Working from Home

Organization of workspace in the Home

Tatyana Mourad

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Thesis Statement

Thesis Statement

This thesis is centered on the adaptation of architecture to accommodate university students working from home. Through studying real lived experience space of everyday domestic life. Embracing the everyday humble, messy, real inhabited domestic space. A habitable space that supports healthy work environments used by students. Space is designed to reduce stress and reverse the negative connotations surrounding "work" and increase efficiency and satisfaction and fulfillment in the workspace. Since the rise of Covid-19, students are now forced to merge their educational environment with their home environment. What is difficult about this is that work and relaxation environments are typically thought of as opposing places. The goal is creating a smooth transition between the two spaces by organization and change of behavior That will minimize their stress during this very unique time that will have lasting effects on everyone.

Wake up
Students typically started their day around 8-9am

Break
Students typically take a break to use their cellphones

Work/School
Students typically spent 8-16 hours in their workspace

Break
Students typically take a break to eat

End of the Day
Students typically end their day past 12am

Introduction

During the novel COVID-19 pandemic, more than 130 countries have closed schools around the country, affecting approximately 80% of students worldwide. This is unusual; the world has never seen such a large number of students out of school at once. During this time it's normal to feel sad, concerned, puzzled, frightened, or angry in this situation. This thesis is looking into working from home and how these students have been affected by it. More specifically, how the transformation of a space and adding key elements can have a significant effect on an individual's mental health and overall wellbeing. The focus of this thesis is to explore the most experienced emotion, stress. With the ever changing world around us, one is left feeling stressed.

To first understand the solution, one must understand the definition of stress. Stress can be defined in many ways, however, there does not exist a concrete definition of stress, but there are many theories and methods. We will explore three purposes that were useful in the research process. The three processes are 1) stimulus-based, 2)response-based, and 3) stress as a dynamic process.

Stress is a part of our everyday life and is our body's way of protecting us, but too much stress negatively impacts us. Stress is subjective, different people can be in the same situation, and each individual could be experiencing different levels of stress or none at all. Another focus is on an individual's space, Americans spend 93% of their lives inside, thus it is no surprise that the built environment plays a vital role in an individual's mental state.

7%

6%

93% Of our lives
are spent indoors

"Using design to benefit human health on multiple levels is one of the most important things that architecture can contribute. Affecting both our mental and physical health, stress is one of the essential issues we need to tackle in today's workplace."
-Ben van Berkel

01
Stress

What is S

Stress?

Chapter One
What is Stress?

Stress can be defined as a reaction to feeling overwhelmed but there are still many more definitions of stress. The three definitions studied in this thesis are stimulus based, response based, and stress as a dynamic. The first is stimulus-based stress which is defined as:

"**The stimulus-based** definition suggests that stress results from pressure. The greater the pressure, the more likely that the recipient, whether a person or a load-bearing beam, will succumb."

stress which is defined as: "**The response-based** definition focuses on stress as a response to noxious or aversive stimuli. This definition has contributed greatly to thinking about stress, and it is commonly assumed that psychological response follows a similar course, although the processes may have an insidious as well as an alarm-based onset. The duration of the stage of resistance, when the person is adapting to, or coping with, the stress depends on specific characteristics of the person suffering the stress. Still, the assumption is that at some stage, if the stress persists, exhaustion or collapse becomes inevitable."

Stress as a dynamic process:

"Definitions of stress with more value in clinical practice now emphasize that stress is a dynamic process reflecting both internal and external factors: characteristics of a person and his or her circumstances, as well as the interactions between them. These newer views of stress come from greater understanding of the part played by cognitive factors (thoughts, attitudes, beliefs, images) in psychological well-being. The amount of stress experienced by individuals is determined by the perceived demands upon them as well as by their perceived resources. Cognitive factors thus influence both the stimulus and the response sides of the equation. "

"Lazarus and Folkman's (1984) definition of stress reflects very clearly this way of thinking. They say that stress is "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being". Two implications of this definition have greatly influenced current thinking about stress and therefore should be made explicit."

-DR Gillian Butler PhD, Stress Management

in General Practice

Stress is a normal emotion to experience in our lives but too much stress can be unhealthy to human beings.

This graph illustrates the increase of stress results in an increased productivity, up to a point after which things go rapidly downhill. However, that point or peak differs for each of us. Stress is subjective and we all experience it differently. The perfect analogy for this is a rollercoaster, and there are three carts, front, middle, and back. The people in front are super excited and cannot wait to go again, the people in the middle are calm about it, and the people in the back are scared and cannot wait to get off the ride. Another stress model that has been researched in this thesis is the Diathesis-stress model. According the American Psychological association Diathesis stress can be defined as the theory that mental and physical disorders develop from a genetic or biological predisposition for that illness (diathesis) combined with stressful conditions that play a precipitating or facilitating role.

Good stress   Distress
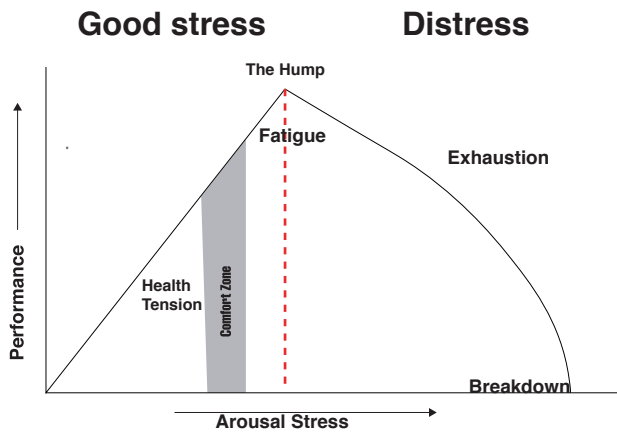
Adapted from: Nixon,P Practitioner 1979

Diathesis–stress model

the theory that mental and physical disorders develop from a genetic or biological predisposition for that illness (diathesis) combined with stressful conditions that play a precipitating or facilitating role. Also called diathesis–stress hypothesis (or paradigm or theory).

Diathesis-Stress/Dual-Risk Model
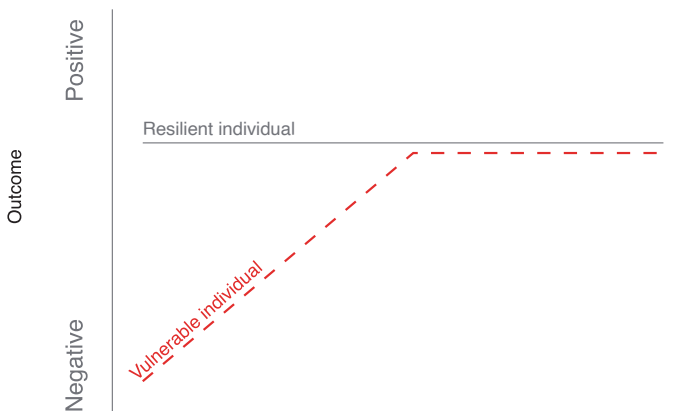
This graph is representing two individuals and their response to stressful environments. One is an individual genetically predisposed to some mental illness, making them a "vulnerable individual" and the other is a resilient individual, with no biological predisposition to mental illness. Negative or positive environments determine the outcomes in the mental health of these individuals based on their predisposition. If placed in a negative environment such as one that could take place if someone was undergoing a divorce, the resilient and vulnerable individual respond differently. The vulnerable individual may respond negatively given that this stressor can exacerbate or trigger a preexisting mental health condition. The resilient individual may be able to cope with the stressor more easily and have a positive outcome. On the other hand, if these same individuals are placed in a positive environment, for example one that is surrounded by loved ones and supportive family members congratulating them after a job offer, they will both respond positively to this regardless of preexisting mental health conditions because it is a positive experience.

Types of Stress

Acute Stress

This type of stress is known to be short term and most common. A reaction usually occurs when there is a stressful event. For example, negative thinking about a past event, almost getting in a car accident, public speaking, etc.

Episodic Acute Stress

This type of stress occurs when there are frequent bouts of Acute Stress. For example, someone taking on too many responsibilities than they can handle, always in a rush, and disorganized.

Chronic Stress

This type of stress is known to be long-term. It is a response to emotional pressure suffered for a long period of time which an individual perceives to have no control over. For example, childhood trauma, unhappy marriage, unhappy job, and financial problems.

Symptoms of Stress

Cognitive Symptoms

Memory problems

Inability to concentrate

Poor judgment

Seeing only the negative

Anxious or racing
thoughts

Constant worrying

Emotional Symptoms

Depression or general
Unhappiness

Anxiety and agitation
Moodiness, irritability, or
anger

Feeling overwhelmed

Loneliness and isolation

Other mental or emotional
health problems

Physical Symptoms

Aches and pains

Diarrhea or constipation

Nausea, dizziness

Chest pain, rapid heart
Rate

Loss of sex drive

Frequent colds or flu

Behavioral symptoms

Eating more or less

Sleeping too much or too
little

Withdrawing from others
Procrastinating or
neglecting responsibilities

Using alcohol, cigarettes,
or drugs to relax

Nervous habits (e.g. nail
biting, pacing)

"Environment is a crucial piece of the puzzle when you look at behavior because your brain reacts profoundly to its surrounding environment."
-Ms. Kirti D. Bhonsle1 , Dr. V. S.Adane2

