PIECING MINDS: Creating a healing space for mental health in the West End Neighborhood

Jeromette Belcher

Follow this and additional works at: https://digitalcommons.kennesaw.edu/barch_etd

Part of the Architecture Commons

Recommended Citation
Belcher, Jeromette, "PIECING MINDS: Creating a healing space for mental health in the West End Neighborhood" (2020). Bachelor of Architecture Theses - 5th Year. 125. https://digitalcommons.kennesaw.edu/barch_etd/125

This Thesis is brought to you for free and open access by the Department of Architecture at DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Bachelor of Architecture Theses - 5th Year by an authorized administrator of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.
PIECING MINDS
CREATING A HEALING SPACE FOR MENTAL HEALTH IN THE WEST END NEIGHBORHOOD
Piecing Minds: Creating a healing space for mental health in the West End Neighborhood

Request for Approval of Thesis Research
Project Book Presented to:
Mine Hasas-Degerterekin PhD

and to the
Faculty of the Department of Architecture
College of Architecture and Construction Management

by

Jeromette Belcher

In partial fulfillment of the requirements for the Degree
Bachelor of Architecture
Kennesaw State University
Marietta, Georgia
May 1, 2020
Acknowledgments

This thesis would not be possible without

My thesis advisor: Professor Mine Hashas-Degertekin
For your expertise, dedication, and encouragement. Thank you for your insightful critique and motivation.

Dedication

This thesis is dedicated to

My parents: Jerome Belcher Sr. and Janifer Belcher
For supporting me throughout my college career and always encouraging me to strive for greatness

My grandmother: Mattie Belcher
For your wisdom and always making me feel like I can accomplish anything

My siblings: Jerome Belcher Jr. and Jayla Belcher
For believing in me and always holding me accountable

My uncle: Wayne Bryant
For being a listening ear and motivating me throughout all the stress

My cousins: Robert Lewis Cost and Terrence Driskell
For keeping me laughing and sane throughout the years

My friend: Joshuah Robinson
For being a great friend and support throughout my thesis

My studio classmates
For your work ethics, laughter, and company throughout the long days in studio

"Unless the Lord builds the house, its builders labor in vain"

Psalms 127:1
## Chapter 1 | Design Theorem

### Abstract

Introduction

1.1 Understanding Mental Health

1.1.1 Mental Well-being Components

1.1.2 Mental Health Symptoms

1.1.3 Associated Physical Health Concerns

1.1.4 Associated Socio-Economic and Health Equity Concerns

1.2 Mental Health in Lower Income Neighborhoods

1.3 Environments

1.3.1 Socio-Economic Environment

1.3.2 Built Environment

1.3.3 Natural Environment

1.3.4 Positive Environment

1.4 Healing Environment

1.4.1 History of Social Stance regarding Mental Health

1.4.2 Healing Environment Concepts

1.5 Case Studies

1.5.1 Superkilen

1.5.2 Highlands Garden Village

## Chapter 2 | Analysis

### 2.1 Demographics

2.1.1 Age, Gender, and Race

2.1.2 Education and Employment

### 2.2 Site Analysis

2.2.1 Alignment & Axis

2.2.2 Road Hierarchy

2.2.3 Bus Stops, Routes, and Marta

2.2.4 Train Routes and Time

2.2.5 Parks, Plazas, and Unused Green Spaces

2.2.6 Air Pollution

2.2.7 Land Use

2.2.8 Fast Food, Restaurants, and Grocery

2.2.9 Senior Centers, Schools, and Recreational Center

2.3 Health Services, and Pharmacy

2.3.1 Religious Buildings

2.3.2 Historic Landmarks

2.3.3 Neighborhood Home Prices 2014-2018

2.3.4 Neighborhood Home Prices 2020

### 2.4 Connection to the West End

## Chapter 3 | Design

### 3.1 Design Methodology

### 3.2 Conceptual Framework

### 3.3 Program and Users

### 3.4 Design Strategy

3.4.1 Street Network

3.4.2 Land Use

3.4.3 Land Use Design for a Positive Socio-Economic Environment

3.4.4 Land Use Design for a Positive Healthy Environment

3.4.5 Land Use Design for a Positive Natural Environment

3.5 Design Proposal

3.5.1 Plaza Design Concept

3.5.2 Plaza Design for a Positive Socio-Economic Environment

3.5.3 Plaza Design for a Positive Healthy Environment

3.5.4 Plaza Design for a Positive Natural Environment

### Appendix

A.1 Figure List

A.2 References
Abstract

Throughout history, mental health has been an issue. Mental health has been labeled from a disease, to treatment, and to facility design. There have been design theories that have looked at throughout the centuries such as anthrophosohy, evidence-based design, generative design, planetree, salutogenic design, and specialist design. There has been facilities designed for people dealing with mental health such as residential, impatient, and outpatient. But, the impact of the environment on mental health plays a significant role. Specifically, in the lower income neighborhoods which have a lot more issues in mental health than those living in higher income neighborhoods. Mental health is a big issue in the lower income community. People living in lower income neighborhoods are exposed to more violence, gentrification, poor housing and lack of physical activity. The environment around a person can affect a person’s mental health. There are facilities that are specifically targeted to people who have mental issues but not people who are living in low income areas. People that deal with this have high rates of substance abuse and even as extreme as schizophrenia and depression in these neighborhoods. People feel powerless because they feel like they cannot change their circumstances which make symptoms like social separation and avoidance amplified. The methodology I used to work on my thesis was through literature review, case studies, statistical analysis, analyzing experimental spaces, and interviewing people. My thesis is focused on how a positive environment in the West End neighborhood community can help create positive mental health.

