible for this study, participants had to meet the following criteria:

1. Cook at least twice weekly.
2. Is experienced enough with cooking to make meals independently (i.e. with no help from others).
3. Have access to a video call service (e.g. Zoom, Skype) for the interview.

The first and second conditions ensure that the interviewee is an experienced cook, which this study will aim to focus on. The third requirement is necessary due to social distancing measures that disallow social gatherings. Participants were recruited by contacting potential interviewees on social platforms such as Slack and WeChat. Upon agreement, interviewees were invited to a Zoom call for the interview.

Interview questions varied from broad, open-ended questions to specific questions regarding time efficiency and kitchen cleanliness. Follow-up questions were asked when relevant, depending on the participant’s answers.

The biggest ethical consideration in this study is ensuring consent to being recorded in the study. Before the study, I informed the participants on their agency to opt out of being recorded, as well as the option to turn off video recording. I also reminded participants that they need not answer a question they feel uncomfortable answering and made sure to repeat the reminder before asking potentially sensitive questions. One limitation with this study is that the interviewee demographics varies in age from those observed, so the results from observations may not be applicable to their experiences. On the other hand, the participants were of a similar age, effectively making age a controlled variable when comparing across the three interviews.

Results and Recommendations

Below are three results and recommendations based on the study.
Spatial Constraints in the Kitchen

Field studies revealed that observed cooks suffered from a lack of counter space when cooking. Interview findings expanded this annoyance with a lack of space to other aspects including the stove tops, refrigerator, and the sink. Having multiple people cooking simultaneously added to the struggle to find space to work on. As such, the general kitchen (and not just the counter) struggles from space constraints.

Participant 2 explained that they “do meal prep,” but “it’s harder to meal prep in dorms” due to a lack of space in the refrigerator. Later in the interview, they express their desire for a drying rack to “help keep things organized.” The drying rack as a way to reduce space is also repeated by Participant 3, who says that because they don’t have a drying rack, “it’s kind of like a game of tetris in terms of stacking everything as it dries.” Participant 3 also struggles from finding space due to living with three roommates who also cook at the same time as them. During these sessions, they “[trip] over each other [and] one person has a fridge open [so] one person can’t get through,” resulting in “a lot of twisting and turning in a small space.” Participant 2 explicitly states that they “need space” and “get annoyed if there’s people in the kitchen while [they’re] cooking.” Finally, Participant 3 finds it difficult to clean dishes when other dirty dishes are in the sink.

Solutions to spatial constraints in the kitchen have also been explored by participants. Participant 1 plans cooking sessions ahead of time to avoid conflict, Participant 2 adjusts their behavior according to the kitchen style they’re in (e.g. not meal prepping in dorms), and Participant 3 works around it by respecting each other’s space. A kitchen redesign I propose that could help with space constraints due to having multiple people cooking at once is to include multiple entryways into the kitchen. This way, cooks will have more space to be able to maneuver around. For example, when a dish is finished, rather than struggle through a crowd of people, the cook can exit from a nearby entryway.

Inhibitions to Social Cooking

Participants consider home cooking to be an individual venture, rather than a group effort. The interviewees desire to socialize but are not able to due to inhibitions such as a lack of space and differences in diet. Furthermore, participants found personal cooking to be more convenient than cooking for a group.

All of the participants express a motivation for socialization associated with cooking. Participant 2 talks about how they “help out” when their “mom does the cooking.” Participant 1 “[wants] to share what [they] make with the whole family.” Participant 3 talks about how their family was “centered on having family dinners every night.” Furthermore, they talk about “lik[ing] the social experience of going to restaurants.” In this way, participants generally associate food with a social experience. However, they also find that cooking is easier when done individually. “We used to do more meals together… but because of different meal preferences, we decided that it’s better if everyone makes their own food,” states Participant 3. Participant 2 prefers to cook for themselves only because they can “gauge how much I need to eat based off of the ingredients, which is easier if it’s only for [themselves].” Participant 1, despite being motivated to cook for the entire family, prefers to do so individually.
Participants desire for a more social cooking experience but is inhibited by factors such as spatial limitations and dietary differences. A recommendation I have to approach this gap is to figure out ways that cooks can collaborate while making separate dishes. An app that takes desired recipes and organizes the steps in a way that allows for collaboration may be a possible solution. For example, if one cook is making omelet and another is making scrambled eggs, the app can divide the tasks so that one cook mixes the eggs and another works on other steps in the cooking process.