02
Built Environment
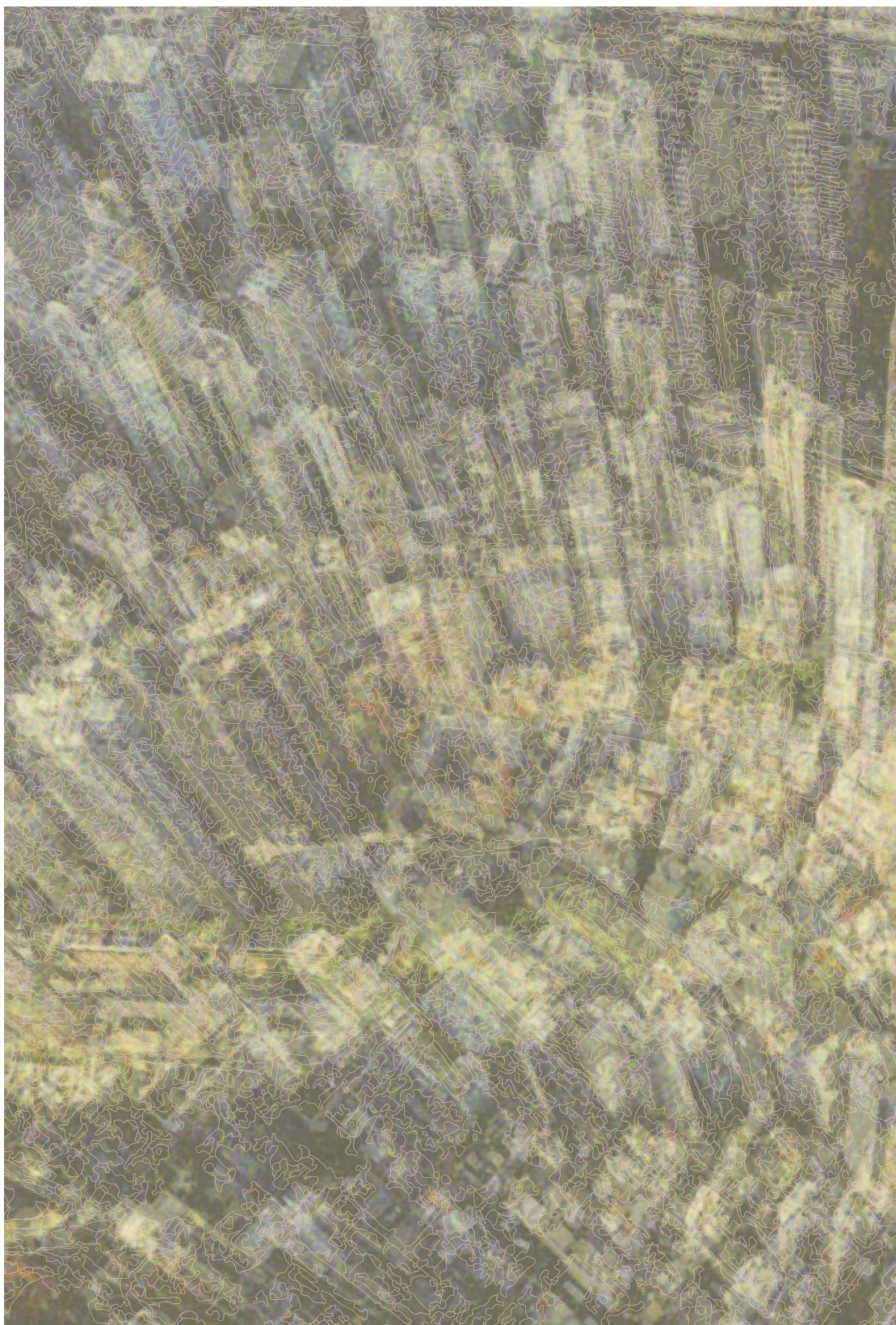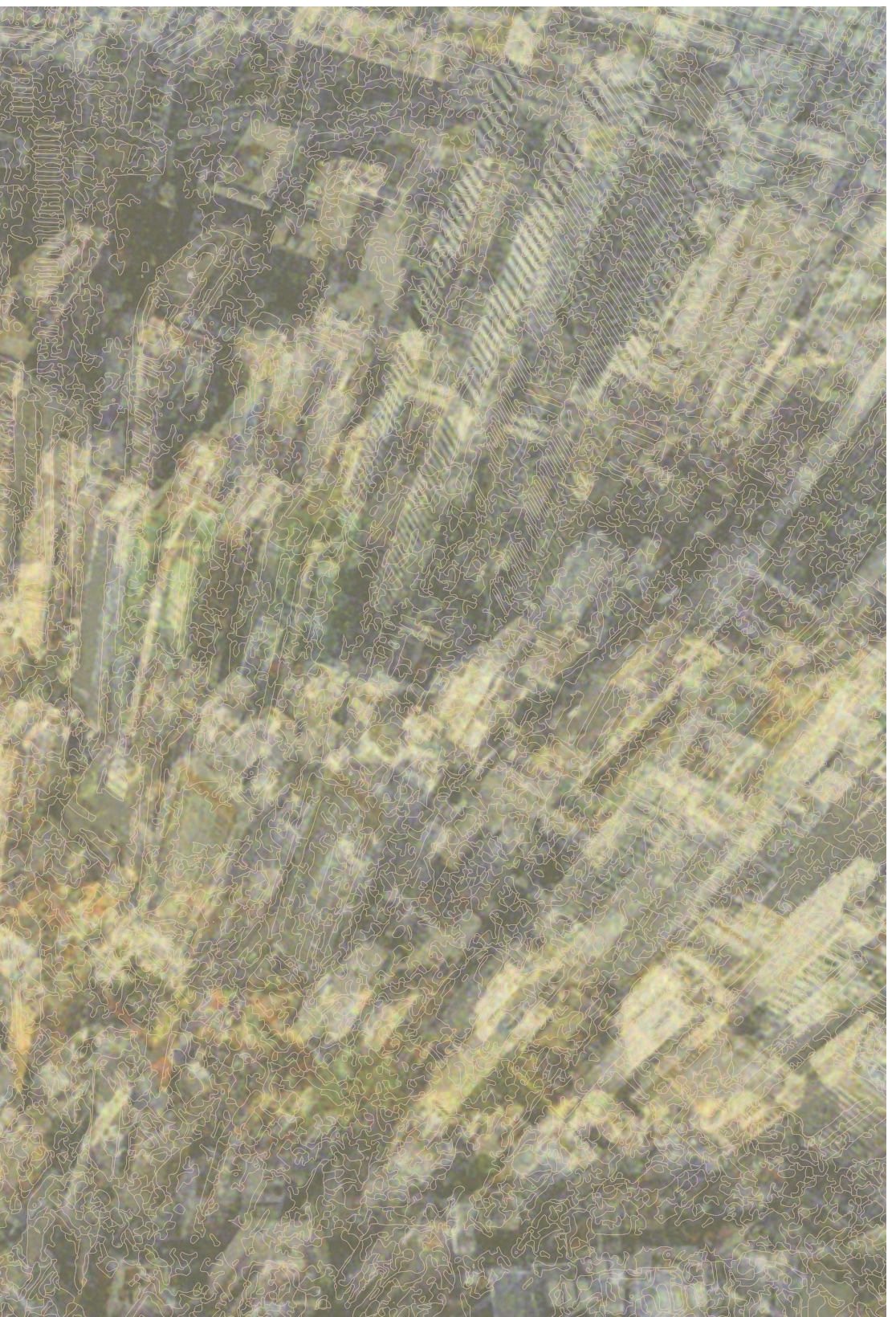
Chapter Two
Built Environment

How does the built environment impact our stress levels?

The natural environment is known to be essential to human health and survival. With that being considered, it is also important that we acknowledge that in our generation, our living circumstances have grown to be centered around being indoors for a substantial amount of time. This is secondary to our requirement of work, school, and other social establishments. The built environment plays an important role in the mental health of individuals seeing that they are indoors for the majority of the day. Due to this, it is necessary that buildings support the work and academic environment that humans occupy for a substantial amount of time. The built environment is vital in shaping the individuals mental health and should concentrate on providing the space that is advantageous to the individuals productivity and efficiency while accommodating to and supporting the the individuals mental health. On average, Americans spend 93% of their lives indoors, 6% of that is spent inside cars, and only 7% of our lives are spent outdoors. It is no surprise that the built environment plays a vital role in an individual's mental state.

Definition:

Its four interrelated characteristics can define the built environment – First, it is extensive: it is everywhere, it provides the context for all human endeavors [everything humanly created, modified, or constructed, humanly made, arranged or maintained. Second, it is creating the human mind, needs, purpose, wants, and values. Third, it is created to help us deal with and protect us from the overall environment, to mediate or change this environment for our comfort and well-being. Fourth- all the components of the built environment are defined and shaped by context. Each and all individual elements contribute either positively or negatively to the overall quality of the environments both built and natural and to human-environment relationships

-Ms. Kirti D. Bhonsle1
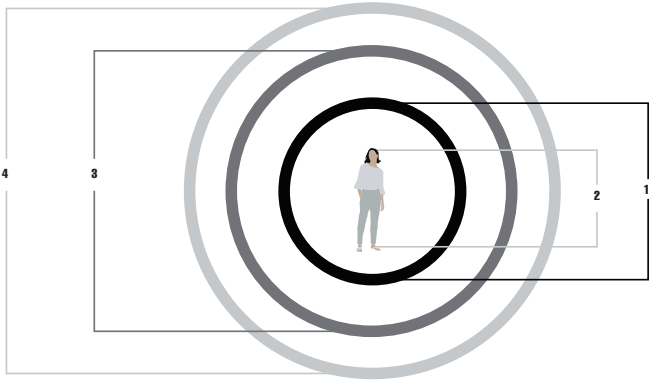
1- The built environment is everything humanly made, arranged, or maintained
2- to fulfill human purposes
3- to mediate the overall environment
4- with result that affects the environmental context

Built Environment Stressors

Housing

Most research on housing and health focuses on physical health: House type, floor level, and housing quality.

Links between high-rise housing and psychological distress are social isolation of mothers and limited play opportunities for children. Housing quality: Typically incorporates some aspects of structural quality, maintenance, and upkeep amenities such as private bath, central heat, and physical hazard is associated with mental health.

Indoor air quality

Environmental conditions that people experience in their indoor environment impact them more severely than the outdoors' environmental conditions. The reason for that is because there are chemical properties in the building materials that could be toxic, such as cooking systems that could affect indoor air quality.

Light

The amount of sunlight a person sees help our well-being.
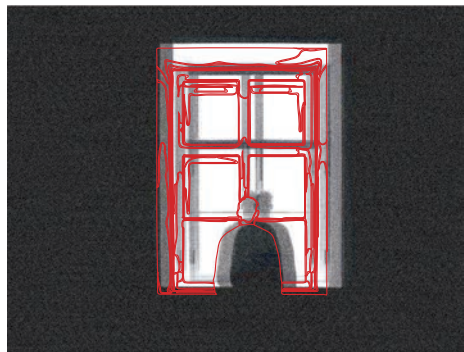
Isolation

Being confined in a room or space for an extended period alone can cause psychological distress.
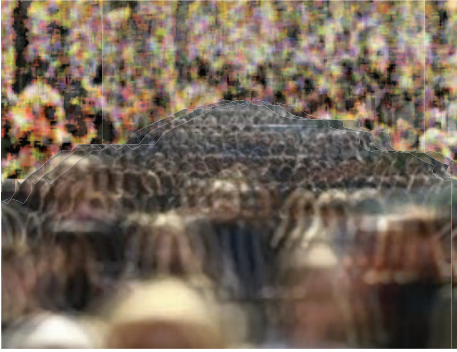
Crowding
The more crowding in space, the more negative
impact on stress levels.

