Photo
https://www.theguardian.com/environment/gallery/2020/jun/29/coronavirus-and-the-return-of-plastic-in-pictures

PANDEMIC AWARENESS RESEARCH TEAM

Identifying patterns of thought, behavior, and attitudes towards various aspects of the Coronavirus Pandemic

IDUS 711 SUMMER 2020
METHODS OF CONTEXTUAL RESEARCH

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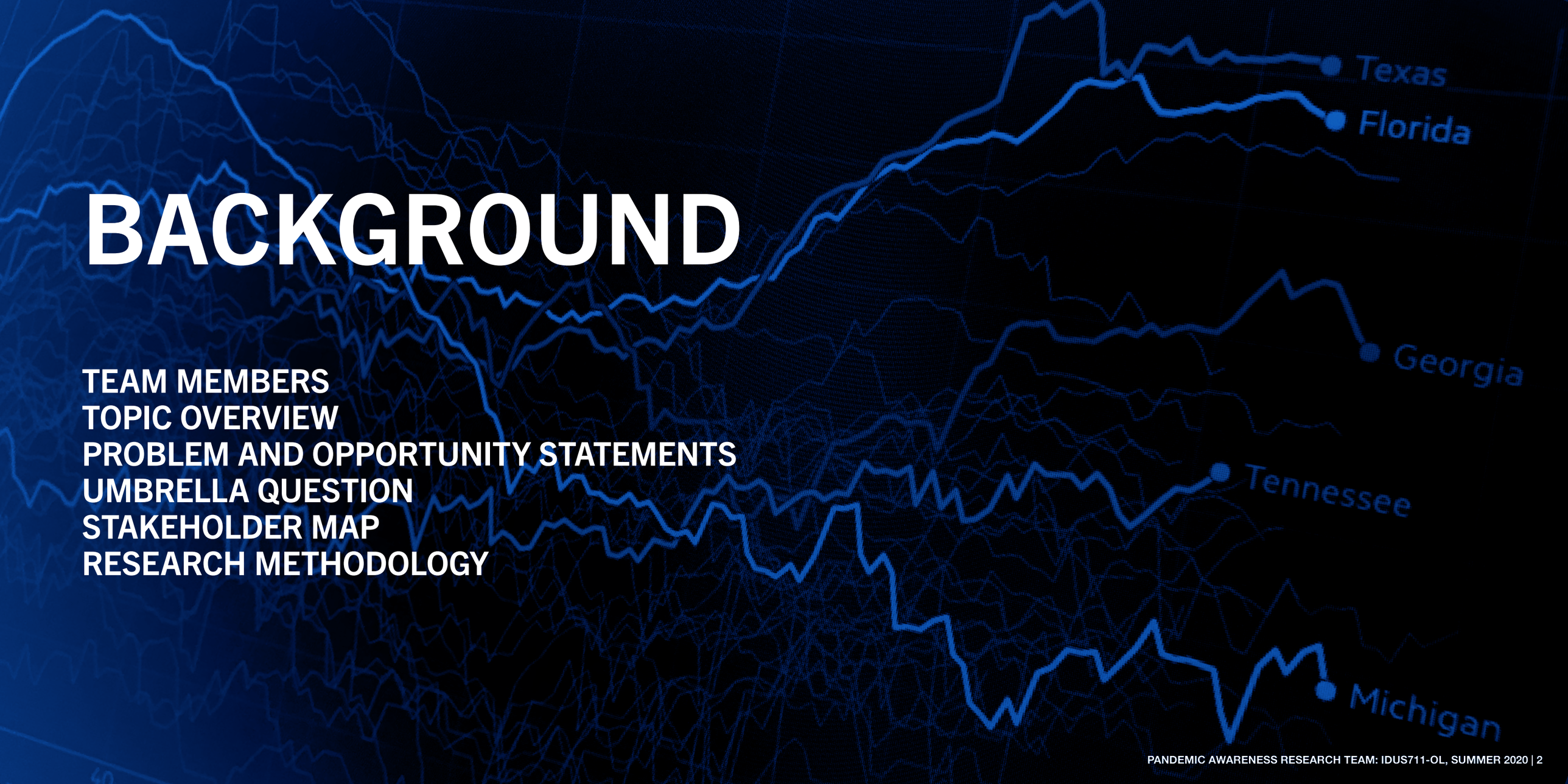
BOBBY L.
MEGLYN M.
CALE M.
CHRISTINA W.

PROFESSOR KWELA H.

BACKGROUND

TEAM MEMBERS
TOPIC OVERVIEW
PROBLEM AND OPPORTUNITY STATEMENTS
UMBRELLA QUESTION
STAKEHOLDER MAP
RESEARCH METHODOLOGY



TEAM MEMBERS

JIMMIE HANES
MFA Graphic Design and Visual Experience | Grand Rapids, MI

Research Interest: To better understand why people are still refusing to wear masks during a global pandemic.

AMELIA LEICHT
MFA, Graphic Design and Visual Experience | Dallas, TX

Research Interest: Causes for inconsistency in adoption of social distancing measures.

CHENGJUN LI
MFA Industrial design | Savannah, GA

Research Interest: How to use masks in an environmentally friendly way and handle them safely.

MEGLYN MASTERS
MA Design Management | Houston, TX

Research Interest: Human behavior in regards to the discrepancies in government and business mandates of mask wearing.

CALE MOOTH
MFA Graphic Design and Visual Experience | Nashville, TN

Research Interest: I've been fascinated hearing how friends are changing routines, giving up certain activities, or modifying those activites to better fit the current environment.

CHRISTINA WONG
MA Design Management | Orlando, FL

Research Interest: How the top rated destinations for family fun, such as the global epicenter, are handling surges.

BACKGROUND

The Novel Coronavirus is a new form of coronavirus first identified in Wuhan, China, in December 2019. With a high rate of transmission and a yet-to-be-understood disease pathology, the virus spread virtually unchecked worldwide, prompting economic shutdowns, border closings, precautionary measures and panic.

In the United States, the first confirmed cases appeared in January 2020, and the face of the country has changed constantly from that point onward. The effects of the pandemic are far-reaching, touching every aspect of everyday life for everyone in the US. While many effects of the virus have been sudden and severe, many are more subtle and will require time in order to realize and understand their full impacts.

The aim of this research project is to begin to tease out some of these longer-term impacts through contextual research around attitudes and behaviors towards the pandemic, with specific focus on the topics of well-being, adoption of safety protocols and associated waste production.

Photo
https://unsplash.com/@anniespratt

2020 Coronavirus Pandemic Timeline

In December 2019, Wuhan China reported cases of pneumonia with unknown causes to the World Health Organization

GLOBAL | WHO | CHINA | USA | FLORIDA | GEORGIA | MICHIGAN | TENNESSEE | TEXAS

January

- January 1st - China: Health authorities close the Huanan seafood market, deemed source of virus
- January 7th - China: China reports they have identified the virus as a novel coronavirus
- January 11th - China: Wuhan municipal health commission announces first death by coronavirus
- January 23rd - China: Wuhan begins lockdown
- January 31st - World Health Org: Global health emergency is declared

WORLDWIDE DEATHS **213**

UNITED STATES DEATHS **0**

- January 21st - USA: First coronavirus cases in USA
- January 29th - USA: POTUS forms and announces coronavirus task force
- January 30th - USA: First confirmed person-to-person coronavirus transmission case

February

- February 2nd - Global: First reported coronavirus death outside of China
- February 5th - World Health Org: WHO begins holding daily media briefings on coronavirus
- February 11th - World Health Org: WHO names coronavirus Covid-19
- February 27th - World Health Org: WHO issues use of PPE guidance

WORLDWIDE DEATHS **2,942**

UNITED STATES DEATHS **0**

- February 2nd - USA: USA places restrictions on travel to and from China
- February 2nd - USA: USA declares public health emergency
- February 29th - USA: First coronavirus deaths in USA

March

- March 11th - World Health Org: WHO declares the novel coronavirus to be a pandemic
- March 13th - World Health Org: The WHO declares Europe the epicentre of the pandemic
- March 13th - Global: 2020 Tokyo olympics are delayed
- March 17th - Global: European Union closes borders

WORLDWIDE DEATHS **40,665**

UNITED STATES DEATHS **2,398**

- March 1st - Florida: First coronavirus case
- March 2nd - Georgia: First coronavirus case
- March 4th - Texas: First coronavirus case
- March 5th - Tennessee: First coronavirus case
- March 9th - Florida: Gov declares state of emergency
- March 10th - Michigan: First coronavirus case; Gov declares state of emergency
- March 11th - Texas: Houston Rodeo is cancelled
- March 12th - Tennessee: Gov declares state of emergency
- March 13th - USA: POTUS declares National Emergency
- March 13th - Texas: Gov declares state of emergency
- March 14th - Georgia: Gov declares state of emergency
- March 15th - Florida: Disney and Universal close parks
- March 23rd - Georgia: Gov issues "Stay at Home" order
- March 24th - Michigan: Gov issues "Stay at Home" order
- March 27th - USA: POTUS signs stimulus package

April

- April 8th - China: Wuhan reopens after 76-day lockdown
- April 9th - World Health Org: WHO updates mask guidance
- April 9th - World Health Org: WHO marks 100 days since reports of pneumonia with unkown cause
- April 18th - Global: "One World: Together at Home" raises $127m for coronavirus relief

WORLDWIDE DEATHS **224,446**

UNITED STATES DEATHS **57,730**

- April 1st - Florida: Gov issues "Stay at Home" order
- April 1st - Georgia: K-12 schools officially close
- April 2nd - Texas: Gov issues "Stay at Home" order
- April 2nd - Tennessee: Gov issues "Stay at Home" order
- April 2nd - Michigan: K-12 schools officially close
- April 3rd - USA: The Trump admin recommends wearing "non-medical cloth" face coverings
- April 13th - Georgia: Gov suspends anti-masking statute
- April 14th - USA: POTUS halts funding to the WHO
- April 15th - Tennessee: K-12 schools officially close
- April 17th - Texas: K-12 schools officially close
- April 17th - Florida: Beaches begin to reopen
- April 18th - Florida: K-12 schools officially close

May

- May 4th - Global: Major airlines begin to require that all passengers wear masks
- May 10th - World Health Org: WHO publishes considerations for school-related health measures
- May 23rd - China: China reports no new symptomatic cases

WORLDWIDE DEATHS **366,341**

UNITED STATES DEATHS **102,640**

- May 1st - Texas: Gov lifts "Stay at Home" order
- May 1st - Tennessee: Gov lifts "Stay at Home" order
- May 1st - Georgia: Gov lifts "Stay at Home" order
- May 4th - Florida: Gov lifts "Stay at Home" order
- May 14th - Michigan: Armed protests opposing mask orders occur at the capitol
- May 14th - USA: CDC issues guides to reopening
- May 30th - Michigan: Gov lifts "Stay at Home" order

June

- June 11th - Global: European Union releases checklist for reopening
- June 26th - China: China declares outbreak in Beijing

WORLDWIDE DEATHS **500,685**

UNITED STATES DEATHS **126,203**

- June 1st - Texas: Gov lifts "Stay at Home" order
- June 5th - Florida: Universal reopens theme park
- June 12th - USA: CDC releases guidelines for reducing risks post-lockdown
- June 20th - Florida: Gov issues state-wide mask order
- June 22nd - SCAD IDUS 711: Methods of contextual research begins

July

- July 1st - Global: European Union reopens borders
- July 24th - China: Dalian city begins lockdowns

WORLDWIDE DEATHS **663,678**

UNITED STATES DEATHS **150,054**

- July 2nd - Texas: Gov issues state-wide mask order
- July 7th - SCAD IDUS 711: Our research team is formed
- July 7th - USA: The Trump admin formally withdraws the US from the WHO
- July 11th - Florida: Disney begins reopening parks
- July 11th - USA: POTUS publicly wears mask for the first time
- July 22nd - Tennessee: Gov reiterates intent to not issue state-wide mask order
- July 28th - USA: CDC calls for reopening schools
- July 29th - Tennessee: State health dept refuses to collect coronavirus data in schools

August

- August 1st - World Health Org: WHO warns that the coronavirus pandemic will be lengthy
- August 6th - China: Dalian city reopens

WORLDWIDE DEATHS **814,135***

UNITED STATES DEATHS **177,336***

- August 1st - Texas: Gov lifts "Stay at Home" order
- August 3rd - Tennessee: Schools return to in person learning
- August 3rd - Georgia: Schools return to in person learning
- August 5th - Michigan: Schools reopen with virtual and in person learning options
- August 10th - Florida: Schools return to virtual learning
- August 12th - Texas: Schools return to virtual learning
- August 17th - Georgia: Gov allows local mask mandates
- August 19th - Tennessee: 5 counties close schools
- August 20th - Michigan: 14 schools report outbreaks
- August 27th - SCAD IDUS 711: Methods of contextual research ends

*As of August 25, 2020

PROBLEM AND OPPORTUNITY STATEMENTS

PROBLEM STATEMENT

Since the onset of the Coronavirus Pandemic, the public has gone through numerous new issues. As a society we are still learning how the pandemic is affecting us, mentally, physically, in the community, and our environment. Not only is the situation a health crisis but it is also fluid and changes every day; including what we hear from leadership and how our government responds to these issues.

OPPORTUNITY STATEMENT

To identify patterns of thought, behavior and attitudes towards various aspects of the Coronavirus Pandemic through conducting contextual research.

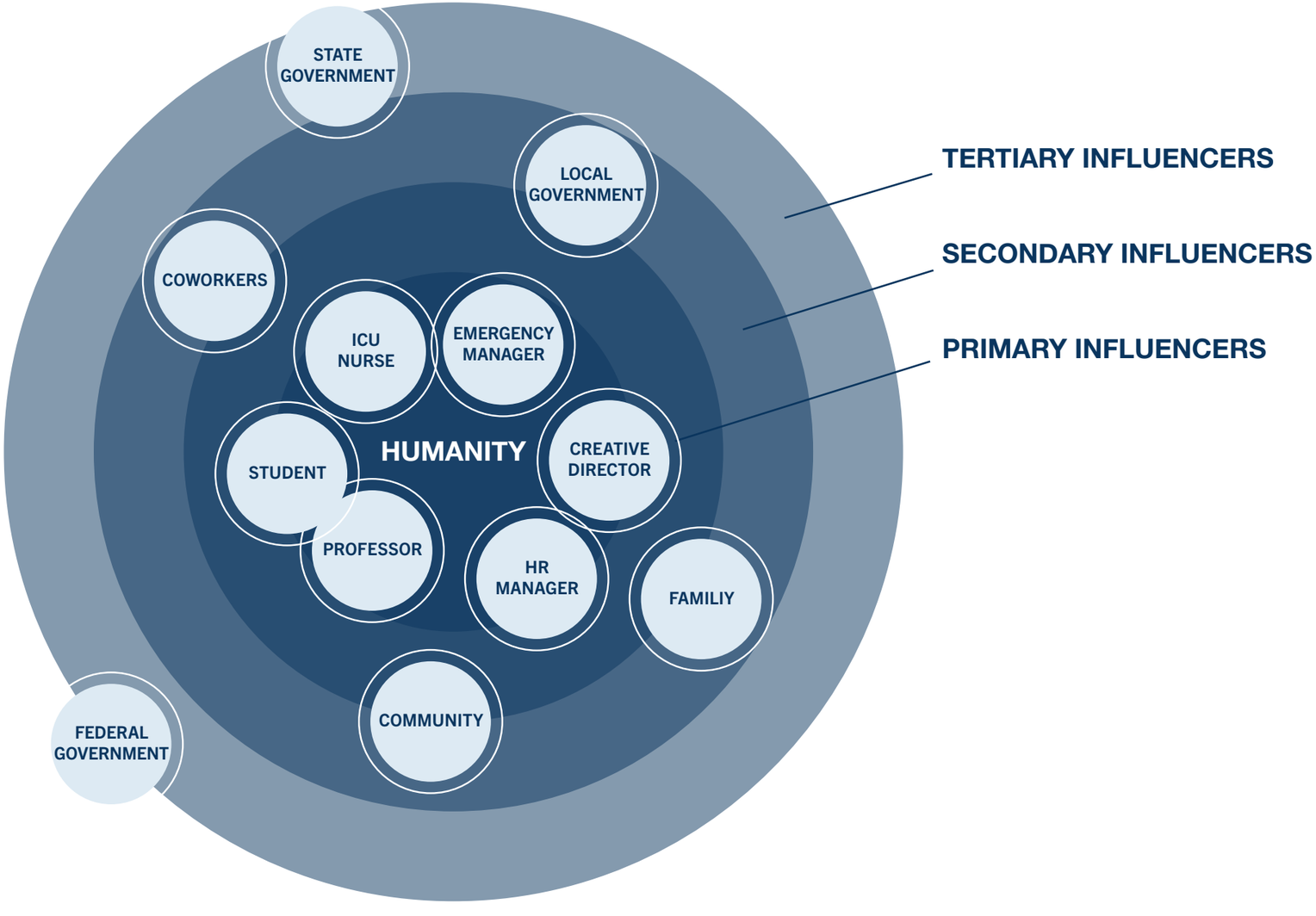
UMBRELLA QUESTION

How might we explore and analyze different user groups' attitudes and behaviors around the Coronavirus Pandemic involving well-being, adoption of health and safety protocols and associated waste production?

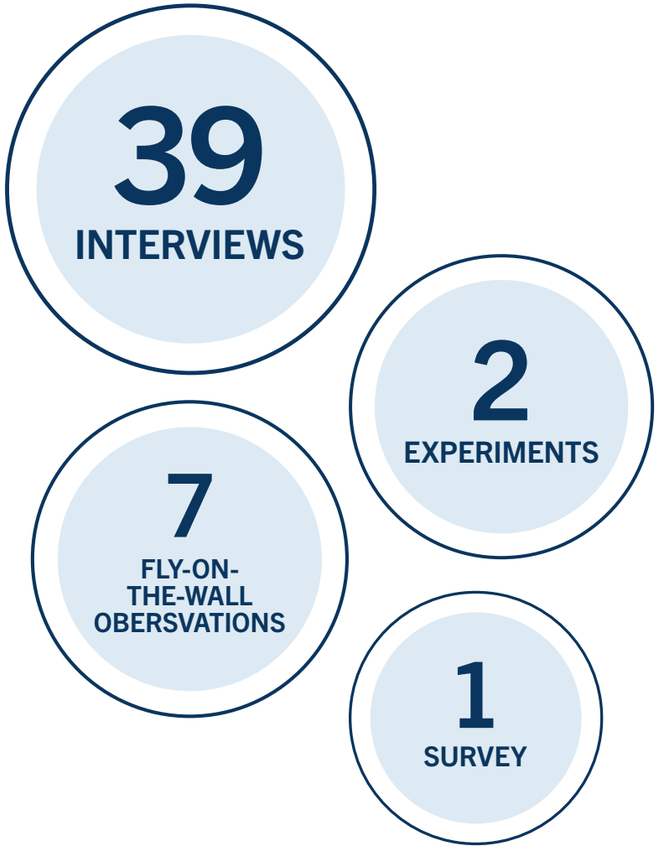
STAKEHOLDER MAP

STAKEHOLDERS

The pandemic has the potential to impact every human on earth. For this research project, we've primarily focused on people living and working in the United States. While our research focuses on individuals and families, there are larger entities such as government agencies, states, and nations.



RESEARCH METHODOLOGY



Our research will be conducted according to contextual research guidelines and methodologies, with a mindset towards ethnographic principles and concepts. Contextual research will consist of a small set of research methods designed to examine subjects in their given contexts. The ethnographic lens to our lines of inquiry will seek to understand the relationships that participants have with the pandemic, within the setting of their day-to-day lives. Given our goal of examining attitudes and behaviors towards the pandemic, we feel this is the most reasonable approach to gaining descriptive data that will aid in identifying design opportunities and potential solutions.

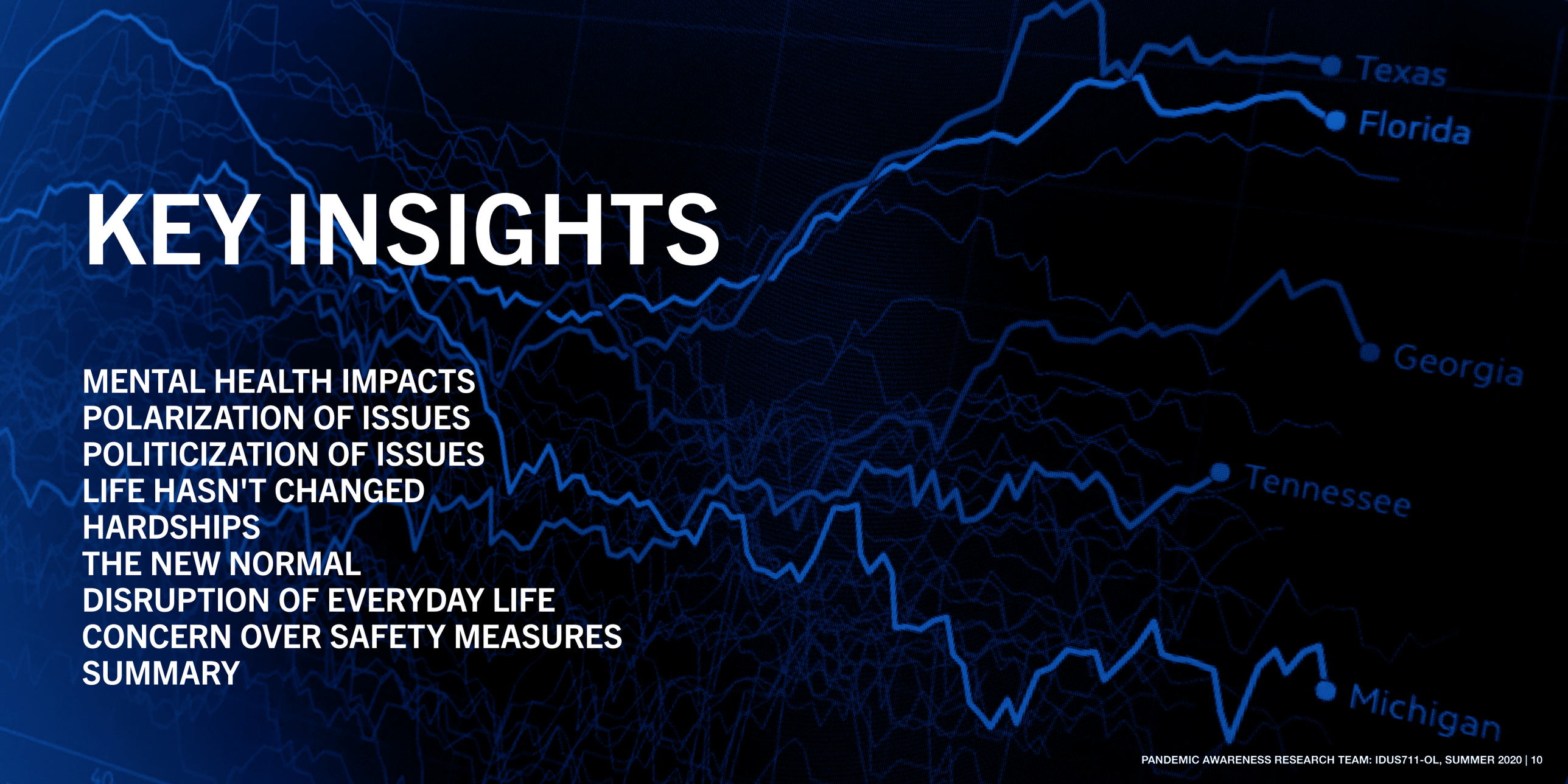
Data Collection Methods:

- Secondary research
- Popular Media Scan
- Survey
- Fly-on-the-Wall Observation
- Experiments
- In-Depth Interviews
- Expert Interviews

Given the nature of our standing as students, participation in this study will be limited to participants in our immediate social circles and extended orbit. We acknowledge this consideration with the full understanding that our data may not be as complete as we would wish.

KEY INSIGHTS

MENTAL HEALTH IMPACTS
POLARIZATION OF ISSUES
POLITICIZATION OF ISSUES
LIFE HASN'T CHANGED
HARDSHIPS
THE NEW NORMAL
DISRUPTION OF EVERYDAY LIFE
CONCERN OVER SAFETY MEASURES
SUMMARY



MENTAL HEALTH IMPACTS

OVERVIEW

We found that fear and anxiousness are two of the most common traits among our participants. Previously mundane aspects of life now produce stress and frustration.

DESIGN SOLUTION

Publishing proactive information for affected people that includes economic and social support especially within unheard demographics.

INSIGHTS, PROBLEMS, AND PAIN POINTS

Social distancing has resulted in people losing human connections. Jobs have become more stressful with the added task of caring for children at home. People see divided leadership as a contributing factor to poor mental health.

"This is a nightmare scenario."

"It's a challenge keeping everyone safe and engaged working from home while also taking care of kids."

DESIGN OPPORTUNITY

There is an opportunity to connect with those who are struggling and in need.

"We are stressed, fearful, and anxious and it seems to be increasing."

Photo: https://unsplash.com/@enginakyurt

POLARIZATION OF ISSUES

OVERVIEW

A major insight coming out of our research is how polarized people are regarding almost every topic of discussion, from masks to sports, to children in the classroom.

INSIGHTS, PROBLEMS, AND PAIN POINTS

- Confidence in school safety measures vs. fear over infection
- Social media's positive effect keeping people connected vs. SM's ability to divide us
- Returning to in-person work to improve mental health vs. fear of the disease spreading to coworkers

DESIGN SOLUTION

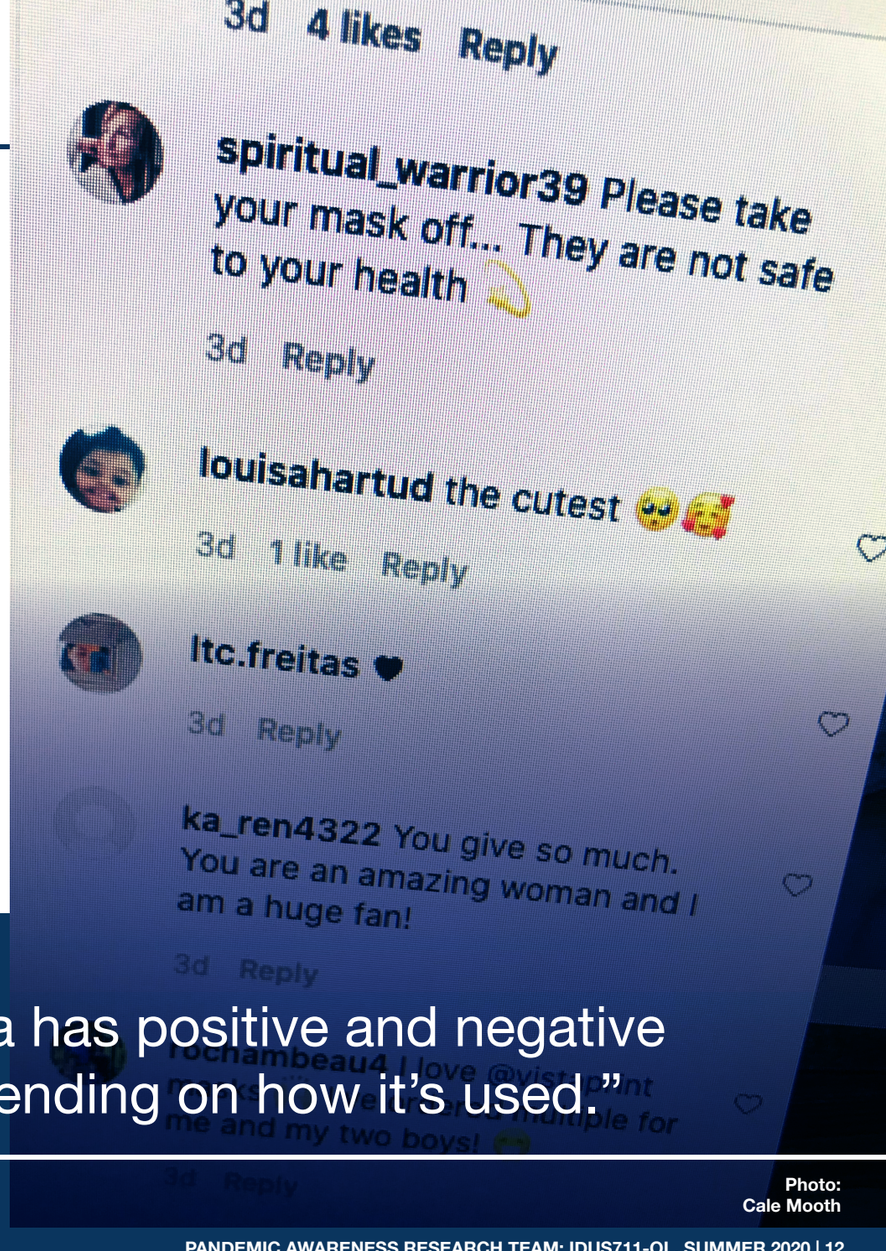
Create an open space for the community to have citizen-led community responses, including local volunteer groups and neighborhood associations, churches, teachers, or others helping to inform the public on the risks and necessary steps.

"I'm really, really concerned about sending my kid back to school."

"My kids are home schooled, so I'm not concerned."

DESIGN OPPORTUNITY

There is an opportunity to establish common understanding of the pandemic's potential impact on each aspect of our lives.



"Social media has positive and negative effects depending on how it's used."

Photo: Cale Mooth

POLITICIZATION OF ISSUES

OVERVIEW

Politicizing the pandemic has encouraged ethnic and racial discrimination among different people, parties, and states. It has created political, social, and even overarching health problems.

INSIGHTS, PROBLEMS, AND PAIN POINTS

Overall distrust in the government and it's leadership role. The media channels creating division and opinionated information.

DESIGN SOLUTION

Experts in business and design can take on formal roles in health care, and physicians and academics have seats at the table in industry and government.

"I believe our political system works to divide people and there's no common sense or community consideration."

"I believe health has been politicized and we have become divided over it and adds stress and divides this country."

DESIGN OPPORTUNITY

There is an opportunity for trust to be built between the government and citizens through strong communications and focusing on reaching vulnerable communities with the information they need such as digital platforms or apps to keep people informed, enable public participation and/or offer open data.

"I think other countries have more effective leadership."

Photo: https://www.miamiherald.com/news/politics-government/article244994110.html

LIFE HASN'T CHANGED

OVERVIEW

People's personal and professional lives such as their personal care, social lives, and work environment have not been impacted by the pandemic.

INSIGHTS, PROBLEMS, AND PAIN POINTS

A significant group felt that nothing really changed. They feel unaffected because they found a way to still live their lives as normal as possible.

DESIGN OPPORTUNITY

Communicate via messaging across various meaningful channels that life is continuing on as normal in many ways, and "normalize" the new to aid in acclimation to changes.

"Being at home so much of the time makes me forget that there is a pandemic going on."

"Getting out of the house to take walks has helped me cope with being in quarantine."

DESIGN OPPORTUNITY

There is an opportunity for people to share their methods of coping and being unbothered as a way to help others.

"The pandemic has not affected my physical fitness and lifestyle."

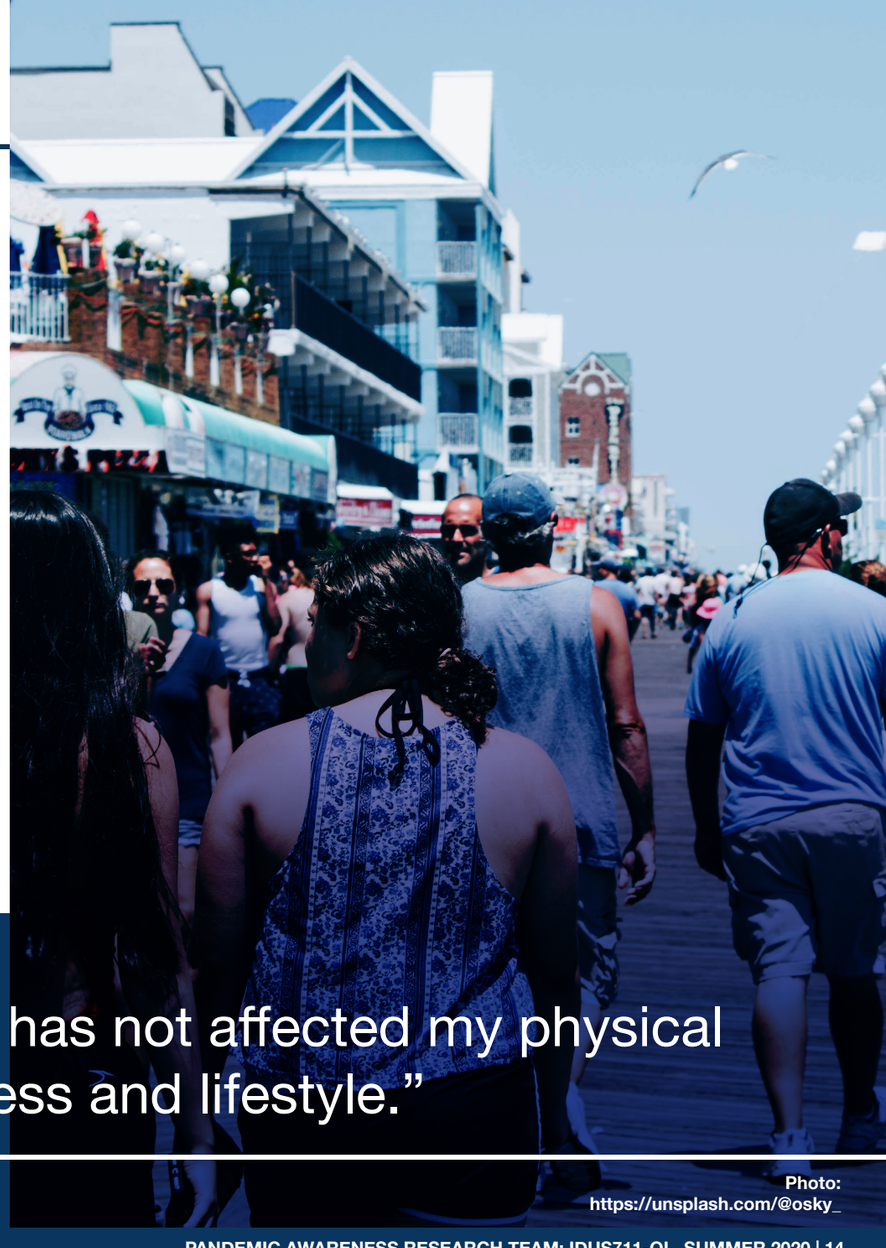


Photo: https://unsplash.com/@osky_

HARDSHIPS

OVERVIEW

People do not have the luxury to stay at home or are miserable at home while they do not have access to technology to stay connected.

DESIGN SOLUTION

Provide an alternate technological or newly developed resource of information for those in need. Also consider an analog based solution for those who cannot receive information electronically.

INSIGHTS, PROBLEMS, AND PAIN POINTS

Economic and logistical hurdles to technology access have hindered connectivity, impacting sociological development, economic achievement and socio-emotional well-being.

"My company had taken a huge financial hit due to the lack of attendance due to COVID concerns."

"We don't have the luxury to stay home."

