

8-2013

Interior design in the realm of social services: Housing the homeless

Amanda Kaserman Leininger

Follow this and additional works at: <http://commons.emich.edu/theses>



Part of the [Interior Architecture Commons](#)

Recommended Citation

Leininger, Amanda Kaserman, "Interior design in the realm of social services: Housing the homeless" (2013). *Master's Theses and Doctoral Dissertations*. 513.

<http://commons.emich.edu/theses/513>

This Open Access Thesis is brought to you for free and open access by the Master's Theses, and Doctoral Dissertations, and Graduate Capstone Projects at DigitalCommons@EMU. It has been accepted for inclusion in Master's Theses and Doctoral Dissertations by an authorized administrator of DigitalCommons@EMU. For more information, please contact lib-ir@emich.edu.

Interior Design in the Realm of Social Services: Housing the Homeless

by

Amanda (Kaserman) Leininger, MS, IIDA, USGBC, LEED Green Associate

Thesis

Submitted to the School of Engineering Technology

Eastern Michigan University

In partial fulfillment of the requirements

for the degree of

MASTER OF SCIENCE

in

Interior Design

Thesis Committee

Shinming Shyu, PhD, RA, LEED AP, Chair

Jiang Lu, PhD

James Stein, PhD

August 2013

Ypsilanti, Michigan

Dedication

I would like to express my deepest appreciation to my committee chair and advisor, Dr. Shinming Shyu, who allowed me to attend Eastern Michigan University's Interior Design program and has continuously supported me through my master's degree studies. Dr. Shyu has always been supportive of my passion and interest in the homeless and worked with me over the past two years to develop my topic. Through his encouragement and support through my academic career, I have been able to advance my research and gain a deeper understanding of design and how it affects the homeless population.

It is with immense gratitude that I acknowledge the support and help of my committee members, Dr. Jiang Lu and Dr. James Stein, who offered great insight on my topic, asked tough questions, and challenged me to work harder. Without their support this thesis would not have been possible. Thanks to my classmates in the Interior Design program who have been supportive and motivated me to excel over the past two years.

Last but not least, my family, who has supported and encouraged my educational path, especially my husband for putting up with my schedule and deadlines, and encouraging me through the final months of my thesis development and defense.

Abstract

The present study plans to investigate the social issues of homelessness and the strategies for creating positive living environments that aim to enable inhabitants to re-enter society.

Supported by statistical evidence, homelessness has been recognized as a growing issue in the United States that deserves serious attention and proper solutions. There are a wide range of reasons why people succumb to the undesirable status of homelessness. By exploring the circumstances, we will be able to gain a better understanding of the issues, which in turn can help formulate supportive programs and inform environmental design solutions to accommodate their needs. Currently homeless shelters are, in most cases, located in either poorer neighborhoods or older rundown buildings that lack the capacity to accommodate the growing number of people who need to be housed in the space, let alone the programmatic facilities, such as computers, job preparation, basic medical care, and so on, to help the homeless regain their footing in society. The study will examine the relevant issues of programmatic planning and environmental design for the homeless shelters that are able to address the temporary sheltering needs, and, more importantly, to provide long-term solutions for the homeless to re-enter the society.

Table of Contents

Dedication	ii
Abstract	iii
List of Figures	vii
Chapter 1: Introduction	1
Introduction	1
Problem Statement	4
Study Objective	4
Operational Definitions	5
Summary	6
Chapter 2: Review of Literature	8
Introduction	8
Homelessness	8
Poverty in the United States	11
Homeless Shelters Current Design State	13
Interior Designers	16
Contributions of an Interior Designer	17
Incorporation of Sustainability	18
Universal Design Impact	21
Looking to the Future of Homeless Shelters	23

Summary	25
Chapter 3: Design and Methodology.....	26
Introduction	26
Problem Statement	26
Study Objective	26
Research Method.....	27
Material Collection Procedure.....	27
Population and Sampling.....	27
Summary	27
Chapter 4: Presentation of Data.....	29
Introduction	29
Homeless Shelter 1	30
Homeless Shelter 2.....	33
Homeless Shelter 3	37
Summary	39
Chapter 5: Analysis of Findings.....	40
Introduction	40
Homeless Shelter Information.....	40
Analysis of Homeless Shelters	41