Noise
A study showed that a community that lived in a
noisy area such as an airport in

03
Methods

Chapter Three
Investigations

The excessive time spent indoors versus spending time outside has revealed effects on an individual's stress levels. Excessive time spent indoors can have an adverse effect on an individual's mental health. The methods used to investigate the effects were testing the differentiation between a individual's stress levels based on the: 1) ounds they heard indoor and outdoors, 2) asking individuals direct questions via a survey, 3) analyzed home spaces photograph evidence.
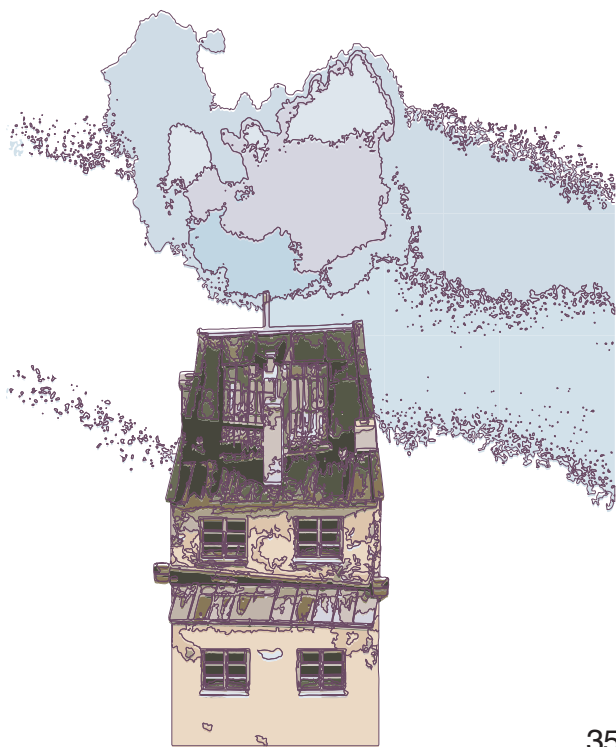
Sketch Problem

One of the first investigations is studying environmental sound. The sounds of the environment can impact our stress levels and state of mind. This study uses sound to reveal the type of environment, how indoor and outdoor sounds differ, and how they make us feel by listening without using our sight. When studying the indoor sound environment, it is a sense of being compressed vs. the outdoor environment, feeling a sense of release. These audios are 30seconds to 1 minute long, and it is a variety of different indoor, outdoor, and mixed sound environments.
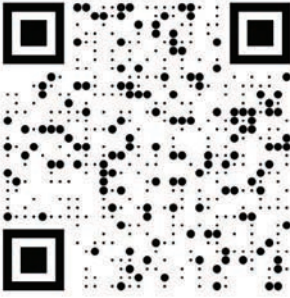
Workspace (indoor) with window open
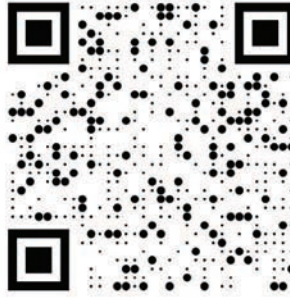
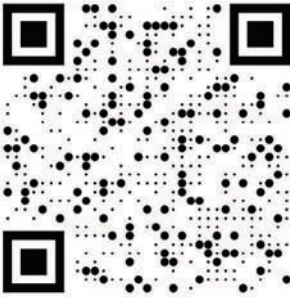Workspace (indoor) 8pm

Outdoor by water
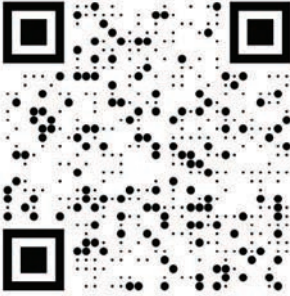
Outdoor at 4:45PM
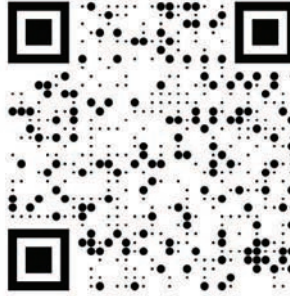
Kitchen 10:45AM

Livingroom to outdoor

Livingroom 4:45PM
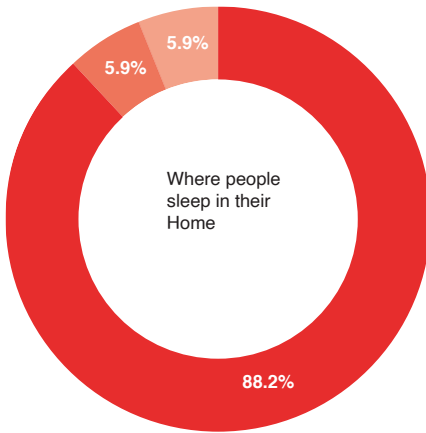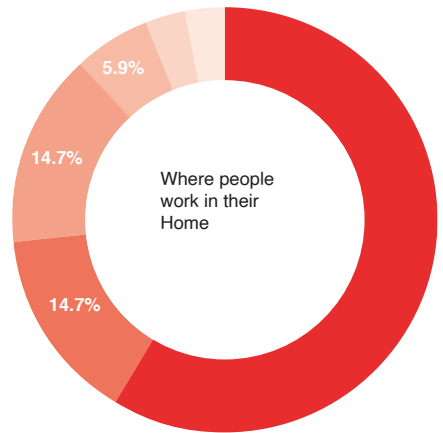

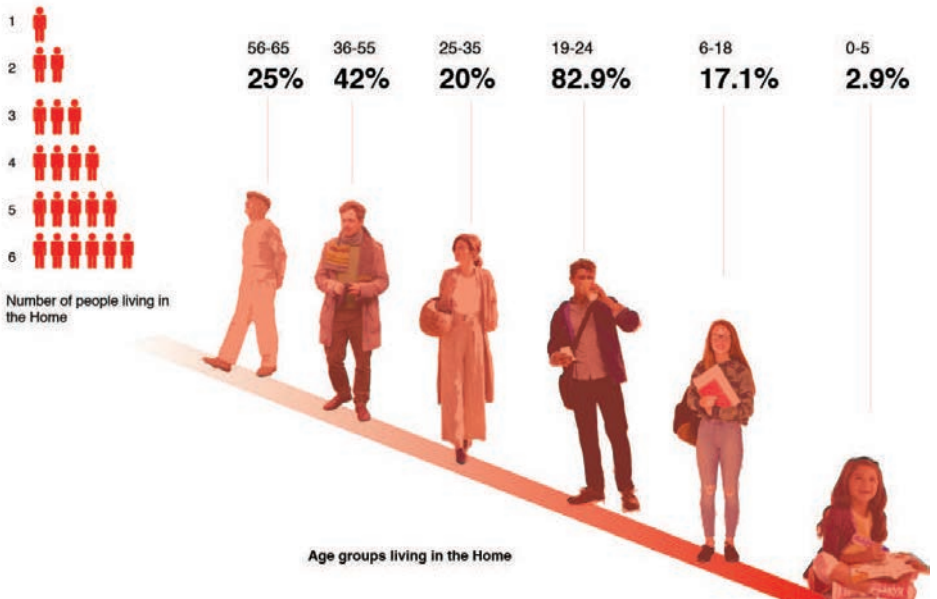Outdoor 8PM

Busy Road outside

Inside Car

Survey

One of the methods that have been used to gather quantitative data is surveying. The purpose of the survey is to find and understand how the Home environment impacts students and their stress levels. The survey is small, with only 35 participants, and results are based on those 35 responses. The age groups that took part in the survey are 18 to 30 years of age. Students from different fields of study took part in the survey, but most participants studied architecture. Firstly, the survey looked at where students were sleeping and where they were working at home. The pie chart below shows the percentage of what space students slept and where they worked. Most students worked in the same space that they sleep in, which is the bedroom.
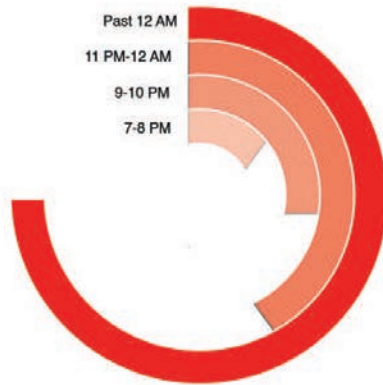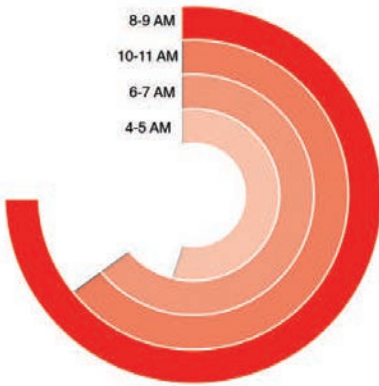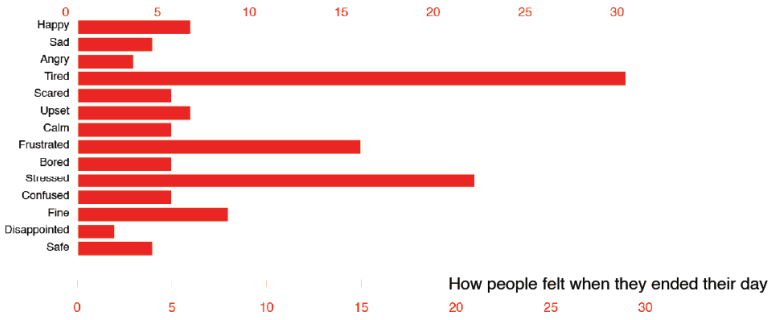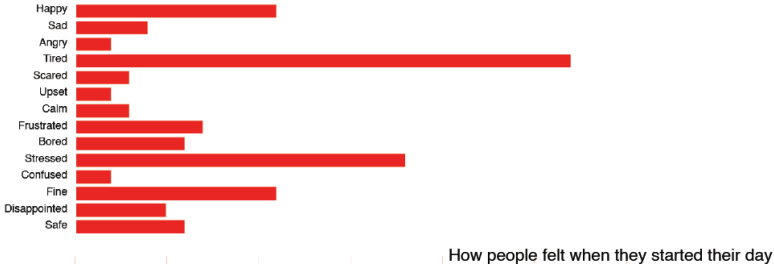
Where people sleep in their Home