Differing Impressions of the Dishwasher Leading to Use and Misuse

One specific finding from the interviews is that cooks have different perceptions of the dishwasher. Some believe the dishwasher to be environmentally friendly, while others believe that they are costly. Another believes that the dishwasher is effective at cleaning, while a different cook believes it to be ineffective. This difference in perception influences whether the cook prefers to wash plates by hand or use the dishwasher.

Participant 1 prefers using the dishwasher because it “does the drying step automatically.” They also believe that it does a better job at cleaning glass than washing by hand. Participant 2 thinks the dishwasher is “cleaner and more environmentally friendly,” while Participant 3 believes it “uses a lot of water and heat.” Participant 3, due to severe allergies, prefers to wash by hand and be “diligent about making sure all the dish and dinnerware is clean.”

The main problem area associated with this result is that cooks are not certain about whether dishwashers are sustainable or costly. Despite being a staple of most kitchens, some home cooks still hesitate to use them due to fear of ineffectiveness or electricity/water bills. One approach to improving home cooks’ relationships with dishwashers is to implement statistics on dishwashers that show information such as estimated water used and cleaning effectiveness gauges.

Prioritization with Justification

The recommended prioritization of the findings is as follows:

1. Differing Impressions of the Dishwasher Leading to Use and Misuse
2. Inhibitions to Social Cooking
3. Spatial Constraints in the Kitchen

A specific, concrete finding, proceeding with the differing impressions of the dishwasher can lead to immediate progress as there requires little to no extra constraining before proceeding to design an actual product. On the other hand, inhibitions to social cooking may require additional research or constraints, as the current finding is too broad to address with a single product. Lastly, spatial constraints should be prioritized last as kitchen remodeling is expensive and likely unfeasible for most clients.

Next Steps

Results found that home cooks are looking for a way to improve the social experience of cooking while also improving spatial constraints in the kitchen. In addition, I learned a specific finding about cooks’ relationship with dishwashers. Considering that the next step will be to conduct a
survey, I believe the better course of action will be to focus on the dishwasher experience. This is due to the following reasons:

1. The other two findings (social experience and spatial constraints) are more theoretical, and thus will require a higher amount of open-ended questions that may be harder to analyze than quantitative questions.
2. Open-ended questions may deter respondents from completing the survey.
3. Since most houses have a dishwasher, the scope of the survey is wide enough to be applicable to most people.
4. Specificity of the subject will allow for an easier time creating quantitative questions that are easier for survey respondents to answer.

Reflection

The next time I conduct a semi-structured interview, I will prepare a longer list of follow-up questions, as well as put more thought into the questions I ask. The most interesting insights I’ve received from participants were provided when the conversation derailed from the interview questions. As such, the interviews became more like unstructured interviews, which made thematic analysis considerably more difficult. I think that next time, I will hold a practice interview with someone before the actual interviews in order to verify that my questions and follow-up questions will be useful during the actual interview. It was surprising how easily the interview went off-topic, but equally surprising that the insights from derailing were most useful in forming findings.

Appendix 1: Field Study Report Findings Prioritization with Rationale

Results

An analysis of observations revealed common trends of working around minimal counter space, using time efficiently, and frequently cleaning the cooking area. Findings focused on analyzing the key values that cooks have through their behaviors, as well as understanding issues with the built environment. By looking at the affinity diagram, I focused on the key labels that related to the aforementioned categories. As I decided on the three key findings, I found that some observations under other labels in the affinity diagram solidified the importance of these findings and decided to incorporate them as evidence as well.

Finding 1: Keeping the Kitchen Clean

Cleanliness seemed to be a priority for the cooks alongside efficiency. Before starting cooking, the cooks ensured that the kitchen space was clean. They ensured food safety through planning food preparation and cleaning the knife and cutting board throughout the process. They washed their hands often and dried them off using a towel or on their apron. Though one cook did not video themselves washing their hands, a towel was hung up on the wall presumably for drying hands.