Improvements for Homeless Shelter 1	41
Improvements for Homeless Shelter 2	42
Improvements for Homeless Shelter 3	42
Designing for the Future of Homeless Shelters.....	43
The Entryway	44
Public Spaces.....	45
Bathrooms	46
Sleeping Areas.....	46
Storage.....	47
Specialization Spaces	48
Shelter Budget and Self Sustainment	49
Summary	50
Chapter 6: Conclusion	52
Contribution to the Discipline	52
Limitations of the Study	53
Implications for Further Research.....	53
References	54

List of Figures

Figure 1: Breakdown of the United States Homeless Population by Race.....	10
Figure 2: United States Poverty Breakdown.....	12
Figure 3: Breakdown of Poverty in America by Race.....	13
Figure 4: Joan Kroc Center at Saint Vincent de Paul Village.....	30
Figure 5: Saint Vincent de Paul Village	33
Figure 6: The Bridge Shelter	34
Figure 7: The Bridge Shelter Floor Plan 1	35
Figure 8: The Bridge Shelter Floor Plan 2.....	35
Figure 9: The Bridge Shelter Floor Plan 3.....	35
Figure 10: Boulder Shelter for the Homeless	37

Chapter 1: Introduction

Introduction

Homelessness in the United States is an issue that is not predicted to disappear anytime in the near future. Unfortunately, homelessness has become an expected part of society and community life throughout the U.S. People who fall below the poverty line and try to live on minimum wage are often faced with the difficult choice of purchasing essential needs or paying housing expenses, usually resulting in housing expenses being unpaid. According to the U.S. Bureau of the Census (2007), it was reported that 12.5 percent of the United States population, more than 37 million people, live below the poverty line. As the number of decent employment opportunities continues to decrease the number of people able to afford housing will also decrease, resulting in an increase of homelessness. In 2009 the National Coalition for the Homeless estimated that around 12 million Americans pay more than 50 percent of their yearly salaries towards housing costs when they should be spending only 20-30 percent of their yearly earnings on this necessity. In many regions in the United States, an individual making minimum wage would have to work 89 hours every week to afford a two-bedroom apartment at the recommended amount of 30 percent of their income (Pable, 2005). Therefore, for most homeless individuals, it is statistically impossible to work enough hours in a week to afford a small apartment. With high unemployment rates in the United States, homelessness will continue to rise.

For Americans who do find employment earning minimum wage, the income is not enough to rise above the poverty line and afford basic housing needs. There are many homeless people who work full-time positions, earning minimum wage, who cannot afford to maintain steady housing costs to avoid shelter living. The hardest housing choice that

individuals living in shelters and housing assistance buildings face is how to spend their monthly earnings: paying housing costs or purchasing essential needs like food, clothing, medications, baby necessities, and so on. Usually humans first choose to satisfy basic needs to survive, leaving housing fees at the end of the priority list.

A high percentage of people who are considered part of the homeless population are low functioning, suffering from some type of physical or mental disability, making universal design principles an important aspect of designing a housing assistance facility. Even though a homeless shelter will never be able to adequately accommodate everyone who could use the space, it is important that the space be designed to work for people of all ages and abilities, maximizing the number of potential users.

In most cases, homelessness is not a simple problem, and in countless cases these individuals have dealt with a form of life crisis. The individuals using these shelters and housing assistance facilities come from diverse backgrounds. With high numbers of families or single parents with children needing shelter, it is crucial to realize these people have fewer economic resources and support groups. Single mothers also face higher rates of abuse and assault throughout their lives (Bassuk, Weinreb, Buckner, Browne, Salomon, & Bassuk, 1996). By addressing these potential predicaments, individuals will feel more comfortable becoming acquainted with the space. Cases of homelessness typically result from factors like limited skills and education, job loss, family instability, abuse, physical or psychiatric disability, addiction, and housing foreclosure (svdvp.org, 2011).

For most homeless individuals, the need for basic shelter is acute and immediate (Davis, 2004). Helping the homeless re-stabilize their lives is not a simple task for anyone, but it is also not impossible. As a design community it is our responsibility to find effective

ways to help homeless people move off of the streets, regain control of the lives, and re-enter society. It is important to take into consideration a person's behavioral tendencies; because behavior is shaped by dispositions and daily situations, a homeless person's actions and behavior will be influenced by their life situation (Miller & Herzberg, 2006). By incorporating all of the services needed to influence a person back into society, a shelter can be a lasting, transformational environment that leads people to a productive and satisfying life in the community (svdpv.org, 2011).