Introduction

According to Callcutt more than 10 million Americans suffer from addictive conditions, and another 40 million are afflicted with mental health disorders. Within the context of these high numbers, Arthur Nikely found out that mental health practitioners mainly focus on strengthening individual responsibilities and making sound behavioral choices. There is also evidence that shows mental health being carved by economic and social structures rather than the behavior of the individual. Results of these studies show that the structural factors played a larger role in determining mental health status than did the lifestyle factors. Since our urban and residential environments are organized mostly around income levels, it is not wrong to claim that lower income neighborhoods dealt with more mental health issues than higher income neighborhoods. Studies suggest that living in a lower income neighborhood contributes to stress, anxiety, depression, violence, and substance abuse. People feel powerless because they feel that they cannot change their circumstances which make symptoms such as social separation and avoidance amplified. Mental health services and interventions implemented in these neighborhoods are limited. Most of them only serve to re-victimize and re-traumatize people, which result in mistrust with these interventions. Consequently, these interventions contribute to mental health problems.
Ch. 1
Design Theorem
1.1 Understanding Mental Health

1.1.1 Mental Health Components

Mental health is defined by several things. It is first defined as all aspects of the environment that have a distinct and interrelated influence on mental health. It is defined as a state of well-being which every individual realizes in his or her own potential. Finally, it is also defined as being able to cope with the normal stresses of life, productively and fruitfully in the community. According to the World Health Organization, all areas of functioning, mental well-being should be viewed within the context of genetic, epigenetic, developmental, and contemporaneous environmental influences. Social skills and cognitive functioning are components of health that impact engagement in basic tasks and social roles.

Mental health is defined by several things. It is first defined as all aspects of the environment that have a distinct and interrelated influence on mental health. It is defined as a state of well-being which every individual realizes in his or her own potential. Finally, it is also defined as being able to cope with the normal stresses of life, productively and fruitfully in the community. According to the World Health Organization, all areas of functioning, mental well-being should be viewed within the context of genetic, epigenetic, developmental, and contemporaneous environmental influences. Social skills and cognitive functioning are components of health that impact engagement in basic tasks and social roles.

Mental health has three components. Those three components are emotional, psychological, and social. Emotional is defined by life satisfaction and positive emotions. Psychological is defined as well acceptance, environmental mastery and personal growth. Social is defined by self-acceptance, integration and actualization. Depending on where the person is located, their emotional, psychological, and social mindset can vary. The components that influence overall mental well-being is the social environment and the physical environment which acts as a heavy role for a person's overall mental well-being.
Mental health symptoms that come from mental health is stress and anxiety. With these two ongoing signs they can cause a lot of negative results. The results from stress and anxiety is violence, sexually transmitted infections, and substance abuse. Violence is a result of these two factors because a person can feel a lot of hostility and anger. Harvard Medical School found a national survey that 31% of people who had a substance abuse problem committed at least one act of violence in year compared to 18% of people with a psychiatric disorder alone. What stood out from this research is how the violence was reported in the study that reflected factors from a particular neighborhood rather than the symptoms of a psychiatric disorder. This study shows how violence and substance abuse can be a negative result from intense hostility and anxiety being in a particular neighborhood. Wadsworth and Nation reviewed the causes of neighborhoods and found that poverty, single parent families, high unemployment, poor social resources, and population flux are associated with stress, anxiety, behavior disorders, somatic symptoms, depression, hospitalization, and mental illness. Higher remission rates from unipolar depression were associated with psychosocial integration and low stress environments. Many people have these mental health symptoms but when it becomes a concern it affects a persons everyday life in work, school, and relationships. These symptoms can affect a persons behavior, emotions, and thoughts.

Associated physical health concerns affiliated with poor mental are heart disease, stroke, hypertension, diabetes, and birth outcomes. High rates of smoking, lack of physical activity, obesity, and inadequate sleep put people at risk for health problems. Mental health can take a physical toll on the individual because there is link between the two. Researchers have found that even though chronic stress can contribute to depression it can also contribute to physical illness as well according to Houston behavioral health. People that live in low income neighborhoods are exposed more to poor constructions and poor indoor temperatures that negatively impacts their physical and mental health.
Mental health in the lower income neighborhoods

In lower income neighborhoods, people are unable to afford care. There is an issue of safety in the neighborhood that can affect a person’s psychological distress and physical activity. In a low-income neighborhood due to crime, there is gentrification. Discriminatory practices in lower income areas classifies the benefits of psychotherapy. Elevated mortality due to the psychosocial stress resulting from lower socioeconomic status. Harvard Medical School researched that there is a shared vulnerability or common elements of the social environment that included poverty and early exposure to violence in a neighborhood that is partially responsible for violent behavior. People who are poor or have low economic status are more likely to become violent than others. These socio-economic factors and substance abuse tightly woven into the fabric making it hard to get away from influences and negative environmental factors. Younger people are more likely to act violent than an adult due to early exposure to fights in the household or physical abuse or a parent with a violent record. On the other hand, high economic status is associated with general well-being, being positively related with physical and mental health and low mortality. Lower income neighborhoods show more mental issues because they have more vegetation and have less access to green spaces.