DESIGN OPPORTUNITY

There is an opportunity to develop community-based technology solutions and to rethink traditional ways of doing business.

"Not everyone has access to or knows how to use Zoom and other technology."

Photo: https://unsplash.com/@mylovefromjesus

THE NEW NORMAL

OVERVIEW

The COVID-19 pandemic has had far-reaching consequences on how people are living, working, staying connected and being mindful of the new normal.

INSIGHTS, PROBLEMS, AND PAIN POINTS

Loss of human connection paired with a steep technological learning curve have forced us to rethink and reconfigure the majority of our day-to-day lives.

- Access to and ability to interact with technology
- Major changes to shopping habits: online ordering, delivery, increased environmental impact

DESIGN SOLUTION

Using social media to tutor users on connectivity software; programs to get Internet access to underserved communities; technology cooperative/share

"I am very aware of the things customers touch and concentrate on people's proximity at the store."

- Hyperawareness of safety, sanitation, hygiene and precautionary measures.
- Hope for a return to "normal."

DESIGN OPPORTUNITY

Creating access to and skill sets around connective technology to improve the human experience during forced isolation.

"I don't go to grocery stores anymore. Very often I get curbside pick-up."

Photo: https://www.marketplace.org/2020/08/21/pandemic-economy-changing-how-americans-buy-groceries/

DISRUPTION OF EVERYDAY LIFE

OVERVIEW

Peoples' daily routines have dramatically changed. Many have either accepted this as their new reality while others struggle to cope.

INSIGHTS, PROBLEMS, AND PAIN POINTS

Working from home, virtual learning, and heightened safety precautions with personal care routines, are just some of the new realities.

DESIGN SOLUTION

Support groups, platforms and telehealth options for developing healthy coping mechanisms and adaptive skillsets.

"I have weekly virtual therapy visits to adjust and adapt."

"I think we're seeing an increase in alcoholism, domestic violence, and mental health issues."

DESIGN OPPORTUNITY

An opportunity to provide more assistance and online training for those struggling to cope and adapt.

"Our routines have changed and we are struggling to adapt to the pandemic."

Photo: https://www.theguardian.com/environment/gallery/2020/jun/29/coronavirus-and-the-return-of-plastic-in-pictures

CONCERN OVER SAFETY MEASURES

OVERVIEW

People hope that their lives will be protected by various preventive measures, but are also worried that discarded protective equipment like disposable masks will pollute the environment.

INSIGHTS, PROBLEMS, AND PAIN POINTS

- Parents want kids involved in daycare but only if it's safe.
- A system or protocol to recycle masks hasn't been established.
- People feel uncomfortable wearing masks.

DESIGN SOLUTION

- Replace degradable mask materials
- Modular mask
- Design a flow chart for discarding protective equipment

DESIGN OPPORTUNITY

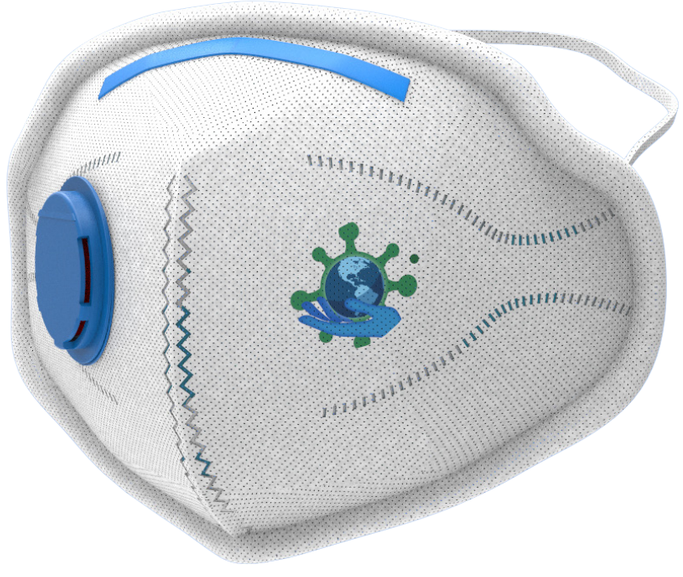
There's an opportunity to develop masks to be more environmentally friendly and teach people how to properly dispose of PPE.

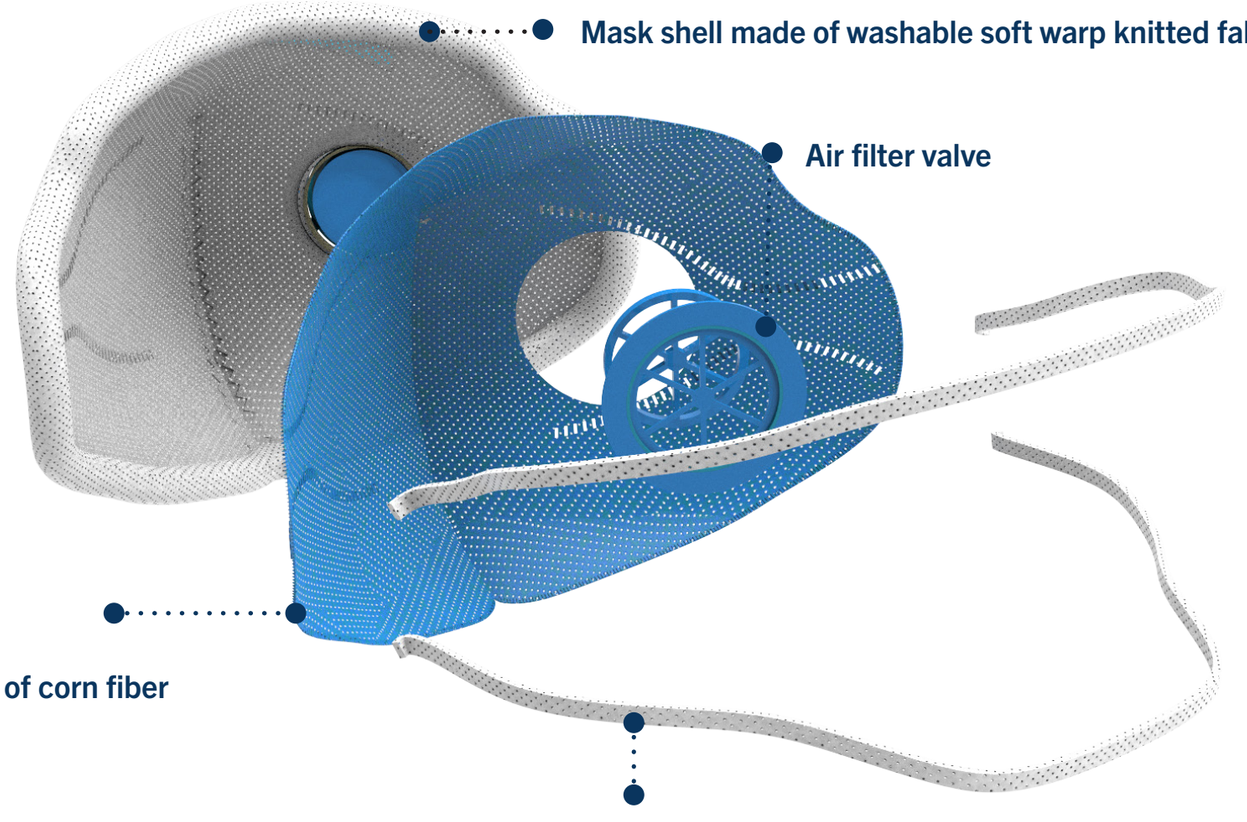
"I feel there are more risks of infection at universities and I don't want to go back."

Photo:
https://www.greenmatters.com/p/face-masks-wildlife

DESIGN SOLUTION-REDESIGN OF THE MASK

THE MASK EXPLODED VIEW





Problems have been solved

1.Discomfort of wearing masks for a long time
2.Masks are not environmentally friendly
3.The problem of insufficient air filtration of cloth masks

DESIGN SOLUTION- NEW MATERIALS OF THE MASK

Corn fiber

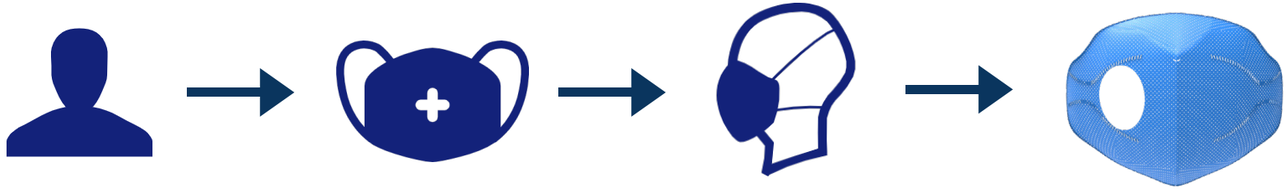
Corn fiber is a synthetic fiber made from corn, wheat and other starches, which is fermented into lactic acid and then polymerized and spun. Therefore, it is also called polylactic acid fiber or PLA fiber.

Masks made of polylactic acid have a 20-70% improvement in filtration performance compared to traditional materials.

Corn fiber has biological affinity and excellent antibacterial and antifungal properties

Cost reduction and natural degradation

NEW USAGE FLOW CHART



Citizens need to go out

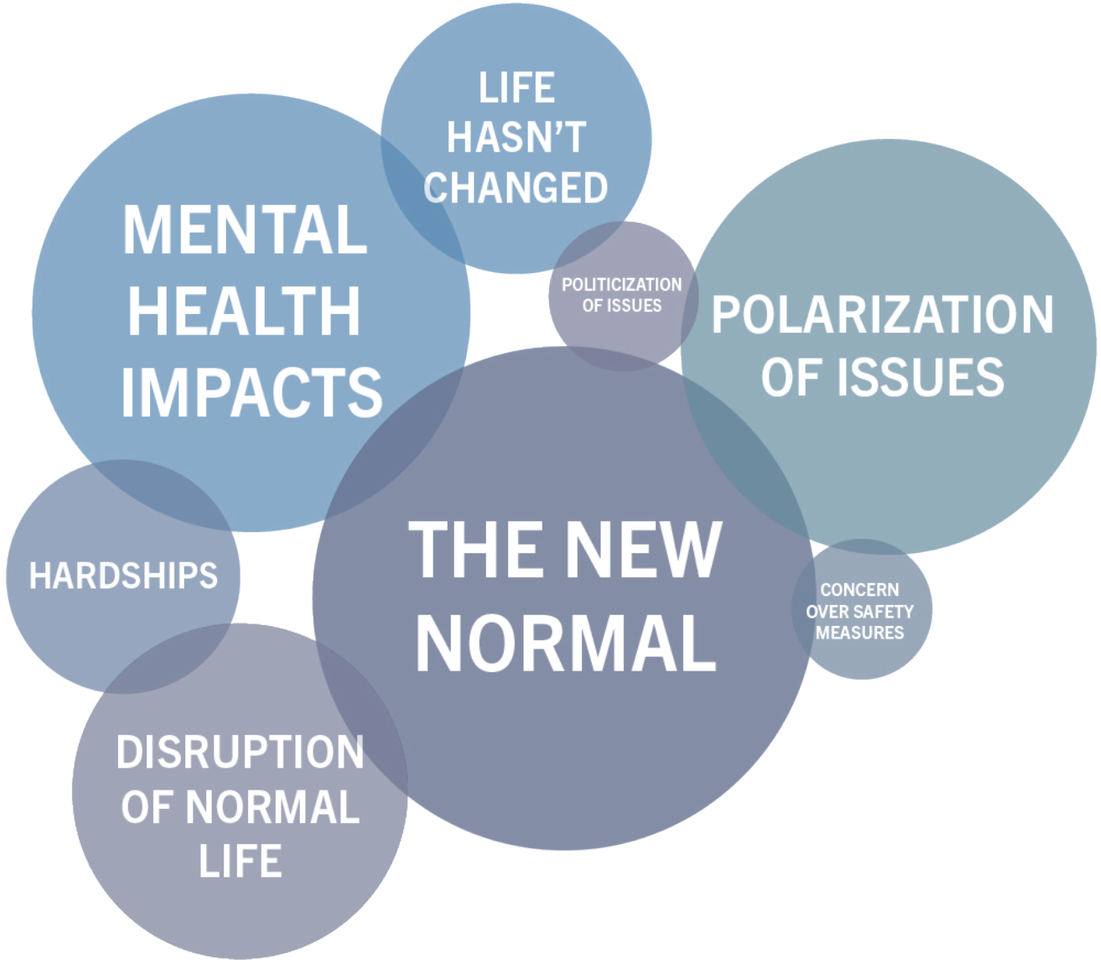
Citizens buy the masks we designed

Citizens wear more comfortable and antibacterial masks

Citizens discard disposable filters made of corn fiber

KEY INSIGHTS | *Summary*

Well-Being | Health and Safety Protocols | Associated Waste



MENTAL HEALTH IMPACTS

We found that fear and anxiousness are two of the most common traits among our participants. Previously mundane aspects of life now produce stress and frustration.

POLARIZATION OF ISSUES

A major insight coming out of our research is how polarized people are regarding almost every topic of discussion, from masks to sports, to children in the classroom.

POLITICIZATION OF ISSUES

Politicizing the pandemic has encouraged ethnic and racial discrimination among different people, parties, and states. It has created political, social, and even overarching health problems.

LIFE HASN'T CHANGED

People's personal and professional lives such as their personal care, social lives, and work environment have not been impacted by the pandemic.

HARDSHIPS

People do not have the luxury to stay at home or are miserable at home while they do not have access to technology to stay connected.

THE NEW NORMAL

The COVID-19 pandemic has had far-reaching consequences on how people are living, working, staying connected and being mindful of the new normal.

DISRUPTION OF NORMAL LIFE

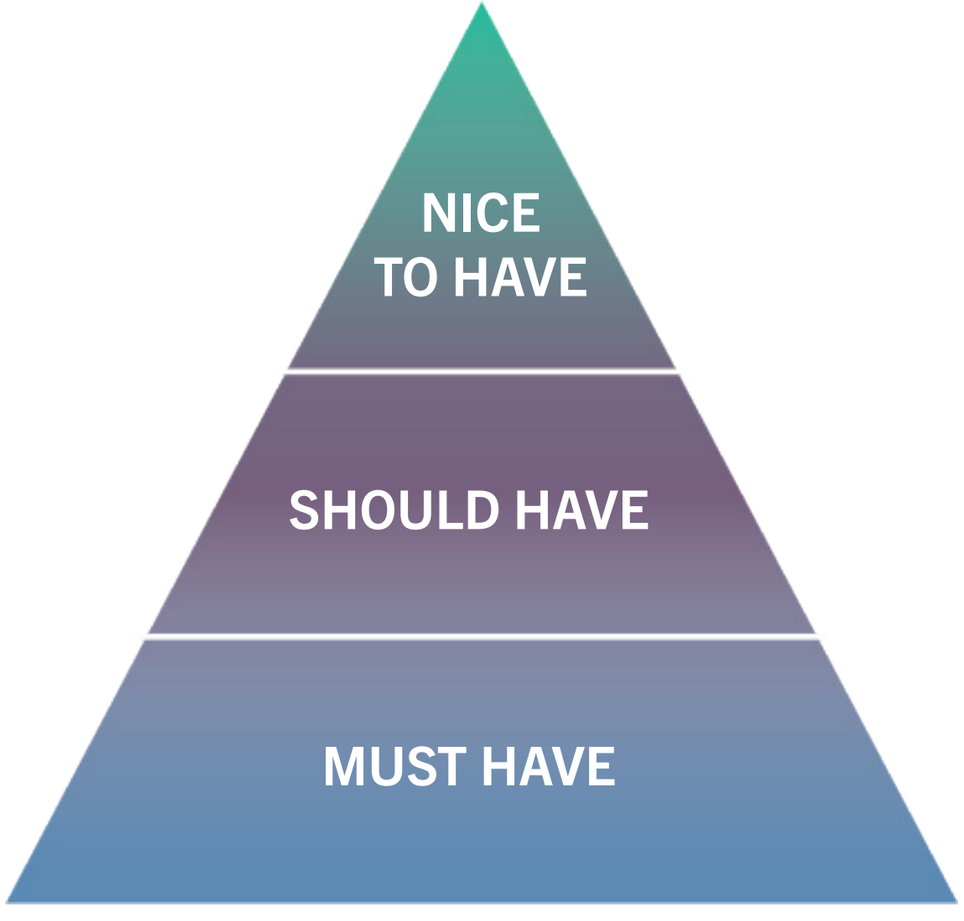
Peoples' daily routines have dramatically changed. Many have either accepted this as their new reality while others struggle to cope.

CONCERN OVER SAFETY MEASURES

People hope that their lives will be protected by various preventive measures, but are also worried that discarded protective equipment like disposable masks will pollute the environment.

DESIGN OPPORTUNITIES AND CRITERIA

Based on the insights gained from our interviews and research data, we established criteria for design opportunities.



NICE TO HAVE - STRONG LEADERSHIP

Trustworthy, unified leadership from government, in partnership with public health agencies and institutions, will be significant drivers of adoption of proposed solutions.

SHOULD HAVE - DESIGN FOR ADOPTION BY ALL VIEWPOINTS

Knowing that our society and pandemic issues are so polarized, it will be important to design solutions with executions that appeal and can be adopted by members of demographics with opposing viewpoints. Leverage learnings from participants who indicated that they did not feel affected by the pandemic to provide unified solutions.

SHOULD HAVE - ALL VOICES REPRESENTED

In our own research, we realized that by virtue of technologies and methods used, several demographics (economically disadvantaged, elderly) were not represented. It will be a core requirement that any proposed solutions ensure that all voices are represented.

MUST HAVE - CLEAR MESSAGE

Lack of clear, consistent communication has been mentioned directly and indirectly by our research participants, and has been identified as a barrier in many of our key insights. Having a clear message that is uniformly communicated without bias or sensationalism increases the likelihood that recommended practices are adopted by everyone.

THANK YOU

Photo:
https://unsplash.com/@scottsanker

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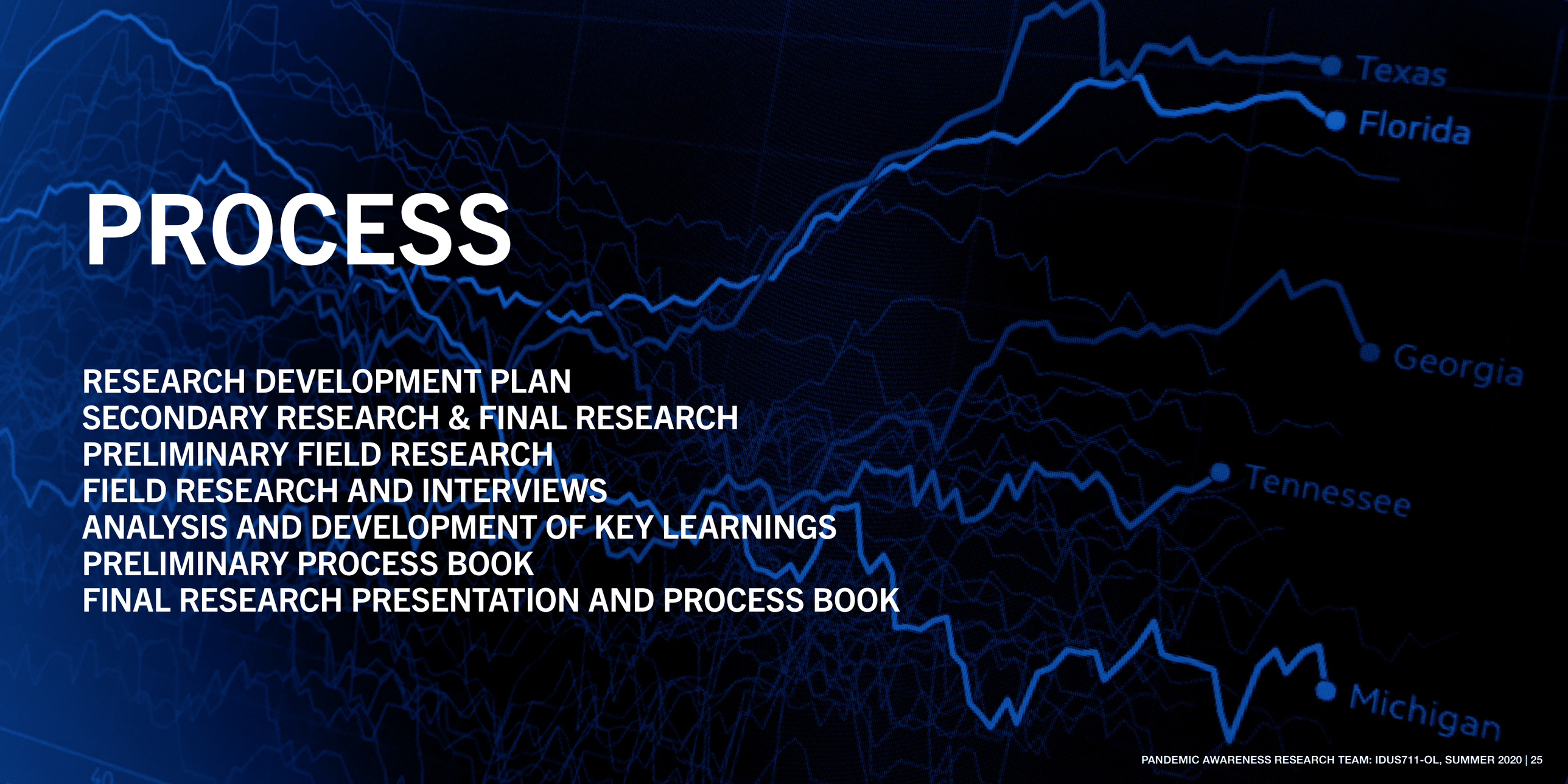
LEARNING OUTCOMES

This project is designed to take you through the entire contextual-research process. You will collect and organize data about a specific culture or population or environment; then as a team, you will analyze and identify patterns, breakdowns, and anomalies, and synthesize your work into design opportunities.

PROCESS

RESEARCH DEVELOPMENT PLAN
SECONDARY RESEARCH & FINAL RESEARCH
PRELIMINARY FIELD RESEARCH
FIELD RESEARCH AND INTERVIEWS
ANALYSIS AND DEVELOPMENT OF KEY LEARNINGS
PRELIMINARY PROCESS BOOK
FINAL RESEARCH PRESENTATION AND PROCESS BOOK



LEARNING OUTCOMES

- Identify an area of focus and inquiry
- Conduct preliminary secondary research
- Define a problem statement
- Write a research question set
- Create a research plan to guide the project

PART ONE:

RESEARCH DEVELOPMENT PLAN

PROJECT TIMELINE

RESEARCH PROTOCOL

PROJECT SUMMARY

This project is designed to take you through the entire contextual-research process. You will collect and organize data about a specific culture or population or environment; then as a team, you will analyze and identify patterns, breakdowns, and anomalies, and synthesize your work into design opportunities.

STUDY GOALS AND OBJECTIVE

The goal of this research project is to explore different user groups' attitudes and behaviors around the pandemic, specifically in regards to well-being, adoption of health and safety protocols and associated waste production. We seek to address the overall lack of understanding around immediate and long-term effects of the Coronavirus Pandemic through contextual research.

RESEARCH DESIGN

Our research will be conducted according to contextual research guidelines and methodologies, with a mindset towards ethnographic principles and concepts. Contextual research will consist of a small set of research methods designed to examine subjects in their given contexts. The ethnographic lens to our lines of inquiry will seek to understand the relationships that participants have with the pandemic, within the setting of their day-to-day lives. Given our goal of examining attitudes and behaviors towards the pandemic, we feel this is the most reasonable approach to gaining descriptive data that will aid in identifying design opportunities and potential solutions.

Data Collection Methods:

- Secondary research
- Popular Media Scan
- Survey
- Fly-on-the-Wall Observation
- Experiments
- In-Depth Interviews
- Expert Interviews

CONSIDERATIONS

We do not anticipate any safety concerns for our participants, but have specifically called out perceived safety in the Informed Consent document created for potential participants (Please see Appendix B for this form).

Given the nature of our standing as students, participation in this study will be limited to participants in our immediate social circles and extended orbit. We acknowledge this consideration with the full understanding that our data may not be as complete as we would wish.

PROBLEM AND OPPORTUNITY STATEMENTS

PROBLEM STATEMENT

Since the onset of the Coronavirus Pandemic, the public has gone through numerous new issues. As a society we are still learning how the pandemic is affecting us, mentally, physically, in the community, and our environment. Not only is the situation a health crisis but it is also fluid and changes every day; including what we hear from leadership and how our government responds to these issues.

OPPORTUNITY STATEMENT

To identify patterns of thought, behavior and attitudes towards various aspects of the Coronavirus Pandemic through conducting contextual research.

UMBRELLA QUESTION

How might we explore and analyze different user groups' attitudes and behaviors around the Coronavirus Pandemic involving well-being, adoption of health and safety protocolsand associated waste production?

REFLECTIONS | *PART ONE*

I was a little apprehensive going into this part of the class, because I have never worked on or closely been involved in a Research Matrix before. The nervousness quickly passed as I soon realized that I had an incredibly talented group of individuals that I would be working with on this project. As we ventured forward, it was still difficult for me to understand and somewhat comprehend the amount of data that was being captured and placed within our Matrix. Dealing with the topic of the Coronavirus Pandemic was a very relatable issue, so each of us were able to bring in so much personal information, but it was hard to not have a bias towards the issues at hand. The initial collaboration with this team was easy from the start, each and every one of us had so much passion and creativity, I was eager to see how this project was going to progress over the new few weeks.

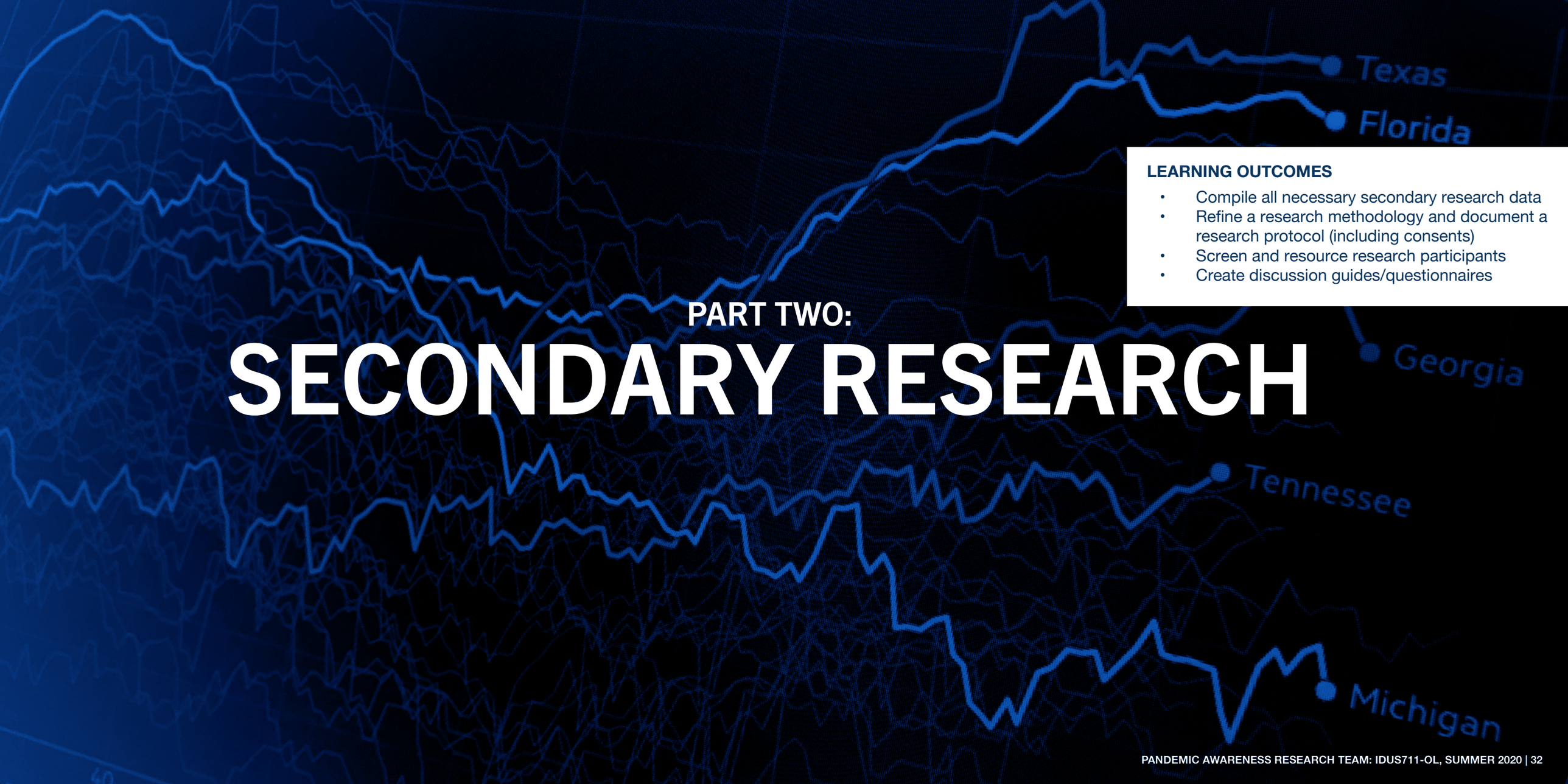
This week we refined our research matrix and started talking about our process for interviews. We have a large group, and each of us has a slightly different focus within the COVID-19 pandemic, so it is going to be a challenge identifying umbrella questions and an interview procedure that allows us to capture both general information and specific data around each of our interests. We are lucky that each of us is so involved and so proactively communicative – we've had great luck so far in meeting, communicating and approaching our work. Hopefully we're able to keep it up in the upcoming weeks!

This week we completed our research matrix. This is actually an extremely difficult thing for our group. First of all, pandemic is a very large topic, and each member of our group has a sub-topic of interest, so For us, creating an umbrella problem is a challenging thing, but through our video conference and active communication, we have handled this problem very well, and I hope everything goes well for the next interview.

The research matrix was a very interesting thing to tackle since it is a practice of pulling the musings and wonderings of a thing out of your head, thinking critically and turning them into a concise question to explore. We all had different areas of interest under the Coronavirus Pandemic umbrella, so it wasn't difficult to pose several questions, but it was difficult to refine them and determine which we would explore and what we decide would be relevant to the project.

The Research Matrix is a new form of organizational structure that I was anxious to learn more about. It feels like a good grounding resource to refer to as the project progresses. Our matrix ended up containing so many rows and questions, I wonder if there's a better way to structure such a large project. Are there multiple research matrix diagrams per major sub-topic? Maybe this is the nature of a larger project. If we're referring to the matrix on a regular basis as a living document, maybe it becomes more manageable, but for someone looking at the matrix for the first time, I could see potential to be overwhelmed.

Personally, I try not to jump into things with a preconceived judgment such as worrying about having a good team, the endurance of the semester and its content. The moment I met my team members and how they instantly created such a safe environment when we first got together, I noticed how this was a team of designers that wanted to gain a deep understanding of our potential end-users and eventually create thoughtful, well-crafted solutions. With each meeting, my confidence to conduct relevant and useful research of pandemic awareness grew each time we were introduced to the role contextual research played in our design process.



LEARNING OUTCOMES

- Compile all necessary secondary research data
- Refine a research methodology and document a research protocol (including consents)
- Screen and resource research participants
- Create discussion guides/questionnaires

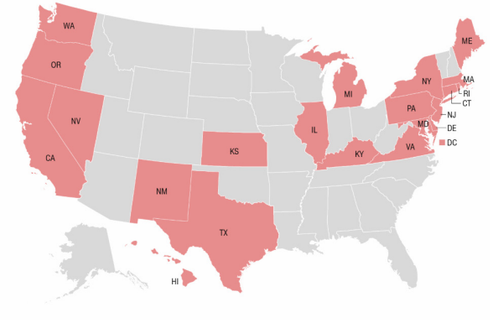
PART TWO:

SECONDARY RESEARCH

SUMMARY OF SECONDARY RESEARCH

REFERENCE APPENDIX A FOR FULL DATA AND ANALYSIS

Key Information



PANDEMIC RESPONSE (OFFICIAL AND SOCIO-CULTURAL) VARIES GREATLY BY REGION

- Federal response in the US has pushed states to decide which measures to implement, resulting in **uneven application of measures** by state, county and city.
- In the US, **22 states have public mask mandates in place,** along with varied guidelines for businesses, schools and for reopening economies.
- In many areas, **the information is difficult to find** and contradictory, depending on where you look.

PPE IS WIDELY DISCUSSED FROM A VARIETY OF ANGLES

- Some studies indicate that wearing a mask during exercise can **decrease oxygen levels** and **increase carbon dioxide levels**
- Mask mandates are in place around the world, and are recommended as a **key measure in reducing spread of the virus.**
- Some reports indicate that a 1% improper disposal rate of distributed masks would result in **40,000 kg of plastic distributed in nature each month.**
- There is some **concern that the virus can be spread through improperly disposed-of masks**, since the virus can live on surfaces for several hours.

INFORMATION IS POLARIZED

- Studies done on social media use during the pandemic indicate that it is increasingly being used for the **spread of (mis)information, as a marketing platform, an influence on public response and a tool for remaining connected.**
- **Pandemic topics are highly polarized and politicized** - every issue seems to have two sides with plenty of data and research to back up the opinion or conclusion.

Photos:
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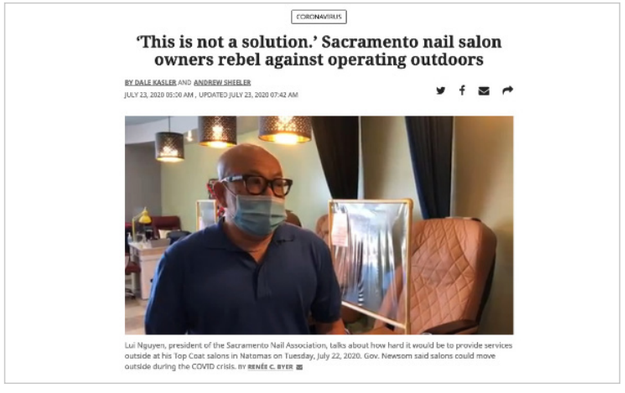
SUMMARY OF POPULAR MEDIA SCAN

REFERENCE APPENDIX A FOR FULL DATA AND ANALYSIS


CORONAVIRUS

'This is not a solution.' Sacramento nail salon owners rebel against operating outdoors

BY DALE KASLER AND ANDREW SHEELER

JULY 23, 2020 05:00 AM , UPDATED JULY 23, 2020 07:42 AM

Lui Nguyen, president of the Sacramento Nail Association, talks about how hard it would be to provide services outside at his Top Coat salons in Natomas on Tuesday, July 22, 2020. Gov. Newsom said salons could move outside during the COVID crisis. BY RENÉE C. BYER

WELL-BEING

- The pandemic has taken a toll on people, especially those who are spending increased time together during quarantine. **Doctors have seen a significant rise in mental health cases.**
- **Regulations and the social shift in self-care routines have shaken up the personal care industry** - salons and barbershops in particular are struggling to stay open in the midst of changing guidelines and public fear.
- Quarantine is changing how we think about style - buzzcuts are back in!