P1: Washed hands 3 times
Finding 2: Using Time Efficiently

Cooks managed their time effectively to reduce the total time spent on cooking. Instead of cooking one step at a time, they made use of waiting time to prepare future ingredients or begin accompanying dishes. They maximized their use of space to speed up the process, such as by using all of the stove tops and freeing up counter space by using containers to temporarily store ingredients.

However, cooks also faced some challenges resulting in time loss. Two cooks spent some time searching for cooking tools. By far the largest time loss in the cooking process came from washing dishes. One cook cleaned up dishes from a previous cooking before they started, resulting in a significant time loss. Washing the cutting board and knife after each use also contributed to this time loss.

Finding 3: Minimal Counter Space

The counter space usable for cooking was minimal due to design faults as well as obstacles placed by the participant themselves. As you can see in Appendices 3.6 and 3.8, cooks used a small-sized cutting board despite the well-organized, minimalist layout. Cooks compensated for this lack of space by actions such as overlapping the cutting board with the sink or moving dishes or bowls to an open table to increase space. Even when clear of obstacles, some kitchens’ counter space only accommodated enough space for a medium-sized cutting board. Due to the inability to use multiple cutting boards at once, participants reused the same board multiple times, resulting in inefficiency. One cook had a potentially dangerous problem relating to the minimal space: due to the narrowness of the counter, the outlet with cords connected to
electronic devices such as a microwave was located near the sink, potentially becoming a fire hazard.

*P1: Space for cutting board reduced by the rice cookers and other containers*

*P1: Used and unused containers/dishes/bowls/cups left on the counter*

*P3: Cutting board slightly overlaps with sink*

*P3: Pipes and wires jumbled at the top section of the counter, hugging the wall*

**Prioritization**

1. Keeping the Kitchen Clean
2. Using Time Efficiently
3. Minimal Counter Space

Bottom priority in this list is the lack of minimal counter space. This is because despite the lack of counter space, cooks were able to overcome this issue by making use of cutting boards. Furthermore, cooks made use of non-counter surfaces to free up extra space if needed. On the other hand, cooks’ motivations for keeping the kitchen clean and using time efficiently were placed on a higher priority because they are the core values that kitchen designs should support. Of the two findings, cleanliness was ranked higher because a lack of cleanliness poses a higher risk than time inefficiency. If cooks are time inefficient, food takes longer to prepare. On the other hand, if cooks have no regard for cleanliness, food may be dangerous to consume. This risk evaluation is the reason why I ranked cleanliness over time efficiency. I hope this prioritization of findings can be useful in discussions about how to optimize the design process.

**Appendix 2: Questions and Protocol**

1. How often do you cook?
   *Rationale: This question delves into how experienced the cook is. It is intended as an easy-to-answer question to ease the participant into the interview.*
   a. What kinds of food do you cook?
   b. How much food do you make in one session?
2. What motivates you to cook?
   *Rationale: This question delves into the motivation behind why participants prefer cooking. Understanding the motivations can help realize behaviors that a kitchen redesign should support.*
   a. Can you give an example of a situation when you were inspired to cook something?
   b. Can you tell me more about the first time you picked up cooking?
3. How long do you spend on cooking?
   *Rationale: The focus of this question is actually the follow-up question a. This question delves into the time efficiency finding from field research, and probes the emotional experience during time-consuming steps in the cooking process.*
a. Which steps do you think take up the most time when cooking?
   i. Can you describe how you feel during these time-consuming steps?

b. How much time are you comfortable with spending on cooking?

4. How long do you spend washing dishes?
   **Rationale:** As with 3., the focus of this question is follow-up question b. This question delves into the emotional experience of washing dishes to investigate how participants feel when cleaning.
   a. How do you wash your dishes?
   b. Can you describe how you feel when you wash dishes?
   c. (If unsatisfied) Do you have any suggestions for improving the dishwashing experience?