Figure 1

1.2 Mental health in the lower income neighborhoods
1.3 Environments
The environment is made up of three parts, the built environment, the socio-economic environment, and the natural environment. These three parts of the environment contribute to the individual's well-being, privacy, and social identity and have a direct influence on mental health. The built environment consists of buildings, products, transportation, and spaces modified by people. The built environment that involves poor quality housing increases psychological distress. According to Gary W. Evans, mental health has been linked to design elements of the built environment that affect a person's ability to regulate social interaction. Research shows even certain housing types such as high-rise, housing quality, and floor level with structural problems link to mental health issues. Insufficient resources for low-income families restricted play areas for children with allotted spaces create a lot of issues. The Socio-Economic environment is a combination of social-economic status, measured income, education, and occupation. It refers to the surroundings, social relationships, and cultural settings where people function. Crowding in small spaces will aggravate the individual and cause a lot of distress which will affect a person's relationship with another person and can affect the mental health outcomes. Children also show evidence to how crowding in compact neighborhoods correlates to mental health. The natural environment refers to the water, air, landscapes, natural green spaces such as fields and forests. Natural views in the environment is tied to mental health. The quality of lighting can reduce anxiety, stress, and improved mood.
The built environment has an impact on mental health. Negative effects from the built environment includes unmain- tained property, dangerous traffic conditions, high exposure to noise and traffic, unsafe living conditions, prevalence of fast food, corner stores that sell unhealthy food and alcohol, and displacement. The built environment is rare- ly built or designed with the goal of improving a person’s positive mental health. The link between the built environment and particular housing quality in low income neighborhoods has a huge role in psychological distress. Gary Evans stated that the higher the density along with low social support results in an increase in psychological distress. Women in particular with young children in low income neighborhoods are more vulnerable to these consequences. The link between residential crowding and helplessness appears to be stron- ger in females than males according to Gary Evans. Psychological distress is in relation to inadequate housing for those who live in more diluted neighbor- hoods. Stress is even higher depending on the housing type. Crowded families living in high- er floors do worse than crowded families living on the lower floors. With all the crowding there is an increase in noise. Traffic conditions with a lot of noise exposure can ele- vate distress. The results in people dwelling in these compact environments go hand in hand with people having high emotional reactions and a personality trait. People with higher mental reaction are more likely to be affected by negative events. The socio-economic environment can affect the mental health of an individual. The socio-econo- mic status of an indi- vidual is widely studied amongst the social sci- ences. For instance, hous- ing quality for low income families was found to be more highly correlated to poor psychological health in the neighborhood qual- ity. Negative effects from the socio-economic envi- ronment include reduced levels of relationships, social issues, crime, and exposure to traumatic events, family stress, poor quality housing, and lack of physical activity. There is a lot of evidence showing how adults and children function have negative effects with other people through work and school more than their counter- parts. People who have lower income are unable to afford certain hous- ing qualities and services which can result in mental health disorders. Accord- ing to a study done by Ruel, Oakley, Wilson, and Maddox people with an economically disadvantaged status have documented that experiencing posi- tive well-being, such as feeling satisfaction in the meaning in life, flourishing in relationships despite hardship, is harder for the people that dwell in those environments to feel a belonging in their community. People who are socially integrated in the community have a feeling of alienation, fear, mistrust and victim- ization due to their deteriorating living conditions. Supportive communities can strongly influence a neighborhood which can result in a positive affect on the mental health of the residence.
The natural environment has a lot of influence on mental health. A study done by the University of Illinois suggests that residence in Chicago public housing who had trees and green spaces grew their building reported lower levels of anxiety, feeling of loneliness, being more concerned with helping and supporting each other, and having stronger feelings of belonging than tenants in the building without trees. They also had a reduction in crime, lower aggression between domestic partners and able to cope with life's demands even though the residence is living in poverty. Having parks and activated green spaces can benefit the individual by having a positive mental affect on him or her. These natural spaces are also great places to socialize and create relationships.

In order to create a positive mental health there needs to be a positive physical environment. Some of the positive aspects include several things. Design that create places to have social connections in the neighborhood. Spaces that create personal connections to a person's culture and community. Safe housing quality and affordable housing. Property maintenance, access to bike lanes, active transportation, access to green spaces create a positive environment. Social interaction can be promoted by creating focal points. Having successful focal points can be created when a person can see what is happening in a space. Having an inclusive of activity such as urban furniture food can encourage social interaction. Some examples of positive focal points or areas are plazas and outdoor social spaces. Studies show that views of natural landscapes have a positive correlation with positive mental health. Children with access to nature show less impulsiveness, concentrate better, and have better behavioral problems than those without. Gary Evans. Residence feel safer and adjust better to their living arrangements that are closer to a lot of natural elements, activated green spaces, private gardens and tranquil scenes. Trees that bring in hummingbirds with tranquil sounds and smells can give the residence a calming and rejuvenated feeling.
1.4 Healing Environments
1.4.1 History of Social Stance regarding Mental Health

The history timeline shows how mental health was seen as a disease from 4 BC to 1761. People around that time were seen as idiots or imbeciles and were often treated barbarically and cruelly. Treatment was seen as punishment and was looked at between 1790 and 1946. People around the treatment time were operated on and given heavy medication. The design aspect was looked at between 1965 and 1946. Around this time is where practitioners focused on creating different facilities to help the individual deal with mental health issues.

**13th Century**: Focus on punishment rather than treatment.

**8th-11th century**: Connection between the body and soul.

**4th BC**: Symptom of mental disorder are due to disease originating in brain.

**1761**: Mental illness known as something that can be cured.

**1758**: Mental illness requires compassionate treatment.

**19th Century**: Origins of talk therapy, psychotherapy based on ideas of human experiences and natural effort to make sense of the world.

**1908**: National Committee for Mental Hygiene: Early detection of mental illnesses as a preventive practice institutionalized in the network of child guidance and clinics.

**1946**: National Institute of Mental Health to conduct research into reducing mental illness.

**2008**: Evidence that design can contribute to better treatment of patient safety.

**20th and 21st Century**: Research on programming, planning, and design of mental health facilities.


**2013**: Evidence that design can contribute to better treatment of patient safety.

**1993**: Evidence that design can contribute to better treatment of patient safety.

**1965**: Research on programming, planning, and design of mental health facilities.

**1965**: Systematic approach to mental "nursing".

**1965**: Treatment was looked at starting in 1965. Around this time is where practitioners focused on creating different facilities to help the individual deal with mental health issues.