The design of a homeless shelter matters not only to the homeless individuals who need assistance but also to those who work, volunteer, and participate in the facility, the neighboring community, and society as a whole. Everyone who will encounter the shelter will have an opinion and be affected in some way by how the space is designed. By taking into account that the general public and neighboring community will be affected by the building exterior appearance even if they never enter the space, a designer can work with the architectural team to develop an attractive and effective look for the building.

The structure should be designed to fit within the surrounding community and appeal to the neighbors. Placing a shelter close to the street and general public presents the possibility of negative comments and looks from passersby (Pable, 2007). To avoid this, shelters can be placed further back on large lots of property, in rural areas, or incorporated into a natural setting with trees, bushes, and greens located at or near the front of the space. In city settings it can be challenging to decorate or incorporate a homeless shelter, which is why it is important to use design teams in the process. Being able to create a shelter that matches the general appeal of a community will lower the level of negativity from passersby.

It has been shown through a number of existing homeless shelters that incorporating the use of a design team when creating a homeless shelter benefits all users (e.g., employees, volunteers, homeless) and the outside community. Through this study three different shelters are reviewed and assessed for design success points and for the reader to obtain a better understanding of homeless shelter design. The shelters being examined were chosen based on geographical differences and possible changes for improvement in the future. By looking at three shelters in the United States that have presented positive outcomes, we will have a more in-depth opinion of what design elements are essential when creating this type of environment.

Problem Statement

While it seems important and necessary to involve interior designers in the construction of buildings being created, renovated, or transformed into a homeless shelter, the question of whether or not the economy, shelter staff, and volunteers see a difference in the behavior, attitude, and success rate of homeless people is one that needs to be answered to do this. Homeless shelters that use a design team in the building process will need to be created, maintained, and observed over time and then analyzed and reported on.

Study Objective

Designing spaces for the homeless is not a typical service provided by interior designers. Based on the number of people in the U.S. suffering from homelessness and living below the poverty line, it is clear that there is a sufficient need to provide interior design services when creating living environments for these individuals.

The objective of this case study is to determine whether using interior design theories and research on previous homeless shelters has influenced the homeless more successfully than the shelters that do not incorporate interior designers into the plan.

Operational Definitions

- Accessible - as it applies to accessibility, a building, room, or space that can be approached, entered, and used by persons with disabilities. Also generally applies to equipment that is easy to approach without locked doors or change in elevation or to wiring that is exposed and capable of being removed (Harmon & Kennon, 2008, p. 463).
- Universal Design - the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaption or specialized design (Jordan, 2008).
- Shelter - something that provides cover or protection, as from weather or danger; a place of refuge (Collins, 2013).
- Sustainable Design - designs that reflect a respectful interaction between people and the earth by conserving resources for current and future generations. Criteria focus on developing designs that sustain societies, the environment, and the economy (Winchip, 2007, p. 343).
- Evidence Based Design (EBD) - a process for the conscientious, explicit, and judicious use of current best evidence from research and practice in making critical decisions, together with an informed client, about the design of each individual and unique project (Hamilton & Watkins, 2009, p. 9).

- Indoor Environmental Quality (IEQ) - considerations associated with the built environment that must be employed for the health and well-being of people. Considerations include the availability of daylight, views to the outdoors, humidity levels, adequacy of ventilation, and user control of human comfort, noise levels, and indoor air pollutants (Winchip, 2007, p. 37).
- Sick Building Syndrome (SBS) - an indoor air quality environmental problem that occurs when people who are working or living in the same building experience similar health problems, such as headaches, dizziness, nausea, depression, or eye irritation. When people who experience SBS leave the building they no longer have the shared symptoms (Winchip, 2007, p. 37).

Summary

While all aspects of the continuum of care are important, the shelter facility often is the first place where a homeless person makes contact with an organized societal response to his or her current situation (Pable, 2005). For years homeless shelters have been built with low budgets, in poorer communities, with few resources to house people off of the streets.

In recent years homeless shelter projects have begun incorporating interior designers, architects, environmental design specialists, and so on. to create the most beneficial environment. These newer shelters have also used an evidence-based design approach, using existing studies to develop a design to best suit the need and requirements of a shelter. By incorporating this research into the design process, the end result and outcome of the shelter will improve.