5. Aside from dishwashing, how do you maintain kitchen cleanliness?
   **Rationale:** This question seeks to investigate further into cleaning behavior by asking an open-ended question about other activities cooks do to keep the kitchen clean and investigates their emotional responses. Combined with question 4, these questions dive deeper into the cleanliness finding from field studies.
   a. How do you feel when cleaning the kitchen?
   b. Can you give me an example of how you maintain the kitchen?

### Appendix 3: Interview Notes with Codes

**Participant 1**

Q. How often do you cook?

Probably 3 times a week. Now I live with my family and a lot of us will **cook** at different times of the day.

Q. Everyone in your family cooks?

Yeah, especially my boyfriend’s mom cooks a lot.

Q. Is there a schedule? Do you plan when you decide to cook vs. when other people cook?

It’s **planned**. For example, when I decide I want to make something nice, I’ll take over for the day.

Q. How far ahead do you plan?

I **plan** one or two days in advance, for example I would say “I can cook for Thursday lunch” and another could say “I can cook for Thursday dinner."

We just want to **cook** for fun.

Q. Can you elaborate on that?
Sometimes I buy special ingredients like pineapple and I decide to make a special meal for them. I just see what ingredients I have and then I have a good idea for what I want to cook. I want to share what I make with the whole family.

Q. What kind of food do you make on special occasions vs on a normal basis?

I mainly make midnight food and sometimes make desserts. Desserts and dinners are around the same level, I think. For dinner, I just make some Chinese dishes.

Q. How much food do you make in one session?

Like 2 dishes.

Q. Do you make for the whole family?

I make for the whole family, including me. Sometimes my mom will add some dishes like vegetables and leftovers.

Q. So you don’t have to cook as much?

Yeah.

Q. What motivates you to cook?

Sometimes I like to cook something they like, and sometimes I really want to eat something, so I cook it. In general, I feel that cooking is really fun for me.

Q. What inspired you to start cooking?

At first, it was because I lived by myself so I had to learn how to cook. I could’ve ordered food, but I think it’s unhealthy and expensive. I also think cooking is a skill that everyone should know. I’m glad to see myself if I get good at cooking.

Q. So it’s like a confidence boost?

Yes.

Q. How long do you spend on cooking meals?

If I’m cooking one dish and it’s fairly complicated, I’ll spend 30-45 minutes. Sometimes Chinese food is hard to make because you need to use special sauces and leave it sitting for a long time. If I need to make multiple dishes, I spend 2 hours. Making the rice takes 30 minutes, the soup takes 30 minutes to an hour. I cook multiple dishes at the same time. I’m super slow.

Q. So you mentioned you cook multiple dishes at the same time. Do you do any other things to save time when cooking?

If I cook rice or soup and need to use pressure pot, I will do that first because it takes a long time. During this time, I will try to prepare something else.
Q. In general, how much time are you comfortable spending on cooking?

It depends on how many dishes I’m making, but I don’t mind spending time on it. When I decide to cook, I have time, so I don’t mind.

Q. What if you’re in a rush?

If I’m rushing, I usually just make instant noodles or fried rice – maybe 20 minutes?

Q. How long do you spend washing dishes?

When I cook for myself and my roommates, I usually spend 10 minutes in the end.

Q. How do you wash your dishes?

If I just make one dish, I will wash by hand. If I cook for a lot of people, I will use the dishwasher. It makes things easier.

Q. How do you feel when washing dishes?

Really relaxing. I enjoy washing everything. I really enjoy cleaning in general. I feel, especially as a female, that wearing gloves improves the washing experience.

Q. What do you mean by that?

I like to wear gloves because then I will feel like it’s not dirty because I’m not touching the dishes directly. Also, it prevents my clothes from getting wet.

Q. Are you satisfied with the dishwashing experience?

I feel like sometimes, using the dishwasher is really good because it does the drying step automatically. If you wash by hand, you would have to wait for the dishes to dry. Some stuff like glass, it’s hard to make them super clean if you wash by hand, but if you use the dishwasher it looks brand new.

Q. Are there any other situations you would rather wash by hand?

If I run out of cleanser.

Q. Is there anything else you do to maintain kitchen cleanliness?

I will try to find good cleaning supplies. I just bought one mop from Japan that’s super effective cleaning stuff. I like to buy tools for cleaning.