STATE

South Carolina state, local leaders urge public to follow COVID-19 health, safety protocols

State Epidemiologist Dr. Linda Bell said over the past two weeks, the state's daily count has been at least 1,400 positive cases reported to DHEC and the statewide positivity rates remain at 29%. (Source: WYFF)

HEALTH AND SAFETY PROTOCOLS

- Adoption of health and safety protocols is widely varied across industries and locations.
- **NASCAR's protocols seem "like a joke,"** according to some, with several incidents going unreported and unaddressed.
- Some CEOs stress quality of life as economic driver, others urge public to "mask up."
- **Schools (Arizona) announce adoption of social distancing**, PPE and other safety measures.

Here's how COVID-19 creates food waste mountains that threaten the environment

WASTE PRODUCTION

- There is some good news - carbon emissions and and carbon monoxide levels dropped in some of the world's most congested cities.
- Food waste is up, as **farmers are forced to dump millions of gallons of milk.**
- **Medical waste has increased sharply** with increased use and disposal of PPE.

Photos:
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WORD CLOUD

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LEARNING OUTCOMES

- Compile all necessary secondary research data
- Refine a research methodology and document a research protocol (including consents)
- Screen and resource research participants
- Create discussion guides/questionnaires

PART TWO:

RESEARCH MATRIX

RESEARCH MATRIX | *Coronavirus Pandemic Well-Being*

Sub-Questions	What do we need to know?	Why do we need to know it?	What kind of data will answer this question?	Where can we find the data?	What research methods should we use?	Who can we contact for access?	When do we need to get a hold of this data?	What will we learn from this data?	What might we be missing?
How has the coronavirus pandemic affected individuals seeking professional self-care services from salons and barbers?	Whether people are changing their self-care routines as a result of the pandemic.	Changes in routines could effect the mental well-being of individuals and revenue of small businesses.	**Qualitative** Understanding individuals' routines and mental state before and after the start of the pandemic. **Quantitative** Cadance of people utilizing self-care services before and after the start of the pandemic.	From patrons of professional self-care services within the local community.	**Primary Research** Crowdsourcing with Google Forms surveys, Zoom & phone interviews, cultural probes via Zoom interviews **Secondary Research** Popular media scan.	Patrons of professional self-care services within the local community.	As soon as possible.	We'll learn the effects of the coronavirus pandemic on self-care activities.	There could be no discernable change in behavior.
How can people feel comfortable receiving professional self-care services during the coronavirus pandemic?	Whether there are viable approaches to the close proximity nature of professional self-care services that give individuals confidence in seeking these services.	Small businesses offering such services could adapt to new methods and maintain revenue streams. Individuals could maintin the care they desire.	**Qualitative** Understanding individuals' level of comfort and the steps they've taken to feel safe.	From patrons of professional self-care services within the local community.	**Primary Research** Crowdsourcing with Google Forms surveys, Zoom & phone interviews, cultural probes via Zoom interviews **Secondary Research** Popular media scan.	Patrons of professional self-care services within the local community.	As soon as possible.	We'll learn the viability of self-care services during the coronavirus pandemic.	Restrictions could prevent people from participating in such services which may result in unanswered questions.
What are alternatives to professional self-care services during the coronavirus pandemic?	Whether individuals have found alternative solutions to those offered by professionals.	Alternative solutions could alter individual behavior as well as the behavior of businesses offering such services.	**Qualitative** Understanding individuals' approach to self-care services before and during the pandemic.	From patrons of professional self-care services among the local community. Precident set from prior pandemics found in journal articles.	**Primary research** Crowdsourcing with Google Forms surveys, Zoom & phone interviews **Secondary Research** Journal articles, news sources.	Patrons of professional self-care services within the local community. DIYers.	As soon as possible.	We'll learn how people are adapting to restrictions placed on professional self-care service providers and individuals seeking those services.	If alternatives exist, but individuals interviewed don't know about them, alternative may be difficult to surface.
How is the pandemic affecting outdoor sports enthusiasts?	Whether the restrictions on wearing masks change the habits and well-being of outdoor sports enthusiasts.	Wearing a mask for outdoor sports could affect the lung function.	**Qualitative** Feedback from outdoor enthusiasts. **Quantitative** Journal articles related to sports health.	Comparing heart rates of outdoor enthusiasts wearing a mask to those not wearing a mask while participating in outdoor sports. Journals from the SCAD online library.	**Primary Research** Surveys, interviews, participant observation, case studies **Secondary Research** Journal articles, news sources.	Johnson Marc (age: 20 ,occupation: SCAD student); Rossel Kluwe (age: 27,occupation: illustrator); Tolley Branden (age: 22, occupation: SCAD student).	As soon as possible.	The effects of wearing masks on the body while participating in outdoor sporting events.	Some hidden health effects (no feeling or long-term effects).
Has social media engagement become and even more important tool for connection?	How have social media users' priorities and interests have changed during the course of this global pandemic?	To determine the positive or negative effects of the social media during a pandemic, and how it affects the mental health of users	**Quantitative** Online questionnaires and surveys, sampling various social media users of all demographics	Experienced social media users, New-to-social-media users (in order to stay in contact with family or work), Paid Professional social media users (such as YouTubers and Influencers)	**Primary Research** Observations, interviews, surveys, social media	Social Media users, Businesses, Influencers, SCAD/University students	As soon as possible.	How much of a significant impact social media has on spreading fear and panic related to the coronavirus pandemic with a potential negative influence on people's mental health and psychological well-being. If people are facing psychological anxiety.	The impact of social media usage among people varies depending on an individual's demographics. Is misinformation being spread at the worst possible time?

RESEARCH MATRIX | *Adoption of Health and Safety Protocols*

Sub-Questions	What do we need to know?	Why do we need to know it?	What kind of data will answer this question?	Where can we find the data?	What research methods should we use?	Who can we contact for access?	When do we need to get a hold of this data?	What will we learn from this data?	What might we be missing?
While school closures may be necessary to slow the spread of the virus, what adverse affects does closure have on parents and students?	How is the public education's system preparing to prevent widespread illness in the school community?	To maintain the health and safety of parents and students, staff, and the community and maximize student learning and thriving amidst a pandemic	**Qualitative** Observing school leaders and how they follow guidance from their state educational agency and public health department, along with their counterparts at the county and local levels	News outlets, the government, state agencies that are posting frequent updates on COVID-19 risk levels, numbers of cases, and recommended precautions	**Primary Research** Surveys, interviews, observation **Secondary Research** Collecting data from schools' websites	School districts, teachers, school nurses, parents, students that were forced to begin online learning	As soon as possible.(school may start in August)	How school systems are being proactive and how they plan to respond in a flexible way to a public health threat. How it will affect us enrolled at SCAD? How will it affect the next generation of children? Are the parents on board?	The privalege of homeschool and trying to bridge the digital divide. Us SCAD students can do, but can parents and elementary students?
What level of confidence does the community have in the ability of public schools to implement and follow sufficient safety guidelines to ensure student and teacher/ staff safety?	What measures are public schools implementing and how is the community responding (by enrollment, opting out of on-campus instruction, etc.)?	To determine the public's confidence in the school system's ability to enact and enforce appropriate safety measures as schools reopen	**Qualitative** Secondary research (guidelines from public school districts), enrollment rates **Quantitative** Minutes from community board/school board meetings documenting reactions of the public to safety protocols, surveys, interviews	Local school district websites, education agencies (TEA in Texas), crowdsourcing from social media user groups	**Secondary Research** Crowdsourcing via social media platforms questionnaires, surveys and interviews	TEA Plano ISD School Board Saigling Stallions Facebook Group (local elementary school social media group for teachers/ parents) Saigling First Facebook Group (local elementary school social media group for teachers and parents)	As soon as possible.(school may start in August)	TBD	TBD
Are people more likely to adopt safety measures/mask wearing if it is made more available to them? (ex. stores providing free masks and hand sanitizer at the entrance to their facility)	Are people willing to adopt a practice if it is more convenient and a portion of the burden of responsibility is taken off of them?	Because availability and joint responsibility might initiate a behavioral change	**Qualitative** Observation of individuals' preventive measures practices outside of stores requiring masks	At retail/business store fronts	**Primary Research** Observation, surveys, interviews	Businesses of all kinds with all different policies (i.e., businesses enforcing masks, businesses offering masks, businesses that don't enforce, etc.)	As soon as possible.	What factors cause people's behaviors to change, or accept the current coronavirus pandemic safety guidelines	Disjointed practices and messaging: Several businesses offer masks, Several businesses require masks but dont offer them, several businesses "require" masks but do not enforce, even some businesses say no masks
What kind of messaging would be people want to see to be inspired/ encouraged to participate in preventive measures/mask wearing?	Can current messaging can be improved to encourage more people to participate in the coronavirus pandemic preventive measures?	To improve the way we communicate important issues to people	**Qualitative** People's perspectives on current messaging, and opinions on what they'd like to see	Surveys and interviews	**Primary Research** Surveys, interviews	People willing to participate	As soon as possible.	How people percieve the current messaging and how they would like it to be improved, how we can use design to create positive social change	Most of this information would be based on personal opinion and perspectives, it's hard to draw conclusive research based on opinion, even if you get an average opinion it'll likely not please everyone

RESEARCH MATRIX | *Adoption of Health and Safety Protocols*

Sub-Questions	What do we need to know?	Why do we need to know it?	What kind of data will answer this question?	Where can we find the data?	What research methods should we use?	Who can we contact for access?	When do we need to get a hold of this data?	What will we learn from this data?	What might we be missing?
What are the barriers to uniform adoption of recommended safety measures throughout the US?	What factors influence the adoption of coronavirus safety precautions.	To identify opportunities for improved adoption of safety precautions and slow the spread of the coronavirus pandemic.	**Qualitative** Existing studies, articles and news, fixed-choice survey questions. **Quantitative** Interviews on attitudes towards general and mandated safety procedures and open-ended survey responses.	SCAD library for studies WHO, CDC, coronavirus.gov Surveys/Interviews with user groups	**Primary Research** Surveys, interviews, role playing, scenarios **Secondary Research** Journal articles, news sources.	Larry Leicht; Amber Isbell; Shelisa LaRue; Gabe Palacios; Cole Russell; Andy Nagel; Laura Cleary; Meredith Teplin; Destiny Garcia; Suhan Yilmaz; NextDoor Plano Group	As soon as possible.	TBD	Underlying causes of slow adoption of safety behaviors (cultural, societal) that have nothing to do with the virus.
How are businesses enforcing local mandates around coronavirus safety measures?	How effectively and in what ways businesses are enforcing local safety measures.	To uncover patterns in communities around social distancing measures and the impact on residents.	**Qualitative** Written safety policies of local businesses, local guidelines/ mandates. Observations of enforcement of safety procedures.	Retailer/business websites Social media posts/feeds Local government websites Observations Interviews and surveys	**Primary Research** Interviews (scenarios) with local business leadership, questionnaires sent out to local business leadership **Secondary Research** Journal articles, news sources.	Cole Russell; Gabe Palacios; Kelvin Henry; Mayor Harry LaRosiliere; Texas DSHS Commissioner John Hellerstedt	As soon as possible.	TBD	City demographics (including religious, ethnic, racial, age, economic and political breakdowns).
How do mandate and messaging discrepancies across various levels of government affect the people's adoption of the coronavirus pandemic preventive measures? (shelter-in-place, mask wearing, social distancing)	Various messaging across the country, as well as local municipalities within a region. What signage and media (social and news) across what platforms affect consumers' decision to follow advice or rebel against it?	To understand the disparity of mask wearing/ social distancing/ preventive measures and practices across the country	**Qualitative** Various government (local/state/ federal) orders, and locals' response to those orders	news media, social media, government websites, local businesses' websites and information, and store front signage	**Primary Research** Observing signage, surveying and interviewing locals **Secondary Research** Collecting data from relevant websites, local news stations	Government officials, governments websites, news websites, and survey audiences	As soon as possible.	How and what kind of messaging plays a role in people's awareness and risk tolerance of coronavirus and preventive measures	rural vs urban impact (geography), demographics
Some people are having public meltdowns. How do the discrepancies in mask orders from various levels of government and businesses affect people' acceptance and ability to adhere to the safety guidelines?	What caused these people to make a public scene and why? What are the consequences of those people's actions, both individually and in the community?	To better understand how the policy changes during the coronavirus pandemic impact mental health, and what the boiling points for people are	**Qualitative** First hand accounts of people who were present or impacted by someone's public meltdown, and news reports about it	Reports of people acting out or "going viral" on social media, before and after store policies involving customers and best practices	**Primary Research** Interviews, observing footage **Secondary Research** News outlets, social media, store policies	Stores where these instances happened, eye witness accounts	As soon as possible.	More about human behavior during a pandemic, negative impact on morale and mental health due to inconsistent messaging, and the consequences when people lash out	How often this actually happens (probably not all that much) vs how much it gets reported by social and news media (people going viral and trending)

RESEARCH MATRIX | *Associated Waste Production*

Sub-Questions	What do we need to know?	Why do we need to know it?	What kind of data will answer this question?	Where can we find the data?	What research methods should we use?	Who can we contact for access?	When do we need to get a hold of this data?	What will we learn from this data?	What might we be missing?
How to environmental factors such as heat and humidity play a role in the adoption of mask wearing during outdoor family fun?	If people are worried about having trouble breathing through their mask, are they willing to adjust in order to make the experience more manageable?	Florida is already breaking covid-19 records daily, is the Sunshine States heat to blame?	**Qualitative** Understanding not only Floridians, but tourists, level of comfort in wearing a mask during the heart of summer. Gathering peoples experiences before and after wearing face masks became mandatory in Florida's extreme heat and humidity.	Florida natives and locals, amusement park workers, and visitors and tourists	**Primary Research** Surveys, interviews, observation **Secondary Research** Photo studies, the weather channel, websites, social media, local businesses	Floridians of all ages, people that plan to visit Florida, OR California, people that have visited Florida in the past	As soon as possible. (Amusement parks such as Universal Studios have already opened)	When combining masks with heat and humidity, we will learn if people will adjust: Will they pick a material that is breathable? Will they be smart when selecting the color of their face mask as darker shades will attract the sun? Will people carry extra masks in case they sweat through one? Will they limit their time outdoors? Will they wear it correctly?	Answers will be fueled by anger rather than a level-head. Every county has a mandated mask requirement and people can be refused service. There are even protests going on this week against masks.
What is the environmental impacted of disposable face masks and how has it contributed to pollution in the coronavirus pandemic?	Are disposable masks an increased burden on municipal waste disposal and recycling?	The generation of large amounts of disposable mask waste increases the difficulty of recycling	**Quantitative** WHO marine litter analysis, and report from the Municipal Waste Disposal Office. **Qualitative** Conduct anthropological observations and interviews with garbage handlers and mask wearers"	Related government agencies and UN websites (Secondary research) Conduct surveys on mask wearers and garbage disposal staff (primary research)	**Primary Research** Experts surveys, storyboard, interview, information collected and synthesized from existing data from google, Questionnaires, Graffiti walls	Rossel Kluwe (age: 27, occupation: illustrator); Charles Chen (age: 23, occupation: SCAD student).	As soon as possible.	We will know how and where the face mask users discard the waste masks, And know how the waste masks are handled, and whether they will pollute the environment	Some audiences may not tell the truth (they may discard masks at will)
Have disposable face masks increased the chance of infection?	Do discarded masks increase the spread of the virus?	People are forced to use masks, but they don't know how to dispose of discarded masks is healthy and safe	**Quantitative** Some journals about waste mask research and remarks by medical experts on social media. **Qualitative** The process of people discarding masks	Journals on SCAD library wsebsite.WHO report on waste face masks (Secondary research).Ethnographic observation of the process of people discarding masks (primary research)	**Primary Research** Experts surveys, participant observation,interviews, photo studies, Graffiti walls	Johnson Marc (age: 20, occupation: SCAD student); Rossel Kluwe (age: 27, occupation: illustrator)	As soon as possible.	We will understand the probability of people being infected with a waste mask containing a virus and how people discard the waste mask in a safe way	People may have accidentally touched a waste facemask

REFLECTIONS | *PART TWO*

To say that Team PART is an amazing team of individuals is an understatement. From Day one we have all acclimated to a very difficult topic of research (COVID-19 and the idea of mask safety) with vigor and determination in a way that you would think we have all been working together for years. Each of us has brought so much experience and raw creativity to this project, it's an exciting venture to experience the "what's next" week after week. Personally, I have thrived in this collaborative environment much better than in past classes. The idea of being part of a creative team like this is an exciting chapter in my SCAD career, and one that I know I will take with me into my creative future. The 5 of my teammates all come from different walks of life and have adapted into one strong cohesive unit with this research project. I am eager to learn more about the Miro software and how it's User Experience capabilities will help us develop stronger data points and reflections as we move forward.

To date, our team has worked very well together - everyone is engaged, supportive, and we never have a lack of volunteers to take on assignments. Our survey, posted via social media, gained a much larger response than anticipated and has yielded over 50 opportunities for interviews, which we're in the process of scheduling and conducting this week. As for myself, I've tried to prioritize within interviewees those who have healthcare, education, or government experience with the pandemic, and have filled in other community members around those interviews. Next will be to aggregate the interview data and map it out in Miro, seeking to identify and uncover patterns in thought, attitude, and behavior that we haven't yet uncovered.

Before going to Methods of Contextual Research, I was very nervous and nervous, because my undergraduate abilities are very weak, but at the same time, I was also looking forward to it. I believe that I can learn a lot of useful knowledge through this course. After reading the textbooks that the teacher asked us to read, I've gained a deeper understanding of ethnography and contextual research, and I know that research is not a simple online collection of second-hand information. When I entered ethnographic research, I found Participant observation is a very rigorous but also very interesting job. Through my observations, I can learn a lot of details that I usually do not notice and information that cannot be collected on the Internet. After observations, I also learned how to create questions that when it comes to interviews of my interviewees, and then collecting more information by creating broad open questions. In the third week of class, we created our consent forms. From the very beginning, we collected the "who's" with consent on line. Then we constantly adjusted our information to match our theme. Everyone in the team is making suggestions, and we want to give interviewees a more professional and friendly feeling. We changed our team name from COVID-19, and it then became the Pandemic Awareness Research Team (PART), and we also created a logo belonging to our group. The final result was shocking! Everyone in our group is from a different state, and our strengths and weaknesses are also different so that we can cooperate better and finally get satisfactory outputs. I am grateful for Professor Kwela's guidance and the team's efforts, and I look forward to gaining more in our future work.

I was apprehensive about approaching such a large topic as a quarter-long research project. However, I am a big fan of studying human behavior, why people do the things they do, and introspection into my own human nature. The first few weeks of the course reeled me in with ethnography and primary research like observation; it was familiar because apparently all of my reading and exploring before this class was essentially secondary research, and now I am fortunate to be able to study this with an academic eye now. Group projects can be "groan-worthy" at times as well, but I deeply appreciate this team, not only for our incredible ability to work together, explore ideas and conduct this project but for their presence during the crisis in general -- this is really the most socializing I've gotten in months! This is far different than what I've experienced during undergrad and in professional life. I welcome this experience; I'm learning every day -- from and with my team and me particularly and enjoying the opportunity to research an historic event while it is happening.

This week has been exciting conducting face-to-face (Zoom) interviews with people and understanding how the Coronavirus Pandemic has been impacting them directly. I'm beginning to hear details and answers to questions that I would not have expected or assumed otherwise. For example, people have increased stress levels because they can't attend a nail salon, not because they're missing the service itself, but because it takes away their dedicated time to relax and relieve stress. Without that dedicated time, stress levels are heightened. I'm looking forward to talking to more people and uncovering more interesting results.

I entered this course with novice assumption and curiosity towards contextual inquiry. There was surely a feeling of unease as I knew I lacked experience conducting questionnaires and surveys. As we dove into ethnographic research, I instantly became interested in learning more about people and various environments. Now I have this mindset when I enter new spaces, I recognize the importance of the people and places within the environment. I realized this was a great head space to be in as I joined the Pandemic Awareness Research Team. We are all in complete agreement about the importance of the lived experiences of individuals, their ideas, values, and viewpoints. I admire how we each bring talent and treasure to the table, have no problems communicating, and are understanding each other's strengths and weaknesses. For example, in Unit 4 my team visualized a consent form. It all started with a draft and by the end of the week, after we each took the time to review and revise, we had this amazing consent form that was so well put together. We all seem to be proficient in collecting and examining data and are very aware of each of our statewide mask mandates. As I began conducting interviews with educators, people in the health field, and fellow Floridians, I was able to discern that there are integrated systems with interrelationships that exist within communities. The more people I engaged with, the more I was able to understand the community through the eyes of my participants. Because I have such a great team, I am excited about our upcoming steps in identifying common themes and contextualizing data together because there is much more to discover.

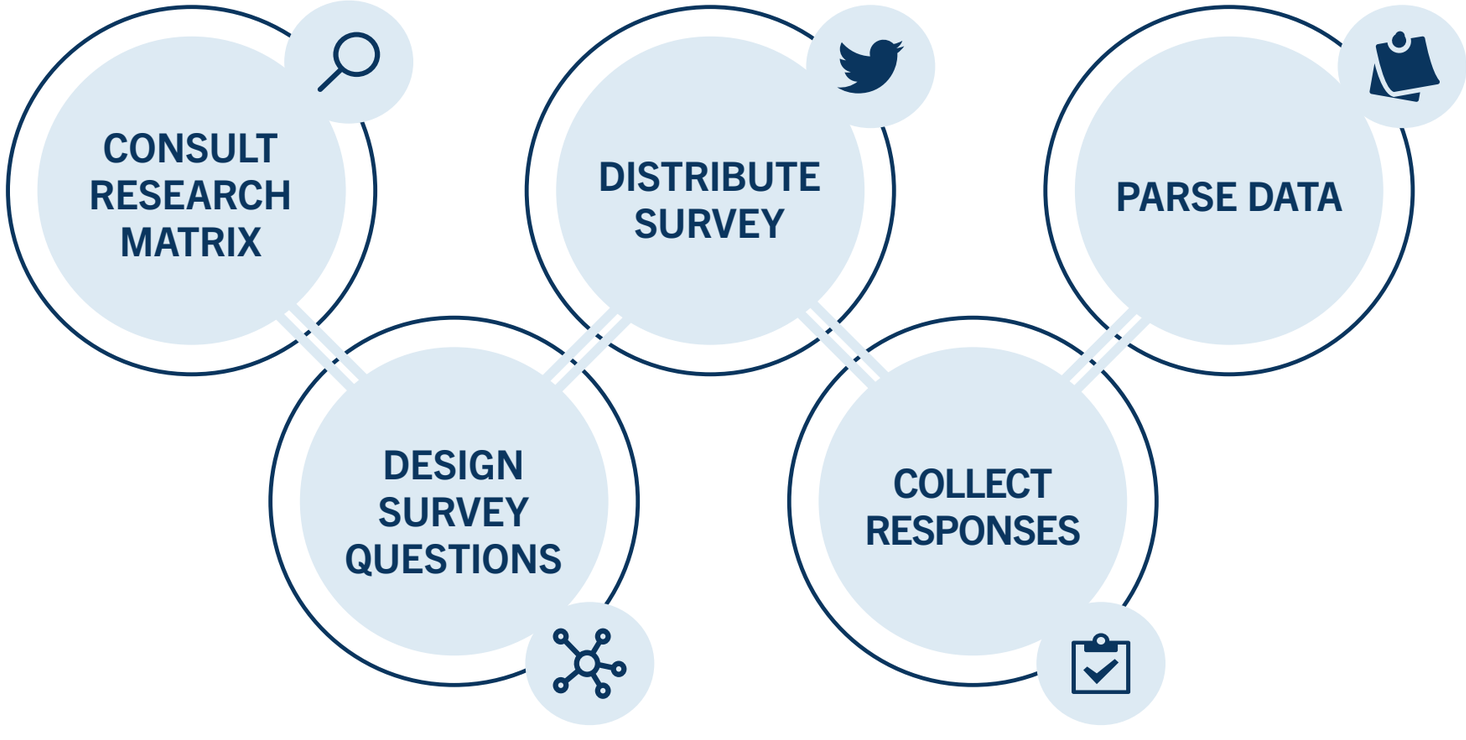
LEARNING OUTCOMES

- Conduct primary research in the field and in environments of use
- Utilize questionnaires and discussion guides
- Organize your data into a working wall

PART THREE:

PRELIMINARY FIELD RESEARCH

SCREENER SURVEY | *Research Protocol*

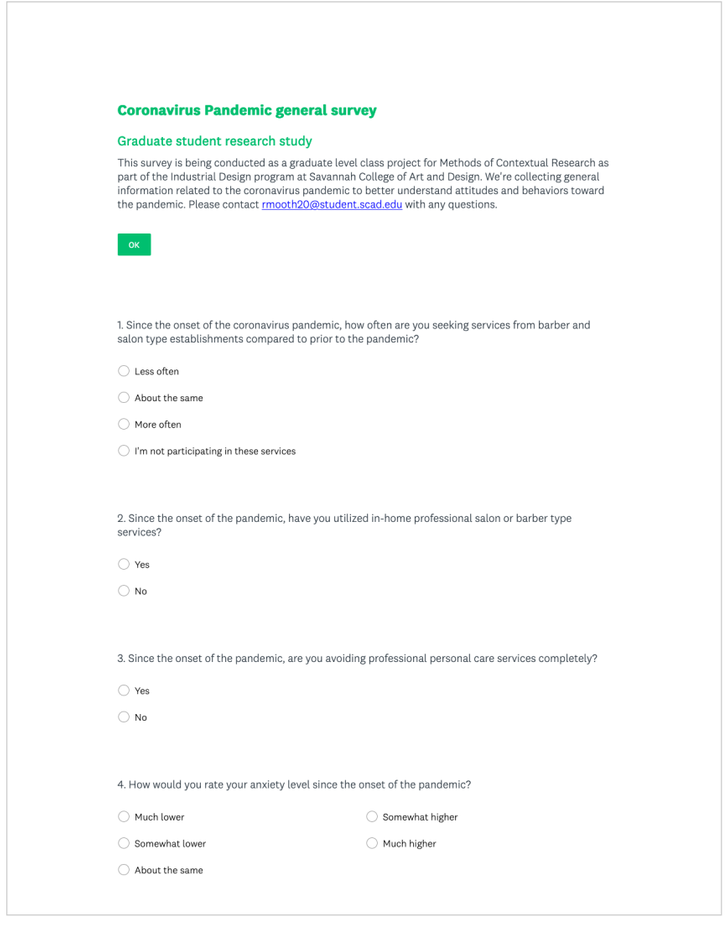


SCREENER SURVEY

We developed a short survey to send to a wide audience with the aim of inviting a subset of respondents to participate in in-depth Zoom interviews.

The survey was sent to **2,000+** candidates through social media, Slack groups, and email.

With a **9.5%** response rate, we collected **189** survey responses. The survey concluded with a request for participants to provide contact information if they were interested in participating in further Zoom interviews. With **56** interview volunteers, we had a robust group of interviewees to choose from.



Coronavirus Pandemic general survey

Graduate student research study

This survey is being conducted as a graduate level class project for Methods of Contextual Research as part of the Industrial Design program at Savannah College of Art and Design. We're collecting general information related to the coronavirus pandemic to better understand attitudes and behaviors toward the pandemic. Please contact rmooth20@student.scad.edu with any questions.

OK

1. Since the onset of the coronavirus pandemic, how often are you seeking services from barber and salon type establishments compared to prior to the pandemic?

- Less often
- About the same
- More often
- I'm not participating in these services

2. Since the onset of the pandemic, have you utilized in-home professional salon or barber type services?

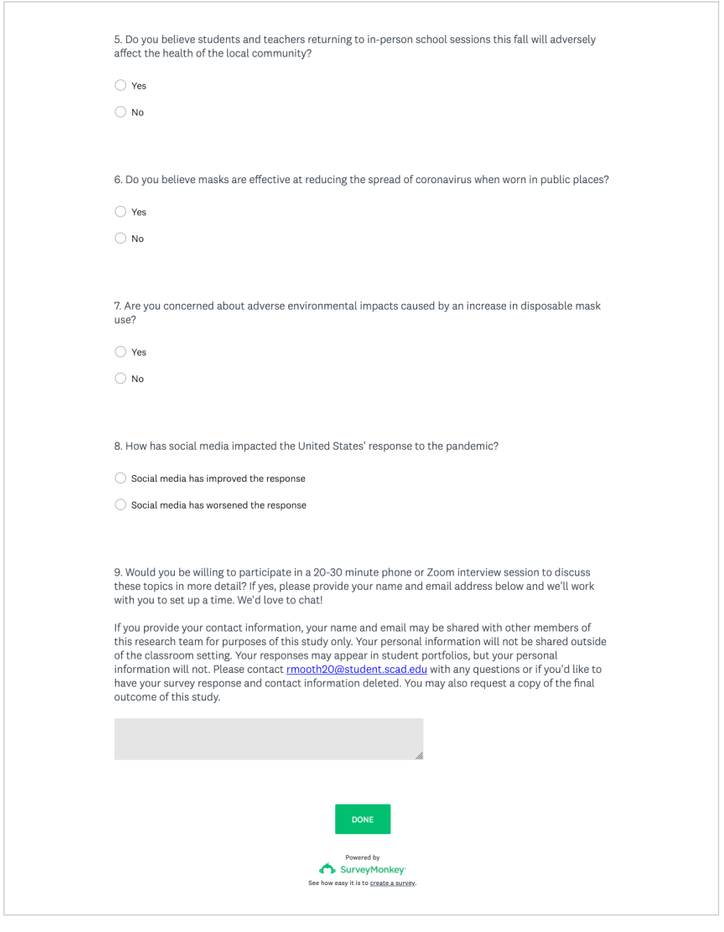
- Yes
- No

3. Since the onset of the pandemic, are you avoiding professional personal care services completely?

- Yes
- No

4. How would you rate your anxiety level since the onset of the pandemic?

- Much lower
- Somewhat lower
- About the same
- Somewhat higher
- Much higher



5. Do you believe students and teachers returning to in-person school sessions this fall will adversely affect the health of the local community?

- Yes
- No

6. Do you believe masks are effective at reducing the spread of coronavirus when worn in public places?

- Yes
- No

7. Are you concerned about adverse environmental impacts caused by an increase in disposable mask use?

- Yes
- No

8. How has social media impacted the United States' response to the pandemic?

- Social media has improved the response
- Social media has worsened the response

9. Would you be willing to participate in a 20-30 minute phone or Zoom interview session to discuss these topics in more detail? If yes, please provide your name and email address below and we'll work with you to set up a time. We'd love to chat!

If you provide your contact information, your name and email may be shared with other members of this research team for purposes of this study only. Your personal information will not be shared outside of the classroom setting. Your responses may appear in student portfolios, but your personal information will not. Please contact rmooth20@student.scad.edu with any questions or if you'd like to have your survey response and contact information deleted. You may also request a copy of the final outcome of this study.

DONE

Powered by SurveyMonkey

See how easy it is to create a survey.

SCREENER SURVEY | *Participant Map*

SCREENER SURVEY | *Potential Interviewee Breakdown by Role*

6

HEALTH PROFESSIONALS

April Hoare, RN
Johnson City, TN

Amber Isbell, 40
PICU Nurse at Dallas Children's
Dallas, TX

Erica Barr, RN
ER Nurse
Spectrum Health Hospitals
Grand Rapids, MI

William L., 32
Blood Bank Lab Supervisor
Orlando, FL

Kimberly Gill, RN, MPH
Patient Care Coordinator
Vanderbilt University Medical Center

Suhan Yilmaz, 29
Occupational Therapist
Baylor McKinney

STUDENTS

Zilan Zhou, 24
SCAD Student
Savannah, GA

Caron Ke, 24
SCAD Student
Savannah, GA

Charles Chen, 23
SCAD Student
Savannah, GA

Shelisa Larue, 27
Design Student At UNT
Home Depot Associate
Dallas, TX

Johnson Marc, 20
SCAD Student
Savannah, GA

Merredith Mooth
MTSU Student
Murfreesboro, TN

6

6

EDUCATORS

Dr. Tanu Rana
Assistant Professor
Meharry Medical College
Nashville, TN

Billy Reiter, 38
3D Modeling Instructor
Orlando, FL

Cathy Gray
Assistant Professor
Spring Hill College
Mobile, AL

Ben Vandyke
Department Chair, School Of Visual Media,
Michigan State University
Lansing, MI

Hongchun Li, 45
Professor Of Dalian,
Jiaotong University
Dalian, China

Sheri Selph
Assistant Professor
Middle Tennessee State University

7

RETAIL

Gabe Palacios, 42
Assistant Manager, Operations
Home Depot

Cole Russell, 33
Assistant Manager, Operations, Home Depot
(Immunocompromised Baby - Heart Condition)

Jeffrey Martinson, 33
Supervisor, Customer Service
Home Depot

Destiny Garcia, 19
Home Depot Associate

Kelvin Henry, 40
Store Manager For Home Depot

Corinne Donah, 38
Assistant Manager at Attic Salt
Houston, TX

Glacy Page, 35
Operator At Shell Deer Park
Houston, TX

3

EXPERTS

Mayor Harry LaRosiliere
Mayor for the City of Plano, TX

John Hellerstedt
Texas DSHS Commissioner

Brian Atmar, 34
Emergency Management Specialist
University Of Houston
Houston, TX

24

OTHER PROFESSIONALS

Greg Leibowitz, 37
Sr UI/UX Designer, Healthcare
Orlando, FL

Brian Haines
Hospitality Manager
Graduate Hotels and Dish Pen
Royal Oak, MI

Cammy Ng, 26
Real Estate Agent
Orlando, FL

Jonathan Schibalski, 33
Small Business Owner
Orlando, FL

Mike Rosso, 27
Downtown Orlando
City Planner
Orlando, FL

Peter John Vander Kooij, 44
Graphic Designer
Hamilton, Ontario

Kelsey Weideman, 22
Attractions Coordinator,
Walt Disney World
Orlando, FL

Laura Cleary, 58
Retired

Meredith Teplin, 31
Pandemically-Unemployed

Krystal Chaisson, 27
Office Administrator
Houston, TX

Andy Nagel, 62
Manager Of Integrations, Travelocity at Expedia

David Hoel
International Business Development Manager, Nice
San Antonio, TX

Matt Dimmer
Creative Director
Mcgarry Bowen
Chicago, IL

Brandi Huyser
Director Of Xs Energy & Next Gen Strategy, Amway
Ada, MI

Josh Ralya
Owner And Creative Director, Ideology Productions
Ada, MI

David Vanderveen
Chief Operating Officer
New Age Beverage Company
Laguna Beach, CA

Corey Tumey
Owner of C. Tumey Law Group
Houston TX

Rossel Kluwe, 27
Illustrator
Savannah, GA

Ziliang Luo, 26
Product Design Director
Shenzhen, China

Larry Leicht, 34
Audio Director.
Freeman Av

Neely Adkins
Communications Manager, Challenge Manufacturing
Grand Rapids, MI

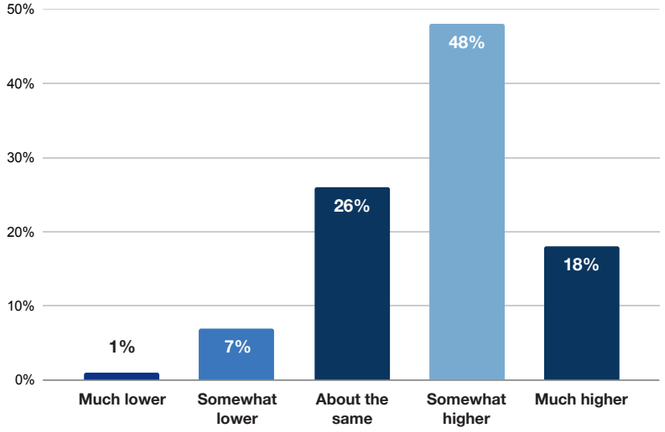
Robin Renzenbrink
Xreative Services Manager, Amway
Ada, MI

James Froeschner, 58
IT Professional
Dallas, TX

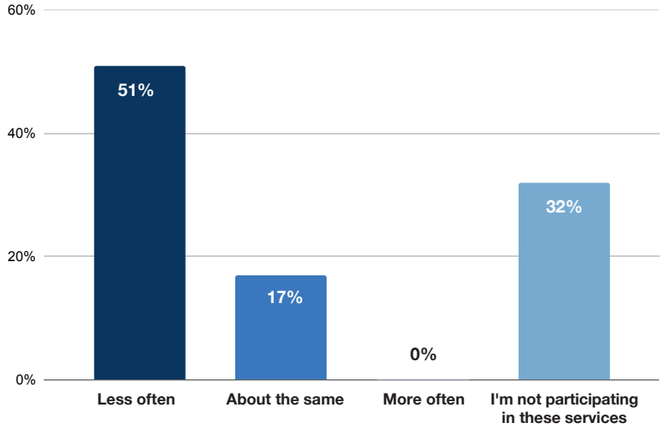
Becky Burnside
International Corporate Travel Consultant
Dallas, TX

SCREENER SURVEY | *Results*

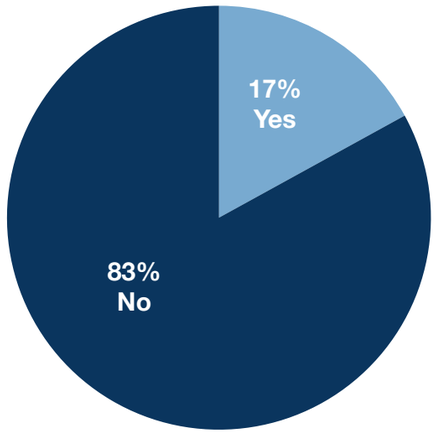
How would you rate your anxiety level since the onset of the pandemic?