**1908**: National Committee for Mental Hygiene: Early detection of mental illnesses as a preventive practice institutionalized in the network of child guidance and clinics.

**1946**: National Institute of Mental Health to conduct research into reducing mental illness.

**2008**: Evidence that design can contribute to better treatment of patient safety.


**2013**: Evidence that design can contribute to better treatment of patient safety.

**1993**: Evidence that design can contribute to better treatment of patient safety.
Having a healing therapeutic environment is essential to reducing anxiety and stress. Healing environments are designed to create a positive psychological effect on the individual in an environment. Having that "restorative" gives an individual a sense of wholeness and rejuvenation. This environment can encourage interactions among people that can influence behavior and motivation. This change to the environment by providing comfortable spaces for families can increase social support. There are ten environment design concepts that can be implemented into creating a healing environment for mental health. These design approaches have been supported and recommended by design researchers. There is common understanding of experience and behavior from existing practice that suggest that these are viable concepts. According to Shepley & Prasha, many competent design decisions have been made based on the knowledge brought to the table by designers and MBH clinicians. So with this being said the ten design concepts are personal space, density, choice control, spatial clarity organization, comfortable homelike surroundings, social interaction, access to nature, daylight, safety, supervision, and scale proportion.
1.4.2.1 Personal Space

Areas with invisible boundaries surrounding a person’s body into which intruders may not come. Robert Sommer (2008) Sheply also stated that personal space has been described as the concept of spatial enclaves around an individual that defines a person’s relationship with others.

1.4.2.2 Density

The number of people in a unit. Evans stated that design teams should be aware of the impact of culture, ethnicity, and race on spatial density, the also found that some ethnicities, such as African, may be more sensitive to increase densities.

1.4.2.3 Choice Control

Offering choices increases an individual’s sense of control and thereby reduces stress. Ulrich (2000). Sheply says the principle of locus of control has its foundation in personality theory and is associated with the perceived center of social control. She also stated mental health environments have been described as being overshadowed by issues of control.

1.4.2.4 Comfortable Homelike Environments

Design should be stylistically familiar to the experiences of residents (non-institutional, safe, have a means of access to nature, courtyards, windows), and privacy. Carr (2011) Many people consider the notion of home is the setting where we are provided with choice and control. Homelike environments extend beyond the building itself to the site.
Spatial Clarity and Organization

The importance of effective way finding that distinguishes public and private space has been clearly articulated. Confl ict and confusion can take place if private vs. public space is not effectively distinguished. This concept is important in having a effective way finding that distinguishes private space vs public space that has been articulated. Designers and clinicians encourage interaction between patients, staff, and visitors for the purpose of socialization and exposure to real-world environments (Porter & Easter, 1980). Davis stated spaces for one on one interaction are specifi cally recommended, as well as play areas, and common areas to encourage interaction and community.

Social Interaction

Access to nature and daylight and nature both direct and indirect environments (Porter & Easter, 1980) recommended access to nature as a tool in the therapy process. Daylight and views are important factors in a healing environment.

Nature and Daylight

Provision of security while avoiding patient intimidation as a goal for designers seeking patient and staff safety (Porter & Easter, 1980) security and safety are impacted by both operational and physical environment factors.
Critical to the safety of all patients, an open nurse station is encouraged staff to interact with patients and increase their sense of wellness. Whitehead, Polley, Crookshank, and Fik (1984).

Provision of security while avoiding patient intimidation as a goal for designers seeking patient and staff safety (Porter & Easter, 1980). Security and safety are impacted by both operational and physical environment features.
1.5
Case Studies
1.5.1 Superkilen

Architect: Nig-Bjarke Ingles Group, Superflex, Topotek 1
Location: Copenhagen, Denmark
Year: 2009

Relevance: This case study is relevant to my project because it shows how the healing design concepts are implemented into the site. The area is made up of three areas: the red area, the black square, and the green area. The design is made as a meeting place for the diverse neighborhood. It is an attraction to the city and it promotes public participation instead of just the normal outreach approach.
The red area on the site consists of a cafe, music, ping pong tables, sports. The urban furniture on the site is conceived as an urban living room where people can play games and they are surrounded by maple trees. This red case study model is showing how the healing concepts are implemented in the Superkilen design.

The white block in this model in the back represents the neighborhood residence which contributes to safety, eye on street and comfortable home-like environment. It also represents the spatial clarity between public and private. The people interacting on the walking path shows social interaction and density.

The black square consists of fountains, benches, and urban furniture. On the site there are different types of furniture from places like Brazil, Mo-CC, and Norwegian. Having different types of furniture from different places give the individuals a connection to the neighborhood. This black case study model is showing the individual benches where the healing concept of personal space is being activated. The white lines running north and south of the ground curves around the street furniture and fountain. The lines different pathways are showing different directions where choice and control is activated.

The green park area consists of sports, walking, animals. On the site there is a hockey field, integrated basketball court, a natural gathering spot for the younger people and a playground. The hills and curves appeal to the children and families where they can have picnics, workouts, and games. The green park by the residence appeal to the occupants because it is welcoming. Another perk to the hills on the site is that at the top the person can almost overlook the entire site of Superkilen. The green case study model shows how the user have access to nature and daylight through the park and walking paths.
1.5.2 Highlands Garden Village

Urban Planner: Jonathan Rose Company
Location: Denver, Colorado
Year: 2003
Concept: Designed with environmentally responsible features which range of uses include urban living and superior commercial space in the middle of Denver’s most desirable neighborhoods. It is an attraction to the city and it promotes public participation instead of just the normal outreach approach.