Q. Do you clean the entire kitchen?

Every time I finish cooking, I clean the stove, the sink, and the counter. I don’t like to touch anything that feels oily.
Q. Do you wear gloves when you’re cleaning the kitchen area?
No, I don’t because it’s hard to tell if it’s clean or not with gloves on.

Q. Is there anything else you want to add?
One thing I like is to use Alexa when cooking because it makes me feel relaxed. I also use it as an alarm. Also, sometimes I feel like the smoke alarm is annoying because it’s super sensitive. Sometimes I use a small pot to boil water, and the warning system will blow.

Q. Do you care about saving time, or do you not care about how much time you spend in the kitchen?
I have two situations: cooking for eating vs cooking for fun. For the first one, I’d rather save time as much as possible; for the second, I don’t care how much time I spend. I feel like if people enjoy doing things, they won’t mind how long it takes.

Participant 2

Q. How often do you cook at home?
About every day. Mostly my mom does the cooking, but I do help out. In terms of cooking, it is a daily thing in my household.

Q. In terms of helping your mom, what do you do?
I chop vegetables, make salad, stuff like that. When I cook my own food, I make sandwiches, pastas, or macaroni and cheese. I like to make quick food because I have classes.

Q. Do you still make quick food even though you don’t have to physically go to classes at this time?
Yeah, I still only have 10 minutes between classes. I also don’t want to eat something during Zoom calls. I find a good balance between making something fast and eating it fast so that I’m not in class eating a sandwich while on Zoom.

Q. How much food do you usually make in one session?
I make enough to fill me up, and also it depends on the time of day. Because I work out, I tend to eat more. So I like to make big sandwiches or pasta or an entire box of mac and cheese.

Q. You mentioned that you have 10 minutes to eat between classes. Do you try to eat everything in the 10 minutes?
No, I try to eat as much as I can, and then store the rest in a fridge for after class.

Q. What motivates you to cook?
Personal health habits and the way I was raised. I think it’s a cultural thing to make homemade meals. We never ate out a lot when I was younger. It’s also cheaper, you just go to a grocery store once a week and then you’re able to plan out your meals. Also, as a college student, it teaches me to cook good food with the items I have, which also taps into my creative side as well.

Q. Do you remember the first time you started cooking?

The first time I picked up cooking was in middle school when I made lunches for school. I made simple food like peanut butter and jelly sandwiches. In middle school I wasn’t a health freak so I just ate typical American food like chicken nuggets. But then it started changing in high school – I went pescatarian so I ate seafood and other vegetarian stuff so I had to adjust the way I cooked my food to make sure I got enough protein. Definitely eating more greens, making smoothies.

Q. Why did you become a pescatarian?

It was sophomore year in high school. In AP Bio, we watched a documentary about how the food we eat harms the environment. I learned more about it watching Cowspiracy on Netflix, and after watching them I decided to not eat meat anymore. I still eat fish because it correlates back to the Middleeastern diet and I don’t want to lose that. I also eat fish because I need a source of omega and protein.

Q. So the reason you don’t eat meat is because you’re worried about the environment?

Yes, that’s correct.

Q. How long do you spend cooking?

15 to 30 minutes if I’m really going for something good. Otherwise, I can make something in 10 minutes.

Q. When do you decide to make quick food vs. elaborate food?

I guess I could explain this summer. I lived alone in an apartment – I would work, make money, go grocery shopping, worked out, and after a good workout session you really want a good meal to end the day on. So, I invested time into experimenting with the food I have to make something I really like.

Q. Like a reward after a hard day?

Yeah. Something to satisfy me.

Q. Which steps in the cooking process do you think take the most time?

Cleaning. I think that’s mostly because I’m lazy, but I also want to be tidy. You cook, you’re enjoying it, time goes by fast, then after I eat I get really tired.

Q. Do you wash by hand or do you use a dishwasher?
I wash by hand. I would’ve used a dishwasher if there was one.

Q. Why do you prefer the dishwasher?

I prefer the dishwasher because it is cleaner and more environmentally friendly, since it uses less water.