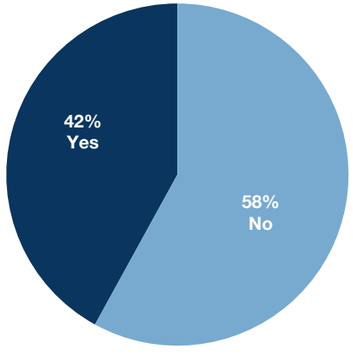
Since the onset of the Coronavirus Pandemic, how often are you seeking services from barber and salon type establishments compared to prior to the pandemic?



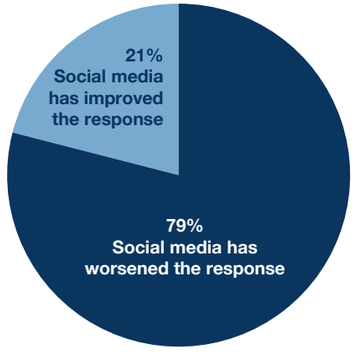
Since the onset of the pandemic, have you utilized in-home professional salon or barber type services?



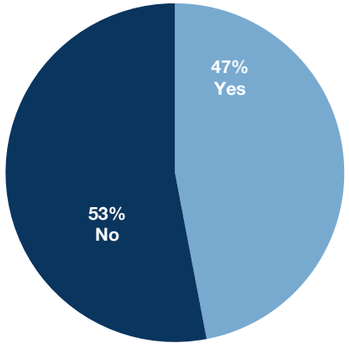
SCREENER SURVEY | *Results*



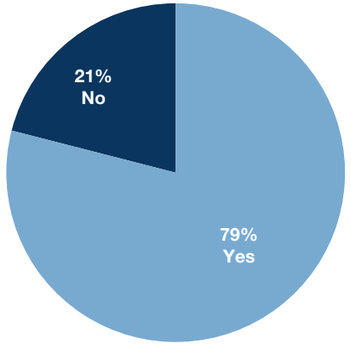
Are you concerned about adverse environmental impacts caused by an increase in disposable mask use?



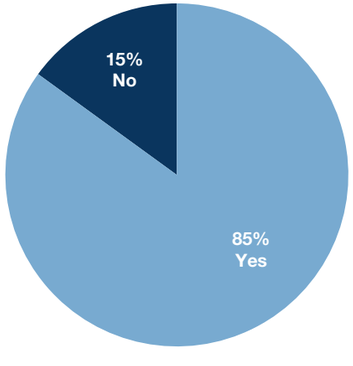
How has social media impacted the United States' response to the pandemic?



Since the onset of the pandemic, are you avoiding professional personal care services completely?



Do you believe students and teachers returning to in-person school sessions this fall will adversely affect the health of the local community?



Do you believe masks are effective at reducing the spread of coronavirus when worn in public places?

REFLECTIONS | *PART THREE*

As week 6 (or Part 3) brought on the onslaught of interviews and further discussion points - personally I feel that the research my Team and I are doing is incredibly viable, and has opened up some incredible data with what is going on in the world. It has been great to interact with my interview participants, and connect on a more professional level. It's been great to understand and see their viewpoints as well. As we look at starting the 5th month of the pandemic, it is hard to imagine that it has actually been 5 months since we have found ourselves in this strange world. Grad school has brought me a different level of focus these past months, and weeks in this specific course; that I can honestly say has been a refreshing perspective, as I look more to my future; than what is currently the life I am living in. To reiterate and say that my research Team, "Team PART" isn't a bunch of "rockstars" is a complete understatement; they are all incredible individuals and have brought so much hard work, passion and insights to this project with me. I am so excited to connect with them week after week and really see this project come to fruition.

This week (and previous) was hectic with interviews and trying to map them on the Miro board. I think the biggest struggle that I've had, and particularly in interviewing people who I know very well personally, is to remain objective. It's very easy to fall into casual conversation and to stray from the academic questions at hand, especially when I'm already very familiar with their thoughts, attitudes and beliefs around the current crisis. I've had the opportunity to interview many people (9) who come from varying backgrounds, economic situations, professions, belief systems, etc., and it's been interesting to see the differences in their thoughts and behaviors, but even more so the commonalities. I'm hoping as we all map our interviews in Miro we'll be able to uncover even stronger themes that we can pull out as insights for our final presentation. We've begun discussion how we might retarget survey respondents (who declined to interview) with a more in-depth questionnaire around some of the themes and topics we've uncovered in interviews to date.

In the third week, my main task was to conduct online or offline immersive interviews with my interviewers. Through the interviews, several interviewees left a deep impression on me. The first is Meng Huang, who I was an intern doctor in my hometown and participated in the first-line nucleic acid testing work. He told me a lot of professional knowledge, knowledge and ways of virus transmission, and the steps of nucleic acid testing. The second interviewee was a lady I met during fly on the wall observation. This lady had just finished running and was wearing a mask. so I conducted a brief interview with her, I want to know when she exercises wearing a mask Does she feel difficult to breathe, but she told me that when she runs, she doesn't wear a mask more often, but uses a towel to cover her mouth and nose. When she meets strangers, these interesting interviews made me collect a lot the key data, I enjoy this process!

I often find it hard to be extremely good at public speaking and communicating ideas, so interviews intimidated me a bit. The first one I did I was very nervous and I found myself looking at my question screen quite a bit. But afterwards, I rewrote quite a few things to be able to have more of a conversation instead of an interrogation, and I got quite a bit more comfortable with the flow of the interview, and how I asked questions. It turned out to be an enjoyable experience, and I almost wish I had time to interview several more people. I find that I'm learning a lot from these interviewees, connecting with them, and I'm grateful that everyone has been willing to give up information and share their stories with me so easily – I honestly thought it would be closer to pulling teeth to get people to talk. I'm also really enjoying the Miro board, and once I started putting notes down it became so easy to see patterns and how everything is related; it's a great tool.

Part three of this research project focused on more interviews which is always an interesting and educational experience. Making a human connection and hearing unique, individual stories helps create a better understanding of what people are going through. Otherwise, we're guessing, assuming our experiences are just like everyone else's. I'm looking forward to moving on beyond the interview phase and into the analysis phase to start uncovering common patterns which will lead to potential solutions even further down the road. The most interesting takeaway this week was hearing a common thread from interviewees that they enjoyed the interview process because it gave them a chance to talk out loud about all the pandemic related challenges. I got the impression that this was almost a therapeutic exercise for many of the interviewees.

Conducting interviews and surveys last week was not only a new experience, but also a chance for me to reconnect with old cohorts. I noticed how well Team Part has been maintaining collaboration and I feel that our experience creating a Miro board can be applied to other projects. I am also very impressed by how easily our team structured board content and my teammates never over complicate anything. I enjoyed developing a system for organizing our data and ensuring that no information gets lost out in the field during analysis. We know not to come to premature conclusions, but we are so anxious about discovering what our data might mean. With our research surrounding COVID-19, I do find myself struggling to maintain disinterestedness and keeping a healthy distance between what our data says and my own perception. What was most surprising for me this week was the mindfulness involved and avoiding my own bias during the preliminary field research we conducted.

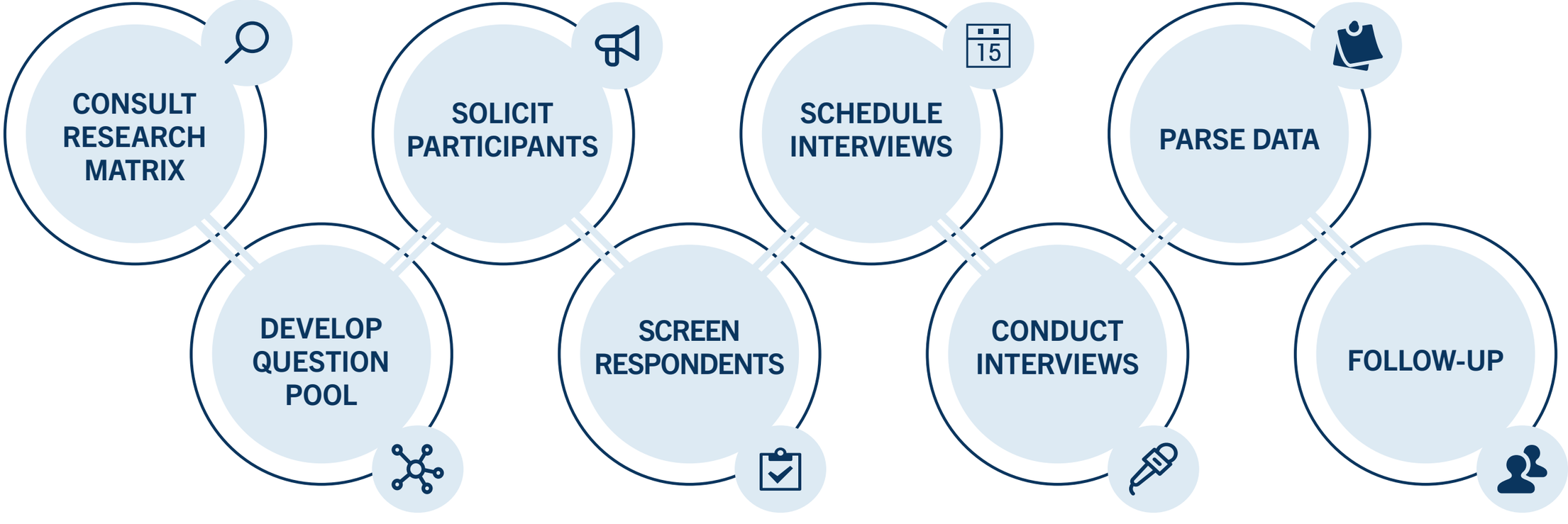
LEARNING OUTCOMES

- Conduct interviews and build an information database
- Refine their research matrix
- Compile and organize research data into a working wall

PART FOUR:

FIELD RESEARCH AND INTERVIEWS

INTERVIEWS | *Research Protocol*



IN-DEPTH INTERVIEW QUESTIONS

General questions

Introduction: Starting off, tell me a little about yourself, name, role, professionally or otherwise, etc...
How has the Coronavirus Pandemic affected your day-to-day life?
How has the pandemic affected your personal care routine for activities like getting a haircut?
What kind of impact has the pandemic had on your overall anxiety level on a day-to-day basis?
From a professional perspective, how has the Coronavirus Pandemic impacted your work?
How effective do you believe social media has been in helping to reduce the overall impact of the pandemic?

Education professionals

As an education professional how do you feel about potentially returning to an in-person classroom environment this fall?
In the scenario that in-person classes resume in the fall, do you feel you can be effective at your job with the right safety measures put in place? How so?
In the scenario that in-person classes resume in the fall, do you feel health risks for faculty and students can be mitigated with the right safety measures put in place?
How effective is online learning compared to an in-person classroom setting?

Health & medical professionals

In the scenario that in-person classes resume in the fall, do you feel health risks for faculty and students can be mitigated with the right safety measures put in place?
What type of measures would be required to reduce risk?
What are the potential impacts if in-person classes resume?
What is the most effective measure we can adopt to reduce the overall impact of the pandemic?

Business owners / Self employed individuals

As a business owner, how has the Coronavirus Pandemic impacted your business, generally?

Environmental protection/sports enthusiasts

How is the pandemic affecting outdoor sports enthusiasts?
What is the environmental impacted of disposable face masks and how has it contributed to pollution in the Coronavirus Pandemic?
Have disposable face masks increased the chance of infection?

INTERVIEW PARTICIPANTS

Expert Interviews

Alison S., 56
Clear Lake, TX
Retired Aerospace Engineer
NASA

Amber I., 40
Pediatric ICU Nurse
Dallas Children's Medical
Plano, TX

Ava D., 33
Euless, Texas
Human Capital Consultant
at Deloitte

Bethany B., 31
Bend, OR
Transitions Coordinator
Partners in Health

Billy R., 38
3D Modeling Instructor
Orlando, FL

Branden T. ,22
SCAD student
Jersey City, NJ

Brian A., 34
Emergency Management
Specialist
University of Houston
Houston, TX

Brock N.
Attraction Designer
Mount Dora, FL

Cammy N., 28
Real Estate Agent
Orlando, FL

Charles C., 24
SCAD student
Savannah, GA

Charles C., 52
Surgery Specialist, Dalian
Central Hospital

Corinne D.
Retail Store Manager
Attic Salt
Houston, TX

Deovandre J., 26
Benton Harbor, MI
Dancer and Marketing
Consultant

Erica B., 27
ER Nurse
Spectrum Health Hospitals
Grand Rapids, MI

Glacy P., 35
Plant Operator
Shell
Deer Park, TX

Greg L., 37
Orlando, Florida
Sr UI/UX Designer in
Healthcare.

Hannah B.
Fort Worth, Texas
Massage Therapist at
Medical Therapies

James F., 58
IT Administrator
Carrollton, TX

Jessica M., 34
Software Specialist
ERP System
Houston, TX

Keith N.
Hot Springs, AR
Unemployed

Kelli'Ann M., 28
Expert in Accident
Reconstruction

Kelsey W., 22
Attractions Coordinator
Walt Disney World
Orlando, FL

Lisa B., 48
Fort Worth, Texas
IT Compliance Analyst at
Workforce Logic

Maddie G.
HR Manager
Vecteezy.com
Bowling Green, KY

Marc J., 20
SCAD student

Marc S.
Independent UX Contractor,
Healthcare
Franklin, TN

Matt D., 46
Creative Director
McGarry Bowen
Chicago, IL

Matt T.
Lead Product Manager,
Lonely Planet
Nashville, TN

Matthew V., 34
Managing Partner,
Catalyst Partners
Grand Rapids, MI

Meng H., 26
Dalian City, China
Intern, Clinical Medicine
Dalian Hospital

Mike R., 27
Planner
Orange County Zoning
Altamonte, FL

Richard F.
COO, Vecteezy.com
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Savannah, GA

Sheri S.
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Tennessee State University
Murfreesboro, TN

Shivani D., 28
Flowermound, TX
Marketing Manager
Expedia Group

Dr. Tanu R.
Associate Professor,
Dept. Medical Education
Meharry Medical College
Nashville, TN

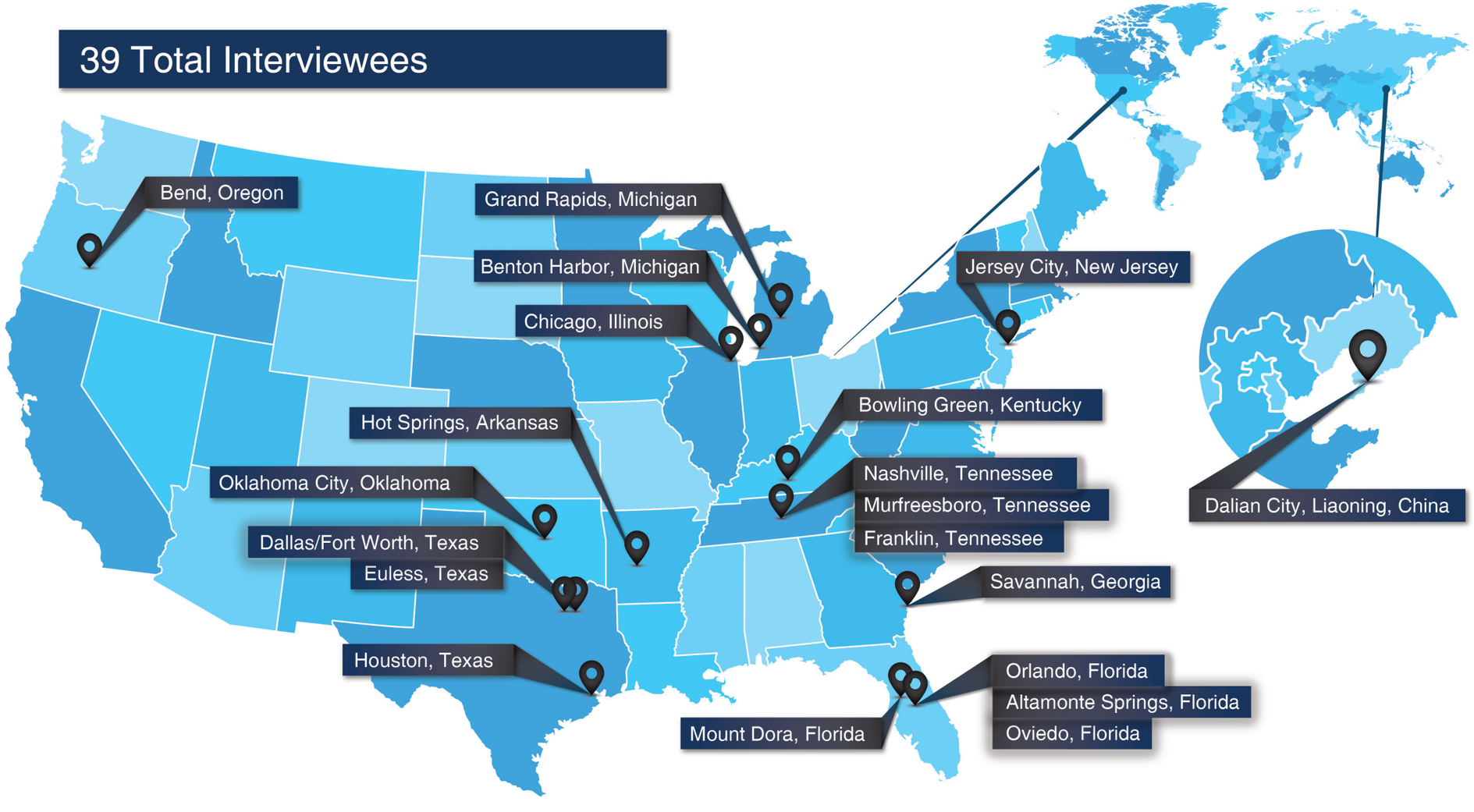
Toni-Ann R.
Researcher
University of Central Florida
Oveido, FL

Tyler F., 33
Melissa, TX
Music Director
Melissa UMC

Wes V., 33
Oklahoma City, Oklahoma
Customer Support for
Milan Milan Medical

William L., 32
Blood Bank Supervisor
Orlando, FL

INTERVIEW PARTICIPANT MAP



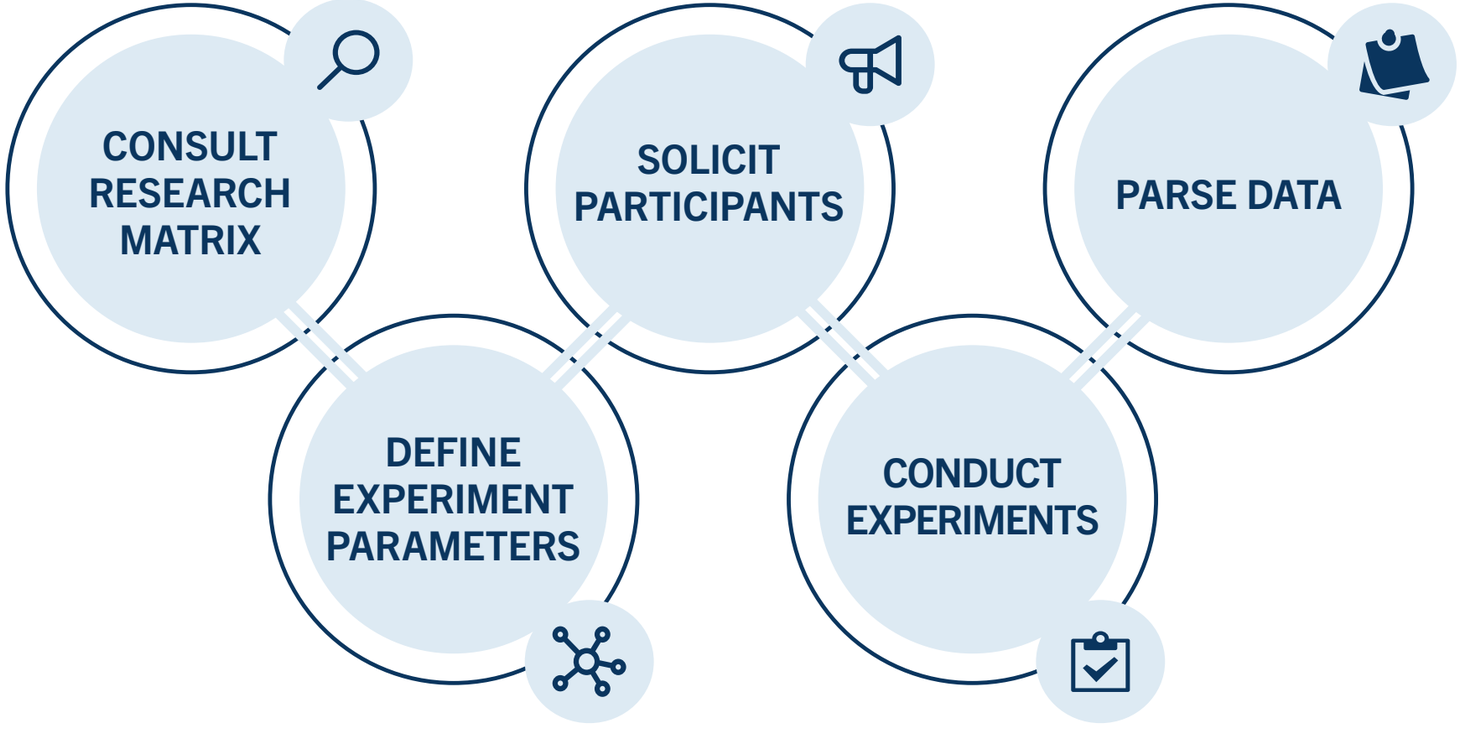
PART FOUR:

EXPERIMENTS

LEARNING OUTCOMES

- Conduct interviews and build an information database
- Refine their research matrix
- Compile and organize research data into a working wall

EXPERIMENTS | *Research Protocol*



EXPERIMENTS | *The effect of wearing a mask on the heart rate of outdoor athletes*

Garden Lake (4024 Kessler Ave., Garden City, GA 31408)
Basketball court (Ardmore, Garden City, GA 31405)

Charles Chen, 24, Male
Zoe Zhou, 24, Female

Explore the impact of wearing a mask on running and playing basketball

Heart rate

Jogging
Charles Chen 130 per minute (without a mask for 5 minutes)
Charles Chen 156 per minute (with a mask for 5 minutes)
Zoe Zhou 124 per minute (without a mask for 5 minutes)
Zoe Zhou 143 per minute (with a mask for 5 minutes)

Playing basketball
Charles Chen 140 per minute (without a mask for 5 minutes)
Charles Chen 152 per minute (with a mask for 5 minutes)

Conclusion

The heart rate of exercising with a mask is 20% higher for boys and 15.3% for women than those without a mask.

Jogging

Date: August 1 **Time:** 4.30PM EST **Temperature:** 89°

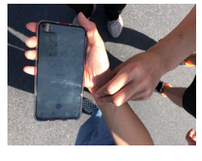
Jog for five minutes without a mask

Jog for five minutes with a mask

Charles Chen has a heart rate of 130 per minute

Zoe Zhou has a heart rate of 124 per minute

Charles Chen has a heart rate of 156 per minute



Zoe Zhou has a heart rate of 143 per minute

Playing basketball

Date: August 1 **Time:** 5:20PM EST **Temperature:** 92°

Play basketball without a mask for 5 minutes

Play basketball with a mask for 5 minutes

Charles Chen has a heart rate of 140 per minute

Charles Chen has a heart rate of 152 per minute

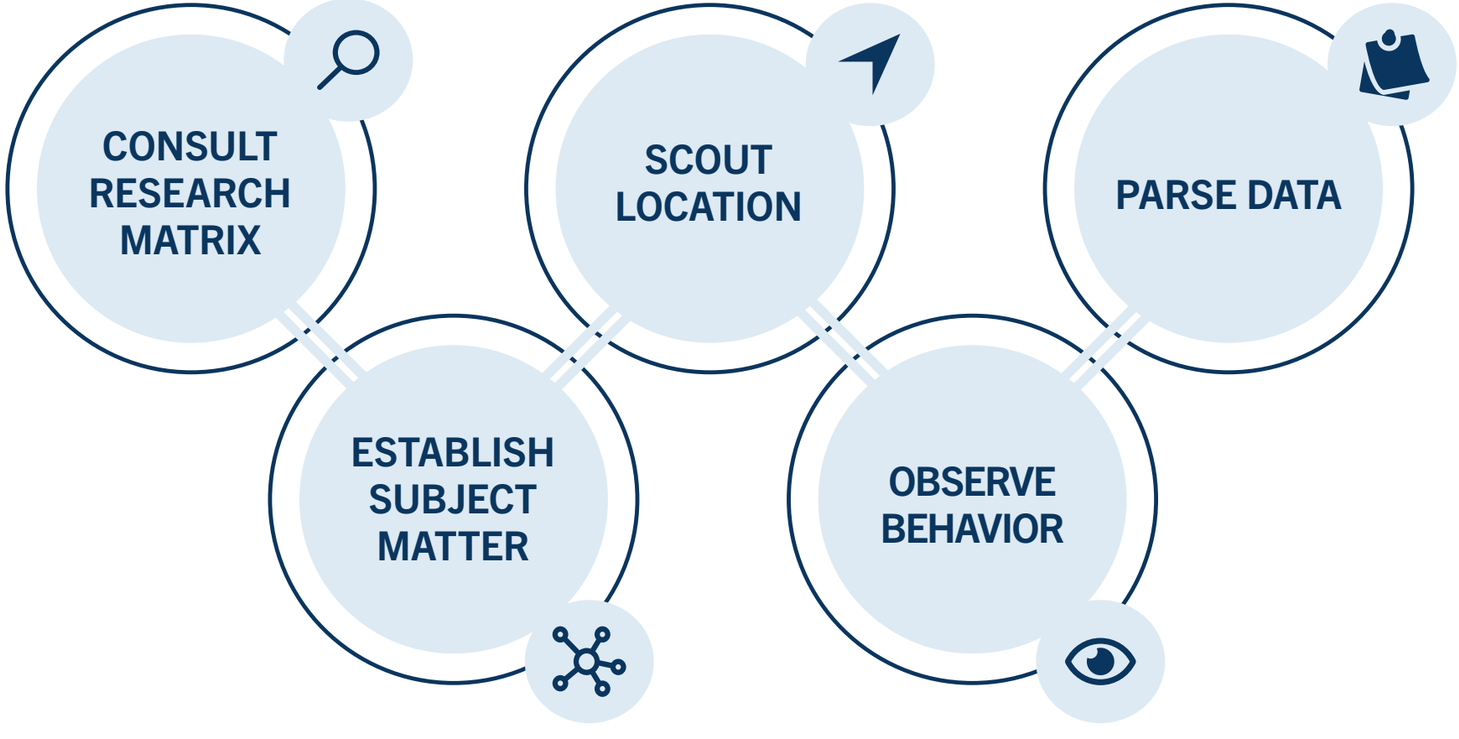
LEARNING OUTCOMES

- Conduct interviews and build an information database
- Refine their research matrix
- Compile and organize research data into a working wall

PART FOUR:

FLY ON THE WALL OBSERVATION

FLY ON THE WALL OBSERVATION | *Research Protocol*



FLY ON THE WALL OBSERVATION | *Exploring people wearing masks for outdoor sports*

Forsyth Park (2 W. Gaston St., Savannah, GA 31401)
Date: August 2 **Time:** 6:00-7:00 PM EST

Forsyth Park spans over 30 acres.It is home to the Confederate Memorial, a half shell theatre, plus tennis and basketball courts. It also offers a cafe, two playgrounds, and ample room for sports and events.

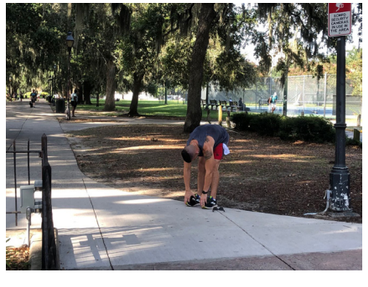
Conclusions

Within an hour of my observation, only 20% of people who exercise wear masks, and I was fortunate enough to interview one of the women who was running with a mask. She told me that running with a mask has an impact on breathing, so when she runs she would cover her mouth and nose with a towel instead of wearing a mask.

Tennis court

A man and a woman are playing tennis and no one else is around, neither wearing a mask

Run



A man is running with people around and no mask

Walk the dog

A family of four and two dogs, none of them wearing masks

Tai Chi

A man is doing Tai Chi, no one is around, no mask

Ride a bike

A cyclist wearing a mask

Run

A woman is running, keeping social distance and wearing a mask

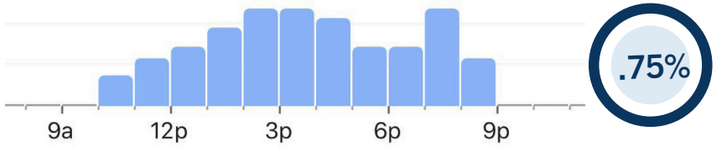
FLY ON THE WALL OBSERVATION | *Percentage of people littering masks*

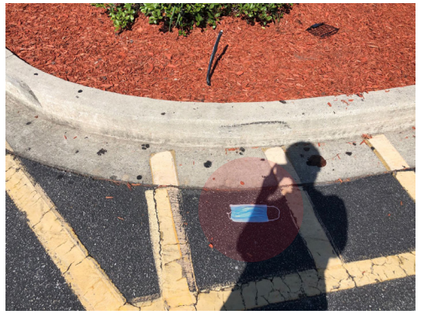
Key Information

Walmart Supercenter & Sam's Club
1955 E. Montgomery Cross Rd., Savannah, GA
Date: August 5 **Time:** 5:00-6:20 PM EST

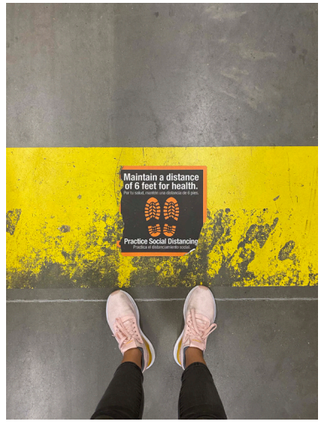
Conclusions

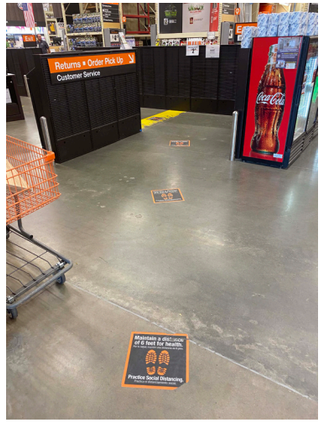
Within 1 hour of my observation, I observed 5 people in depth. None of the 5 people discarded their masks randomly after shopping. They all put the masks in their pockets. Only one person discarded the masks on the road after shopping.
According to the analysis of Walmart passenger flow, the number of people at 4 o'clock is about 1,000, 80% use disposable masks, and the number of discarded masks is 6, so the rate of discarded masks is 0.75%.

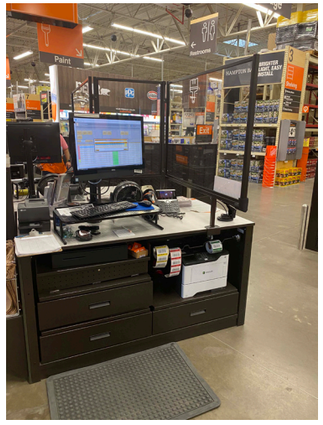


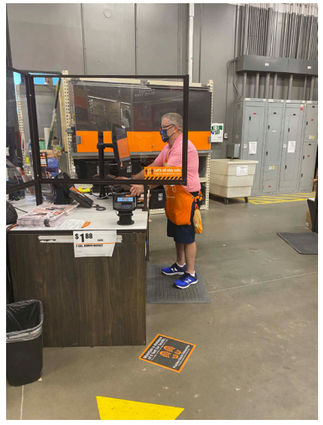


FLY ON THE WALL OBSERVATION | *Social Distancing Adoption at Local Businesses*









Home Depot Store #6833: Plano, Texas
Date: June 20, 2020, 9:00a-6:00p

SESSION 1

Service desk associates that are delivering orders to curbside check-in are now required to wear masks (there is a great deal of grumbling). Most customer-facing associates at the desk are already wearing masks, but a few associates in the store are vocal about their disdain for those who are opting to wear masks. The environment is somewhat tense. There is some indication that masks will be mandatory for all associates in the next few days - there is already talk among some associates about quitting if that rule is instituted.

A number of customers (8 of the 20 comments received on surveys this week) indicated frustration that associates were not wearing masks, particularly those bringing orders out to curbside pickup. Customers in the store have made a point to speak to store managers and supervisors about associates not wearing masks, gloves, etc. It's a very common source of complaint. Customers regularly come around the partition at desks and registers to speak to associates, there is frustration when asked to step back around the partition or maintain a 6ft distance. There is not enough space at the service desk and at registers to accommodate more than 1-2 customers at a true 6ft distance (see visuals on page 6).