Highlands Garden Village offers a flourishing retail development. It has revitalization and modern architecture in a sustainable building. The tenants have a healthy community because the homes are affordable with an economically diverse surrounding neighborhood and community. There is a diverse retail ranging from cafes, fitness centers and markets. The facade and material used to design the buildings establishes a colorful presence in the neighborhood. This photo shows a movie night at the historical theatre in the neighborhood. The Denver historic street grid surrounds the community. This allows the residence to take advantage of the existing street neighborhood goods, and mass transit. This site offered numerous opportunities with the land. The gardens and trees were salvaged and thirty tons of concrete was also salvaged. The healing concepts implemented into this is social interaction, density, comfortable homelike environment.

This site plan shows how spatial clarity and organization was used to separate public and private. Recycled material was used to make homes energy efficient. This site has been transformed into a mixed-use neighborhood with new open spaces. Pedestrian friendly walking with convenient paths as a connectivity to primary areas of interest. The community offers a wide range of housing types such as single family, multi-family, and senior apartments. The homes have diverse income groups to increase socio-economic integration.
I chose the West End as the low-income neighborhood for my site. The west end site is an area where I know I can implement my design for mental health because there is a need for that in that area. The west end site have a high crime rate and a lot of people who are unable to afford care in that area. There is gentrification in the neighborhood and not a lot of green spaces. There is not a lot of walkable areas in the neighborhood so people rather drive than walk. There is not a lot of diversity in the commercial land use. People do not have access to therapeutic healing spaces that can be getaway from their circumstances. So that’s why I chose the West end area to implement the nine healing design concepts.
2.1 Demographics
The demographics show that the West End neighborhood is predominantly black. There is the same percentage of men and women in the neighborhood. A high percentage of people are unemployed with no health insurance. In the homes there are more households with children than households without. More people drive cars than ride the bus or any other type of transportation. There is a high crime rate in the West End neighborhood. The rate is higher than the national average. The highest categories are robbery, assault, and murder. The median household brings in around $25,873. The median rent is $604 and sixty-six percent of people have mortgages. The percentage that is below the poverty line is thirty-three percent.
2.2 Site Analysis
The road hierarchy in the West End shows the street network around the site. Highway 20 runs in very close proximity to the neighborhood, which is good for the access, but divides the neighborhood. There are primary roads in the area ensuring traffic flows freely. The secondary roads are mainly around the residential areas.

The alignment of the site is aligned between the roads of Lee Street, Oak Street, Dunn Street, and Ralph David Abernathy Blvd SW. The axis of the site shows the entry points of how people can enter the site. Also, the axis shows how the roads are already connecting to the site.
There are several different bus routes and bus stops in the west end area. The bus routes are highlighted in different colors. The public transportation system is important because people drive cars rather than take the bus or subway even though there is a good transit network. There isn’t a lot of walking destinations. The safety issues in the community such as the underpass under I-20 that makes walking unsafe for pedestrians with crime and gang activity.

This is the MARTA line with the access points and the times they run.
There are a lot of community parks in the West End and several untouched green spaces. Some of the parks are not activated. From my literature review, people in the community having access to green space in order to get physical activity in the neighborhood have fewer emotional problems.

This map shows how air pollution makes the environment harmful to the community by creating toxin exposure from the highway. The orange shows the high air pollution. The yellow shows the mild pollution. The low pollution is the green.
2.2.7 Land Use

The land use is important in the West End community because it impacts mental health in the built environment because the housing quality can either increase or decrease psychological well-being of the residence who live there. The West End land use map shows that the land use is largely commercial, a lot of barber and nail shops.

2.2.8 Fast Food, Restaurants, and Grocery

The West End Neighborhood shows the fast food and healthy restaurants. The only grocery stores in the area is the Kroger and Big Bear. There is a prevalence of fast food in the area. Having access to healthy food retail environment and stores, restaurants, and food banks contribute to positive mental health.
2.2.9 Senior Centers, Schools and Recreational Center

The West End Neighborhood has several schools, daycares, and one Senior Center. There is YMCA close by the West End. There isn’t many recreational centers or recreational fields in the area for physical activity.

2.3 Health Services and Pharmacy

The West End Neighborhood does not have a lot of health services in the area and there is a lack of Mental Health resources in the community. The closest medical centers in the West End is Total Health Medical Center, JenCare Senior Medical Center, Tarr Medical PC, Tarr Medical PC, and Medical Center Of The West End.
2.3.1 Religious Buildings

Spirituality and religion have an impact on mental health. Spirituality can help a person tolerate stress by generating purpose, forgiveness, and peace. Black churches are usually easily accessible, trusted, and prominent institutions. The West End has a lot of religious institutions.

2.3.2 Historic Landmarks

The historic landmarks in the west end represent the socio-economic environment of the West End. It also increases the levels of connections and relationships. Each historic building in the West End shows the identity of the community.
The West End Neighborhood home prices around 2014-2018 were mostly between $98,001-150,400. The darker blue ones on the map show the other homes were mostly between $248,201-358,100.