Q. Are there any other annoying steps in the cleaning process?

Yes, one time I put frozen shrimp in a frying pan and everything kind of blew up. It was a mess.

Q. Is there anything you do to save time when cooking?

Sometimes I do meal prep. On Saturday or Sunday I’ll plan out my week and prep out the week. It helps if you’re eating something consistently every day.

Q. Is there enough storage to meal prep for the whole week?

At my house, yeah there’s space. It’s harder to meal prep in the dorms. I’m kind of organizing the ingredients so I have them at hand.

Q. How long do you spend washing dishes?

If I’m handwashing, I spend 15 to 20 minutes. It depends on how much of a mess I made. I’m also kind of a germaphobe, so maybe I’m overdoing it. On average, using a dishwasher, maybe it takes 5 minutes to load it. When it comes to cleaning and washing dishes, I’m also cleaning the entire area and disinfecting everything.

Q. Can you elaborate on what kinds of things you disinfect?

Once the stove cools down, I clean the stove top, the countertops, and sweeping the kitchen floor.

Q. Can you talk more about the process of cleaning dishes?

For hot pots, I let them cool first. Then, I take a sponge with dish soap and I clean with water. Some stuff is harder to clean so I let it sit in water for a bit before I start cleaning it. If I’m hand drying, I’ll lay out a towel and dry everything off.

Q. How do you feel when you clean the kitchen?

It is satisfactory when I’m done cleaning – I like having a tidy area around me. I can go to bed and wake up the next morning to a clean kitchen. During the cleaning, I don’t mind it because I’m listening to music while I’m cleaning. I get annoyed if there’s people in the kitchen while I’m cooking, though.

Q. Why is it annoying if there’s people in the kitchen?

I don’t like having people in the kitchen while I’m cooking. It’s not that I minds the noise, it’s that I like having control over the space while I’m working. If there’s people around, I feel like I’m not in control.
I like space. I need space. If someone’s in the kitchen while I’m sweeping the floor, it’s just bothersome.

Q. Is there anything that you want to see in the kitchen?

Maybe something that helps you organize things. Right now, I don’t really use anything. I just put a towel down to put my dishes on. I know some people have a drying rack. It helps keep things organized and drive things faster naturally.

Q. Is there anything else you want to add?

I think cooking really depends on what you’re doing – it can either be a joyful experience or a hectic one. I cannot imagine cooking for a bunch of people. I like cooking for myself only, which sounds really bad, but I think taking into account how different people enjoy cooking is important. My mom loves cooking for lots of people.

Q. Why do you like to cook for yourself only?

I just don’t like messes. More dishes means a bigger mess, which leads to more cleaning. I also think it’s easier to measure out for one person. I gauge how much I need to eat based off of the ingredients, which is easier if it’s only for myself.

Participant 3

Q. How often do you cook?

Generally, I cook 3 times a day for most days of the week.

Q. What kind of food do you cook?

Depends on the meal. I make a lot of meals that usually have rice or pasta with some sort of meat like chicken or sausage, and a veggie to go with it.

Q. How much food do you make in one session?

Usually I’ll make meals as they go, but occasionally I’ll make food that lasts three or four meals. I’m currently eating leftover lasagna from yesterday.

Q. So you don’t usually eat leftovers?

No, I don’t usually eat leftovers unless it’s something I can make in a big batch like pasta or soup.

Q. Do you live alone, and do you cook alone?

Well, I cook alone, but I do live currently with three others.
Q. So the food you make is mostly for yourself?

Yes, that’s correct.

Q. What motivates you to cook?

I kind of have a picky palate. Mostly, it’s due to money and also dietary restrictions. I have a limited food budget every month and I find that it’s cheaper to buy things in the grocery store and make at home, especially since there are times when I can’t afford the luxury of time in terms of waiting for ordered food to come. For dietary restrictions, I have a lot of food allergies. I’m allergic to shellfish, peanuts, tree nuts, and some other things. A lot of those allergies limit me from wanting to order from restaurants because often their allergens aren’t specifically stated or I have to go out of my way to acquire that information. So for me, it’s less of a hassle to cook myself because I’ll know exactly what I’m eating.