Whole Foods: Plano, Texas
Date: June 20, 2020, 6:30p-7:15p

SESSION 2

Made a quick stop at Whole Foods for a specialty item not available at most conventional grocers. Though there is no line outside, there are clear signs and markings delineating where customers need to queue up, at 6ft intervals, outside of the store, indicating that capacity limiting is a regular occurrence.

No signs indicating that masks for customers are mandatory, but I did not see a single customer without a mask, and most had gloves. Employees were sparse, wearing masks and gloves, and most employees on the floor were engaged in some sort of cleaning.

Aisles are marked directionally, one way for each aisle, except for main aisles, where 6ft intervals are clearly marked for reference. All customers I encountered kept a good distance (generally 6ft or greater), waited patiently if they needed to get something off a shelf behind another customer, stood in line patiently.

Registers are a different setup, but the clear plastic partitions have a teller-style half circle hole, which I suspect makes it easier to communicate. Pin pads are covered in plastic, checkers/cashiers do not back groceries. Did not notice music in the store - perhaps that helped with hearing issues?

Sprouts: Plano, Texas
Date: June 21, 2020, 11:30a-12:30p

SESSION 3

Spent a longer time at Sprouts doing a full grocery shop, (masked and gloved) children in tow (childcare is hard to come by these days). No line outside, and no evidence of capacity limiting (as indicated by ropes, interval marks, signage, etc.). Aisles are narrow and omni-directional, which means passing other customers/employees happens at less than 6ft. It does not appear that masks and gloves are mandatory for customers or staff - it's about 50/50 for both groups (though all food-preparation staff and cashiers have masks and gloves).

There appear to be more employees on the floor at Sprouts than at Whole Foods, and certainly more than Home Depot. I have no problem finding an employee to inquire about a product location, but the employee gets into a conventional conversational space, does not social distance, is not wearing a mask or gloves.

At checkout, there is a plastic partition, but not a teller-style communication hole, which makes hearing her difficult. She does bag the groceries. Pin pads are wrapped in plastic, and I observe the cashiers wiping down the pin pad, register and belt with (presumably) disinfectant after each transaction. This makes the wait longer, but there are clearly marked social-distancing spaces for customers enduring the increased checkout time.

FLY ON THE WALL OBSERVATION | *Social Distancing Adoption at Local Businesses*

Home Depot Store #6833: Plano, Texas
Date: June 22, 2020, 9:00a-6:00p

SESSION 4

New mandate: Home Depot now requires all store associates, regardless of role, to wear a mask while clocked in, effective 6/22. 3 store employees have quit over the rule.

There is a lot of talk today amongst employees about the mandatory masks. Nearly all discussion is negative - employees express frustration with discomfort, perceived restriction of personal liberty/choice, and perceived unfairness that customers are not required to wear masks. On the other side of the coin, employees who were already wearing masks express frustration with the complaining. The overall environment is tense. Noticing that the store music is fairly loud, there is a lot of forklift and phone noise. Also, that pinpads are not wrapped. Cleaning activities are not regular or obvious - as a customer, I would not suspect that the store is regularly cleaned.

Conversely, customer conversation on the new mask rule for associates is overwhelmingly positive. Customer comments center around increased feelings of safety, caveatted with comments about difficulty hearing associates. This issue, coupled with the partitions at registers and desks (see page 6) has increased the occurrence of customers violating the 6ft social distancing rule, in favor of being able to hear associates speak. Had to ask multiple customers to step behind the partition and adopted a near-yell for most of the day to communicate.

Home Depot Store #6833: Plano, Texas
Date: June 24, 2020, 9:00a-6:00p

SESSION 5

Negative talk around the mask-wearing has died down considerably, though overall morale still seems low. Employees seem to have adjusted to the new rule, although there are still complaints about having no definite end date, no clear communication of impending measures (with the surge of cases Texas is seeing and consequent state measures to slow reopening), and frustration expressed that customers are not required to wear masks and we are not limiting store capacity.

Customers are still having a hard time hearing associates at desks, between mask(s) and the plastic partitions - customers still coming around the partition to get close to associates for hearing purposes, although some are coming around the partition, but standing a good distance back. This seems to alleviate some of the issues around communication at desks and registers.

Music may definitely be a factor in hearing, as well as the disruptive noise of fork lifts, machinery, phone noise, paging system and conversation.

Conclusions

Social distancing measures (masks, 6ft intervals, gloves, cleaning/disinfecting) seem to be more effectively enforced and followed by customers at the grocery stores than at Home Depot.

Is this a hygiene factor always in play (due to close interaction with food and cultural conventions around food and cleanliness), even when there is not a pandemic?

Is this a function of the store demographics? Or of the store's corporate policies?

Is this a function of traffic flow, store setup, policy communication or other?

Perceptions of social distancing measures appear to be much more contested/ discussed at Home Depot than at grocery stores (by customers AND associates).

Again - is this related to a "common sense" food safety factor? Or is it related to store/industry demographics or corporate policies?

Cleaning measures and "hygiene cues" (such as bagged pin pads and hand sanitizer stations/cart wipes) are much more prevalent at grocery stores than at Home Depot.

Is this an opportunity for improvement of perception or adoption of social distancing measures at Home Depot?

Communication issues (due to layers of masks and solid partitions) seem to be the same at Sprouts and Home Depot.

The Whole Foods model seems to alleviate the communication problems, though the register/ checkout setup is entirely different. Opportunity here to improve conditions and better maintain social distancing at registers and desks at Home Depot?

REFLECTIONS | *PART FOUR*

This week brought about a lot more personal data gathering for me. I'm still navigating Miro, it has been a struggle, but I am diligently powering through it and really seeing the overall data come together. My Team members again, have been excessively hard working and I feel that I have not held my own weight this week as much as in weeks past. (personal injuries aside - I will make a major change with that for the remaining weeks of class.) 2 of my 4 final interviews fell through, so I was a little upset about that – I was looking forward to capturing their viewpoints on the pandemic; I was assuming they would be quite different from my other interviewees? I have been really good at validating my own biases during the interviews, and I feel that I had a real strong sense of professionalism – even though a few of them were very close friends. (I was worried that I wouldn't maintain focus or easily get sidetracked). I am a little overwhelmed at the amount of data my Team has created over these past few weeks – it is quite difficult to view our Research document and not feel that way with everything it contains. I do really appreciate seeing it all come together, but it's still a lot for me to comprehend. One thing I have done is printed the document out, this actually helps me get a better and more cognitive understanding of things when I can actually hold onto them. Looking forward to another strong and much busier week (for me) with my Team!

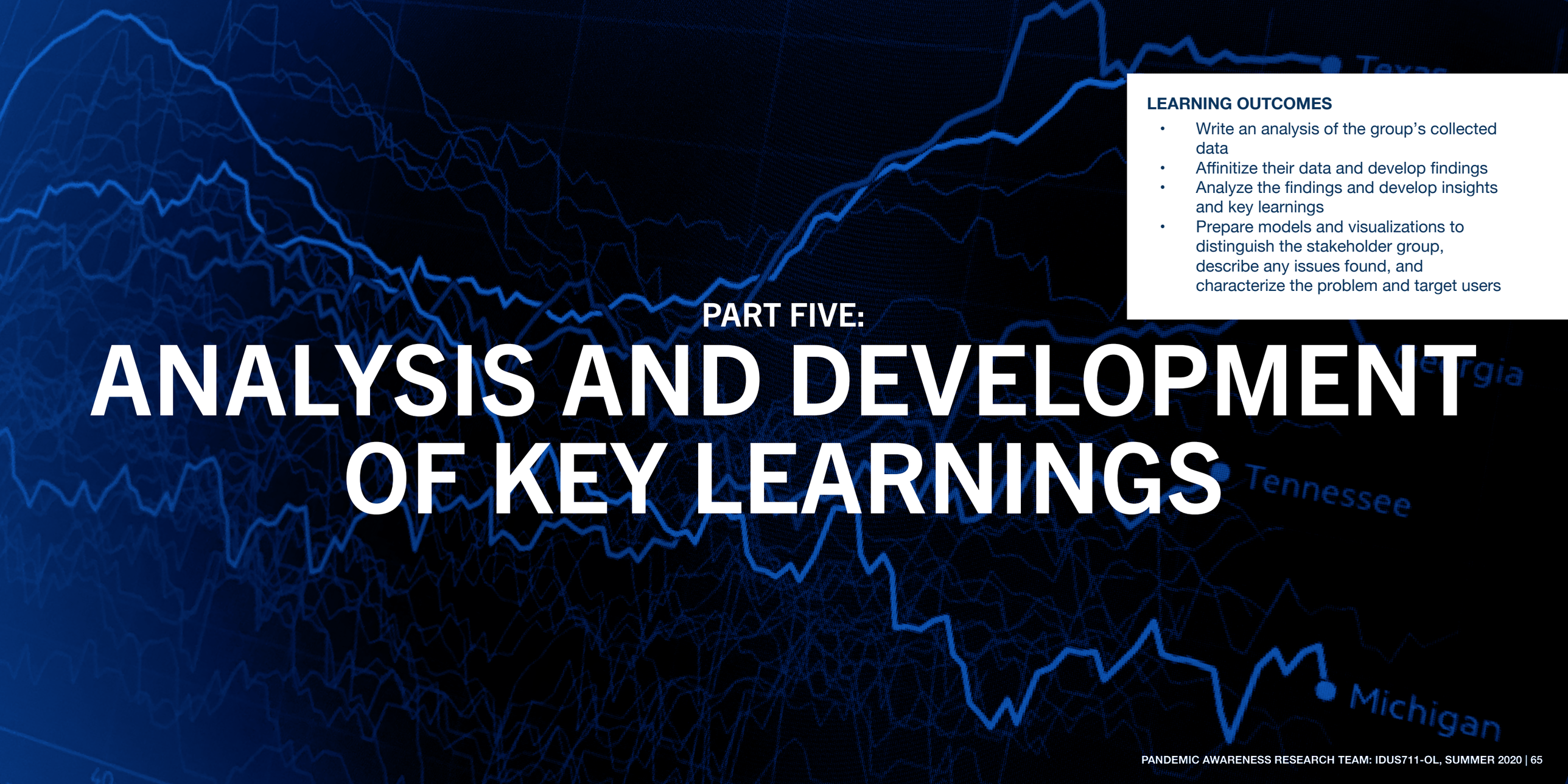
Altogether, we did a great deal of work to wrap up our research gathering process in anticipation of beginning our analysis next week. The expert interview I conducted with Meglyn was a great opportunity to practice interviewing in pairs – I found it much easier to cover all of the questions and data with a partner there to help ensure that we asked all questions in our interview script and drive elaboration and deeper conversation with the participant. The expert interview, too, gave me a good opportunity to practice reframing questions and focusing the conversation towards the area of expertise in order to gain detailed data. Other group members also conducted expert interviews, observations, experiments and we added all of this to our Miro board and presentation for submission. We also spent time visualizing our data – the research protocols, user journeys and began a timeline to map our research and participant experiences against the broader pandemic timeline. Another great week of work from our team, and we're looking forward to getting into analysis next week!

Our team did a lot of work this week. Some team members set out to conduct more expert interviews to collect important data, and some team members set out to conduct Fly on the wall observation. For our team, I think Fly on the wall observation. It is a very suitable method, because during the Coronavirus Pandemic, it is very difficult to interview strangers. We collected a lot of key data through observation and we also took a lot of pictures. Using these data and pictures, we tried to make a user journey map and personas. Through reading the textbook, I learned that personas need a lot of data and finally classified 3-5 personas models. Fortunately, our group collected enough data during interviews, so our personas mainly have three Character models (students, experts, nurses), this is a tiring week because the temperature is very high, but it is also a week full of rewards.

As I got more comfortable with interviewing, I found that I tended to dive into topics more and go slightly off script just because I was so fascinated with our interviewee's stories. It turned out to be a good thing in regard to research information, but some of my interviews lasted an hour! Then of course I had to put all of their information into Miro, which was a challenge to sift through the interviews for the incredibly important information. It did seem like the more information and interviews the better because it was so encouraging to see patterns emerge from our work. It was also really cool to see everyone else's work and interviews, and our team worked great together with deadlines, and helping each other with parter interviews. I feel like I have learned so much these past few weeks not just from the class, but from interviews, and especially from my teammates.

This week I focused on visualizing our research protocol which helped me better understand and follow a solid set of steps for each of our different types of research methods that we've been utilizing. Continuing with interviews, I've identified with this week's reading as it relates to diversions and distractions. It's easy to get distracted in interviews. An interviewee will mention a subject or tangent that's interesting to me, but not really part of the subject matter we're trying to research. It's so tempting to continue down that tangent path, but clearly, it's important to focus and stay within or adjacent to our pool of research questions. I've also found it tempting to sympathize or express my bias toward the interviewee (which could alter their response). Recognizing that and trying to adjust in real time has certainly been a challenge.

Sitting down with my team this unit to discuss the key research supporting our design methods and the visuals that go hand in hand with them was yet another positively memorable experience. After we all read this weeks required texts, we debated on the origin of some of the techniques we came across. For example, we were all in agreement about the importance of highlighting the passage of time and decided on an accurate timeline for the pandemic. The reading discusses a flow diagram that goes alongside a timeline and I like how it graphically charts how an idea evolves, in this case how the pandemic evolved. This week I became aware of how I consider what I am learning in my other classes. After studying the importance of "looking and seeing" in my other class, I noticed how quickly my eyes can pick up a pattern and anything that sticks out from it and I applied that when I was continuing on in our Miro board. The day before Bobby conducted field research, it was exciting to plan for how he can proceed with research to be able to aggregate the most complete set of data necessary and possible within the pandemic's constraints. I was intrigued by how Amelia's fieldwork uncovered the truth about mask disposal. We found ourselves making assumptions as to why Home Depot customers act, think, and communicate the way they did. As I reflect and really think about it, my team is very skilled when it comes to developing a strategy that fully addresses the issues we encounter and as we talked about the foreseeable future, we are prepared to make adjustments to our research design as we move forward.



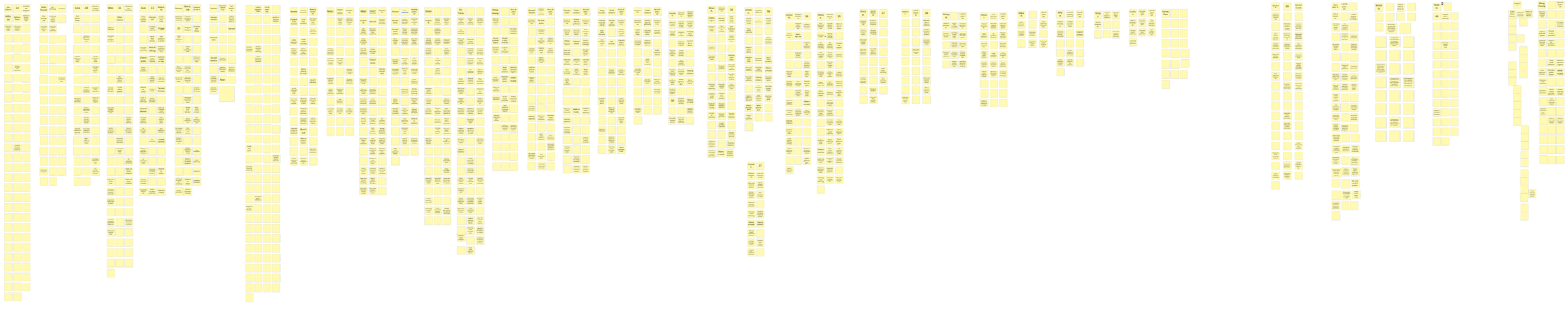
LEARNING OUTCOMES

- Write an analysis of the group's collected data
- Affinitize their data and develop findings
- Analyze the findings and develop insights and key learnings
- Prepare models and visualizations to distinguish the stakeholder group, describe any issues found, and characterize the problem and target users

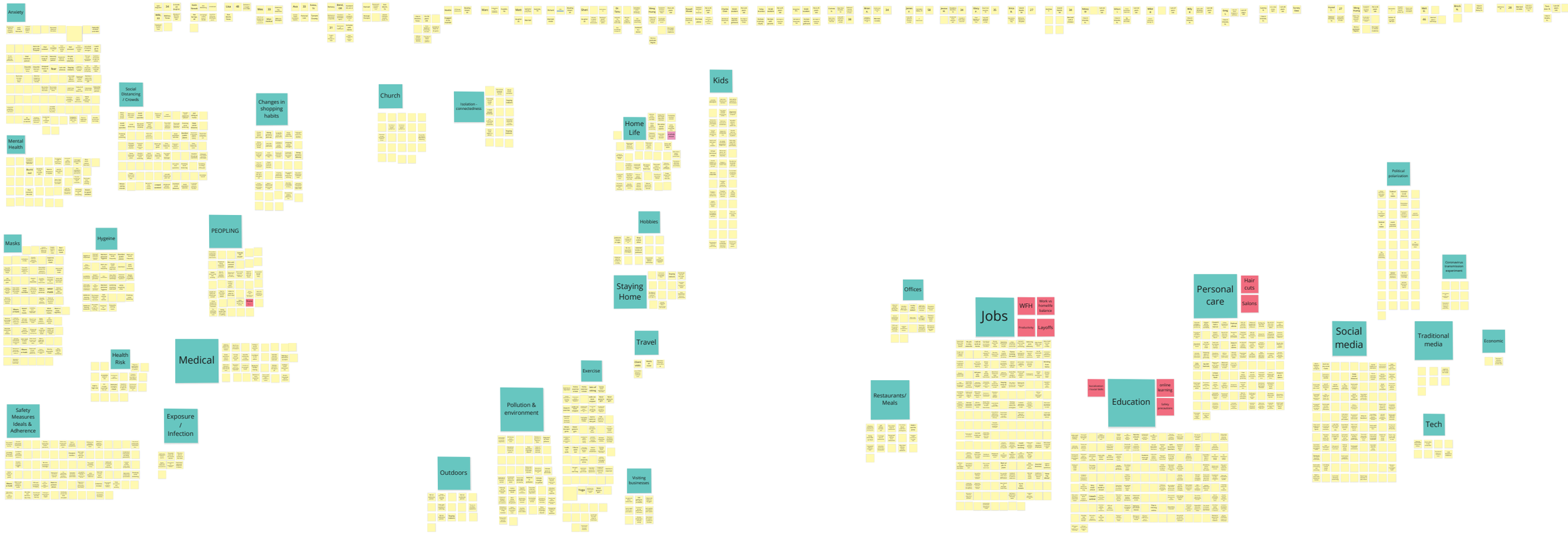
PART FIVE:

ANALYSIS AND DEVELOPMENT OF KEY LEARNINGS

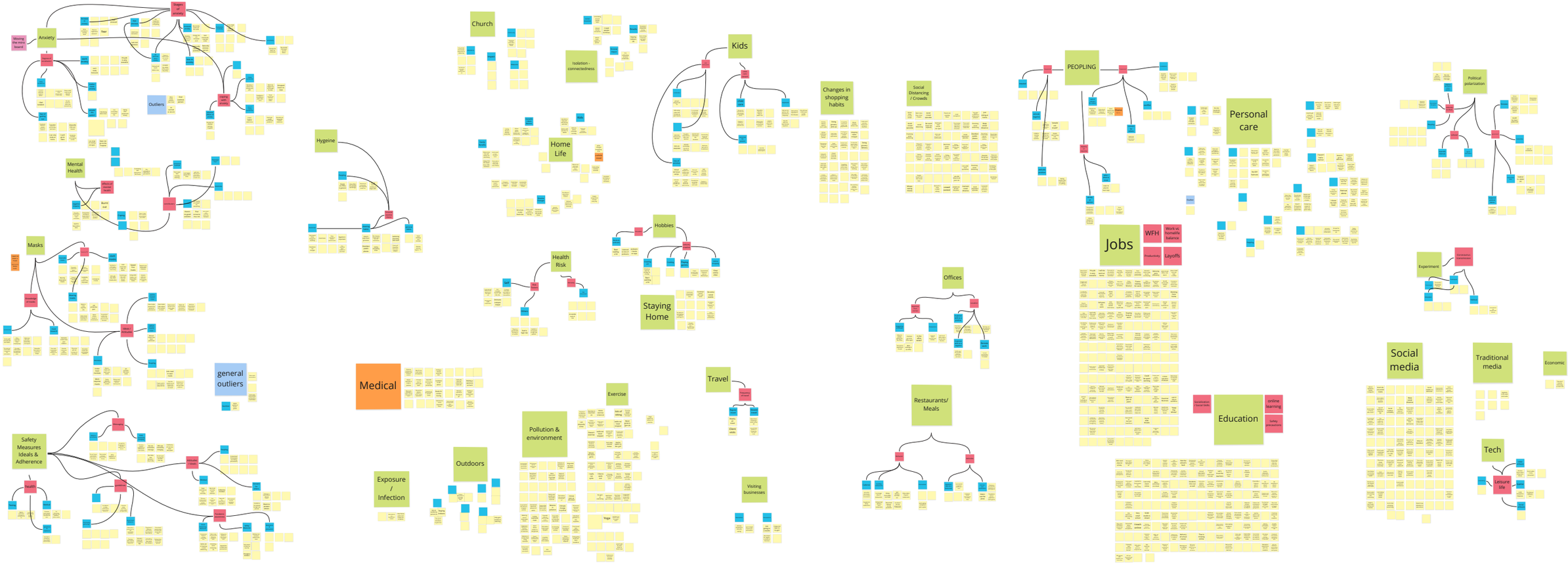
WORKING WALL | *Parking Lot*



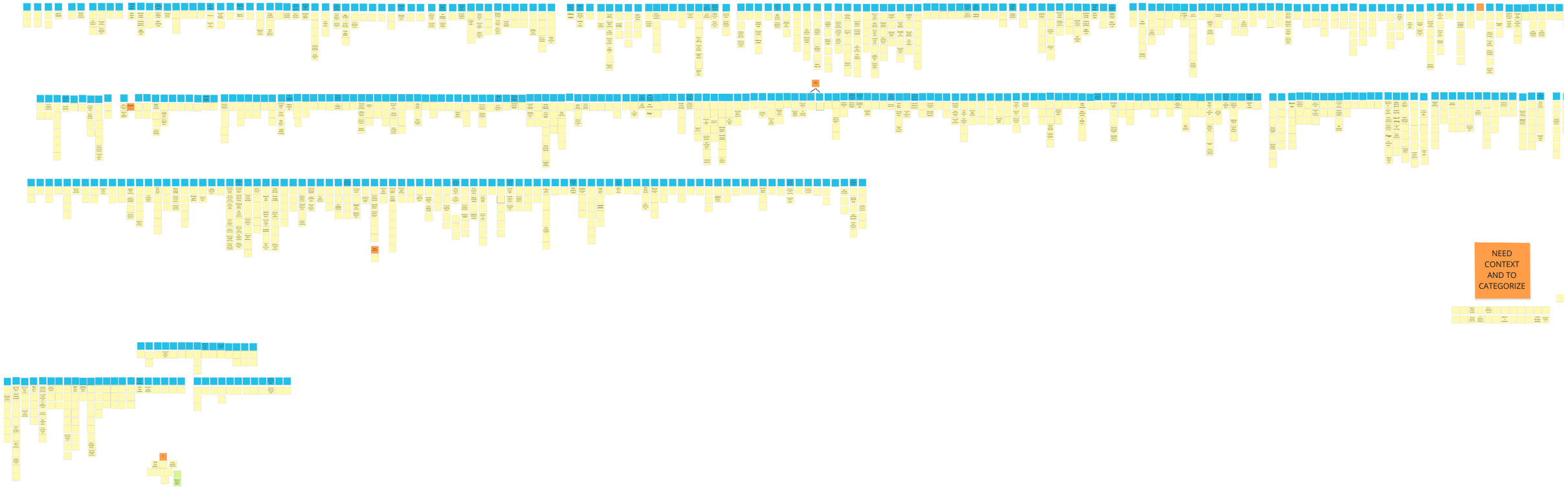
WORKING WALL | *Initial Clusters*



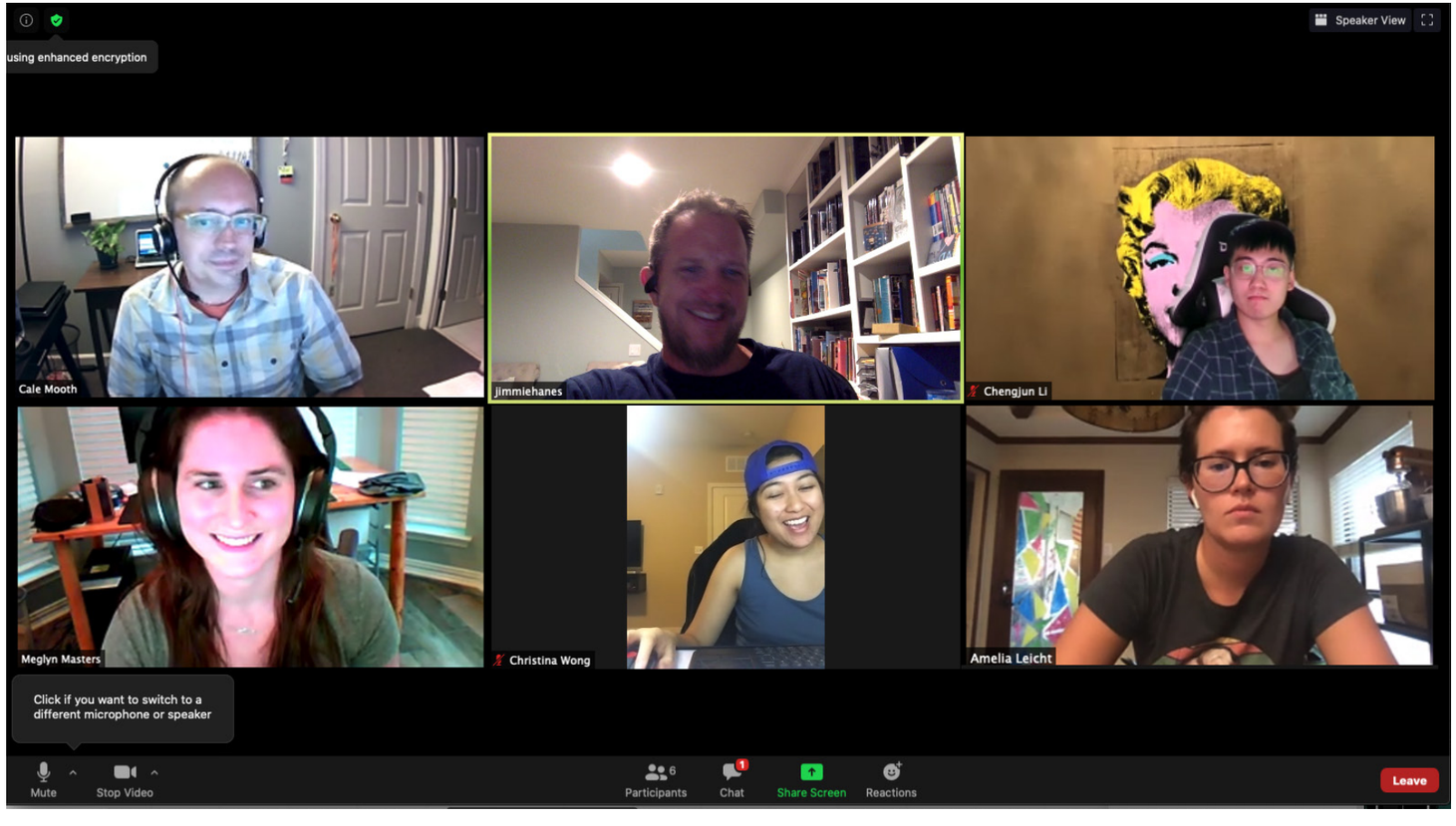
WORKING WALL | *First Affinity Diagramming Attempt*