5.9%
5.9%
88.2%

- Bedroom
- Basement
- Other

Where people work in their Home

5.9%
14.7%
14.7%

- Bedroom
- Office
- Living room
- School
- Basement
- Coffee shops/libraries

1
2
3
4
5
6

Number of people living in the Home

56-65	36-55	25-35	19-24	6-18	0-5
25%	42%	20%	82.9%	17.1%	2.9%

Age groups living in the Home

How people felt when they started their day

How people felt when they ended their day

Time people typically started their day

Time people typically ended their day
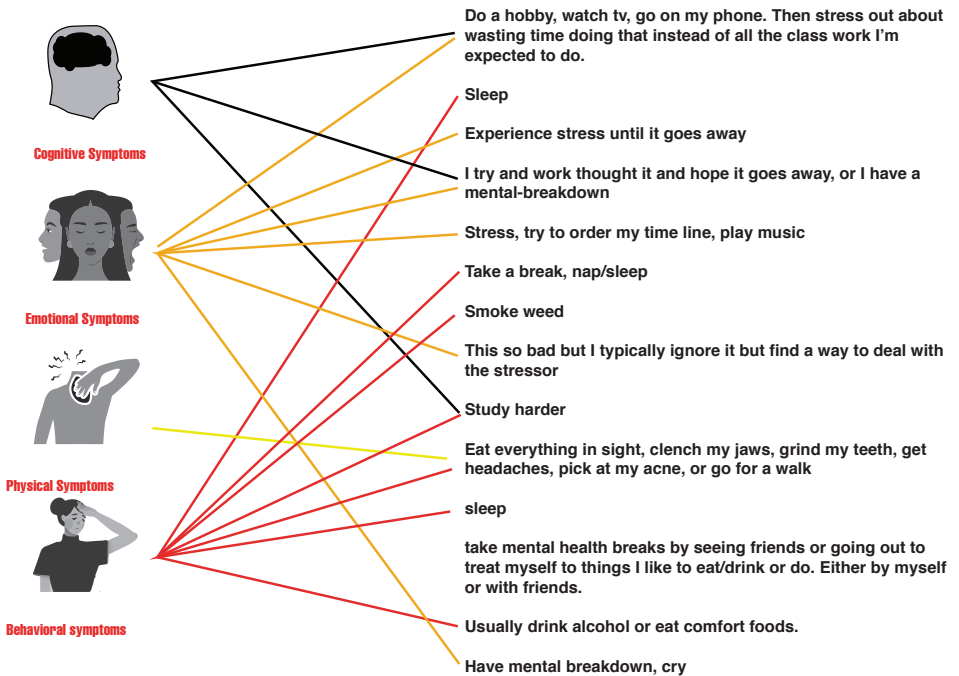
40

On average students work for 8-16 hours per day

On average students take a **break** for 2-3 hours per day

What is the cause of your stress?

Professors that forget I have other classes / a **job** and my life doesn't revolve around just their **class**. If I will be able to graduate on time because I didn't have a coop over the summer. Not knowing how to do basic things that are expected by firms in the real world (software, how to put together a set of drawings). **School**, personal life.no stress level **School**, **Studio**, **working** part-time in retail, full-time student **Online Education** Lack of self-care (eating, sleeping, etc.)Final **assignments** coming up, election, **Coved-19**. Life, angry people, ignorant people, **constant sadness**, **school** Amount of **school work**/election **Lack of privacy**, lack of resources, high tuition rates for exclusively **Online courses**, lack of proper workspace, lack of reliable Internet connection, concentration issues **COVID work** schedule taking care of **family** apartment bills Overwhelming **assignments** the **workload**, the time frame, the type of learning being given (not face to face help)Money and Relationships Living at home with **family**, the complicated nature of **remote school** **School**, personal well-being, the well-being of friends and **family**, **career**, **school**, and social life obligations **School**, **Work**, Friendships during the election Unanswered questions, not knowing when assignments are being posted, limited communication with **professors** Politics, **school**, lack of sleep Heavy workload Relationships stressing me out, **School**. My mom, financial instability, lack of communication between my boss and I **Work** and **school** life **Work**, **school**, **family** GROUP **hw**, GROUP Projects, or anything. **Professors** expect us to find a way to get in contact with partners when getting a lot of junk mail is sent on our email. How can we do this virtually??? (Personal Stress everyone is home doing their own things, the house is loud (usually with construction machines running) my workspace is in the dining room, my sister who is an IT tech (answering calls) is just across me making it hard to listen to class when she is saying "HI this is .... how can I help you with?". Most of the time I'm not sure if I'm doing **assignments** right. **School**, medical **school** applications,MCAT, volunteering,clinical hours Final presentations Personal reasons, **Family illness**, deadlines for all class projects Thesis and **covid** The election, **workload**, **class load**, the **pandemic**, etc. too much **school work**, not feeling like my work is good enough **Workload**

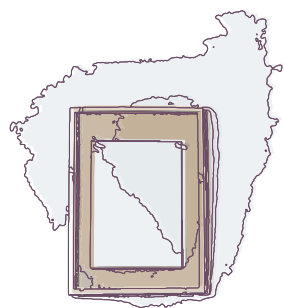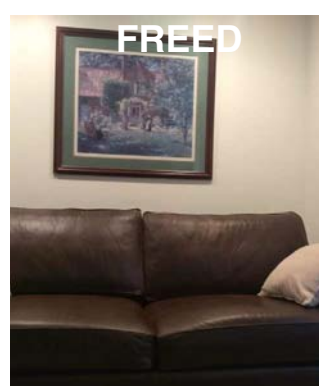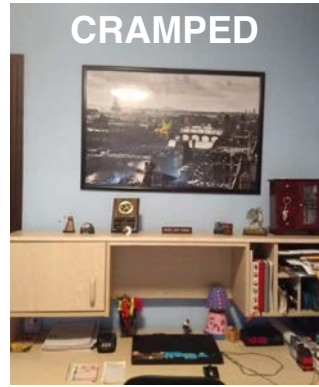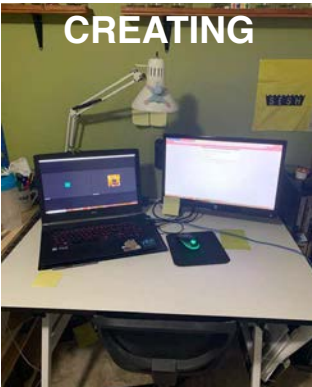# What did you do when you felt stressed?

Cognitive Symptoms

Emotional Symptoms

Physical Symptoms

Behavioral symptoms

Do a hobby, watch tv, go on my phone. Then stress out about wasting time doing that instead of all the class work I'm expected to do.

Sleep

Experience stress until it goes away

I try and work thought it and hope it goes away, or I have a mental-breakdown

Stress, try to order my time line, play music

Take a break, nap/sleep

Smoke weed

This so bad but I typically ignore it but find a way to deal with the stressor

Study harder

Eat everything in sight, clench my jaws, grind my teeth, get headaches, pick at my acne, or go for a walk

sleep

take mental health breaks by seeing friends or going out to treat myself to things I like to eat/drink or do. Either by myself or with friends.
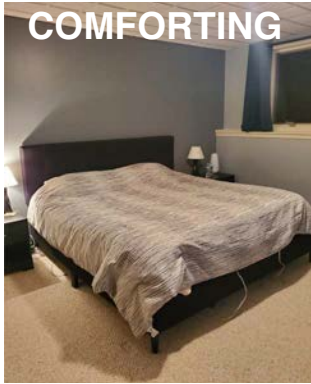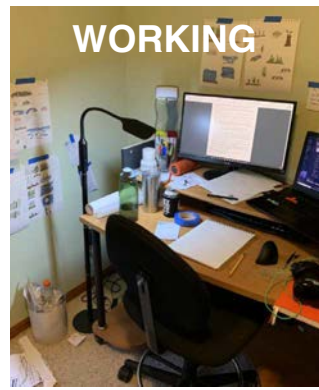
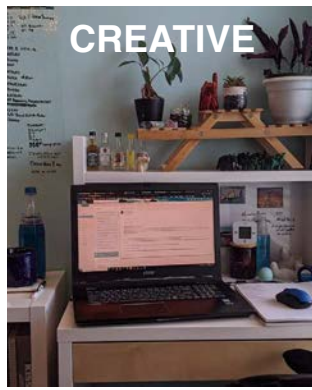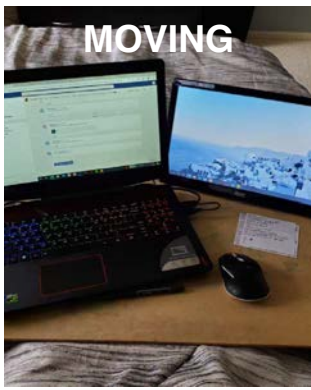Usually drink alcohol or eat comfort foods.

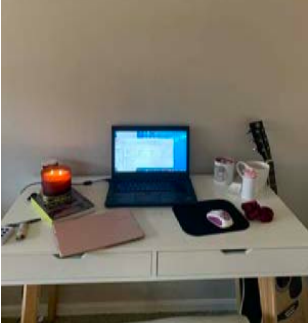Have mental breakdown, cry

Investigation on working from home

The second method used is interviewing and observations. Students were asked to take a photo of their workspace (desk or wherever they work) and a picture of where they relax, and then describe what they feel they are doing in each space with one verb. This study is to observe the student's home environment through their perspective. Each student took photos of their space. The images provide the opportunity to analyze the behavioral and programmatic aspects of the space.

The thesis is taking the approach of a very concrete domestic, actual everyday perspective. These photos aren't the perspective of a great architect., It is the perspective of authentic student domestic spaces. These spaces are the actual lived experience space of everyday, humble, Very messy, real inhabited domestic space. These photos helped with understanding the behavioral and programmatic aspects of the space.

MOVING

CREATIVE

WORKING

COMFORTING

IGNORING

RELAXING

COMPRESSED

CREATING

CRAMPED

GAZING

DECOMPRESSING

FREED

46

CONFINED

CONFINED

Workspace

RELEASE

CONTENT

Relaxspace

RESTRICTING

CORNERING

Workspace

DRIFTING

OBSERVING

Relaxspace

Room Analysis

The next step was to take these photos and analyze them further by highlighting the different elements in each room and look for common themes. These diagrams look at the placement of the desk, organization, use of the wall, and where these spaces are in the home, whether they are in private or public settings.