Q. Can you talk more about why you avoid takeout?

Often times when I cook, it’s not planned in advance, I cook when I’m hungry. Cooking can take 20 minutes to half an hour, or more if I put something in the oven, generally I find it easier to do that than try to figure out what I want to eat and order off of Uber Eats or something and have to wait. It takes the same amount of time if not longer to take out, so I just tend to cook instead.

Q. What kind of time restrictions do you have?

I have a lot of night meetings for extracurriculars or just classes. I have an inconsistent and busy schedule that limits me into a certain time window of when I can eat. Knowing when I can eat can help me figure out what I can eat during the time windows I have. I think the busy schedule limits the free time I have to order food, services are so busy lately, I ordered din tai fung earlier this week and it took over an hour to get to my house. I don’t know if it’s circumstantial, but I expect takeout to take a little longer.

Q. Before the quarantine, would you have ordered takeout more often?

Well, I would go to restaurants more often because I liked the social experience of going to restaurants. I actually find myself ordering takeout more often now because of quarantine.

Q. How long do you spend on cooking?

For breakfast, I’ll usually have oatmeal or cereal or fruit smoothie which will take 5 minutes max. For lunch, I’ll usually fry up a veggie patty or something with veggies. That takes like 15 minutes. For dinner, it’ll take a little longer. That would take anywhere from 30 minutes to an hour if I’m using the oven. Sometimes, cooking things takes a while.

Q. Why do you spend longer for dinner, rather than breakfast or lunch?

Growing up, my family was centered on having family dinners every night. We would always try to make dinner more of an occasion or an event, so we would put more time and effort into the
food we’re making. Also, dinner is the main meal in which I like to incorporate a well-roundedness of food groups, but that also means that I have to cook multiple things at once.

Q. So you think more about nutrition for dinner?

Yeah, I also think dinner is the heavy meal. I’ll have the most calories in the day. Making more and having a wider variety means it’ll take longer. I say that I’m busy during the night but I also find myself as busy or busier during the day. With lunch, I have more leeway to snack up the afternoon if I’m feeling desperate, whereas for dinner, I’ve been intermittent fasting so I end my eating period at 8, so dinner is the way for me to fill up before I don’t allow myself to eat past that point.

Q. What is intermittent fasting?

It just means that I have scheduled meal times and windows in the day where I allow myself to eat. I allow myself to eat from 10am to 8pm, which prevents me from binge eating at night.

Q. If you’re comfortable, can you share why you started to fast?

Yeah, it’s mainly for personal health reasons. It helps your body digest food better, as well as help with weight loss if you supplement it with exercise and a healthy diet which is a personal goal of mine too.

Q. In terms of time spent in the kitchen, what do you think are the most time consuming steps?

I tend to do a lot of things at once, but I think a time consuming part would be cooking things from raw to cooked, especially when you oven bake. Denser things take a long time. I found that making pasta, while it’s quick, you have to wait for the water to boil. I think the longest thing for me is rice, especially because I make them in large batches. That’s usually the thing I’ll do first before I do anything else. I put the rice in the rice cooker, then let it do its thing while I take a shower or do homework or whatever, and once it’s near done, I’ll start cooking the rest of meals so that everything is done at once.

Q. When do you make the rice?

Whenever I’m starting to feel hungry, I’ll usually then just start making the rice. I usually put it in half an hour before I want to eat.

Q. How do you feel during time consuming steps in the process?

It can be annoying at times. Sometimes I wish the oven wouldn’t take as long, or that the chicken I had was fully cooked from the start. But, I think these processes are always worth it in the end, especially if you can plan ahead and strategically think about the meal-making process.

Q. How long do you spend washing dishes?

It depends on the meal. Breakfast and lunch is the time of day I spend the least amount of time on dishes. That’s also the goal of lunch, I want to make something that is quick to make and
quick to clean up. Dinner is typically the time of day I spend the longest time washing dishes. I’ll usually do it as I’m going but often times I’ll wait until I eat my meal and wash the dishes afterward. That can take anywhere from 5 to 15 minutes depending on how many pots and pans I use.