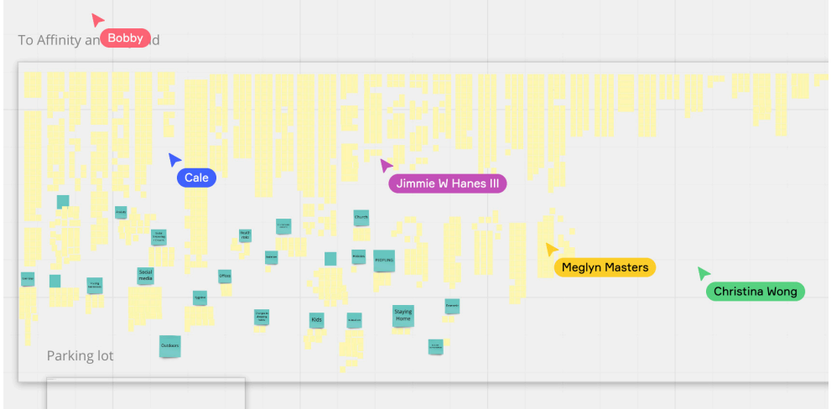


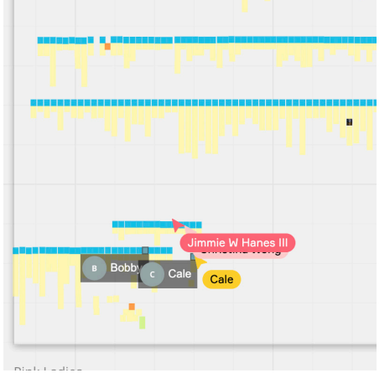
WORKING WALL | *Process Pivot, Blues*

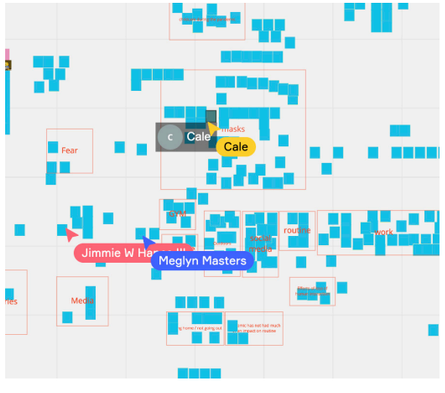


WORKING WALL | *Work In Progress*

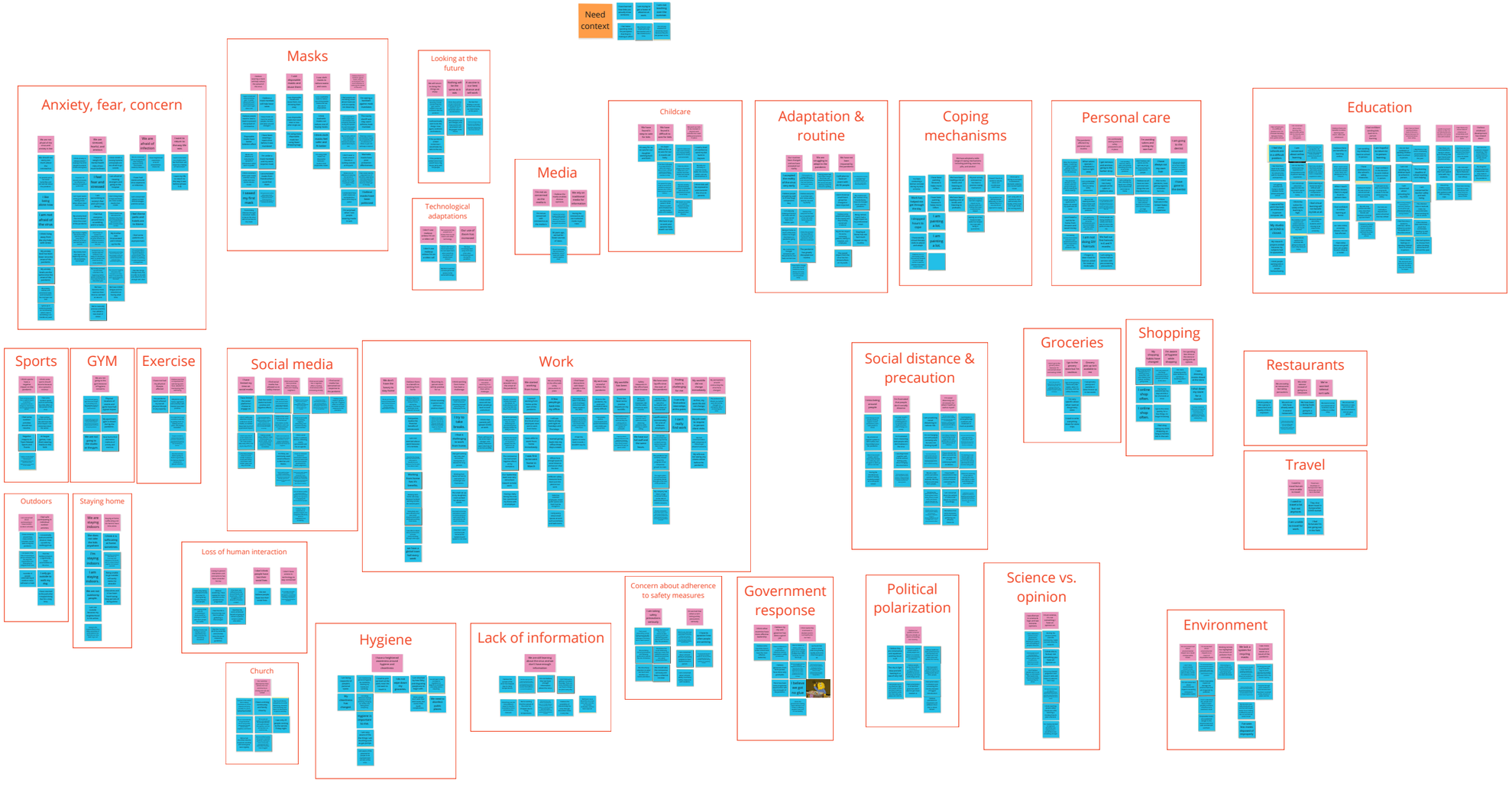




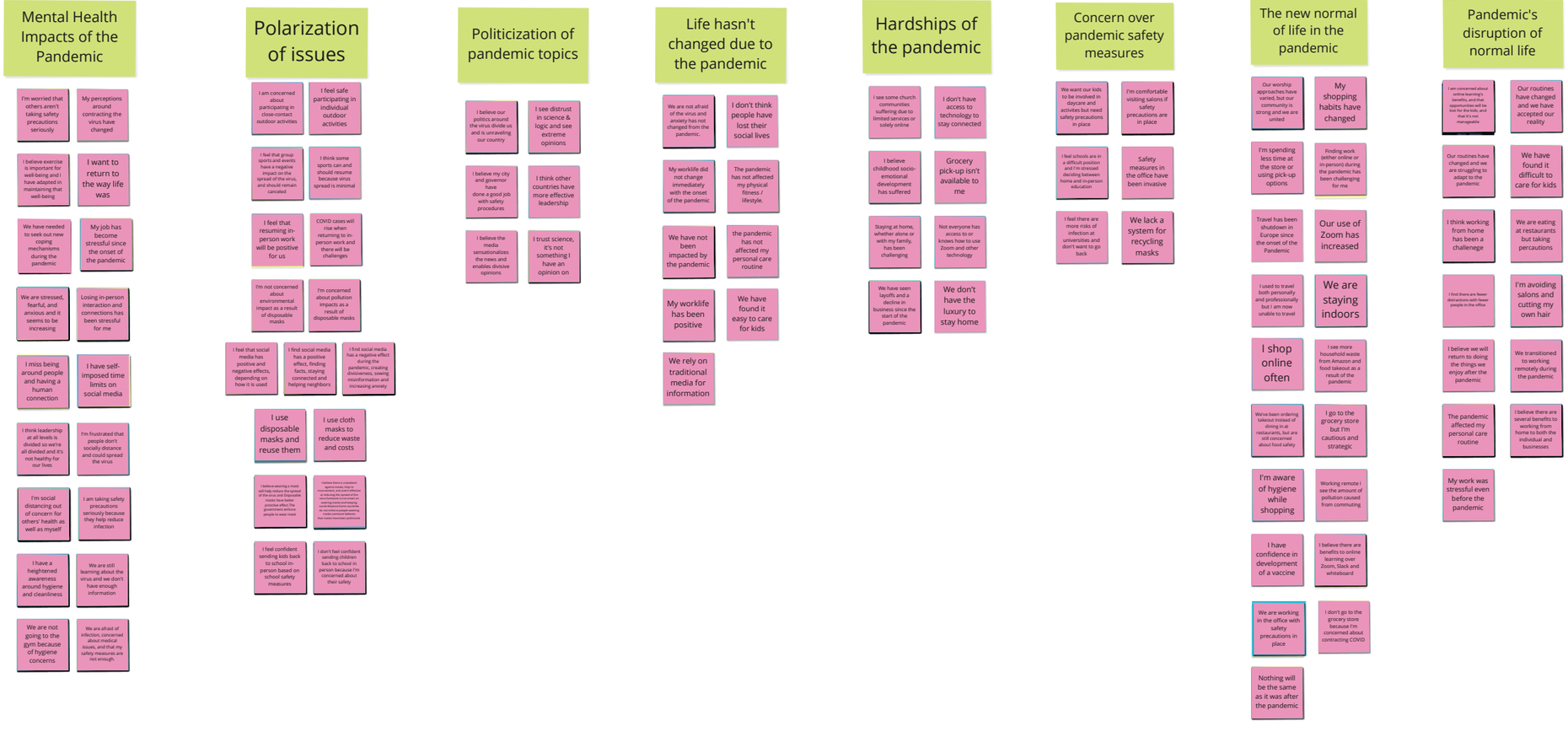




WORKING WALL | *Pinks*



WORKING WALL | *Completed Affinity Diagramming*



8 Greens

99 Pinks

496 Blues

1,796 Yellows

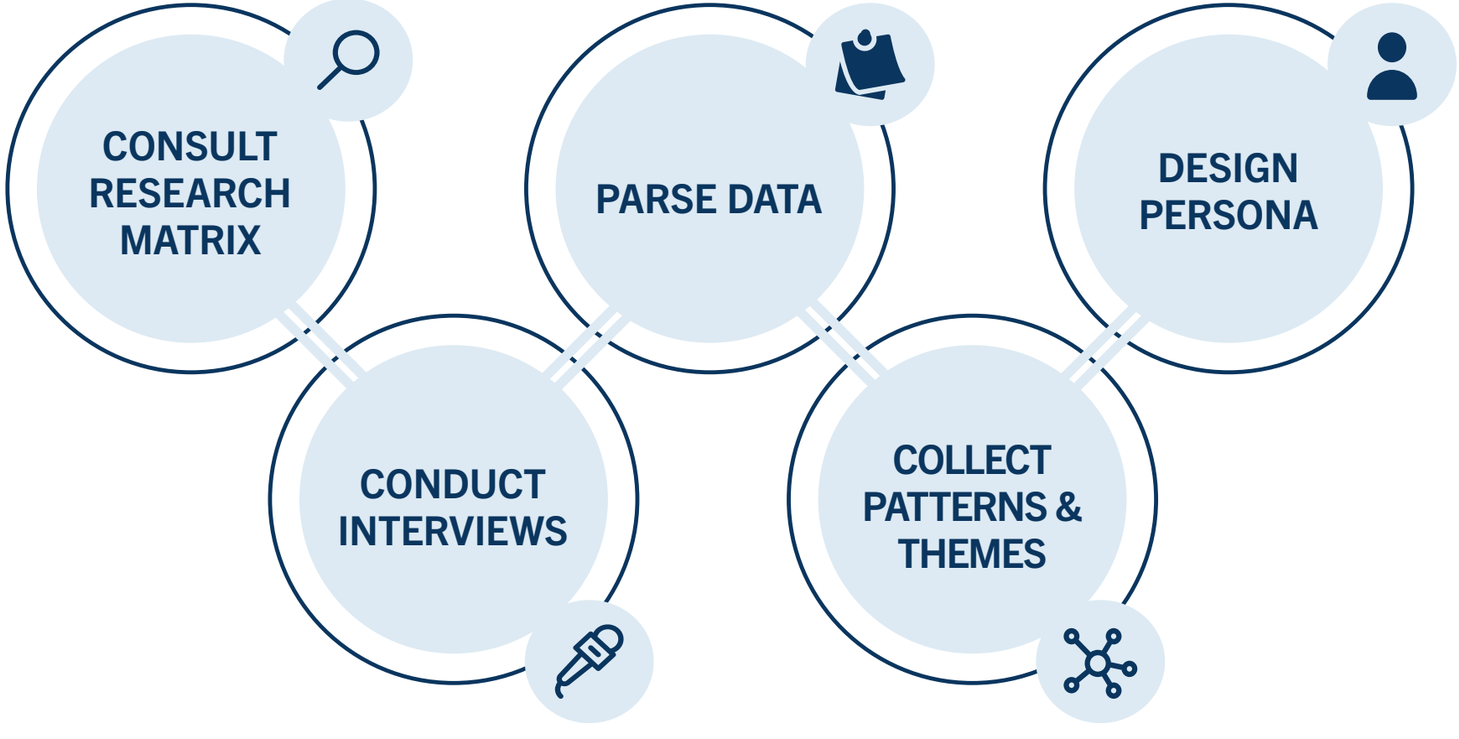
PART FIVE:

PERSONAS

LEARNING OUTCOMES

- Write an analysis of the group's collected data
- Affinitize their data and develop findings
- Analyze the findings and develop insights and key learnings
- Prepare models and visualizations to distinguish the stakeholder group, describe any issues found, and characterize the problem and target users

PERSONAS | *Research Protocol*



THE STUDENT

ZOE

Age 25

Photo:
https://unsplash.com/@natcatalyst

ABOUT ZOE

Zoe is a first year SCAD MFA graduate in Industrial Design living in Savannah. She has a boyfriend that is also a SCAD student.

GOOD DAYS

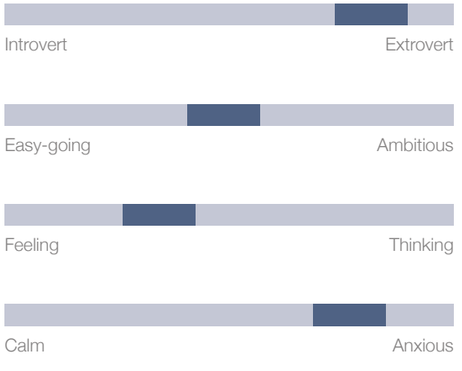
- Being in a productive Zoom call with her class group
- Avoiding parking fines traveling to class
- Receiving a good grade on her final project

BAD DAYS

- Missing out on seeing friends because of school work
- Being anxious and stressed over bad grades
- Struggling to pay for tuition

> "So many students are crammed into a classroom, no one is safe."

PERSONALITY



PANDEMIC IMPACTS

- Saving money due to fewer social activities
- Reduced work and study motivation because of uncertainty
- Added hassle of social precautions such as masks

Photo:
https://unsplash.com/@jtylernix

THE EMERGENGY MANAGEMENT SPECIALIST

JORGE

Age 34

ABOUT JORGE

Jorge prepares for natural disasters for a major university in the South. He has a masters degree, and is married with no children.

GOOD DAYS

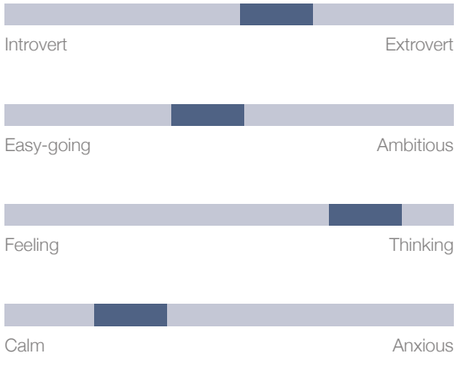
- There are no active disasters
- He's able to plan and manage response scenarios appropriately
- Communication lines are open and information is being collected

BAD DAYS

- In an active disaster mode. A major hurricane has hit the coast
- Trying to coordinate evacuations
- Can't communicate with front line emergency workers

"Wash your hands and wear a mask!"

PERSONALITY



PANDEMIC IMPACTS

- Sent home for remote work, alternating on-site
- Got into a groove working from home
- He's prepared and ready, but frustrated with people not taking pandemic seriously

Photo:
https://unsplash.com/@betoframe

THE PEDIATRIC ICU NURSE

SUSAN

Age 39

ABOUT SUSAN

Susan is a Pediatric ICU Nurse in the South West US responsible for managing an entire ward of patients, nurses, and doctors. She is single and has a cat named Mr. Business.

GOOD DAYS

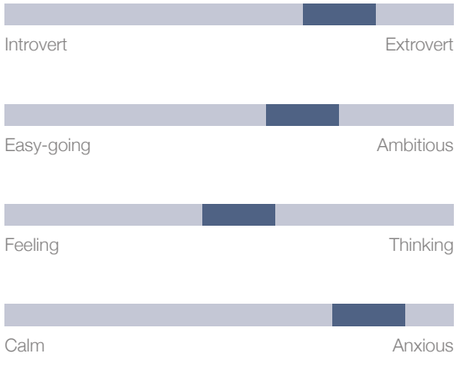
- Helping kids make progress toward healthier lives
- The ward is running smoothly and on time
- Cooperation between families and staff

BAD DAYS

- Kids are coding with lack of personnel and supplies
- Uncooperative family support
- Working overtime

"I better not hear a single damn soul tell me that they're not getting their kids flu vaccines this year."

PERSONALITY



PANDEMIC IMPACTS

- Increase in anxiety for both hospital staff and patients
- Limited visitors and support for families
- Lack of PPE supplies and funding

MELISSA

Age 40

Photo:
https://unsplash.com/@amyhirschi

THE ASSISTANT PROFESSOR

ABOUT MELISSA

Melissa is an Assistant Professor at a large university. She's married and has an elementary school-age kid living in Atlanta, Georgia.

GOOD DAYS

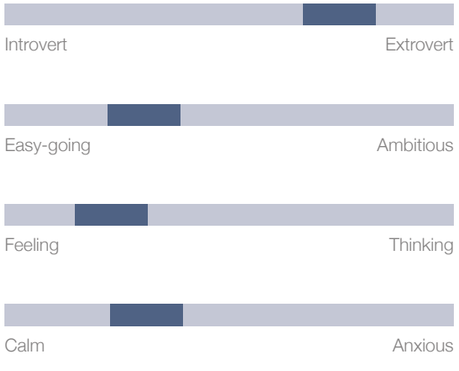
- Students are present and engaged
- Lesson plans are prepared ahead of time
- Made a good impact on a student's life

BAD DAYS

- Students are distracted and technology is unreliable
- Not motivated to facilitate
- Students aren't submitting required work

"This pandemic is a nightmare scenario for students and teachers."

PERSONALITY



PANDEMIC IMPACTS

- Missing human interaction and feedback from students
- Uncertainty around schedule procedure
- Fear of losing funding

THE HR MANAGER

STEVEN

Age 28

Photo:
https://unsplash.com/@fideletty

ABOUT STEVEN

Steven is an HR Manager with a small company. He is engaged to be married later this year, has a dog named Rover and enjoys crossword puzzles.

GOOD DAYS

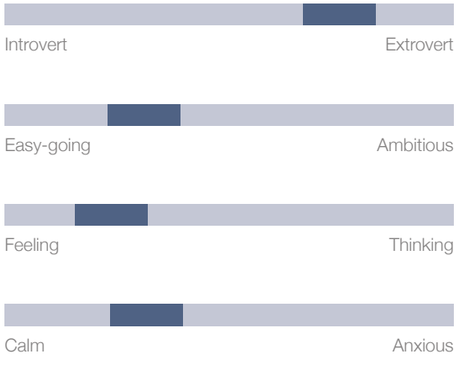
- Celebrating employee achievements
- On-boarding an exciting new hire
- Establishing shared values

BAD DAYS

- Dealing with conflict among co-workers
- Job applicants aren't meeting requirements
- A long-time employee is moving on

"I cope with anxiety through wine and paint-by-numbers."

PERSONALITY



PANDEMIC IMPACTS

- Transitioning to remote work has been surprisingly beneficial
- Finding new outlets to reduce stress
- Difficulty planning a wedding as mandates constantly change

Photo:
https://unsplash.com/@harpsjoseph

THE CREATIVE DIRECTOR

ALEX

Age 28

ABOUT ALEX

Alex is a talented Creative Director for a large theme park in Central Florida. He commutes an hour each way to and from work, is single, and currently has no kids.

GOOD DAYS

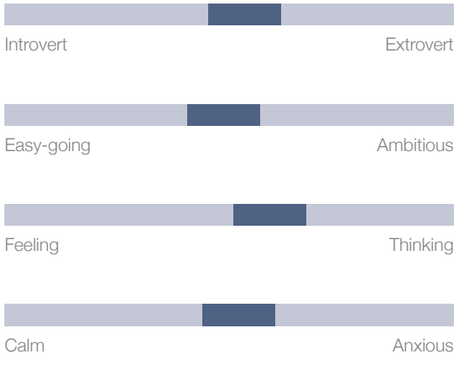
- Starting a big new project
- Finishing a project and making visitors happy
- Effectively communicating with teams

BAD DAYS

- Too many revisions
- Work requirements changing last minute
- Working late to meet a deadline

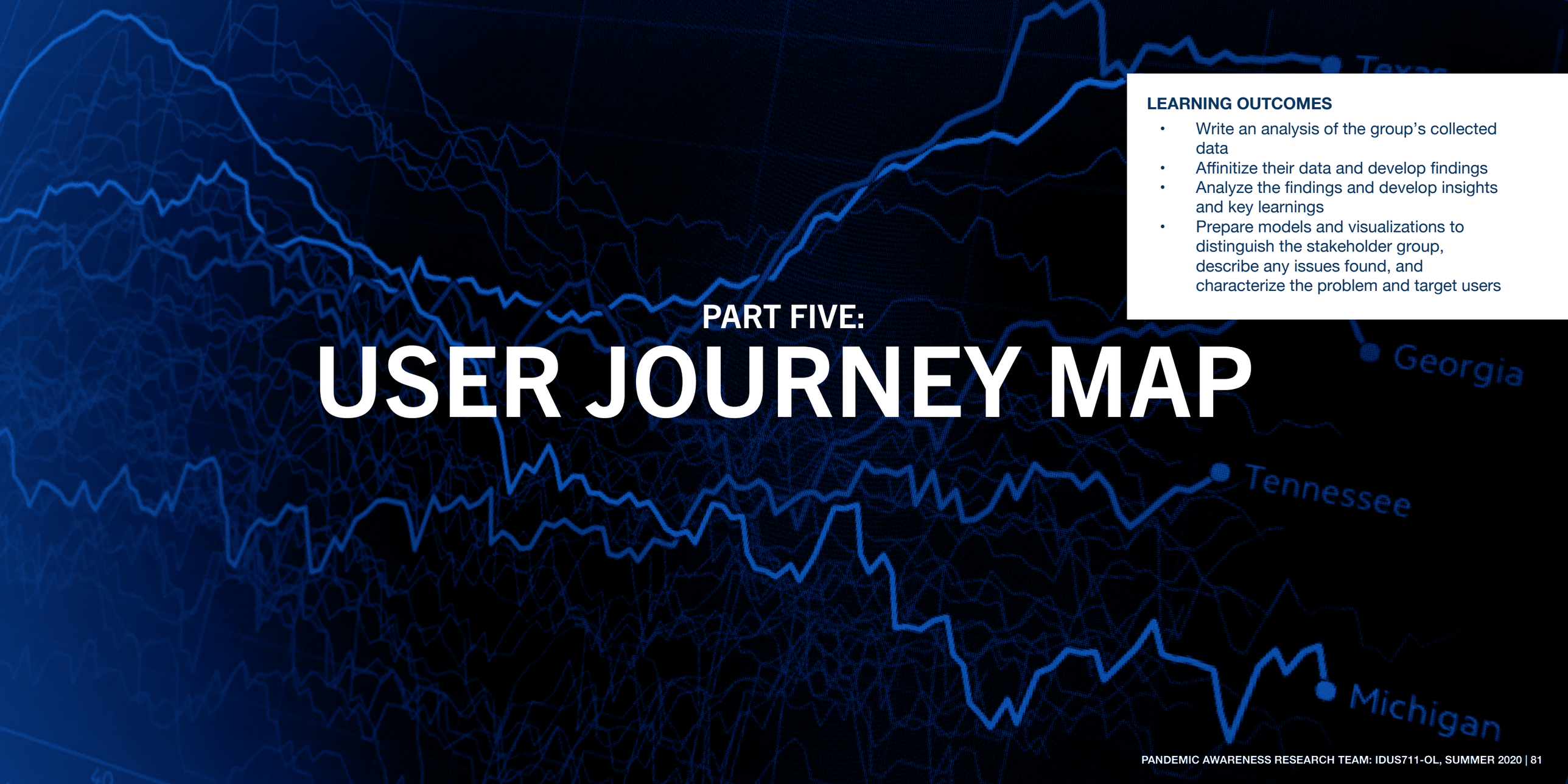
"While still employed, I have survivor's guilt because I know former coworkers have families to take care of."

PERSONALITY



PANDEMIC IMPACTS

- Communication and process challenges with entire office moving online
- No more time spent commuting
- Uncertainty with company financial downturn



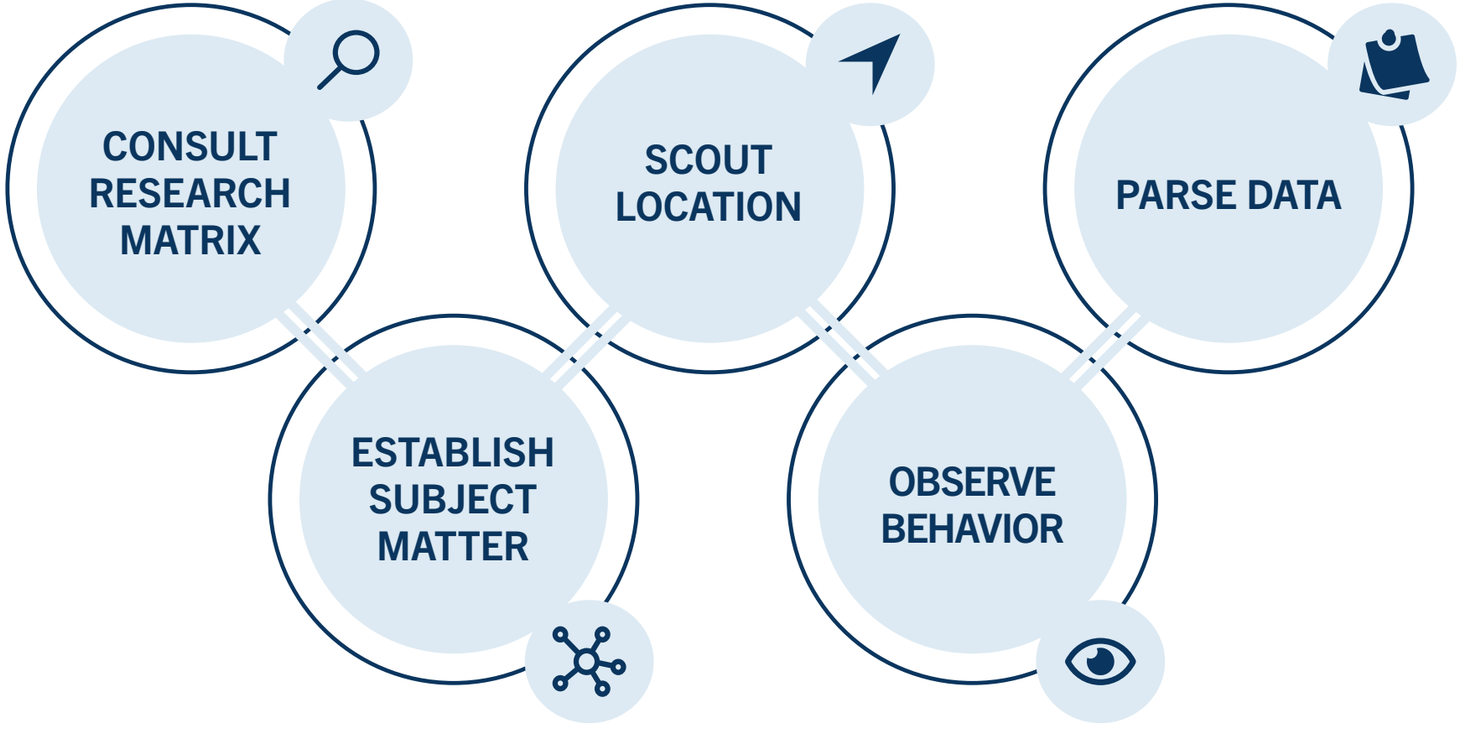
PART FIVE:

USER JOURNEY MAP

LEARNING OUTCOMES

- Write an analysis of the group's collected data
- Affinitize their data and develop findings
- Analyze the findings and develop insights and key learnings
- Prepare models and visualizations to distinguish the stakeholder group, describe any issues found, and characterize the problem and target users

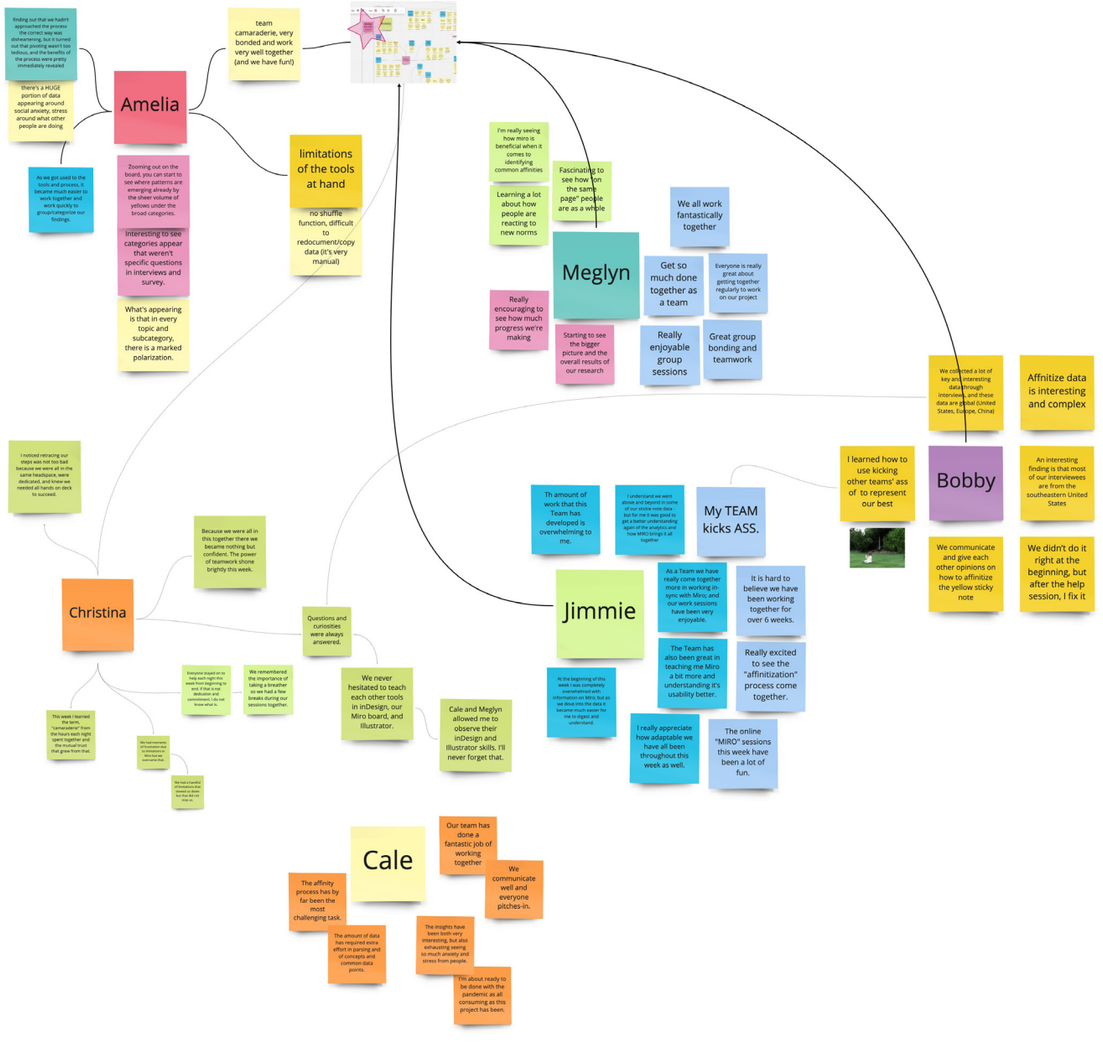
USER JOURNEY MAP | *Research Protocol*

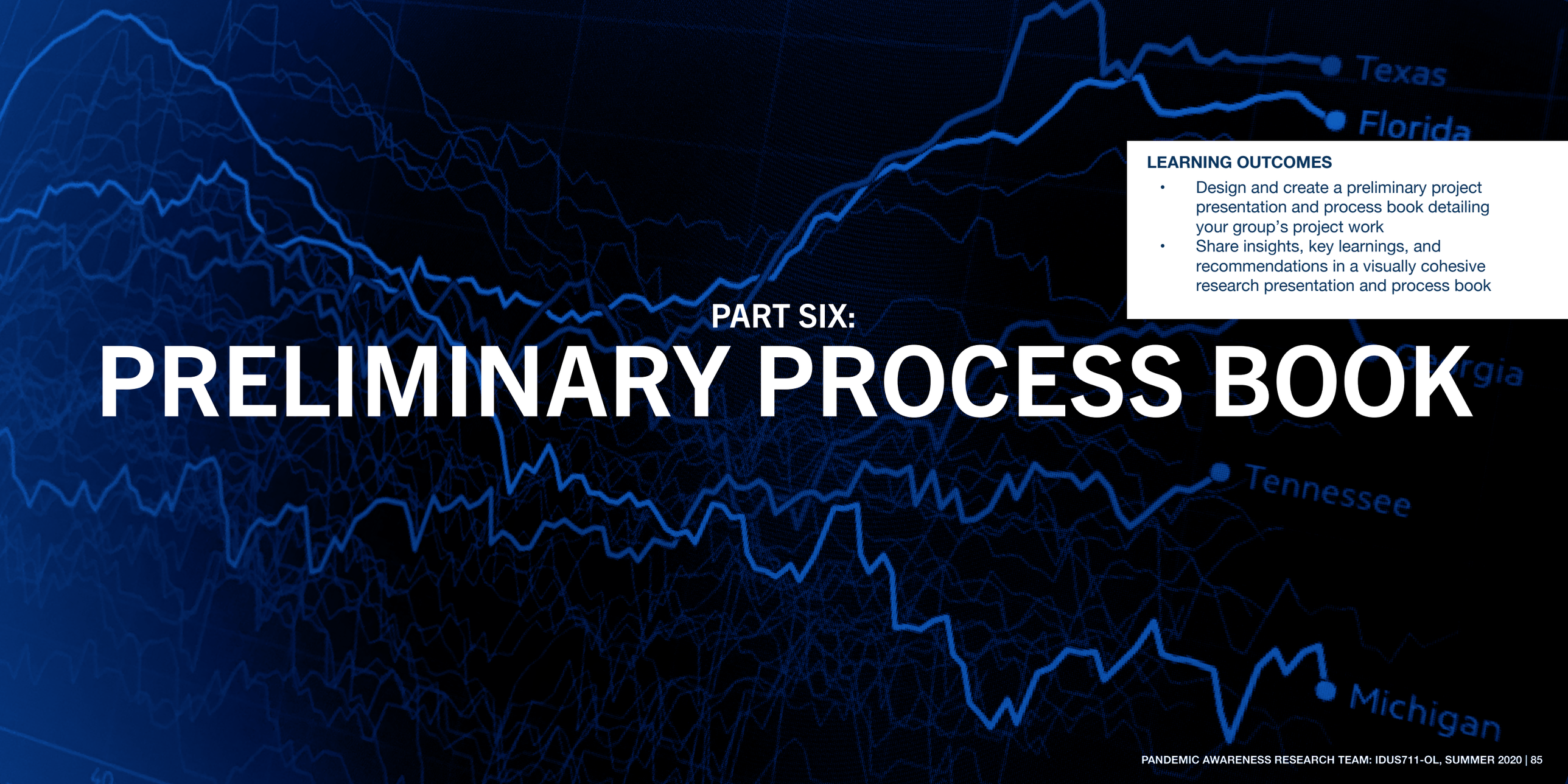


USER JOURNEY MAP | *Behavior Around Wearing & Discarding Masks*

STAGE	Ready to go out	Go out	Reach the target location	Enter the store to shop	Finish shopping and leave
User goals	Buy favorite products quickly and safely	Arrive quickly	Find a parking area with few people	Buy favorite products quickly and maintain social distancing	Avoid contact with other people, and find a trash can to discard protective equipment
Behavior description	Think about what to shop and wear protective equipment	Find the fastest route	Find the parking space closest to the exit, and wear protective equipment (masks, gloves, disinfection alcohol)	Enter the supermarket to buy the goods you want to buy while wearing protective equipment, maintain social distancing, and minimize shopping time	Push the trolley full of items to the parking position, put the goods in the trunk, throw away the protective equipment, and leave
Behavioral thinking	Desire to buy	Save time	Protect personal health and safety	Protect personal health and safety	Protect personal health and safety, environmentally friendly discard masks
Experience	Interested, curious	Excited	Worried, nervous	Worried, nervous	Tired, inconvenient, and not satisfied
Pain points/problems	There may be no mask at home	I don't know how many people are in the store, and which store has the least number of people	No disinfection equipment at the entrance of the store, no temperature detection equipment	There is no internal route map of the supermarket, the speed of finding goods is slow, and there is no line to maintain social distance in the self-checkout area	The parking lot is too far from the exit, it's inconvenient to find the parking location and there is no trash can in the parking area
Design opportunity	Mask vending machines should be provided at the door of the store	The store should provide data on the number of people in the store to Google Navigation	Design infrared body temperature detector, spray alcohol sterilizer	Design the supermarket distribution map and draw social distance lines	Set the number of parking spaces and add sorted trash bins in the parking area
Priority evaluation	Urgent ① ③ ⑤			Important ② Unimportant ④	Not Urgent

REFLECTIONS | *PART FIVE*





LEARNING OUTCOMES

- Design and create a preliminary project presentation and process book detailing your group's project work
- Share insights, key learnings, and recommendations in a visually cohesive research presentation and process book

PART SIX:

PRELIMINARY PROCESS BOOK

REFLECTIONS | *PART SIX*

This week, my Team again showed their overall amazing talents again and have brought together an incredible amount of data; into a beautifully designed presentation/process book. Our work efforts have really showed week after week, and it's really fulfilling to see it all coming together in these final days. It has been a little difficult for me to make all of the class meetings, so I really want to thank my Team members for representing all of us and making sure the comments and class critiques were recorded. One of the highlights for me was working simultaneously in Miro, as we all navigated around so much of our sickie notes, and found unique patterns and personal personas come out of them. I am really excited to see all of our hard work and teamwork come together for one final presentation on Tuesday.

This week was challenging, personally, between my husband being out of town, managing my children's schoolwork and getting food poisoning one day! Thankfully, this team is incredibly flexible and supportive, and we were able to shift workload between us to get everything done. As we looked at personas and our final greens, we began to identify the story we would be able to tell from our data and research process: despite the variety and volume of participants and research, we saw some pretty strong patterns emerge around social media, the specific situation with politics here in the US, and levels of anxiety throughout the pandemic. We spoke about potential design opportunities (Bobby even had time to design a solution!), began design work for our final presentation (thanks to Cale, Meglyn and Christina!). outlined roles for the presentation, confirmed our presentation day/time and mapped out time to complete visualizations, models, presentation and do some practice runs. We are looking forward to sharing out work next week!

This week is a very busy week. There are many things we need to do. First, we created 6 great insights based on the interview data and created design opportunities and design solutions. I am very impressed with Concern over pandemic safety measures. Hence, I redesigned the mask. I modularized the mask and applied corn fiber to the disposable filter. I think this is a very useful change, which can help people wear the mask more comfortably and discard it. There is almost no impact on the environment, because corn fiber can be degraded naturally.

The last few weeks have been heavy on work with the interviews, the analysis and the finalizing of our project. It's amazing to me how with everything we did we still see more and more observations around our research. From the data analysis on the Miro, to the creation of the pandemic timeline that I took on. I noticed that we missed several demographics, that some people were more likely to participate in our study than others, and that there is almost always a need for another project slide around information! I'm amazed daily with the work my team does but I can't help but struggle with the limitations we have, both in time and access to more people and data. I also shared the lament of several of our interviewees about there not being a consistent message from authorities, additionally so when I was investigating dates for the timeline. It was very difficult finding the right information and dates from so many different websites, news outlets, and government announcements. Putting together the personas, I could really see myself visualizing and identifying with these people we created, and it makes me feel so good about our work. For the last two weeks, the majority of us have participated in 3-4 hour zoom calls where we worked on our project 5 or 6 days a week. I'm beyond amazed with the amount of work we've put in – and we still have a great time together when we're on our calls.

This has been an incredibly active week for our group. With all the data and analysis in place, we focused on bringing our findings to life and present them in a way that's coherent and interesting. I've been very impressed with the dedication and especially the attention to detail that this group has paid toward this project. We've held group sessions over Zoom just about every day this week making sure we're all on the same page and helping each other out to build a cohesive book. It's been satisfying to see the culmination of several weeks of data gathering come together and tell a story. The amount of data this group collected was quite daunting when it came time to affinitize all those data points. But we were able to come together and make it happen. As a result, we have a series of insights that we can confidently speak to and provide potential solutions. Huge thanks to everyone willing to make this last push!

I was already aware of the strong dedication my group had towards this project but this week, one could clearly see the dedication put in with each day spending at least three hours together just to better understand the relationship between our stakeholders and the system that we have researched. This week I enjoyed learning what a synthesis entails and how to define a design strategy based on my team's insights and key learnings. Days put aside to develop our personas and affinitize our data points lead me to have a better understanding of the common themes in our research. I do not think I would have enjoyed convergent thinking if I did not have my team beside me. We sifted through our research together to identify design criteria and design-solution opportunities to where informing a recommended design strategy and furthering tactical efforts was not as difficult as we thought. I love the moments where my team and I have a few laughs and share our own knowledge and talents with each other.