West End Neighborhood shows the gentrification within the neighborhood. The different housing prices show the various price range jumps from $89,000 to $500,000. There are several homes in the area that range from 400k and more mixed in with homes that are 200k and less. The residents that own homes in this area prior to these expensive homes are being forced...
This map shows how the design on the site is connecting to the strong contributors to the West End. It also shows the connection to the neighborhood communities. The beltline is on the southern border of the West End. The Marta station is in a prime location beside the site. The colleges and Atlantic University Center (AUC) is the major center for academia for the West End neighborhood. The school has a historical relationship to the West End. The new design will attract this demographic also with the new multi-use buildings and plaza.
The West End, like many other neighborhoods, has undergone many changes but still maintains its character. The history of the West End originated in 1835 with the establishment of White Hall Inn at the intersection of what is now known as Lee St and Ralph Abernathy Blvd according to Burke Sisco. In the 1800s, the West End was known as a desirable community. The transition happened after the 1930s where a lot of segregation happened. In the 2000s, a lot of investment and rejuvenation happened in the area. The West End was once known as a desirable community in Atlanta but not in the past due to the tradition of this past in terms of the standard of living in the community. There are a lot of churches in the West End and historical landmarks. The West End is by the curve of the Beltline. Looking at the Mental Health Data in the West End neighborhood, mental health disorders were the second leading cause of hospitalization and the fifth most common cause of ER utilization. 22% of all crimes in the area were documented as violent. Violence is an indicator of undressed mental health concerns. Having access to health services is one of the program interventions because the demographics show that a lot of the community does not have health insurance. Mental health is an important health equity concern, because it impedes employment opportunity, educational attainment, and risk of incarceration or homelessness. Looking into the site condition and literature review, I implemented the positive effects of the socio-economic, physical, and natural environment into the design along with the ten healing concepts I studied. The programs that were chosen for the design contributed to the users of the site and creates overall positive mental health.

3.1 Design Methodology
Conceptual Framework Matrix

<table>
<thead>
<tr>
<th>Socio-Economic Environment</th>
<th>Physical Environment</th>
<th>Natural Environment</th>
<th>Healing Concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>POSITIVE EFFECTS:</td>
<td>POSITIVE EFFECTS:</td>
<td>POSITIVE EFFECTS:</td>
<td></td>
</tr>
<tr>
<td>- COMMUNITY DESIGN THAT FACILITATE SOCIAL CONNECTIONS BY CREATING PLACES FOR NEIGHBORS TO INTERACT OR REMOVING BARRIERS TO SOCIAL INTERACTION.</td>
<td>- SITE CONDITION: LACK OF MENTAL HEALTH SERVICES - HAVING ACCESS TO HEALTH SERVICES SUCH AS THERAPY, COUNSELING, AND HEALTH CLINICS.</td>
<td>• PERSONAL CONNECTION TO A PERSON’S CULTURE AND PARTICIPATING IN ACTIVITIES WHICH RELATE TO THEIR COMMUNITY.</td>
<td>- Site Condition: Not a lot of diversity in commercial spaces for land use - Designing gathering public spaces, urban furniture.</td>
</tr>
<tr>
<td>SITE CONDITION:</td>
<td>SITE CONDITION:</td>
<td>SITE CONDITION:</td>
<td></td>
</tr>
<tr>
<td>- GENTRIFICATION - HOUSING OPTIONS FOR SENIORS, STUDENTS AND MULTIFAMILY.</td>
<td>- UNDERPASS UNDER I 20 IS UNSAFE FOR PEDESTRIANS TO WALK BECAUSE OF THE HIGH CRIME RATE AND GANG ACTIVITY.</td>
<td>• HAVING ACTIVE TRANSPORTATION, ACCESS TO BIKE LANES, AND WALKING TRAILS</td>
<td>- Personal space - Eye on street - Scale and proportion.</td>
</tr>
<tr>
<td>- AFFORDABLE COMMERCIAL RESPONSE - DIVERSITY IN RETAIL SPACES • PROPERTY MAINTENANCE</td>
<td></td>
<td>• Community gardening in the neighborhood</td>
<td></td>
</tr>
<tr>
<td>POSITIVE EFFECTS:</td>
<td>POSITIVE EFFECTS:</td>
<td>POSITIVE EFFECTS:</td>
<td></td>
</tr>
<tr>
<td>- SAFE HOUSING QUALITY AND AFFORDABLE HOUSING</td>
<td>- ACCESS TO PARKS AND GREEN SPACES - CREATING A PUBLIC PLAZA FOR SOCIAL INTERACTION.</td>
<td>• COMMUNITY GARDENING IN THE NEIGHBORHOOD</td>
<td></td>
</tr>
<tr>
<td>SITE CONDITION:</td>
<td>SITE CONDITION:</td>
<td>SITE CONDITION:</td>
<td></td>
</tr>
<tr>
<td>- UNDERPASS UNDER I 20 IS UNSAFE FOR PEDESTRIANS TO WALK BECAUSE OF THE HIGH CRIME RATE AND GANG ACTIVITY.</td>
<td>- Green space in the neighborhood has fewer emotional problems</td>
<td>• Having natural elements in the plaza and retail spaces that have nature and daylight</td>
<td></td>
</tr>
<tr>
<td>- MARKETS THAT HAVE PRODUCE AND HEALTHY FOOD OPTIONS. PEOPLE BEING ABLE TO SELL AND BUY GOODS.</td>
<td></td>
<td>• Creating an activated space</td>
<td></td>
</tr>
<tr>
<td>POSITIVE EFFECTS:</td>
<td>POSITIVE EFFECTS:</td>
<td>POSITIVE EFFECTS:</td>
<td></td>
</tr>
<tr>
<td>- ACCESS TO PARKS AND GREEN SPACES - CREATING AN PUBLIC PLAZA FOR SOCIAL INTERACTION.</td>
<td>- COMMUNITY GARDENING IN THE NEIGHBORHOOD</td>
<td>• Healing concepts</td>
<td></td>
</tr>
<tr>
<td>SITE CONDITION:</td>
<td>SITE CONDITION:</td>
<td>SITE CONDITION:</td>
<td></td>
</tr>
<tr>
<td>- UNDERPASS UNDER I 20 IS UNSAFE FOR PEDESTRIANS TO WALK BECAUSE OF THE HIGH CRIME RATE AND GANG ACTIVITY.</td>
<td>- Green space in the neighborhood has fewer emotional problems</td>
<td>• Creating an activated space</td>
<td></td>
</tr>
</tbody>
</table>

3.2 Conceptual Framework

The conceptual framework chart is based off the literature review, site analysis, a design proposal. The top row shows the design driver factors that contribute to overall positive mental health. Each component of the socio-economic, built environment, and the natural environment has explanations under them to show what contributes to an overall positive environment. The site condition in bold black sentences shows the current condition of the site based off each environmental category. The bold blue sentences show the programs on how I responded to the site based off the conditions. Each program that I designed to the site will bring a healthy environment to the site condition so that the neighborhood will encounter them on a regular basis. The last column shows the ten healing environment concepts that will contribute to the design. The goals is to normalize a positive healthy environment to bring positive mental health.
Plaza will encourage students to walk to destinations.