Student 1
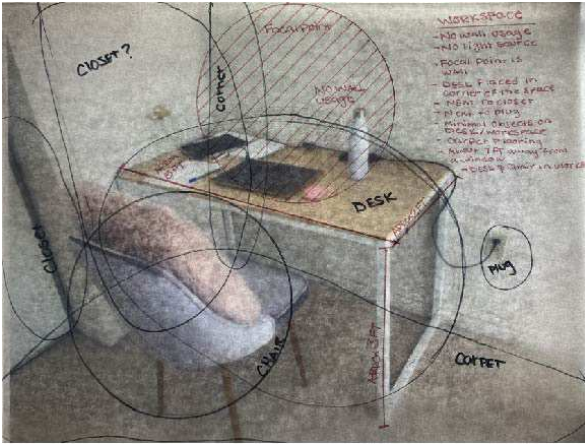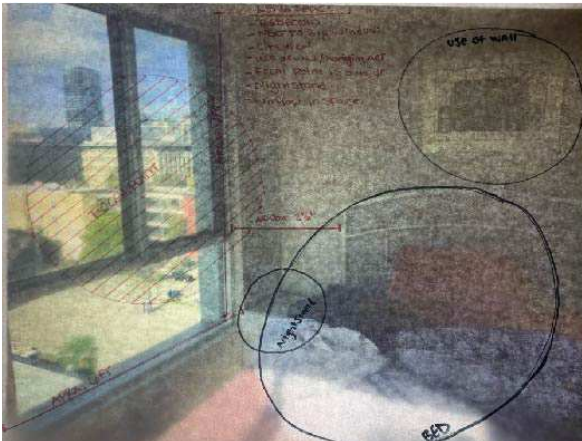

Work Space

Small Desk
Small chair
Desk placed In corner of room
Desk next to closet
Minimal object on desk
No wall usage
Workspace in private space (bedroom)

Relax space

Bedroom (private space)
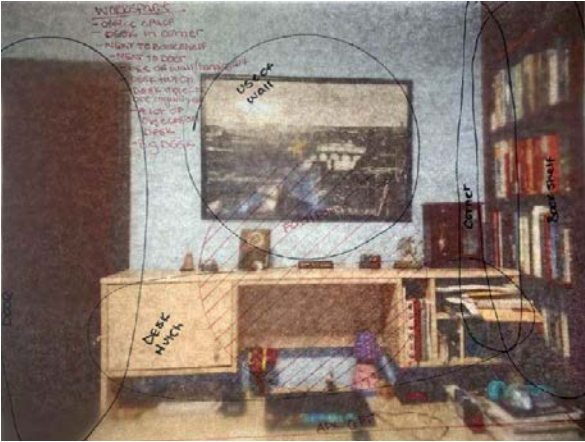Same room as workspace
Window in space
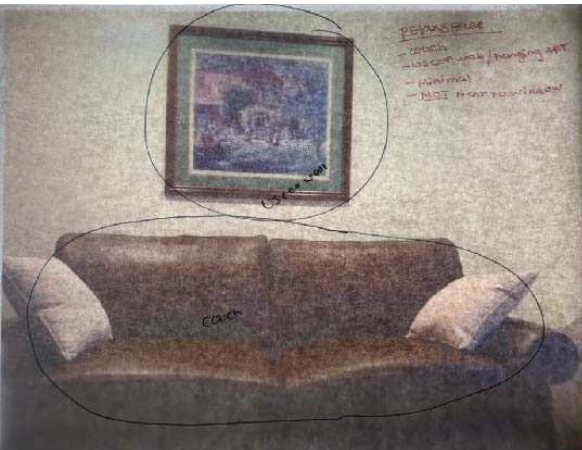Window next to bed
Use of wall
Nightstand
City view
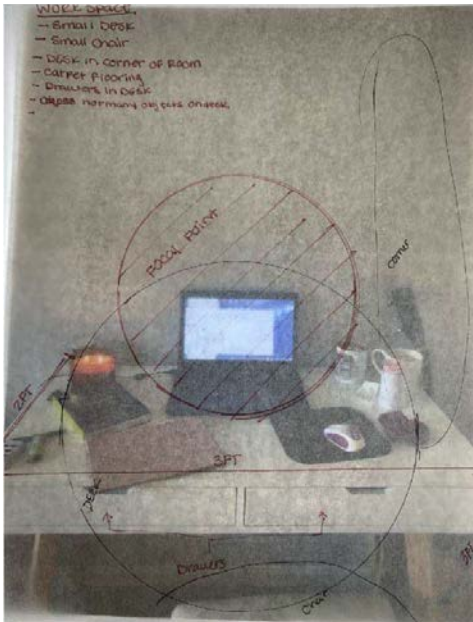Natural lighting in space

Student 2

Work Space

Office space
Desk in corner
Desk next to book shelf
Desk next to door
Use of wall
Desk hutch
Large desk
A lot of objects on desk, but
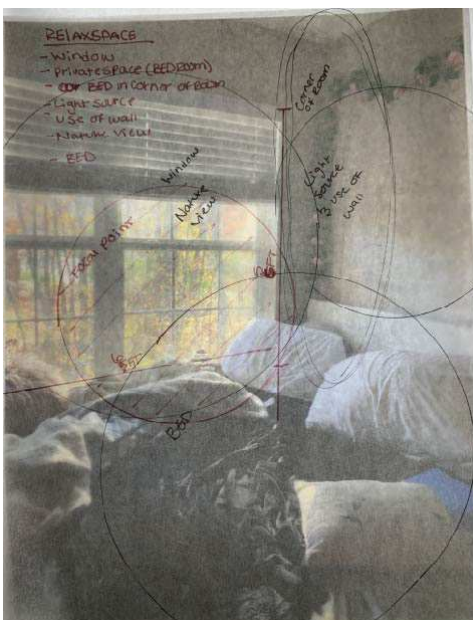
organized

Relax space

Shared Space
Couch
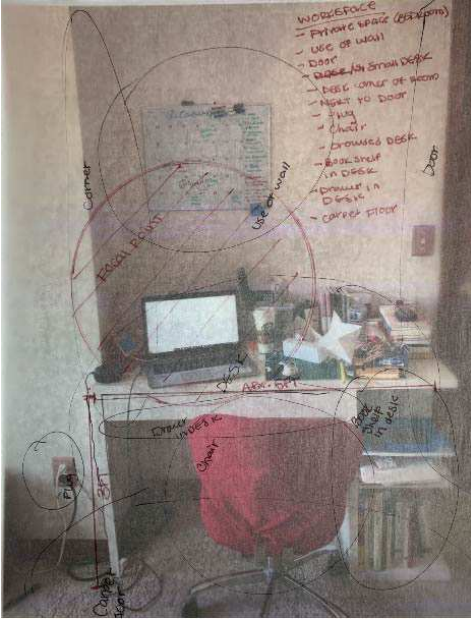Use of wall

Student 3

Work Space

Private space (bedroom)
Small desk
Chair
Carpet flooring
Desk with drawers
Minimal objects on desk

Desk in corner of room

Relax space

Private Space (bedroom)
Window
Bed in corner of room
Light source
Use of wall
Nature view
Bed

Student 4

Work Space
Private space (bedroom)
Use of wall
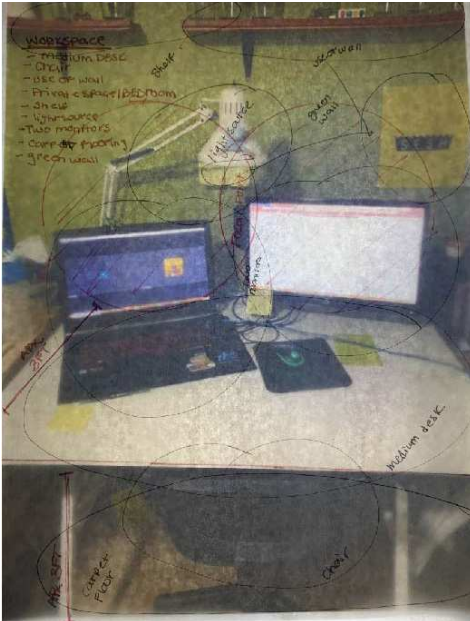Desk next to door
Desk in corner of room
Chair
Crowded desk
Drawers in desk
Book shelf in desk

Relax space
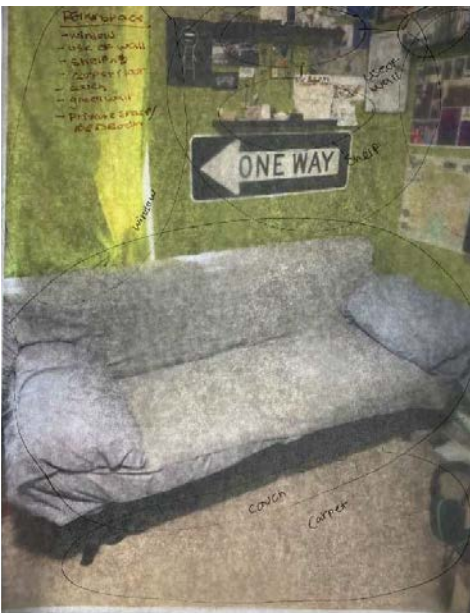Outside

Student 5

Work Space
Private space (bedroom)
Medium desk
Chair
Use of wall
Shelves on wall
Light source
Two monitors
Wall painted green
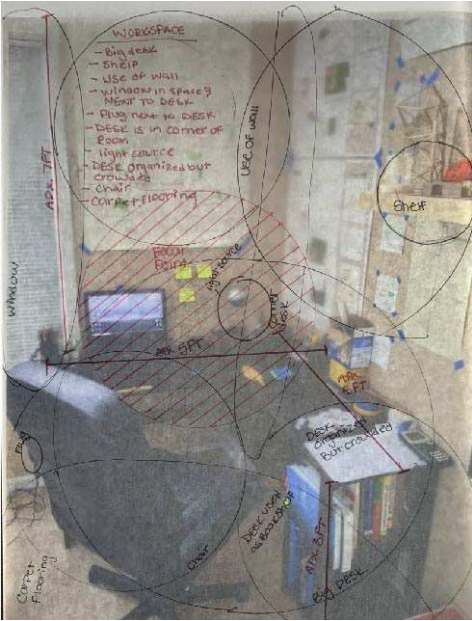

Relax space
Private Space (bedroom)
Couch
Couch placed in corner of room
Shelves on wall
Window
Use of wall
Wall painted green
Carpet flooring

Student 6

<u>Work Space</u>
Big Desk
Office Chair
Shelf on wall
Use of wall
Window in space
Window next to desk
Light source
Many objects on desk

<u>Relax space</u>
Outside

Student 7
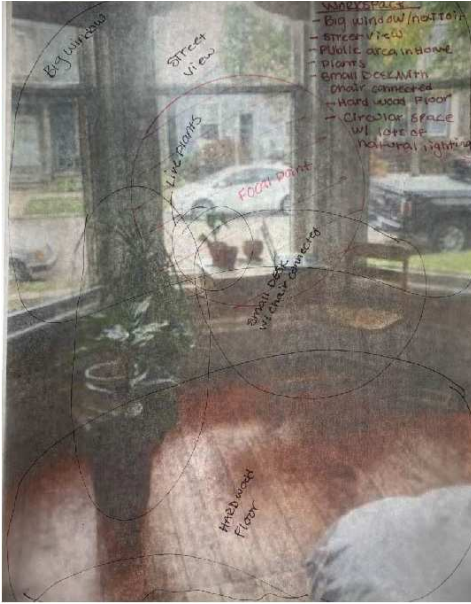
Work Space

Shared Space(living-room)
Big window
Street view
Live plants
Small desk with chair connected
Circular space
A lot of natural lighting
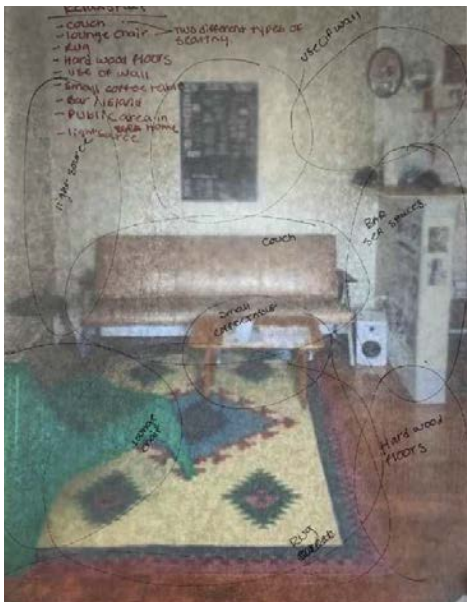
Relax space