PART SEVEN:

FINAL PRESENTATION

LEARNING OUTCOMES

- Refine and create a comprehensive project presentation
- Finalize a project process book documenting your group's project development and results
- Work together to create an aesthetically pleasing, cohesive process book

PRESENTATION

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REFERENCES

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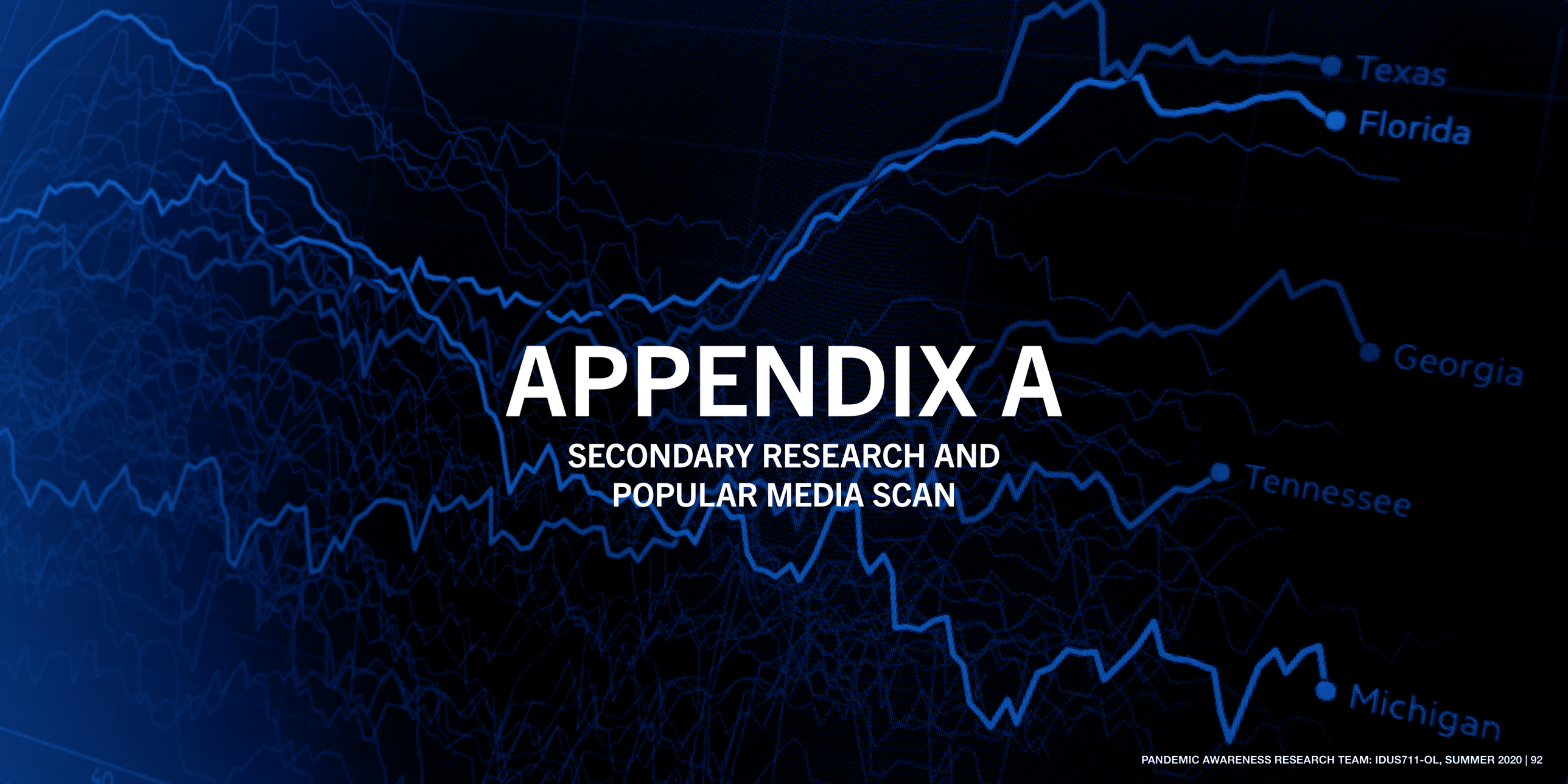


APPENDIX A

SECONDARY RESEARCH AND POPULAR MEDIA SCAN

SECONDARY RESEARCH

THE HARM OF WEARING A MASK TO EXERCISE

Photo: Business Insider

When playing sport, breathing is faster and harder than at rest, which increases the risk of passing the disease on. As a result, premier league football is considering introducing face masks. Others may follow suit.

Yet a mask makes it harder to inhale the quantity of air needed to perform at the highest levels. We know that wearing a surgical mask can increase the resistance to airflow. Exercise invariably leads to faster and harder breaths, so wearing a mask during exercise places a further strain on airflow.

At low to moderate-intensity exercise, effort will feel slightly harder than normal with a mask, but you can still walk comfortably. The challenge appears to be more during heavy exercise (say, rugby or football) taking in air at rates of about 40-100 liters per minute.

When we do heavy exercise, our muscles produce lactic acid, which causes that burning sensation. It is then converted to carbon dioxide and exhaled. But what happens if the carbon dioxide is trapped by the mask? As you move from moderate to heavy exercise, you may be re-breathing carbon dioxide, which can reduce cognitive function and increase breathing rate.

TREADMILL TEST

The concentration of oxygen in the atmosphere is around 21% at sea level. When running on the treadmill with only the fencing mask, the concentration of oxygen was around 19.5%. This would be equivalent to exercising at 600 meters above sea level.

But wearing a face mask under the fencing mask reduced my oxygen level to around 17% — the equivalent of exercising at 1,500 meters. Any further decreases in oxygen concentration — by exercising longer or harder — would have a large effect on the physiological responses to exercise, causing altitude-sickness symptoms such as dizziness or headache.

There are negligible levels of carbon dioxide in atmospheric air, and when exercising with only the fencing mask this remains below 1%. With the face mask on, it trebled to 3%. Bear in mind that the UK Health and Safety Executive — the government agency responsible for regulation and enforcement of workplace safety — advises that employees should not be exposed to 1.5% carbon dioxide for more than 15 minutes.

Source: https://www.businessinsider.com/why-may-be-dangerous-exercise-wearing-face-mask-physiology-expert-2020-6

SECONDARY RESEARCH

THE IMPACT OF THE CORONAVIRUS PANDEMIC ON HAIRCUTS

Photo: Glamour

It's risky, especially if you have a preexisting condition or are much older to go out and get a haircut. The virus spreads through person-to-person contact, and **you'll be breathing the same air as your stylist much longer than you would a grocery or drive through the cashier. Six feet isn't feasible when you're getting your sideburns buzzed.**

The risk right now in visiting a hair salon is coming into contact with a client or employee with COVID-19, even if they're asymptomatic (the virus can still spread even when someone isn't showing symptoms), Claudia Skinner, DNP, former critical care nurse and director of clinical excellence at St. Jude Medical Center in Orange County, CA, said to Health.

HOW TO GET A SAFE HAIRCUT

Before you go, know barbershops and salons look different. You might be asked by the appointment booker to wash your hands and check your temperature at home. You'll also have to likely prepay with a credit card or not use cash. Then when you go in you might be required by ownership to wear a face mask or face shield and gloves.

Your stylist will also limit service

They might wear a face shield and refrain from talking as much. And they might ask you to only sit in a certain chair or not touch a lot of surfaces. Stylists also might not dry and style your hair. Other guidelines suggest washing and drying hair before a cut. But the goal is to not spread the potential virus for the next person.

There will likely be a limited amount of clients allowed in at a time, and likely appointment only. So call or check online ahead. "Limit the number of clients in the shop at one time. Only clients that are actually getting their hair or nails done should be inside the salon.

Source: https://www.theladders.com/career-advice/should-you-get-a-haircut-during-the-coronavirus-pandemic-this-is-what-the-experts-say

SECONDARY RESEARCH

Key Information

HOW ARE BUSINESSES ENFORCING LOCAL MANDATES AROUND CORONAVIRUS SAFETY MEASURES?

Photo: Centers for disease control and prevention

During an infectious disease outbreak, such as the current outbreak of COVID-19, small business owners must prepare for disruption in their business as well as prepare to protect their employees' health and safety in the workplace.

Coronavirus disease 2019 (COVID-19) is a respiratory illness that can spread from person to person. It spreads between people who are in close contact with one another (within about 6 feet) and through respiratory droplets produced when an infected person coughs or sneezes. Symptoms can include fever, cough, or difficulty breathing, which may appear 2-14 days after exposure.

Actively encourage sick employees to stay home. Develop policies that encourage sick employees to stay at home without fear of reprisals, and ensure employees are aware of these policies.

Develop other flexible policies for scheduling and telework (if feasible) and create leave policies to allow employees to stay home to care for sick family members or care for children if schools and childcare close.

Promote etiquette for coughing and sneezing and hand washing. Provide tissues, no-touch trash cans, soap and water, and hand sanitizer with at least 60% alcohol.

Perform routine environmental cleaning. Routinely clean and disinfect all frequently touched surfaces, such as workstations, counter tops, handrails, and doorknobs. Discourage sharing of tools and equipment, if feasible.

Provide education and training materials in an easy to understand format and in the appropriate language and literacy level for all employees, like fact sheets and posters.

Plan to implement practices to minimize face-to-face contact between employees if social distancing is recommended by your state or local health department. Actively encourage flexible work arrangements such as teleworking or staggered shifts.

Consider the need for travel and explore alternatives. Check CDC's Travelers' Health for the latest guidance and recommendations. Consider using teleconferencing and video conferencing for meetings, when possible.

If an employee becomes sick while at work, they should be separated from other employees, customers, and visitors and sent home immediately. Follow CDC guidelines for cleaning and disinfecting areas the sick employee visited.

Source: https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-small-business.html

SECONDARY RESEARCH

HOW DIFFICULT AND UNBEARABLE WILL BREATHING BE THIS SUMMER IN THE UNITED STATES?

Photo: creakyjoints.org

Few people enjoy wearing a cloth face mask, as is recommended by the U.S. Centers Disease Control and Prevention for going out in public places during the coronavirus pandemic. But if you have a chronic respiratory condition such as asthma or COPD, covering your mouth and nose can be especially challenging. The physical barrier of the mask makes it harder to take in air; it also traps some carbon dioxide as you exhale, which means you end up breathing in air that is warmer and moister. Add a compromised respiratory system to the equation and a mask can feel downright suffocating.

Unfortunately, that sensation of having trouble breathing in a mask might get even worse as summer approaches. Many people with chronic lung conditions find it harder to breathe in hot, humid air (though some others fare worse when the weather is cold and dry).

STAY HOME IF YOU CAN

Unless you have a coronavirus infection or someone else in your family does, there is no reason to wear a mask in your home. Because people with respiratory conditions like asthma and COPD are more apt to develop complications if they contract coronavirus, it is best to get groceries delivered or have someone else pick them up for you. “Avoid public places as much as possible,” says Tania Elliott, MD, a spokesperson for the American College of Allergy, Asthma, and Immunology and an allergist/immunologist at NYU Langone Health in New York City.

CHECK THE WEATHER

If you must go out, check the weather first. Many people find it harder to breathe when it’s hot and humid, so try to pick a day when it’s a bit cooler outside or go first thing in the morning or later in the evening.

Air pollution is another important factor for people with respiratory issues, says Adrian Rawlinson, MD, vice president of medical affairs for Upswing Health, a telehealth company. Go to airnow.gov and enter your zip code to find out how the air quality is in your area today before venturing out.

PICK A COMFORTABLE FACE COVERING

Do not use N-95 respirators. First of all, they should be reserved for health care providers. They’re the most effective at blocking virus particles compared with other kinds of masks, but they’re also more difficult to breathe through. The CDC currently recommends that most people opt for cloth face coverings rather than N-95 respirators or even surgical masks for venturing out in public.

Look for a mask that is made of a moisture-wicking and breathable fabric, says Dr. Elliott. If you’re really struggling, you might be better off with a bandana or neck gaitor. “They are more breathable since they are open at the bottom but still provide a protective barrier,” she says.

BE CAUTIOUS ABOUT OUTDOOR EXERCISE

If your condition is mild and you’re used to exercising outdoors it might be OK to continue. In sparse areas you might not need to wear a mask, but it is smart to carry one with you in case you end up closer to others than expected.

People with asthma might benefit from using a rescue inhaler before heading outdoors with a mask on. “While not perfect, it may not be a bad idea because it can open your airways and at least improve your baseline air flow in the short term,” says Dr. Elliott.

Source: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/about-face-coverings.html

SECONDARY RESEARCH

HOW COVID-19 HAS CHANGED SOCIAL MEDIA ENGAGEMENT

Photo: creakyjoints.org

In the face of COVID-19, social media is a great way for individuals and communities to stay connected even while physically separated. With the advent of social media in the 21st century, not only are we learning the latest news updates, but we're also using platforms like Facebook and Twitter to provide personal and business updates. For businesses, this means leveraging social media to support employees and customers like never before. For the government, it means doing its best to efficiently share factual and up-to-date information.

FOUR PRIMARY ROLES THAT SOCIAL PLATFORMS ARE PLAYING DURING THE COVID-19 OUTBREAK:

A SOURCE OF INFORMATION (AND MISINFORMATION)

Never have we had more real time information available at our fingertips in the face of a worldwide event. Such information can help keep us safe, providing us with a better understanding of what is occurring and how it might impact us and those we love. Yet, social media can also spread falsehoods, including miracle preventative measures, false claims about the implementation of martial law, conspiracy theories, and more.

Finding trusted sources of information regarding COVID-19 is extremely important.

AN INFLUENCE ON PUBLIC RESPONSE TO THE OUTBREAK

Billions of people are free to publicly share their opinions on COVID-19 across various social platforms. In the past few weeks, we've seen individuals, organizations, and businesses use social media to spread awareness of COVID-19, as well as the public actions that can be taken.

A MARKETING PLATFORM

The COVID-19 outbreak presents a defining moment for many brands in how they choose to market their product.

Unfortunately, we're going to see people who are selling snake oil-type products (think essential oils claiming to provide immunity). Some businesses will prey on mass hysteria, especially businesses putting extra dollars behind social media ads, selling products like hand sanitizer and face masks (despite frequent claims from health organizations that face masks are not effective if you don't have the disease).

A POWERFUL WAY TO BRING POSITIVITY TO A SCARY TIME

COVID-19 has put many people, especially the elderly, those with disabilities, working parents who are losing childcare, and those who are losing their jobs, in challenging situations. Communities are rallying together to support organizations and individuals by sharing fundraisers with large audiences on social media. People have shown their support and empathy on social media. And while tone and delivery vary, the message from one user to another remains constant: you are not alone in this, there are silver linings to be enjoyed, and it's okay to experience this in any number of ways.

Source: https://khoros.com/blog/social-medias-role-during-covid-19

SECONDARY RESEARCH

Key Information

Death Toll

WHO CORONAVIRUS DISEASE (COVID-19) DASHBOARD

Globally, as of 6:08pm CEST, 1 July 2020, there have been **10,357,662** confirmed cases of COVID-19, including **508,055 deaths**, reported to WHO.

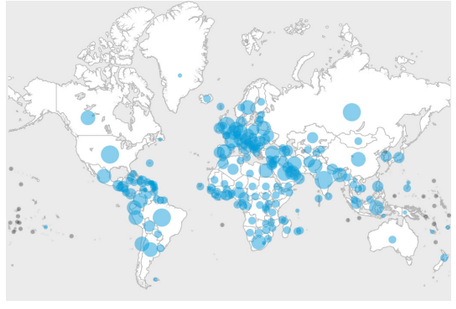
How many masks are needed? And how many are being produced?

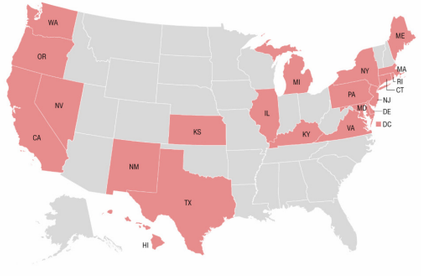
The WHO estimates **89 million** medical masks are needed globally every month while the Coronavirus Pandemic lasts, together with 76 million examination gloves and 1.6 million goggles and face visors.

At the start of the outbreak, US officials estimated that the country needed **300 million** face masks to cope with COVID-19 in 2020. Since then, US manufacturer 3M, which made 550 million masks in 2019, has said it will produce 2 billion this year at plants around the world.

In February, China's daily production of all types of masks soared from around 10 million to 115 million by the end of that month, and production has expanded 12-fold since the pandemic started.

Source: https://www.who.int/news-room/detail/03-03-2020-shortage-of-personal-protective-equipment-endangering-health-workers-worldwide





Photos: World Health Organization

WHICH COUNTRIES AND STATES HAVE MADE WEARING FACE MASKS COMPULSORY?

More than 50 countries and states require people to cover their faces when they leave home.

Europe: France, Spain, Germany, Luxembourg, Poland, Israel, Turkey, Bosnia and Herzegovina, Slovakia, Czech Republic

Oceania: Australia

South America: Honduras, Argentina, El Salvador, Chile, Ecuador, Colombia, Venezuela

North America: US (California, Connecticut, Delaware, District of Columbia, Hawaii, Illinois, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Nevada, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Rhode Island, Texas, Virginia, Washington), Canada (Alexandria, Cornwall, Rockland, Casselman), Cuba

Asia: China, South Korea, Japan, Lebanon, Pakistan, Qatar, Bahrain, United Arab Emirates, Vietnam

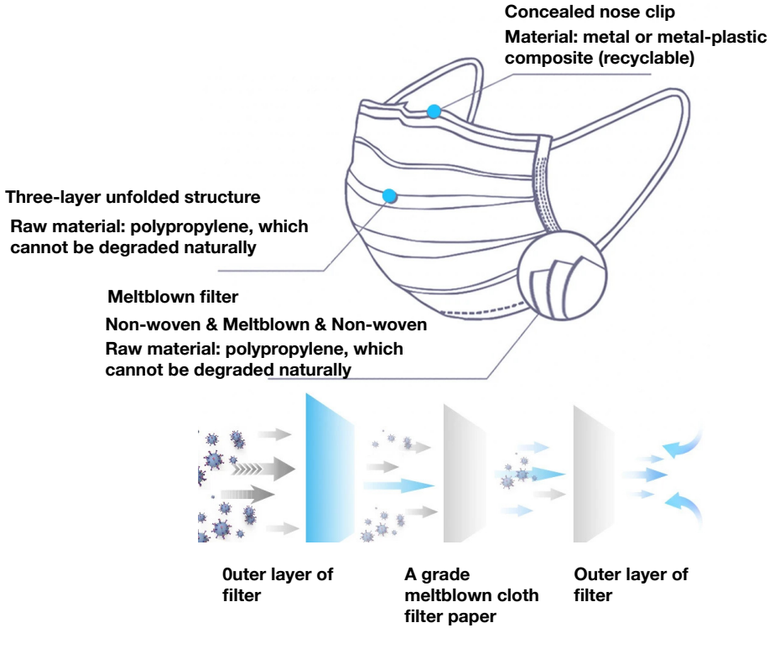
Africa: Cameroon, Angola, Benin, Burkina Faso, Equatorial Guinea, Ethiopia, Gabon, Guinea, Kenya, Liberia, Rwanda, Sierra Leone, Zambia, Uganda, Jamaica, Morocco

SECONDARY RESEARCH

Key Information

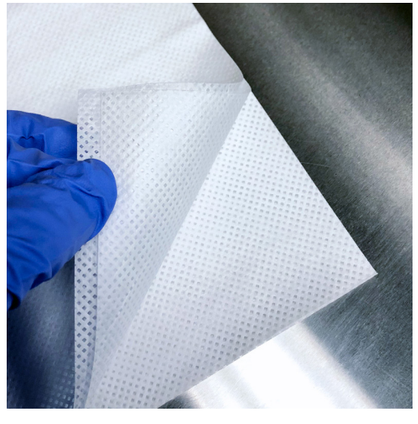
MASK INTERNAL STRUCTURE & MATERIAL SURVEY

According to the survey, the disposable masks currently on sale are mainly composed of non-woven fabrics and melt-blown fabrics. Their raw material is polypropylene. This material does not add any degradable ingredients. It will take about 50 years under natural degradation.



ENVIRONMENTAL DAMAGE AND SECONDARY POLLUTION CAUSED BY NON-WOVEN FABRICS AND MELT-BLOWN FABRICS

non-woven fabrics



Photos: Google Images

There are many kinds of raw materials for the production of non-woven fabrics: polypropylene (PP), polyester (PET), nylon (PA), polyethylene (HDPE), and chloroprene (PVC). These materials are not degradable if If you want to be truly biodegradable, you need to add no polyester or viscose, and only use plant fibers, which is the paper we often say.

melt-blown fabrics

The outer layer of the mask that has been used may have contaminated droplets, which is the source of infection! Discarding easily causes re-contamination!

Source: https://en.wikipedia.org/wiki/Nonwoven_fabric

SECONDARY RESEARCH

Key Information

WHAT HAPPENS WHEN A USED MASK IS DISPOSED OF IMPROPERLY?

Photo: Twitter

Wong Chen Seong, a consultant at the National Centre for Infectious Diseases, said that improperly discarded masks, especially those that are soiled or have a "large amount of respiratory secretions" on them, could be a potential health hazard should others come in contact with it. "The way that the virus may be transmitted to others in this way is **through contact** – that is, if others inadvertently touch the soiled mask, and then their own face," Wong said.

Leong Hoe Nam, an infectious diseases expert at Mount Elizabeth Novena Specialist Centre, said **an exposed mask carries with it a "small risk" of passing a virus through the air**. "If exposed to the open, with strong winds, there is a small risk of aerosolisation," he said. Aerosolisation refers to a process where a substance such as one's spit or mucus is dispersed and transmitted through the air. **"Either way, [improperly discarding used face masks] is disgusting and unhealthy," he said. The experts predicted the virus, when left exposed, could survive as long as a few hours to a few days.**

TWO WAYS DISTRIBUTED MASKS SPREAD THE VIRUS

Touching a waste mask with a virus

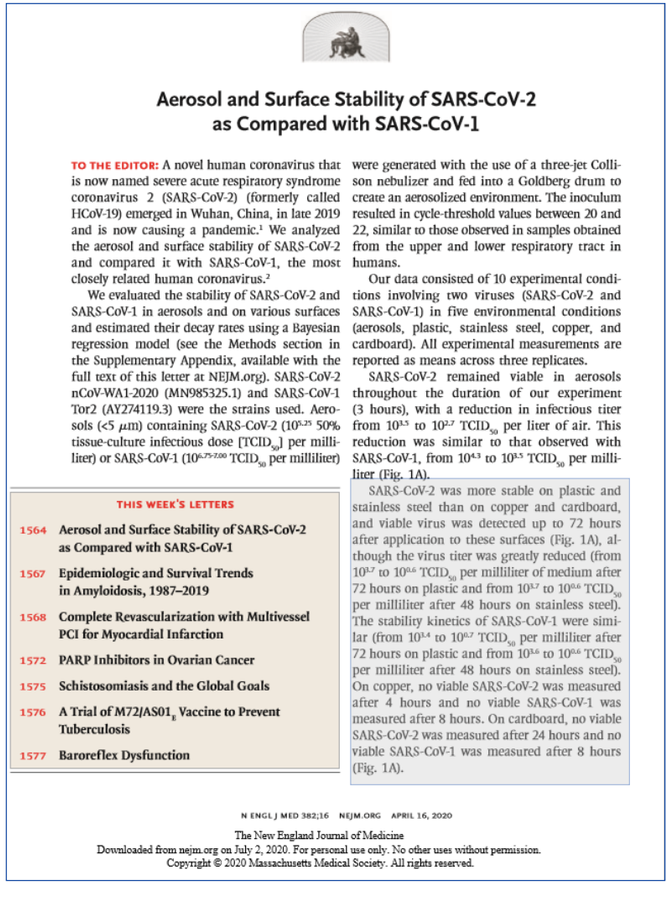
Discarded masks with viruses spread the virus through the air

Source: https://www.scmp.com/week-asia/explained/article/3051429/wearing-face-mask-how-dispose-them-safely-and-can-they-be

SECONDARY RESEARCH

Key Information

CORONAVIRUS SURVIVAL TIME



Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1

TO THE EDITOR: A novel human coronavirus that is now named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (formerly called HCoV-19) emerged in Wuhan, China, in late 2019 and is now causing a pandemic.[1] We analyzed the aerosol and surface stability of SARS-CoV-2 and compared it with SARS-CoV-1, the most closely related human coronavirus.[2]

We evaluated the stability of SARS-CoV-2 and SARS-CoV-1 in aerosols and on various surfaces and estimated their decay rates using a Bayesian regression model (see the Methods section in the Supplementary Appendix, available with the full text of this letter at NEJM.org). SARS-CoV-2 nCoV-WA1-2020 (MN985325.1) and SARS-CoV-1 Tor2 (AY274119.3) were the strains used. Aerosols (<5 μm) containing SARS-CoV-2 ($10^{5.25}$ 50% tissue-culture infectious dose [$TCID_{50}$] per milliliter) or SARS-CoV-1 ($10^{6.75-7.00}$ $TCID_{50}$ per milliliter) were generated with the use of a three-jet Collison nebulizer and fed into a Goldberg drum to create an aerosolized environment. The inoculum resulted in cycle-threshold values between 20 and 22, similar to those observed in samples obtained from the upper and lower respiratory tract in humans.

Our data consisted of 10 experimental conditions involving two viruses (SARS-CoV-2 and SARS-CoV-1) in five environmental conditions (aerosols, plastic, stainless steel, copper, and cardboard). All experimental measurements are reported as means across three replicates.

SARS-CoV-2 remained viable in aerosols throughout the duration of our experiment (3 hours), with a reduction in infectious titer from $10^{3.5}$ to $10^{2.7}$ $TCID_{50}$ per liter of air. This reduction was similar to that observed with SARS-CoV-1, from $10^{4.3}$ to $10^{3.5}$ $TCID_{50}$ per milliliter (Fig. 1A).

SARS-CoV-2 was more stable on plastic and stainless steel than on copper and cardboard, and viable virus was detected up to 72 hours after application to these surfaces (Fig. 1A), although the virus titer was greatly reduced (from $10^{3.7}$ to $10^{0.6}$ $TCID_{50}$ per milliliter of medium after 72 hours on plastic and from $10^{3.7}$ to $10^{0.6}$ $TCID_{50}$ per milliliter after 48 hours on stainless steel). The stability kinetics of SARS-CoV-1 were similar (from $10^{3.4}$ to $10^{0.7}$ $TCID_{50}$ per milliliter after 72 hours on plastic and from $10^{3.6}$ to $10^{0.6}$ $TCID_{50}$ per milliliter after 48 hours on stainless steel). On copper, no viable SARS-CoV-2 was measured after 4 hours and no viable SARS-CoV-1 was measured after 8 hours. On cardboard, no viable SARS-CoV-2 was measured after 24 hours and no viable SARS-CoV-1 was measured after 8 hours (Fig. 1A).

THIS WEEK'S LETTERS

1564 Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1
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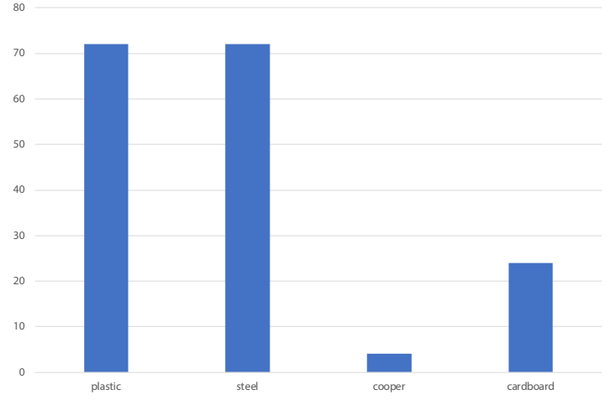
Source: https://www.nih.gov/news-events/nih-research-matters/study-suggests-new-coronavirus-may-remain-surfaces-days

The coronavirus can live for three days on some surfaces, like plastic and steel, new research suggests. The new study, published Tuesday in The New England Journal of Medicine,When the virus becomes suspended in droplets smaller than five micrometers — known as aerosols — it can stay suspended for about a half-hour, researchers said, before drifting down and settling on surfaces where it can linger for hours. (In the study's experimental setup, the virus stayed suspended for three hours, but it would drift down much sooner under most conditions.) The finding on aerosol in particular is inconsistent with the World Health Organization's position that the virus is not transported by air. (Cristina C, 2020, p7).

The virus lives longest on plastic and steel, surviving for up to 72 hours. But the amount of viable virus decreases sharply over this time. It also does poorly on copper, surviving four hours. On cardboard, it survives up to 24 hours, which suggests packages that arrive in the mail should have only low levels of the virus — unless the delivery person has coughed or sneezed on it or has handled it with contaminated hands. **The raw material polypropylene of the mask is a kind of plastic, so the waste mask is one of the important ways for the secondary transmission of the virus**

CORONAVIRUS SURVIVAL TIME ON OBJECTS (H)



SECONDARY RESEARCH

Key Information

THE ENVIRONMENTAL DAMAGE OF A DISCARDED MASK

Photo: Energy Live News

Discarded single-use face masks used to stop the spread of coronavirus could be causing significant harm to the environment.

Environmental group OceansAsia conducted a recent survey trip to the Soko's islands in Hong Kong where it found masses of surgical masks washing up on the shoreline.

Gary Stokes, OceanAsia's Founder, told Energy Live News: "We have found 70 discarded masks within 100 metres of the beach and an additional 30 masks when we returned a week later. Over time the team has seen the odd mask here and now, however this time they were all along the high tide line and foreshore with new arrivals coming in on the current. When you suddenly have a population of seven million people wearing one to two masks per day the amount of trash generated is going to be substantial.

HAZARDS OF DISPOSABLE MASKS ENTERING THE OCEAN

1

Teale Phelps Bondaroff, Director of Research at OceansAsia, told Energy Live News: **"A mask that is ingested by a local turtle, pink dolphin or finless porpoise, for example, could easily become stuck in the digestive system of this animal, thereby killing it."**

2

Most of these masks contain or are made of polypropylene, which does not break down quickly. Marine plastic pollution is a serious problem. It is estimated that every year, **over eight million tonnes** of plastic enter our oceans. This plastic does not disappear but rather **slowly breaks down into micro-plastic**, which enters food chains, with devastating effect.

8,000,000 tons

3

Estimates suggest that more than **100,000 marine mammals and turtles and over a million sea birds are killed** by marine plastic annually. Marine plastic adsorbs toxins, which results in it poisoning animals that accidentally ingest it.

Pcs/year

100,000

marine mammals and turtles are killed by marine plastic

1,000,000

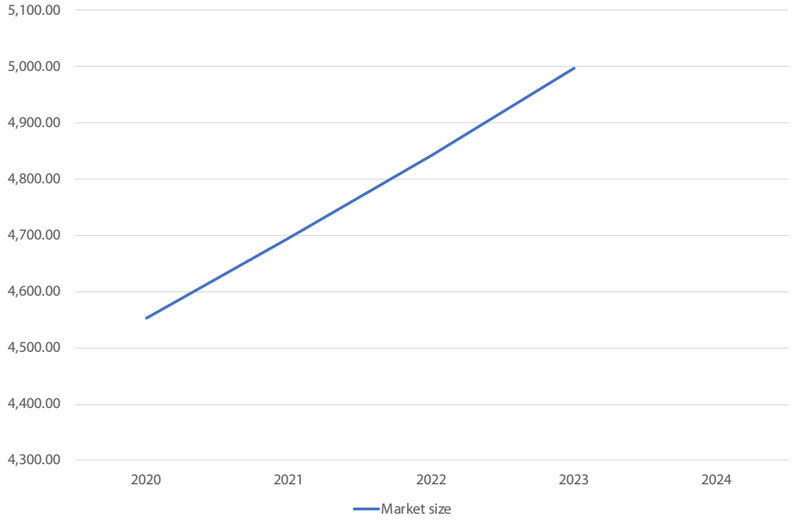
sea birds are killed by marine plastic

Source: https://www.energylivenews.com/2020/03/17/coronavirus-face-masks-could-have-a-devastating-effect-on-the-environment/

SECONDARY RESEARCH

Key Information

GLOBAL DISPOSABLE FACE MASKS MARKET SIZE OUTLOOK $ MILLION)



COMPARING RESEARCH DATA

The UN estimates that **13 million tons of plastic are dumped** in the sea each year and that half of the plastic produced globally is for single-use items.

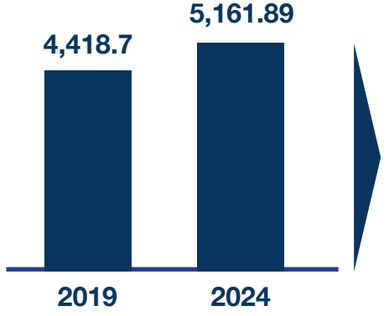
In the Mediterranean, **570,000 tons of plastic are dumped each year**, the equivalent of 33,800 plastic bottles every minute, according to WWF

According to a WWF report, **"if just 1% of the masks were disposed of incorrectly and dispersed in nature, this would result in as many as 10 million masks per month polluting the environment."**

Considering that the weight of each mask is about 4 grams, **this would result in the dispersion of more than 40 thousand kilograms of plastic in nature,**" the report stipulated.

COMPARING RESEARCH DATA

By looking at the global mask industry analysis report for 2020-2024, the demand for masks will further increase in the next 5 years, and the demand for masks in the rigion of MEA will exceed that in Asia.(Technavio, 2020, p4). The global Face Mask market is valued at 4418.7 million US$ in 2020 is expected to reach 21210 million US$ by the end of 2027, growing at a CAGR of 24.2% during 2021-2027.

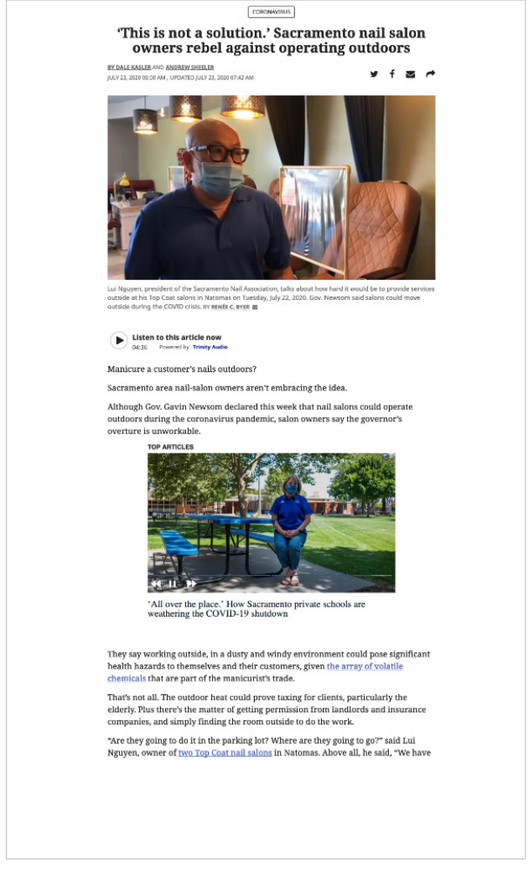


743.17

Incremental growth between 2019 and 2024 ($ million)

POPULAR MEDIA SCAN | *6/30 - 7/24 Well Being*

Key Information



CORONAVIRUS

'This is not a solution.' Sacramento nail salon owners rebel against operating outdoors

BY DALE KASLER AND ANDREW SHEELER
JULY 23, 2020 05:00 AM , UPDATED JULY 23, 2020 07:42 AM

Lui Nguyen, president of the Sacramento Nail Association, talks about how hard it would be to provide services outside at his Top Coat salons in Natomas on Tuesday, July 22, 2020. Gov. Newsom said salons could move outside during the COVID crisis. BY BENJI C. BYRD

Listen to this article now
04:30 Powered by Trinity Audio

Manicure a customer's nails outdoors?