Plaza will encourage adults to walk to destinations.

Plaza will encourage senior adults to walk to destinations.

Students can get supplies for school.

Adults can shop and get jobs through the variety of retail options.

Students can have access to mental health services.

Housing for students.

Housing for adults and their children.

Housing for seniors.

Assist in markets, buy food from markets.

Work at markets, buy food from markets.

Can work, babysit babies and mentor children.

Can drop off children at daycare services or tutor students.

Babysit and tutor by college students or adult.

Senior adults can shop or get jobs through the variety of retail options.

Adults can have access to mental health services.

Senior adults can have access to mental health services.

Play in activated spaces.

Learn about healthy nutritional food options.

Live with parent in a better home quality.

Learn about positive mental health.

This chart shows the programs and how the users will benefit from the program. The users will benefit from the program because it will help reduce the stigma of mental health in the community by providing a healthy environment. The age ranges from babies to senior adults. Each block beside the user shows how the individual of that age range will be using that program. For example, the daycare and tutoring service each user can benefit from. The babies and children are being babysat. The children are being babysat and tutored. College students can tutor the children. Adults can drop their babies and children off at this service while they go to work. The senior adults can babysit and mentor the children. So overall each user can benefit from each program and bring knowledge and improvement to positive mental health.

### Users

<table>
<thead>
<tr>
<th>Babies</th>
<th>Adult</th>
<th>Senior Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babysit and tutor</td>
<td>Work at markets, buy food from markets</td>
<td>Work at markets, buy food from markets</td>
</tr>
</tbody>
</table>

### Health Service

<table>
<thead>
<tr>
<th>Babies</th>
<th>Adult</th>
<th>Senior Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babysit and tutor</td>
<td>Work at markets, buy food from markets</td>
<td>Work at markets, buy food from markets</td>
</tr>
</tbody>
</table>

### Retail

<table>
<thead>
<tr>
<th>Babies</th>
<th>Adult</th>
<th>Senior Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babysit and tutor</td>
<td>Work at markets, buy food from markets</td>
<td>Work at markets, buy food from markets</td>
</tr>
</tbody>
</table>

### Housing

<table>
<thead>
<tr>
<th>Babies</th>
<th>Adult</th>
<th>Senior Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babysit and tutor</td>
<td>Work at markets, buy food from markets</td>
<td>Work at markets, buy food from markets</td>
</tr>
</tbody>
</table>

### Market

<table>
<thead>
<tr>
<th>Babies</th>
<th>Adult</th>
<th>Senior Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babysit and tutor</td>
<td>Work at markets, buy food from markets</td>
<td>Work at markets, buy food from markets</td>
</tr>
</tbody>
</table>

### Daycare and Tutoring Resources

<table>
<thead>
<tr>
<th>Babies</th>
<th>Adult</th>
<th>Senior Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Babysit and tutor</td>
<td>Work at markets, buy food from markets</td>
<td>Work at markets, buy food from markets</td>
</tr>
</tbody>
</table>

### Existing Site Conditions

- Not a lot of healthy food options
- Lack of mental health services.
- Not a lot of retail diversity.
- Gentrification
- Untouched green spaces.
- No walkability
- Not a lot of child care and tutoring resources

### Program

- Reduce stigma of mental health
- Provide a healthy environment
- Age ranges from babies to senior adults
- Each block beside the user shows how the individual of that age range will be using that program
- Examples:
  - Daycare and tutoring service: each user can benefit from.
  - The babies and children are being babysat.
  - The children are being babysat and tutored.
  - College students can tutor the children.
  - Adults can drop their babies and children off at this service while they go to work.
  - The senior adults can babysit and mentor the children.

### Benefits

- Help reduce stigma of mental health
- Provide a healthy environment for users
- Each age group benefits from specific programs
- Overall, each user benefits from each program and brings knowledge and improvement to positive mental health.
3.4 Design Strategy

1. Create social support by having access to health services, gathering spaces, youth programs, and markets.

2. Create economic development through affordable housing and retail spaces.

3. Create activated plaza for social interaction, health, physical activity, and natural elements.
3.5 Design Proposal

3.5.1 Street Network

The road design I added was three new streets inside the site which are blue and will encourage connection within the site. The roads create different block sizes to divide it into the programming. The gray roads show the existing streets around the site. There are sidewalks added along side of the roads for pedestrian circulation also.
The ground floor has the parking on the bottom level for the residence and the users coming to the commercial, retail, and plaza space. The commercial space in red has retail and market space on the bottom. The blue has education programs such as tutoring, a daycare center, and health services that are accessible on the bottom for the young and older residence. The green is the plaza space in the center.

The second floor level shows the residence, second level parking, and commercial space. The new affordable housing is for single family, multi-family, college students, temporary housing, and senior living.

The third floor level shows the residence and commercial space. The central area shows more affordable housing on the mixed use building.