Q. How do you feel when you wash dishes?

Obviously, I don’t love washing dishes. It is kind of burdensome if I wait until after my meal to do them. I try to hand wash as much as I can because as a house we don’t like to use the dishwasher a lot because it uses a lot of water and heat. We try to avoid using the dishwasher for the most part.

Q. Can you go through the process of hand washing?

If it’s something that has marinara or some other crust, I’ll let it soak first. Usually, I’ll take my soap and use a brush to scrub everything and run it under hot water and place it on a drying mat next to the sink. If I have someone helping me out, usually someone washes and someone dries. I think one thing that is annoying is that we don’t have a drying rack, so it’s kind of like a game of tetris in terms of stacking everything as it dries. Definitely, if I could change one thing, it would be to get a drying rack – with that being said, there’s been no problems so far.

Q. You mentioned your roommates use the same kitchen space. Can you elaborate on how that works?

We used to do more meals together as a group but because of different meal preferences we decided that it’s better if everyone makes their own food. But often times, we make meals around the same time, which is definitely an experience – tripping over each other, one person has the fridge open, one person can’t get through, it’s definitely a lot of twisting and turning in a small space. But we’re respectful of each other’s space. We only have four burners on our stove, so we don’t try to use more than 2 burners per person. We don’t usually have all four people cooking at once.

Q. So do you guys have an organized habit for cleaning?

We have one roommate who’s kind of OCD for cleaning – she’ll often spray the countertops after meals, but typically we’ll each do our parts as best as we can, in terms of cleaning up after ourselves, wiping down the stovetops, making sure crumbs are picked up, taking out trash or compost if it’s full. It’s worked so far, we could use a rotation system but we haven’t found the need to because everyone’s honest and keeps each other in line.

Q. How do you keep each other in line?

All of us are best friends, and we’re honest with each other. If we feel one person isn’t pulling their weight, we’ll usually just gently remind them like “next time, can you take out the trash?” Little things like that so we’re all held accountable. That kind of thing helped us to feel that we don’t need to introduce a rigid system.

Q. So you seem to be having a pretty good experience overall with the kitchen.
Yeah, definitely. Luckily, I live with really good and responsible roommates who take care of themselves and clean up after themselves. I feel like maybe if I had different roommates or a different situation maybe things will be different.

Q. Is there anything else you want to add?

Because everyone cooks at the same time, there really isn’t a set system for cleaning the dishes. Sometimes I’ll be doing my dishes but it’s hard because there’s dishes from someone else. We don’t really tell people to clean whenever it’s convenient for us but definitely that could be a pain point. For me specifically, making sure that everything is clean. The reason we like to hand wash is because I’ve noticed that in the past the dishwasher doesn’t get bowls really clean, and that is a huge problem when some of the crust is something I’m allergic to. So really keeping an eye for that and being diligent about making sure that all the dish and dinnerware is clean.

Q. So do you share dishes?

Yeah, plates are usually fine. It’s mostly just bowls because the water doesn’t reach the inside of the bowls so that was a pain point for awhile. But, honestly, it just required me speaking out and telling them why it’s important, especially since my life is on the line.
Appendix 3: Images of Data Analysis

Organization behavior

- scheduling cooking times
- organization
- planning ahead
- store food for later
- wants to be organized
- multitasking
- planning out the week
- organization habits

Time-consuming steps

- long time for food preparation
- oven is time-consuming
- rice and soup take longest
- rice is time consuming

Time efficiency

- Want to be time efficient
- make quick but filling food
- want to reduce cleaning time
- time efficiency depends on time of day
- multitasking
- time efficiency when cooking for self
- strategize food-making to save time
- don’t like eating in class

Flaws with technology

- dishwasher advantages
- dishwasher uses more water
- dishwasher flaws
- dishwasher is environmentally friendly
- dishwasher vs hand-washing
- technology to make cleaning easier

Avoiding contact with dirtiness

- don’t want to touch dishes directly
- avoid touching dishes directly
- don’t like touching dirty surfaces
- clean entire kitchen area
- protecting clothes

Dissatisfaction with takeout

- takeout is unhealthy, expensive
- takeout takes a long time
- takeout is expensive