Shared Space(Living-room)
Couch
Use of wall
Lounge chair
Rug
Hardwood flooring
Light source
Small coffee table

Student 8
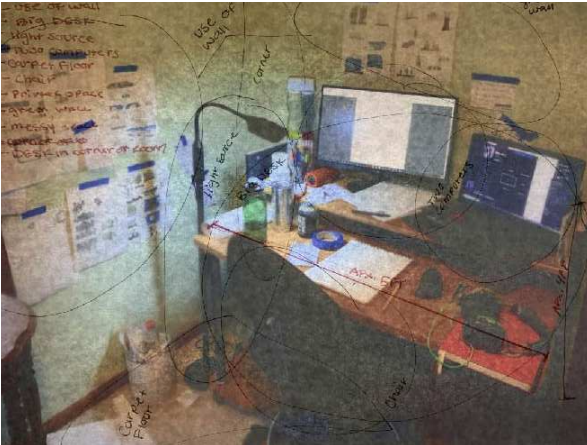
Private space (bedroom)
Big desk
Chair
Light source
Two monitors
Use of wall
Wall painted green
Desk in corner of the room
A lot of objects on desk
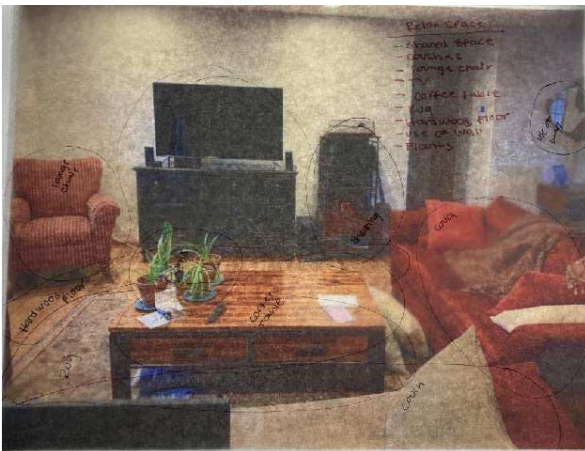
Relax space
Shared space (living room)
Couch x2
Lounge chair
Tv
Coffee table
Rug
Hardwood flooring
Use of wall
Live plants

Student 9
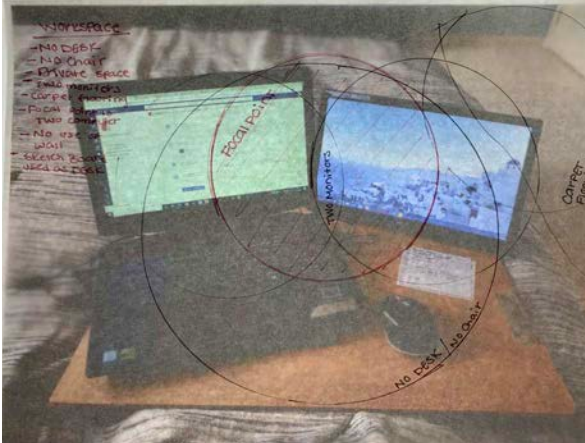
<u>Work Space</u>
Private space (bedroom)
Two monitors
Carpet flooring
Sketch pad board as desk
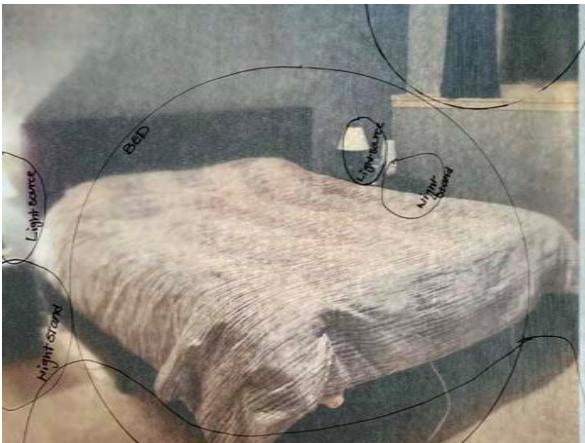
<u>Relax space</u>
Private Space (bedroom)
Bed
Nightstand x2
Window
Light source x2
Carpet flooring

Student 10

Work Space

Private space (bedroom)
Small Desk with hutch
Use of wall
Live plants
Window in space
Desk next to window
Bookshelf
Desk in corner of room
Wall is painted light blue
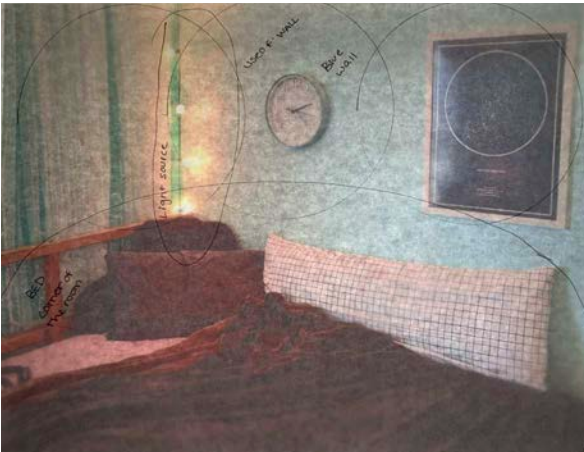
Relax space

Private space (bedroom)
Same room as workspace
Use of wall
Bed in corner of room
Light source
Wall is painted light blue

Common Themes

Object & Furniture

Placement of Desk

Organization

Focal Point

Private or Public space

Views

Daylighting

Desk, bed, bookshelf and chair

Corner of room

Use of wall Crowded desk

When in relax space most focal points were away from workspace

Relax space: Bedroom Work space: Bedroom

Students had different types of views

Natural lighting in every room

When in workspace most focal points were pointing towards the wall

Four Student room Analysis

Four student rooms were picked for further analysis, in this diagram it is showing the relax and work space zones in each space. These diagrams are also looking at the organization, placement, and comparing and contrasting each room.

Student 10 workspace is in their bedroom located in the corner of the room next to a window. They describe the space as "creating," which is a more positive word. The positivity could be because their focal point is away from their relaxed space, and they are sitting next to a window that provides good natural lighting. Another reason could be because they are using their wall for organization and hanging personal items.

Student 3 & Student 1 both students workspace is in their bedroom located in the corner of the room about 7ft away from the window. They described the space as "confined," which is a negative word. The negativity could be because the workspace is away from a window and their focal point is a blank wall.

Student 4 workspace is in their bedroom, also located in the corner of their room. The word they used to describe their workspace is "focused," which is a positive word. Although away from a window, the students use the wall for organization and personal items.

Student 10

Creating
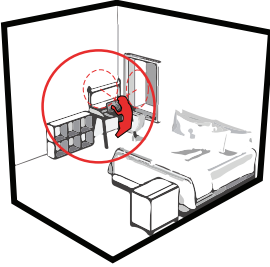
Ignoring
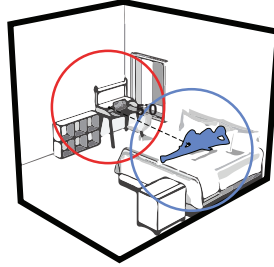
Student 3

Confined
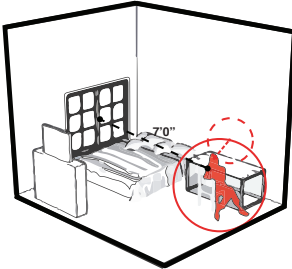
Release
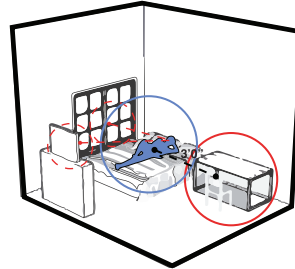
Student 1

Confined
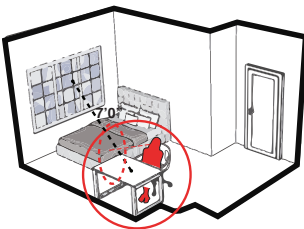
Content
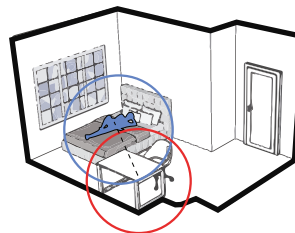
Student 4

Focused

Neglecting

Workspace

Relaxspace
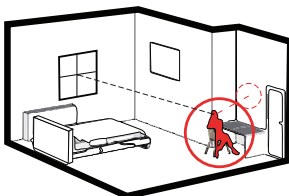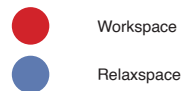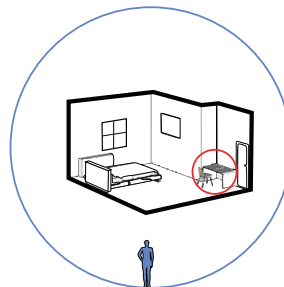
Room and Desk relationship

These diagrams show the relationship between the room and desk and look at the dimension of the wall, window, and desk for each room.

Student 10

10'

8'

Wall

4'

6'

Window

3'

4'

Desk

Student 3

15'

10'

Wall

6'

7'

Window

3'

4'

Desk

Student 1

10'

10'

Wall

5'

6'

Window

3'

4'

Desk

Student 4

16'

8'

Wall

5'

6'

Window

3'

4'

Desk
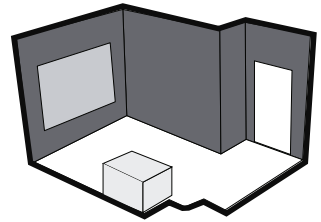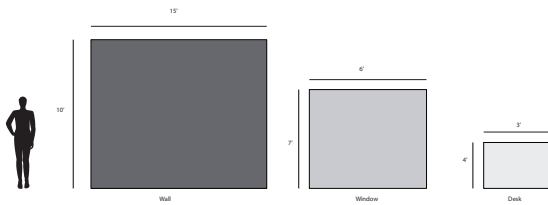
Light study

These light studies show the amount of natural lighting entering each room based on which way the window is facing.