The fourth floor through sixth level shows the residence and commercial space and also more affordable housing on the mixed use building.
3.5.3 Land Use Design for a Positive Socio-Economic Environment

The affordable housing, retail, and offices in the design with the healing concepts will give the residence and users a healthy community. The mixed use buildings with the student housing, multi family housing, single family housing, will create a socio-economically diverse area. There is a diversity in the retail shops, restaurants, day cares, other school progranmming and markets. The healing concepts that the design have is density, comfortable homelike environment and social interaction.
The socio-economic component of the land use offers a diverse amount of programs such as shops, markets, housing, and a community center. This rendering shows the indoor market space that encourages social interaction and density.

Program 1. Retail
2. Mixed Income housing
3. Market
4. Daycare

Single family housing
Multifamily housing
Student housing
Senior housing
3.5.4 Land Use Design for a Positive Healthy Environment

The health programs implemented into the design is the fitness, recreational, and medical center. There is counseling, vitamin and health shops. There is also an art shop and art gallery. All of these programs will allow the user to get personal space, social interaction, density, scale and proportion, and safety.
The Health component of the land use offers counseling and other therapeutic services. This rendering to the right shows that there is counseling available to help contribute to positive mental health in the community.
The green courtyard space is in the middle of one of the affordable housing units. The courtyard is for every user. The healing concepts implemented into the courtyard space is social interaction, density, eye on street, safety. The green spaces around the design will attract users to the site. The retail shops have herb and flower shops for the residences and users. There are flower beds and trees in the design so people can have nature and activated green spaces.
The nature component of the land use offers a garden area and a courtyard inside of the housing area with flower beds. This rendering to the right shows the outside of the flower and herb shop. Being outdoors with the plants offers access to nature and daylight and eyes on the street that helps with emotional health with the indoor and outdoor green spaces.
For the plaza design concept I chose points inside the plaza that I felt certain program would respond well to the land use. These three series of models represent the concept of creating a system scheme that combines the socio-economic which is the red ribbon, the natural the green, and blue being the health environment to come together to create a positive mental health.

The ribs also represent how a person can weave throughout the space. The pins represent the program being placed on the plaza. The key chart below shows the program list I came up with to add on the plaza inside the site.
For the socio-economic part of the plaza there is a playground, picnic tables, kiosks, and commercial stalls. The re-ribbon itself is a piece of urban furniture. By adding these programs to contribute to the socio-economic the users will get personal space, safety, eyes on street, and density.
The red ribbon on the plaza represents the socio-economic component that contributes to mental health. The red ribbon itself is a long curvy piece of urban furniture that the community can use for social interaction or have their personal space. The red ribbon can accommodate a variety of age ranges because it has an area for sports, picnicking, a playground, and an area for sports and a weekly market. All of these things promote mental health for the community.

Local goods can be sold and purchased through shops and vendors at market space.

This is a zoomed in view of the plaza site view. This shows how the red ribbon which is the urban seating is weaving the plaza. The red ribbon weaves past the outdoor market stalls and breaks up through the blue biking and green walking trail.
3.5.8 Plaza Design for a Positive Healthy Environment

For the programs on the plaza that contribute to health is a playground, yoga, basketball, ping pong tables, outdoor fitness, and an outdoor kitchen. The users range from children to senior adult. Each of these programs bring the social interaction, choice and control, personal space, and nature and daylight.
Safe walking spaces, biking, recreational and outdoor fitness activities will be available for people to get physical activity.

Moments

Outdoor kitchen

The blue ribbon on the plaza represents the health component that contributes to mental health. The blue space includes a lot of health promoting strategies. The bike lane keeps the community engaged through physical activity. The ribbon passes by an outdoor kitchen which also promotes good health because of the healthy prepared food. The people who teach at the kitchen will show the community how to prepare healthy food for themselves to help promote mental well-being.
For the natural part of the plaza I added a water fountain, plants and different types of trees that attract hummingbirds. By doing this the user will get a variety of serenity sounds, vibrant colors. The green strip is a walking trail and the user can weave through the plaza to some of the other activities. The healing components the user will get is nature and daylight, personal space, and social interaction.
The green ribbon on the plaza represents the nature component. The ribbon is a walking trail through the landscape. People are able to walk through the different types of trees such as Eucalyptus, Eastern Redbud, Northern Catalpa, and Crabapple tree. All the trees and plants around have a variety of color and scents to attract hummingbirds. This component of the plaza brings on the healing concept of nature and daylight, and social interaction. The engagement through this component can help create positive mental health within the community.
3.6 | Sections

Section A
- Student residence
- Affordable residence
- Senior residence
- Shops
- Multi-family residence
- Daycare
- Tutoring, after-school program

Section B
- Parking
- Officess
- Job training, workshops
- Retail
- Art gallery
- Art shop
- Multi-family residence
- Health center, health clinic
- Flower shop and her shop
- Mini shops
- Restaurants

Section C
- Student residence
- Affordable residence
- Senior residence
- Multi-family residence
- Multi-family residence
- Multi-family residence
- Multi-family residence
- Multi-family residence
- Retail
- Parking
- Officess
- Job training, workshops
- Retail
- Community center
- Offices
- Job training, workshops
- Mini shops
- Vitamin and health shops
- Cafe
- Parking

Sidewalks and traffic buffers are indicated in the map.
A.1 Figure List

2. https://s3-us-west-2.amazonaws.com/axiomimagesthumbs-or/proxy/photo_large/AX37_064.0000071F.jpg
7. https://i1.wpimg.com/angels/files/c9/9c/71a114f82b6f928a14f123c.jpg
8. Archdaily

A.2 References

Devlin, Ann Sloan. Environmental Psychology and Human Well-Being. 2018


Shepley, Marjorie McCuskey., and Samira Pasha. Design for Mental and Behavioral Health.


Shelley, Mandelle McCukey., and Samira Pasha. Design for Mental and Behavioral Health.

"West End." Beltlandia, beltlandia.com/neighborhoods/west-end/.