Sacramento area nail-salon owners aren't embracing the idea.

Although Gov. Gavin Newsom declared this week that nail salons could operate outdoors during the coronavirus pandemic, salon owners say the governor's overture is unworkable.

TOP ARTICLES

'All over the place.' How Sacramento private schools are weathering the COVID-19 shutdown

They say working outside, in a dusty and windy environment could pose significant health hazards to themselves and their customers, given the array of volatile chemicals that are part of the manicurist's trade.

That's not all. The outdoor heat could prove taxing for clients, particularly the elderly. Plus there's the matter of getting permission from landlords and insurance companies, and simply finding the room outside to do the work.

"Are they going to do it in the parking lot? Where are they going to go?" said Lui Nguyen, owner of two Top Coat nail salons in Natomas. Above all, he said, "We have

6 Fall Haircut Trends Stylists Predict Will Rise During the Pandemic

COVID-19 has changed a lot about our lives, and that includes our grooming decisions. Stylists predict we'll see a lot of low-maintenance cuts and styles, which are easy to maintain during these uncertain times.

BY JOSIAH FORBES
July 23, 2020

Getty Images

Since March, most of the United States has been sheltering in place while dealing with COVID-19. The pandemic has forced us, as a nation, to ask ourselves: Is maintaining the normalcy of life that existed before the virus worth risking lives for? Is the will of the individual more important than the safety of the collective?

We've had to adapt nearly every aspect of our lives to this new, harsh reality. The way we work, socialize, date, shop, worship, travel, and learn have all had to change — and that includes our personal grooming habits. Since the stay-at-home orders, folks have had to make do without regular access to beauty professionals. The people who do our manicures, facials, massages, and cut our hair, have been out of reach for many of us. We've had to teach ourselves how to remove our own acrylics, give ourselves dye jobs, and yes, even say a silent prayer before taking a pair of hair-cutting scissors we bought on Amazon to our ragged ends.

As the ways of personal upkeep have changed, so have the trends that come along with them. Haircuts are obviously important to people — a handful of people across the nation were so far as to take to the streets to demand access to hair salons, whether it was actually safe to go or not. Those in areas that have reopened salons have found that their local spot looks and feels a lot different than it did before the pandemic.

With timers on uncertain and folks not knowing how long things will remain open (salons are being seen in cities with less strict policies), the question of what to do with our hair when we do have access to stylists is crucial. And the guidance of our hairstylists is more important than ever before.

"With people not getting haircuts at all — or trying to cut their own hair and messing it up — we're going to see people leaning on their stylists for the more advanced techniques," says hairstylist and author Jernard "Kee" Taylor. These days, it's looking like a combination of infrequent salon visits and virtual interaction from hairstylists may be the new normal.

So, what do haircuts in the time of a pandemic look like? We asked some top stylists to tell us what trends they're already seeing and the forecast for the near future.

WATCH

Easiest Way to Do a Pulled Braid

MOST ALLURE VIDEOS

Most Popular

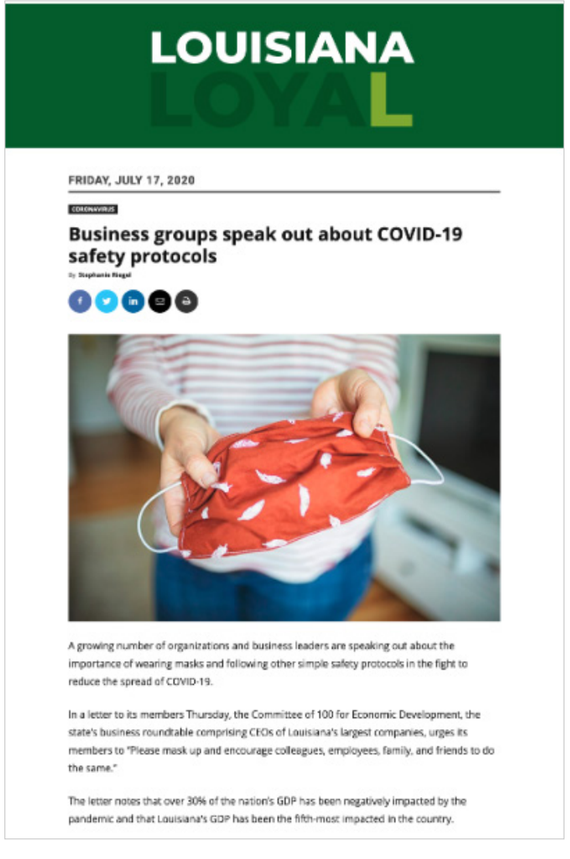
44 Protective Face Coverings to Wear Outdoors

The 39 Best Face Moisturizers for Summer, According to...Skin Editors

- San Diego mental health professionals saw 2,000 people per day in January, up to 5,000 people per day in May (Naso, 2020).
- COVID-19 is putting a strain on people that spend more time together, including families but also those who are isolated (Naso, 2020).
- Salons are dealing with constantly changing rules. Shut down, reopen, shut down again, reopen, but outside only (Goodrich, 2020).
- Stylists are opening to keep their business from failing (Goodrich, 2020).
- 90% of nail salon owners in Sacramento don't plan to operate outdoors because it's unworkable (Kasler & Sheeler, 2020).
- Hair style trends are changing due to COVID-19 restrictions (Forbes, 2020).
- Buzz cuts are gaining popularity because they are low-maintenance but still cool-looking (Forbes, 2020).

POPULAR MEDIA SCAN | *6/30 - 7/24 Health and Safety Protocols*

Key Information



LOUISIANA LOYAL

FRIDAY, JULY 17, 2020

CORONAVIRUS

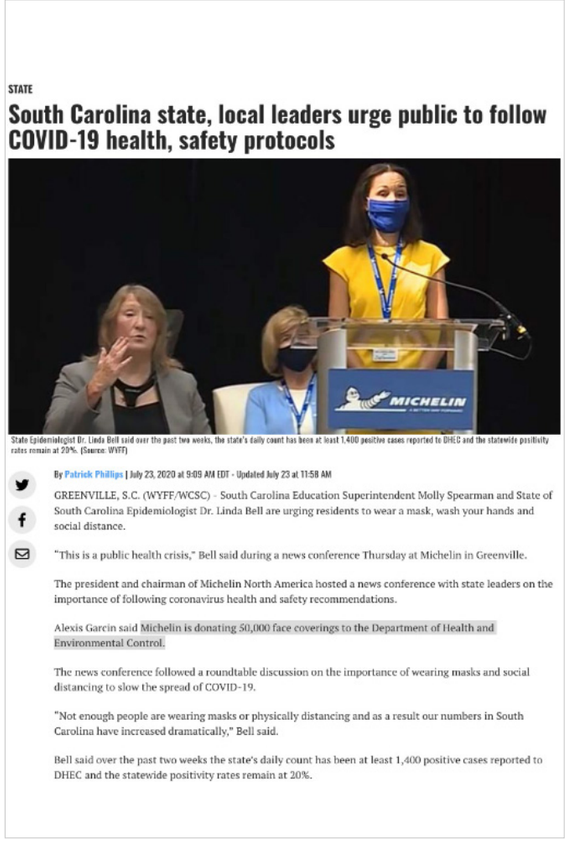
Business groups speak out about COVID-19 safety protocols

By Stephanie Riegel

A growing number of organizations and business leaders are speaking out about the importance of wearing masks and following other simple safety protocols in the fight to reduce the spread of COVID-19.

In a letter to its members Thursday, the Committee of 100 for Economic Development, the state's business roundtable comprising CEOs of Louisiana's largest companies, urges its members to "Please mask up and encourage colleagues, employees, family, and friends to do the same."

The letter notes that over 30% of the nation's GDP has been negatively impacted by the pandemic and that Louisiana's GDP has been the fifth-most impacted in the country.



STATE

South Carolina state, local leaders urge public to follow COVID-19 health, safety protocols

State Epidemiologist Dr. Linda Bell said over the past two weeks, the state's daily count has been at least 1,400 positive cases reported to DHEC and the statewide positivity rates remain at 20%. (Source: WYFF)

By Patrick Phillips | July 23, 2020 at 9:09 AM EDT - Updated July 23 at 11:58 AM

GREENVILLE, S.C. (WYFF/WCSC) - South Carolina Education Superintendent Molly Spearman and State of South Carolina Epidemiologist Dr. Linda Bell are urging residents to wear a mask, wash your hands and social distance.

"This is a public health crisis," Bell said during a news conference Thursday at Michelin in Greenville.

The president and chairman of Michelin North America hosted a news conference with state leaders on the importance of following coronavirus health and safety recommendations.

Alexis Garcin said Michelin is donating 50,000 face coverings to the Department of Health and Environmental Control.

The news conference followed a roundtable discussion on the importance of wearing masks and social distancing to slow the spread of COVID-19.

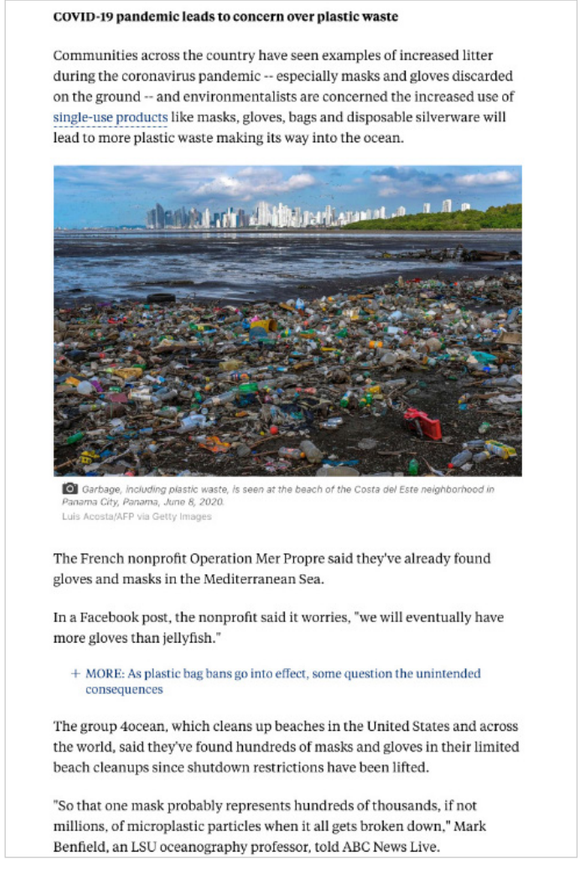
"Not enough people are wearing masks or physically distancing and as a result our numbers in South Carolina have increased dramatically," Bell said.

Bell said over the past two weeks the state's daily count has been at least 1,400 positive cases reported to DHEC and the statewide positivity rates remain at 20%.

- NASCAR procedures have "appeared as a joke at times" (King, 2020).
- High-profile incidents have not been penalized by NASCAR (King, 2020).
- At Arizona schools, meals will be eaten in classrooms or cafeteria capacity will be lowered (Staff, 2020).
- Masks are required to be worn by students at all times inside and outside of buildings at Arizona schools (Staff, 2020).
- Michelin hosted a news conference on the importance of following safety recommendations (Phillips, 2020).
- Michelin is donating 50,000 face coverings (Phillips, 2020).
- CEOs of Louisina's largest companies urge people to "mask up" (Riegel, 2020).
- CEOs stressed the economic importance of quality of life (Riegel, 2020).

POPULAR MEDIA SCAN | *6/30 - 7/24 Waste Production*

Key Information



COVID-19 pandemic leads to concern over plastic waste

Communities across the country have seen examples of increased litter during the coronavirus pandemic -- especially masks and gloves discarded on the ground -- and environmentalists are concerned the increased use of single-use products like masks, gloves, bags and disposable silverware will lead to more plastic waste making its way into the ocean.

Garbage, including plastic waste, is seen at the beach of the Costa del Este neighborhood in Panama City, Panama, June 8, 2020.
Luis Acosta/AFP via Getty Images

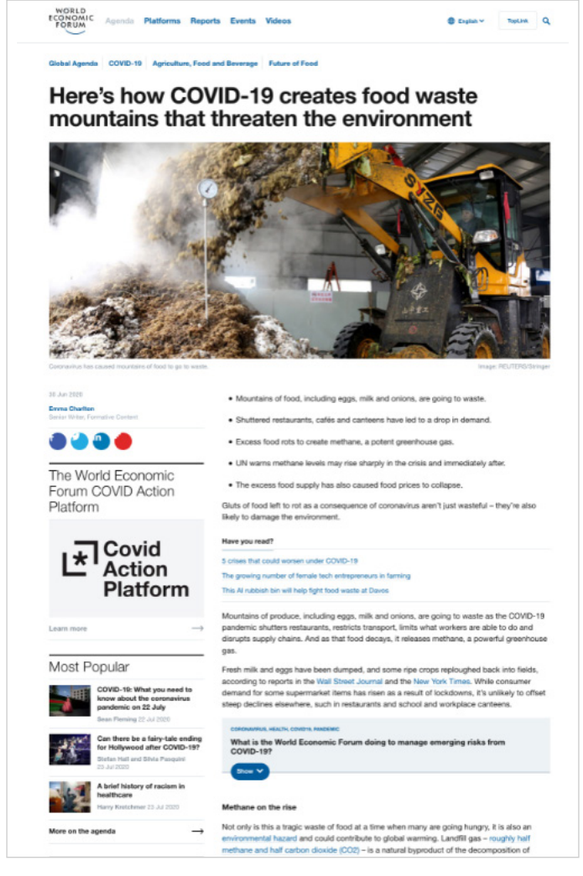
The French nonprofit Operation Mer Propre said they've already found gloves and masks in the Mediterranean Sea.

In a Facebook post, the nonprofit said it worries, "we will eventually have more gloves than jellyfish."

+ MORE: As plastic bag bans go into effect, some question the unintended consequences

The group 4ocean, which cleans up beaches in the United States and across the world, said they've found hundreds of masks and gloves in their limited beach cleanups since shutdown restrictions have been lifted.

"So that one mask probably represents hundreds of thousands, if not millions, of microplastic particles when it all gets broken down," Mark Benfield, an LSU oceanography professor, told ABC News Live.



WORLD ECONOMIC FORUM

Here's how COVID-19 creates food waste mountains that threaten the environment

The World Economic Forum COVID Action Platform

Covid Action Platform

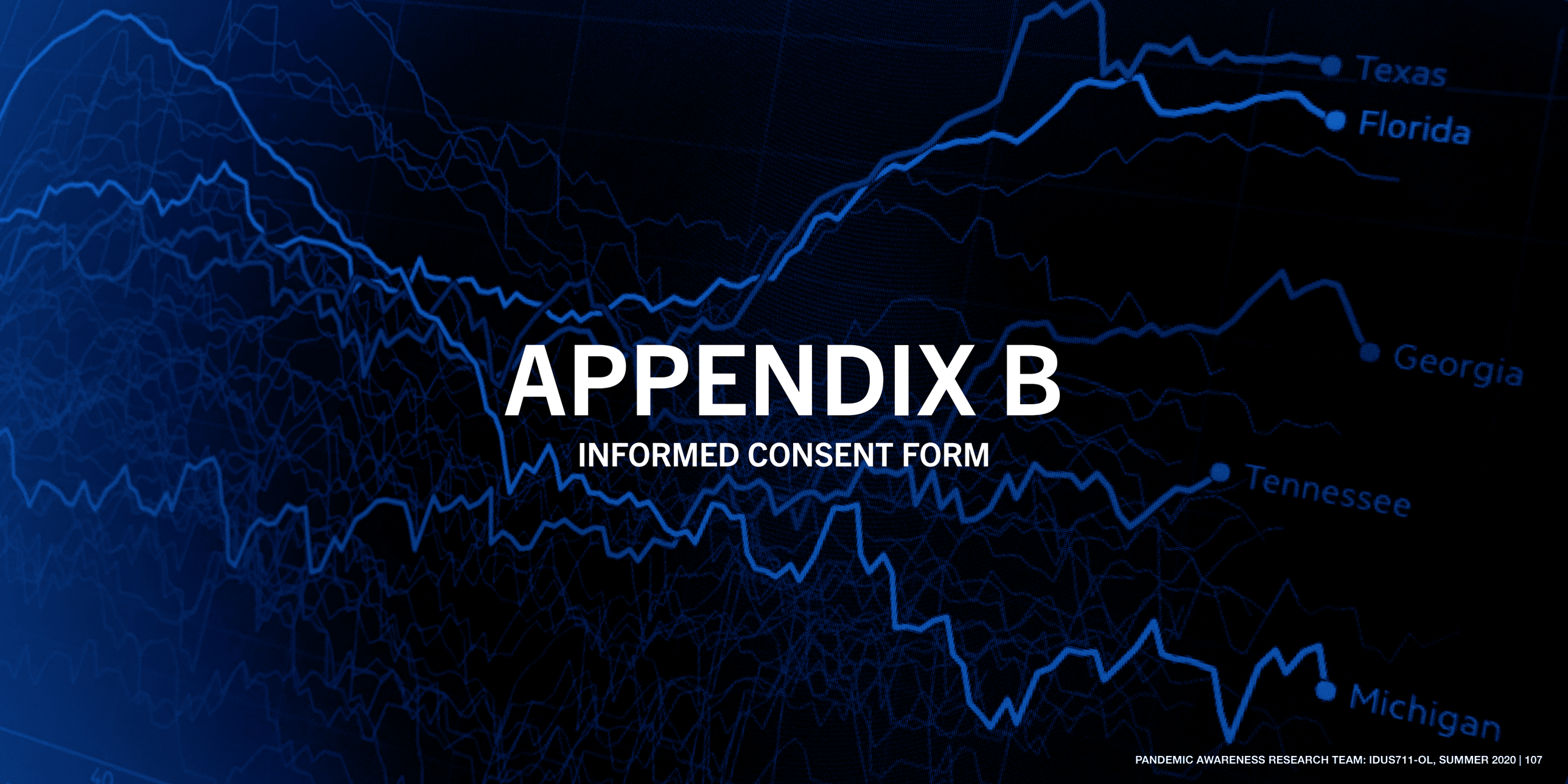
Most Popular

- Mountains of food, including eggs, milk and onions, are going to waste.
- Shuttered restaurants, cafés and canteens have led to a drop in demand.
- Excess food rots to create methane, a potent greenhouse gas.
- UN warns methane levels may rise sharply in the crisis and immediately after.
- The excess food supply has also caused food prices to collapse.

- The UN warns that **methane levels may rise sharply** due to the pandemic (Charlton, 2020).
- **Farmers are dumping 14 million litres of milk per day as a result of the pandemic (Charlton, 2020).**
- **There are at least 75 disposable gloves per city block in Brooklyn (Schlosberg, Zee, Ebbs, & Griswold, 2020).**
- **Carbon emissions fell 36% in Britain during the first four weeks of lockdown (Ambrose, 2020).**
- **Britain's emissions savings fell to 16% in June as more cars returned to the road (Ambrose, 2020).**
- **During the first week of lockdown in New York City, carbon monoxide levels dropped 50% below average (Zapien, 2020).**
- **Wuhan experienced between 40 and 50 tons/day of medical waste before the outbreak to 247 tons on March 1st (You, Sonne, & Ok, 2020).**

APPENDIX B

INFORMED CONSENT FORM



INFORMED CONSENT

Pandemic Awareness Student Research Group
from Savannah College of Art and Design
Summer 2020: IDUS711 Methods of Contextual Research

INFORMED CONSENT FORM FOR INDIVIDUALS IMPACTED BY THE CORONAVIRUS PANDEMIC

INVESTIGATORS AND INTERVIEWERS:

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Chengjun Li
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Meglyn Masters
mmaste22@student.scad.edu

Cale Mooth
rmooth20@student.scad.edu

Christina Wong
chwong34@student.scad.edu

PROJECT NAME

Exploring attitudes and behaviors around the coronavirus pandemic.

INTRODUCTION

We are graduate students with Savannah College of Art and Design conducting research to better understand attitudes and behaviors around various aspects of the Coronavirus Pandemic and invite you to participate. While there is no rush for you to make your decision, the investigation portion of this study will conclude on August 1, 2020. Feel free to ask questions of anyone on this research team, especially if concepts are unclear.

PURPOSE OF THIS PROJECT

With the coronavirus pandemic affecting a wide range of individuals and communities, we want to better understand how the virus and its resultant health, social and community challenges are impacting you. You can assist us by sharing your experiences and thoughts related to the pandemic. Collecting this information could help us all better manage ourselves during this extraordinary time.

TYPE OF RESEARCH INTERVENTION

This study may request your participation in one or more methods including, but not limited to, surveys and interviews. You may decline participation at any time.

PARTICIPANT SELECTION

You were selected to take part in this study because we feel your unique experiences may help us better comprehend our understanding of how people are coming to terms with coronavirus related topics.

VOLUNTARY PARTICIPATION

Your participation in this study is completely voluntary. You may contribute as much or as little as you feel comfortable with. You have the right to withdraw from participating in this study at any time.

PROCEDURES

Detailed procedures for this study will be provided prior to the time of engagement. For example, if participating in an interview, you will be provided with a Zoom invite for a specific time and date upon which your interviewer will ask you a series of questions in a conversational manner. Questions will be similar to the following:

- How has the coronavirus pandemic affected your day-to-day life?
- How have mask requirements impacted your ability to function in public places?

We're happy to provide a copy of all questions upon request.

DURATION

Your commitment to this study should take no more than 60 minutes of your time.

RISKS

While we don't anticipate any adverse risk by participating in this study, you may choose to stop participating in this study at any time should you no longer feel comfortable.

BENEFITS

Your participation in this study will help further the education of the participating interviewers and potentially surface interesting patterns and behavior related to the coronavirus pandemic.

REIMBURSEMENTS

Reimbursements and incentives will not be provided as part of your participation in this study.

CONFIDENTIALITY

Personally identifiable information such as phone numbers, email addresses, and last names will remain private, only made available to this immediate research team (listed above). However, your first name and photo may be made available to our broader class (IDUS711 Methods of Contextual Research graduate level class at Savannah College of Art and Design) and professor as part of class presentations if you provide us with that information, and with your permission.

SHARING THE RESULTS

Information that you provide to us may be shared with the immediate research team (listed above), professor, and classmates that are part of the summer 2020 IDUS711 Methods of Contextual Research graduate level class at Savannah College of Art and Design. In addition, your information may also appear in student portfolio materials. Your recorded interview (with your consent) will not be shared beyond the professor and students of the class. Final research findings are available upon request from your interviewers.

RIGHT TO REFUSE OR WITHDRAW

This study is completely voluntary which means you may stop participating in this study at any time. You also have the right to limit sharing of your image, refuse recording of your interview, review your remarks and modify or remove any of your statements at any time.

WHO TO CONTACT

If you have any questions about this study, including questions about your rights as a research participant, please contact any of the research team listed at the beginning of this document.

Pandemic Awareness Student Research Group
from Savannah College of Art and Design
Summer 2020: IDUS711 Methods of Contextual Research

CERTIFICATE OF CONSENT

I have read the foregoing information and voluntarily agree to be a participant in this study conducted by students from the Savannah College of Art and Design. I affirm that I am 18 years of age or older. I have had the opportunity to ask questions about this study and my questions have been answered to my satisfaction.

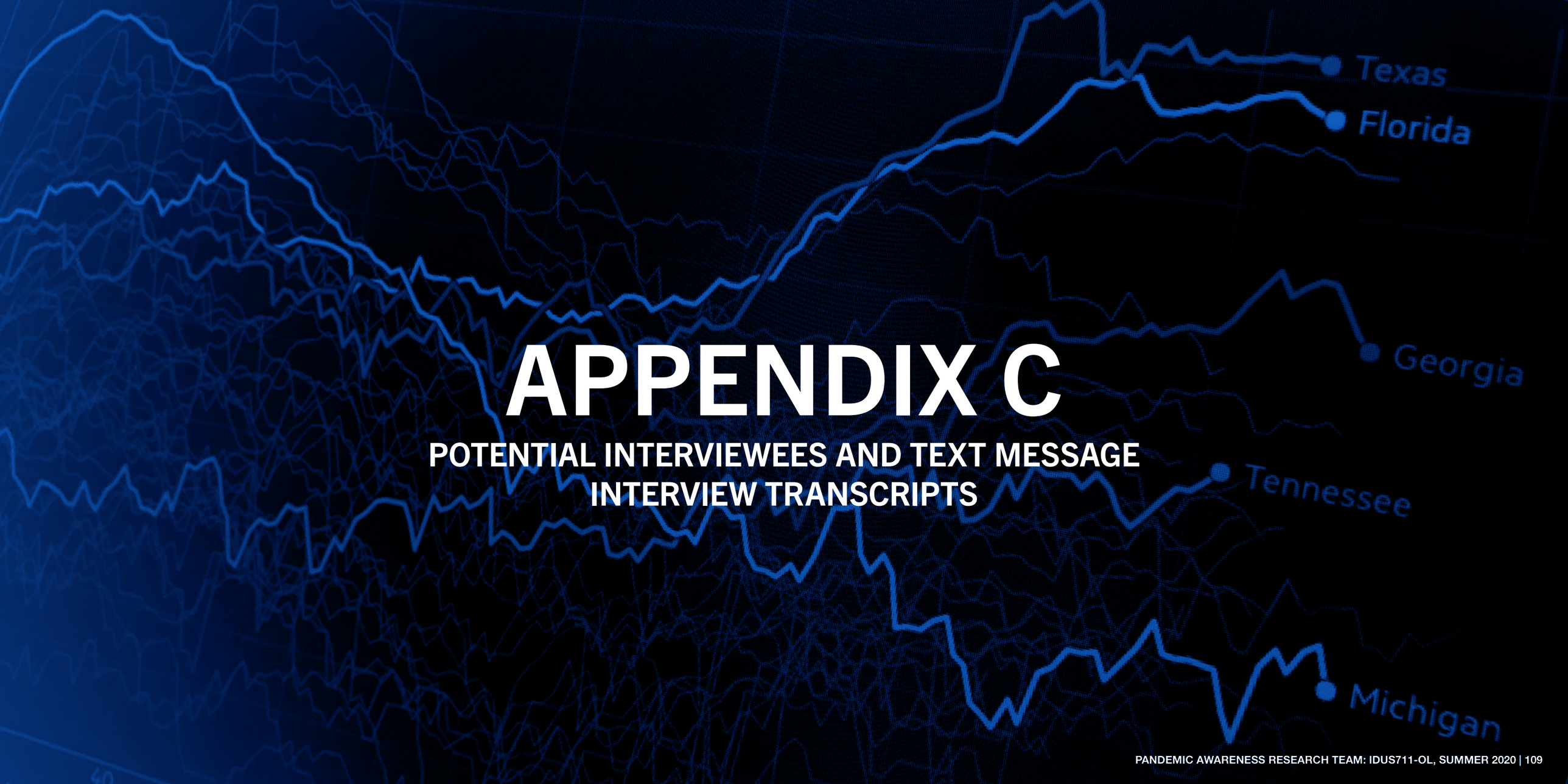
I grant permission for my contribution to this study to be recorded, transcribed, and used in an educational setting. I understand that my personal information will remain anonymous to those outside of this research team.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

_____
PRINTED NAME OF PARTICIPANT

_____ _____
SIGNATURE OF PARTICIPANT **DATE**

This form is based on the informed consent for qualitative studies template from the World Health Organization.
https://www.who.int/ethics/review-committee/informed_consent/en/



APPENDIX C

POTENTIAL INTERVIEWEES AND TEXT MESSAGE INTERVIEW TRANSCRIPTS

POTENTIAL IN-DEPTH INTERVIEWEES

HEALTHCARE

April Hoare, RN
Johnson City, TN

Amber Isbell, 40
PICU Nurse at Dallas Children's
Dallas, TX

Erica Barr, RN
ER Nurse - Spectrum Health Hospitals
Grand Rapids, MI

Greg Leibowitz, 37
Sr UI/UX Designer in Healthcare
Orlando, FL

William L., 32
Blood Bank Lab Supervisor
Orlando, FL

Kimberly Gill, RN, MPH
Patient Care Coordinator
MNPS Health Care Centers
Vanderbilt University Medical Center

Tanu Rana
Assistant Professor, Integrated Didactics
Meharry Medical College

John Hellerstedt
Texas DSHS Commissioner

Brian Haines
Hospitality Manager - Graduate Hotels and Dish Pen
Royal Oak, MI

COMMUNITY

Cammy Ng, 26
Real Estate Agent
Orlando, FL

Jonathan Schibalski, 33
Small Business Owner
Orlando, FL

Mike Rosso, 27
Downtown Orlando City Planner
Orlando, FL

Peter John Vander Kooij, 44
Graphic Designer
Hamilton, Ontario

Kelsey Weideman, 22
Attractions Coordinator at Walt Disney World
Orlando, FL

Suhan Yilmaz, 29
Occupational Therapist at Baylor McKinney

Mayor Harry LaRosiliere
Mayor for the City of Plano, TX

Laura Cleary, 58
Retired

Billy Reiter, 38
3D Modeling Instructor
Orlando, FL

Meredith Teplin, 31
Pandemically-Unemployed

Krystal Chaisson, 27
Office Administrator
Houston, TX

Zilan Zhou, 24
SCAD Student
Savannah, GA

Caron Ke, 24
SCAD Student
Savannah, GA

Charles Chen, 23
SCAD Student
Savannah, GA

Shelisa Larue, 27
Design Student At UNT, Home Depot Associate
Dallas, TX

LOCAL BUSINESS

Cathy Gray
Assistant Professor
Spring Hill College

Gabe Palacios
42, Assistant Manager, Operations, For Home Depot

Cole Russell, 33
Assistant Manager, Operations, Home Depot
(Immunocompromised Baby - Heart Condition)

Jeffrey Martinson, 33,
Supervisor, Customer Service, for Home Depot

Andy Nagel, 62
Manager Of Integrations, Travelocity at Expedia

Destiny Garcia, 19
Home Depot Associate

Kelvin Henry, 40
Store Manager For Home Depot

David Hoel
International Business Development Manager - Nice
San Antonio, TX

Matt Dimmer
Creative Director - Mcgarry Bowen
Chicago, IL

Brandi Huyser
Director Of Xs Energy & Next Gen Strategy - Amway
Ada, MI

Josh Ralya
Owner And Creative Director - Ideology Productions
Ada, MI

David Vanderveen
Chief Operating Officer - New Age Beverage Company
Laguna Beach, CA

Ben Vandyke
Department Chair, School Of Visual Media - Michigan State University
Lansing, MI

Corey Tumey
Owner of C. Tumey Law Group
Houston TX

Corinne Donah, 38
Assistant Manager at Attic Salt
Houston, TX

PROFESSIONAL

Rossel Kluwe, 27
Illustrator
Savannah, GA

Johnson Marc, 20
SCAD Student
Savannah, GA

Hongchun Li, 45
Professor Of Dalian Jiaotong University
Dalian, China

Ziliang Luo, 26
Product Design Director
Shenzhen, China

Sheri Selph
Assistant Professor
Middle Tennessee State University

Merredith Mooth
PhD Candidate, Human Performance - Exercise Science

Larry Leicht, 34
Audio Director at Freeman Av

Glacy Page, 35
Operator At Shell Deer Park
Houston, TX

Brian Atmar, 34
Emergency Management Specialist At The University Of Houston
Houston, TX

Neely Adkins
Communications Manager - Challenge Manufacturing
Grand Rapids, MI

Robin Renzenbrink
Xreative Services Manager - Amway
Ada, MI

James Froeschner, 58
IT Professional
Dallas, TX

Becky Burnside
International Corporate Travel Consultant
Dallas TX

TEXT MESSAGE INTERVIEW TRANSCRIPTS

QUESTION 1:
Do you have any county or city-specific measures social distancing measures in place, beyond what is outlined by [Home Depot] corporate in the social distancing playbook?

QUESTION 2:
How well do employees understand the measures, and do employees feel like they're effective? Unnecessary? Helpful? Prohibitive?

QUESTION 3:
Same question, but customers:
how are the measures understood and received by customers?

QUESTION 4:
What feedback have you received (customer or employee) about the measures that stands out in your mind?

QUESTION 5:
Are there any instances of the measures working particularly well or poor that you'd like to share?

SHELISA LARUE, HOME DEPOT ASSOCIATE

1: "No ma'am i don't [feel] like I'm understanding correctly."

2: "From what i have gained from employees i don't think they think they're effective or helpful & wearing them won't help."

3: "I have mostly heard customers compain about wearing them. And some thanking us for wearing them."

4: SKIPPED

5: "I think that Homedepot [sic] should set the rule that customers cannot enter the store without wearing a mask for the safety of everyone because we never know the health conditions of the people we encounter. My step dad caught corona over the weekend and he wasn't feeling well but now he's feeling a bit better and the necessary precautions they {sic] people don't want to take he wish he had of."

GABE PALACIOS, HOME DEPOT ASM

1: "We are following Dallas county requirements or code compliance for masks and social distancing from customers and associates. Cleaning all stations with computers or registers and following safe practices outline by social distancing."

2: "Employees understand the measures that need to happen daily. Some have even take [sic] much more precautions around masks touching people or carts and following the distances to the T. They do feel it helps some don't like wearing masks but they know it protects them and the customers that don't wear masks it does make some associates upset and tryn to find a way to show customers that it's only protecting them and us but it's hard to do when they don't want to understand that."

3: "Customers don't understand that 'I we' cant tell or make a customer wear a mask while in the store. I can only be cautious when interactivng with customers and associates. Following the company's requirements we have done what we can do by posting signs at all entrances that they are required to have masks. Customers do voice their opinions on social distancing and that we should require all customers to have the mask on."

4: "Customers feed back is just taking this serious enough so we all are staying safe and doing all we can in what the comapny and associates are taking all measures to keep 6ft apart and follow wearing masks and cleaning when its needed and letting customers know staying 6ft keeping that in mind."

5: "I think we all are [sic] doing our best to keep safe my thing is keeping 6ft apart following social distancing and staying safe. Doing your part in general for all aspects of keeping me safe as for our associates to the customers as well."

DESTINY GARCIA, HOME DEPOT ASSOCIATE

1: "Starting tomorrow associates and customers is mandatory to wear a face mask when you do any kind of shopping. If not they would be fined."

2: "At this point we think that it's unnecessary to wear a face mask only because the one's [sic] that we are provided at work have no filter, so to us it doesn't make sense for us to wear a face mask that does us no good."

3: "Before the COVID spiked up again in the Tom Green County area. It was rare to witness anyone take any precautions. Now we see a little more people following through."

4: "None."

5: "Can't think of anything going too well. Poor thing is that while at work and associates wearing mask we all seem to be losing our breath more and most of us get headaches from it. We need more people to follow through with staying 6ft. apart though. At work and while shopping."