Student 10
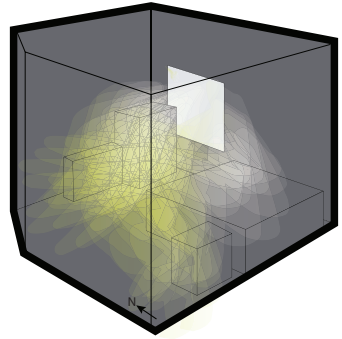
Student 3
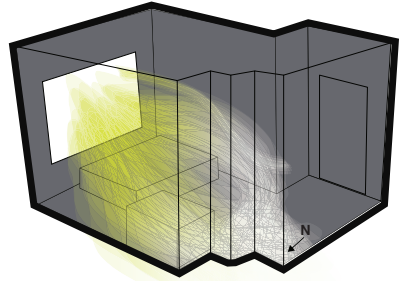
Student 1
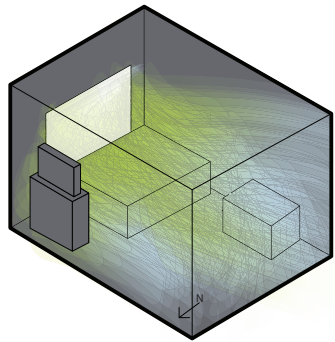
Student 4
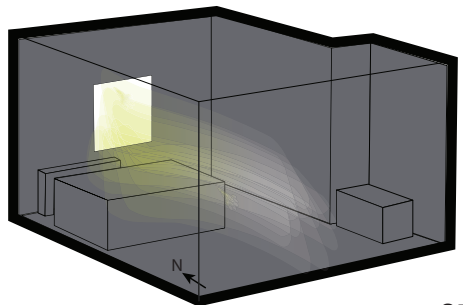
Proxemics

The use of space in communication will reveal a lot about a person's emotions or mood. These diagrams show the three types of proxemic feature elements: permanent, semi-fixed, and non-fixed feature elements.
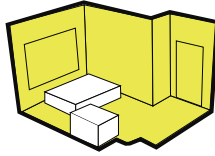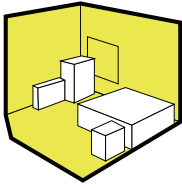
Fixed Features

Fixed feature features are permanent and are used to convey something unique by their placement and arrangement. A floor or a wall are examples of fixed-feature elements.
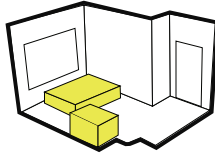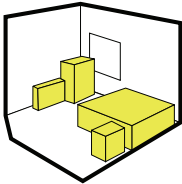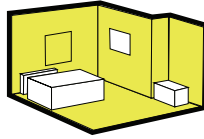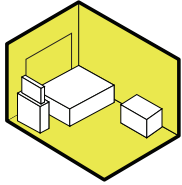
Semi-Fixed Features

Semi-fixed elements are objects that are movable and changeable. The placement of these items in a given context communicates a lot of information. The openness or interactivity of the space is one of the aspects that is shared.
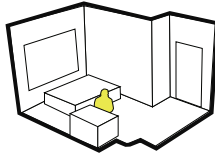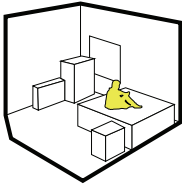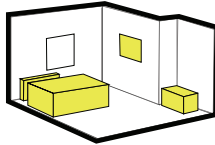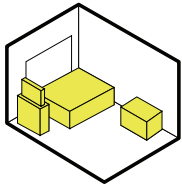
Non-Fixed Features

Non-fixed feature elements are, People themselves and how they interact in that space.

04
Spaces
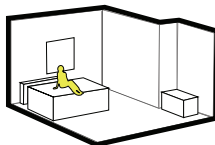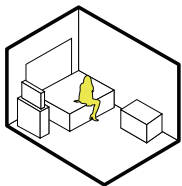
Spaces

Chapter Four
Concept of space

This chapter discusses the logic behind an individual's relationship to different spaces. Different spaces can influence an individual's state of mind. Interestingly, a structure's design represents how an individual views themself as well as their perspective of the world. In later parts, we will discuss the added elements that can enhance any space and, in turn, alter an individual's state of mind.

The common element that we have seen in the photos was that people's workspaces were in the same space as their relaxation space with that said and everything that people have experienced with Covid-19. Staying in the same space for a prolonged duration causes people to experience stress or depression or have any effects on human beings.

Why do humans need to be indifferent spaces?

The stress component from this need for humans to have different spaces and meaning of space. For example, you are eating in your kitchen instead of eating at a restaurant or going to the gym versus working out at home.

Why is this need for scenery better for humans?

As humans, to experience our internal self, who we are inside is by giving meaning to spaces; there is an effect on us because we need to go out and we need to experience different spaces, and we provide emotions to these spaces. Humans give meaning to space, space is just space, but a human comes in and gives it meaning and relates to it and is affected by it. If we walk into a room, it is just an empty square room, we then turn that into our bedroom, and we adapt it.

Workspace

Workspace
Noun. The physical space wherein a worker carries out their primary work jobs, joined with any fixed equipment. Some common workspaces are inclusive of a desk with a computer, or a position on an assembly line.

Elements for better focus and clarity
The workspace environment should be made up of all the factors that can influence your success on a daily basis, such as where, when, and how you work. You should find opportunities and include a supportive work atmosphere that encourages your success and aligns with your core values as your career progresses. These elements are the types of light, color, temperture, plants and types of space.

Elements for better focus and clarity

Light

The best lighting is still natural light. It is better on the eyes and has many mental and physical advantages. Natural light can assist with improved concentration, visibility, and the potential to concentrate over prolonged periods of time, to name a few benefits. Larger windows and skylights allow you to take advantage of natural light without being overwhelmed by it.
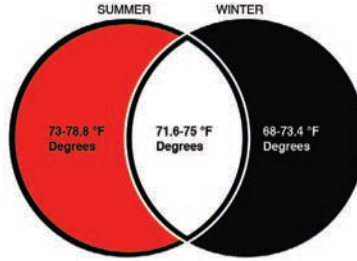
Thermal Comfort

Color

Color and its strength may have a huge psychological effect on us, influencing our attitudes, feelings, and energy levels. Your workspace's texture, saturation, and sheen may all have an effect. Low saturation colors are much less calming than more vibrant ones, whereas glossy paint can enhance energy.

Temperature

The temperature in the workplace, or thermal warmth, should be between 22 and 24 degrees Celsius. Maintaining ideal temperatures during the days and seasons is easier with an efficient HVAC system. Summer temperatures should be between 23 and 26 degrees Celsius, while winter temperatures should be between 20 and 23.5 degrees Celsius.

4 psychological primary colors

Affects the body

Affect the mind

Affect self-confidence

Affects the balance between mind, body & emotions
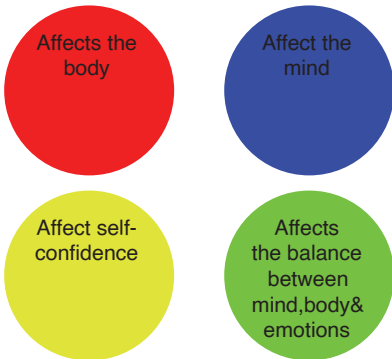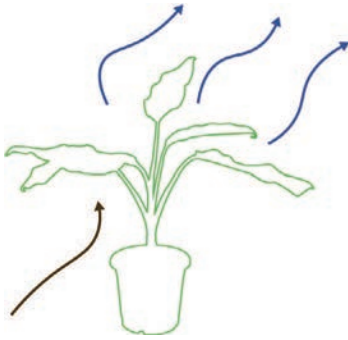
Plants

A plant can help eliminate up to 87 percent of pollutants from the air, such as benzene, formaldehyde, and other chemicals. Plants help you remain well all year by improving indoor air quality and have been found to decrease sick days when used in the workplace.

Types of Space

People who like to operate in silence could have space to shut the door or have a peaceful environment. A multi-purpose room could be more suited if you like being with other people and don't want distractions. Which option you choose, there's a way to make sure it's the perfect fit for your needs.

Enclosed Space   Open Space   Outdoor/Sunroom Space at home
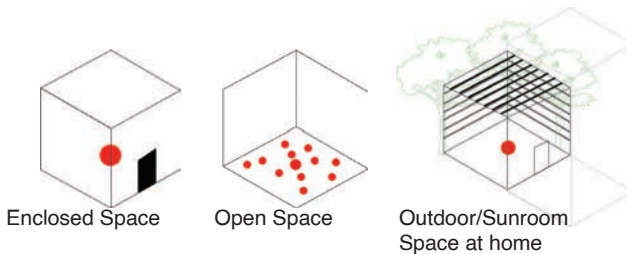
"Changes in the environment change the brain, therefore they change our behaviour. In planning the environments in which we live, architectural design changes our brain and behaviour."
-Fred Gage

05
Final Design

Chapter Five

Manifesto

This chapter will be discussing the conclusion of this thesis. The survey data and analyzing photograph evidence of different workspaces revealed short-term solutions. The short-term solution to reducing stress while working from home is transforming the space. Transforming the space includes placement of furniture, reorganizing your space to reflect a decluttered environment that is more efficient to an individual's work efforts, further integrating more relaxation elements into the workspace to combine relaxation and work environment into one.

To that end, When interviewing, the gathered data evidenced showed students what they wanted to change in their workspace, what they did not like about their workspace, what distractions they experienced, and their length of focus working at home.

The results: the final design is a manifesto. The manifesto will be providing students with guidelines to better their minds and space to create a more healthy, productive, and de-stressing space.

Interview

Space Improvement
Students wanted to improve their workspace by adding more plants in their space, a more oversized desk, more space, and noise control.

Dislikes about working at home
Students did not like that they felt less productive, low motivation, and were isolated.

Distractions
Students did experience distractions from family members, making food, phone use, and feeling too relaxed.

Length of focus
Students multitask and take little to no breaks while working continuously throughout the day.

What students want to improve in their room

Add plants

Bigger desk

More space

Noise Control

How students feel working from home

No motivation

Feeling Isolated

Loss of Productivity

Distractions

Making food

Family

Phone use

Too relaxed

Length of focus

Multitasking

Working Continuous

Taking little to no breaks
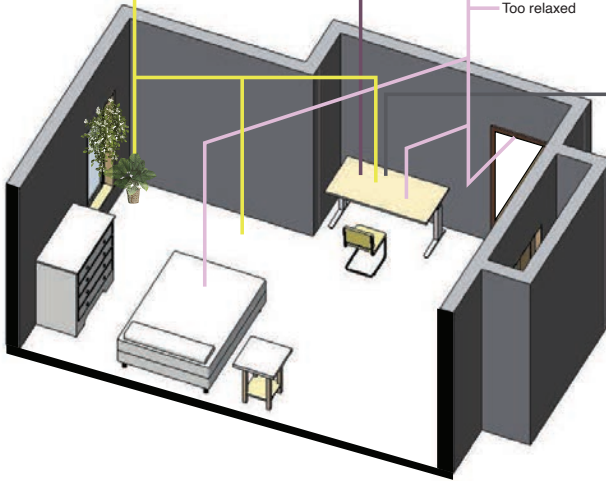
Stress build up and solutions

Working Continuously

Feeling Isolated

Being in the same space for a long time

Break ritual/moment Window

Distractions

Multi-purpose Multiple work and relax stations

Creating a moment or ritual to encourage students to take a break. Break in time and spending time on something helps you reboot relax

Focus/privacy Non-permanent Containment

Flexibility, showing how different things can be used

Creating a degree of privacy and focus

Daily Protocol Improvements

Wake up
Students typically started their day around 8-9am

Break
Students typically take a break to use their cellphones

Work/School
Students typically spent 8-16 hours in their workspace

Break
Students typically take a break to eat

End of the Day
Students typically end their day past 12am

Create a morning routine before studying/working
- Eat a healthy breakfast
- Get organized: Make your bed, organize your space
- Exercise: Morning walk, yoga, gym, etc.
- Meditate

Break
-Try to stay off social media, phone a friend
-Don't sit at desk when taking a break: Get up and take a walk, hangout with a family member, sit by the window, meditate.
- Give yourself more breaks, for every hour you work take a 15 minute break.
-Eat a healthy lunch

Create a work routine
-Maintain regular working hours and stick to that routine
-Set a schedule for your working hours and stop when the time is up.
-Stop multi-tasking: focusing on one thing at a time will help improve quality of work. While taking breaks do not do something too time consuming.

Create a post work routine
-Eat a healthy dinner
-Exercise: go for a walk, yoga, or gym
-Meditate
-Spend time with loved ones or call them.
-Get enough sleep

Space Improvements

Standing desk
Standing desk can help promote movement and activity. Research shows that we must stand for 1 hour for every two hours we are sitting.

Multi-use bookshelf next to window and plants
Store personal belongings and a place to sit and relax by the window.
Adding a plant can help with indoor air quality and encourage you to get up and water it.

Murphy Bed with desk connected
Murphy bed with a desk connected can transform the space into two different functions.

Bench by the window
Adding a bench by the window can provide a space to sit/lounge by the window and allow you to take a break from your busy schedule.

Wake up
Students typically started their day around 8-9am

Break
Students typically take a break to use their cellphones

Open shelves
Adding open shelves can help with minimizing clutter on your desk.
Place personal items.

Partition wall
Adding a partition wall can help with allowing you to focus on work.

Work/School
Students typically spent 8-16 hours in their workspace

Multi-use bookshelf next to window
Store personal belongings and a place to sit and relax by the window.

Break
Students typically take a break to eat

Pin-up board and shelves
Store personal belongings on shelves to minimize clutter on your desk.
Add a pin-up board, so that your work is at arms reach.

End of the Day
Students typically end their day past 12am

Garden Nook
Area in the room (preferred by window) dedicated to relax and surround yourself with plant.

Murphy Bed with desk connected and storage
Murphy bed with a desk connected can transform the space into two different functions.
Adding storage can help with organization and less clutter.

Break ritual/moment Window
Creating a moment or ritual to encourage students to take a break. Break in time and spending time on something helps you reboot & relax

Focus/privacy Non-permanent Containment
Creating a degree of privacy and focus

Multi-purpose Multiple work and relax stations
Flexibility, showing how different things can be used

Bench by the window
Adding a bench by the window can provide a space to sit/lounge by the window and allow you to take a break from your busy schedule.

Open shelves
Adding open shelves can help with minimizing clutter on your desk.
Place personal items.

Partition wall
Adding a partition wall can help with allowing you to focus on work.

Concept Two

Multi-use bookshelf next to window
Store personal belongings and a place to sit and relax by the window.

Pin-up board and shelves
Store personal belongings on shelves to minimize clutter on your desk.
Add a pin-up board, so that your work is at arms reach.

Multi-use bookshelf next to window and plants
Store personal belongings and a place to sit and relax by the window.
Adding a plant can help with indoor air quality and encourage you to get up and water it.

Murphy Bed with desk connected
Murphy bed with a desk connected can transform the space into two different functions.

Concept Four

Garden Nook
Area in the room (preferred by window) dedicated to relax and surround yourself with plant.

Murphy Bed with desk connected and storage
Murphy bed with a desk connected can transform the space into two different functions. Adding storage can help with organization and less clutter.

Standing desk
Standing desk can help promote movement and activity. Research shows that we must stand for 1 hour for every two hours we are sitting.

Conclusion

Students should learn effective methods of transforming the space that works for them to counteract the effects of stress. When such strategies are implemented, individuals will start to realize stress becomes a manageable variable. Based on the studies discussed in this thesis, learning how to transform an individual's space can differ in their mental state. Due to the changes, we have seen in 2020 with COVID-19, working from home can now be the future of workspaces and no one knows what the future may hold. The suggested protocols can help students or individuals adapt to any changes that they face, be it a pandemic or the impact it will make that will change work environments in years to come.

Appendix A

Survey on stress- 35 parcipants

How old are you?
18-30

What is your major?
Architecture,Industrial Engineering,Nursing ,Biochemistry,Film,Marine biology,Biology, Dietetics, Medical,Architecture and Construction Project, Management, Economics,Biomedical Science,Community Development, and Architecture (VABE)

In recent weeks, How stressed have you felt?
80% felt very stressed

Can you list reasons you think contribute to your stress levels?
Professors that forget I have other classes / a job and my life doesn't revolve around just their class. If I will be able to graduate on time because I didn't have a coop over the summer. Not knowing how to do basic things that is expected by firms in the real world (software, how to put together a set of drawings). School, personal life, no stress level, School, Studio, working part time in retail, full time student, Work load, Online Education, Lack of self-care (eating, sleeping etc.), Final assignments coming up, election, Covid-19. ,Life, angry people, ignorant people, constant sadness, school, Amount of school work/election, Lack of privacy, lack of resources, high tuition rates for exclusively online courses, lack of a proper work space, lack of reliable internet connection, concentration issues, COVID, work schedule, taking care of family apartment bills Overwhelming assignments the work load, the time frame, the type of learning being given (not face to face help) ,Money, Living at home with family, the complicated nature of remote school, School, personal well-being, well-being of friends and family, career, School and social life obligations, School, Work, Friendships during the election, Unanswered questions, not knowing when assignments are being posted, limited communication with professors, Politics, school, lack of sleep, Heavy work load, School, My mom, financial instability, lack of communication between my boss and I, Work and school life, Work, school, family, GROUP hw, GROUP Projects or anything. Professors expect us to find a way to get in contact with partners when get lot of junk mail is sent on our email, MCAT, volunteering, clinical hours, Final presentations, Personal reasons, Family illness, deadlines for all class projects, Thesis and covid, The election, workload, class load, the pandemic, etc., too much school work, not feeling like my work is good enough

What type of home do you live in?
71%: Single family home
17%: Apartment
5.7%: Dorm

How many people live in your home?
1-8

Indicate the age groups living in your home. Please select all that apply:
0-65 years old

How many rooms total are in your home? (this includes kitchen, bathroom, etc...)
1-22 rooms in each home

In which space do you spend the majority of your time?
Bedroom, livingroom,basement, and office.

Where do you sleep?
Bedroom,Livingroom,Basement,Shared Bedroom, and basement

In what space do you study/work?
Bedroom,Office, and Livingroom

Indicate the time you typically start your day?
6am-9am

Indicate the time you typically end your day?
Past 12am

How do you feel at the beginning of the day? Please select all that apply:
Tired, happy, sad, and stressed

How do you feel at the END of the day? Please select all that apply:
Tired, happy, sad, and stressed

If you realize you're experiencing stress, what do you do?
Do a hobby, watch tv, go on my phone. Then stress out about wasting time doing that instead of all the class work I'm expected to do. Sleep, changes the work and the place, go for walk, do something different from what is in my hand. Talk to friends. Experience stress until it goes away, Breathing exercises, Nothing, I try and work thought it and

hope it goes away, or I have a mental-breakdown, When I start to get stressed out, I'll find something else to do. If I have other homework, I'll do that. If I've spent a lot of time working, I'll watch some TV, draw, or play Among Us with my friends. Stress, try to order my time line, play music, Distract myself, Take a break, nap/sleep, Therapy, Take a break from everything, step outside for some air, listen to music, Smoke weed, Try to breathe deeply, Push through it, lay down, do chores, write, play guitar, sing, go for a walk/drive, entertainment (movies, video games, etc.), This so bad but I typically ignore it but find a way to deal with the stressor, Try to take a step back and breathe, Distract myself from work (phone, tv etc.), I light my candle and open my window, Step away from my tasks by going outside or for a drive, Study harder, Eat everything in sight, clench my jaws, grind my teeth, get headaches, pick at my acne, or go for a walk, Watch a movie, Try to relax, sleep, take mental health breaks by seeing friends or going out to treat myself to things I like to eat/drink or do. Either by myself or with friends. Take a break and go into nature/outside, Talk to people who can distract me from my stress, or go out with them, I usually make lists of tasks or I escape to occupy myself with other things, Usually drink alcohol or eat comfort foods. Try to take my mind off of school by doing other things

During the day, how many hours do you work/study?
6-16 hours
During the day, how many hours do you relax and take a break during the day?
2-5 hours
What indoor or outdoor spaces do you go to De-stress?
My car to smoke listen to music and cruise, The backyard or the porch, Basement, kitchen, park, nature trail, backyard, My favorite boba place or my friend's apartments, Walking trails on campus, walks around campus, friends rooms, living room, The deck and relax on the porch swing, Walking or biking around neighborhood, My bed, My room, friends' houses, out of my house, Bedroom or vehicle for a drive, Off-road park, walk the dog, cafes, coffee shops, parks, walking trails, Sunroom, Try new food, Go places where I can do activities (movies, games), or go to any new spot where I haven't been before, Indoor is my couch or to play videogames and outdoor spaces is to go to a park or the gym, I don't have a designated area(s) to de-stress. Watch tv in the same room

Appendix B

Interview- 4 students

While working what are some distractions you experience?
Family
Social media
Phone usage
Making Food

What is the length of focus you have working on a task? Or are you multitasking?
Multitask (A lot of back and forth)
4 Hours or more

How much time do you think you spend working in your room? Is this a continuous thing or do you take breaks?
Continuous with little breaks
2-3 Hours with breaks in-between

If you do take breaks, how many do you take? Or do you find yourself doing more than one thing at a time? Or do you switch from one task to the other? If so what is that?
25 Min to an hour break
5 Min break
Overlapping of tasks
One task at a time

Do you find yourself going to another room often? Are you on your phone? Is your phone next to you?
Stay in the same room until work is done
Go to the kitchen
Phone is next to them

Looking at how things were before the pandemic, what would you say worked well in your workspace? What didn't work well?
Never worked in bedroom before pandemic, worked at school or coffee shops
Works well that I don't have to commute
Being in environment with other people helped motivate students

Looking at how things are now, what works well and what works less well?
The convenience works well but the comfort level doesn't really work well. It's hard to sometimes think that i have to focus and think at the same space that i relax and sleep
Working alone helps concentration
Feeling isolated

What do you want to change in your workspace?
More space, bigger desk
Privacy
More Plants
Noise control

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