Statistical data indicate that there is an increased need for homeless shelters due to the number of people dealing with homelessness. Data show that young adults and children get

lost in the system due to a lack of resources and opportunities available to them once they are labeled homeless. It is important to adequately provide these children and young adults with the tools necessary to improve and/or maintain their educations, social skills, and developed professional skills to re-enter society.

By using the knowledge and evidence-based research developed by interior designers and incorporating it to improve the homeless shelter design, homeless individuals will stand a better chance at re-entering society. This study is intended to compare three different shelters in different geographical locations that used interior designers through the process, theories, and methods. The study offers recommendations for future homeless shelter designs.

Chapter 2: Review of Literature

Introduction

The surrounding environment has an influence on individuals who use a space on a regular basis. There are many precautionary measures to consider when designing a shelter because the space requires accommodations for such a diverse set of people. It cannot be predicted or assumed who will be using a shelter on a daily basis; therefore, it is important to ensure that the facility is designed to accommodate to as many people in the population as possible – including physically disabled, the elderly, children, and single men and women. For the purpose of the study, we will look at the issue of homelessness, current homeless shelter environments in general, the contributions interior designers can offer, incorporation of sustainability, and what role universal design plays when designing a space.

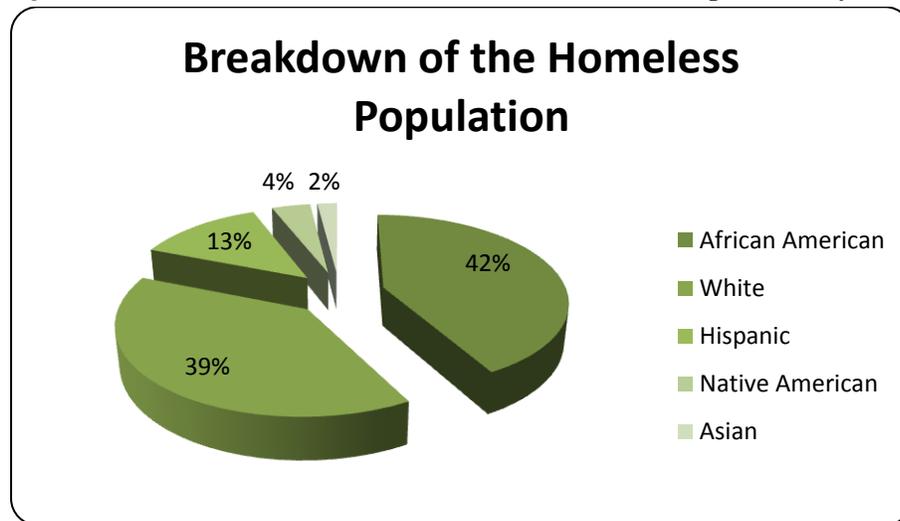
Homelessness

There are many different ways to define homelessness. For this study the definition taken from the Stewart B. McKinney Act, 42 U.S.C. 11301, et. Seq. (1994), is a person who “lacks a fixed, regular, and adequate night-time residence; and has a primary night time residency that is: (A) a supervised publicly or privately operated shelter designed to provide temporary living accommodations (B) an institution that provides a temporary residence for individuals intended to be institutionalized, or (C) a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings.” The act also points out that the term *homeless* does not include any persons imprisoned or otherwise detained. Jill Pable, a designer who has previously researched homeless shelter design also defines homelessness as a lifestyle of danger and discomfort (Implications, 2005).

Researchers have had a difficult time putting an exact count on the number of homeless individuals on a daily basis in the U.S. because the number is constantly changing. USA Today estimated that 1.6 million people used transitional housing or emergency shelters (National Coalition for the Homeless, 2009). The National Law Center on Homelessness and Poverty reported an approximation in 2007 that 3.5 million people, 1.35 million of those people being children, are likely to experience homelessness within a year. Strong evidence supports that there is an increase in homelessness in the United States over the past two decades, and there is no indication the rate is going to decrease anytime soon. Researchers have noticed an increase in a demand for shelter beds over the past two decades, indicating an increase in homelessness and individuals who are using the shelter environments nightly. There will never be an exact number of homeless individuals with 100 percent accuracy, due to the nature of being homeless and the status of each homeless person's living situation constantly changing.

All different types of people fall under the term *homelessness*; it is not defined as a specific race, age, gender, or demographic. The individuals who do fall into homelessness are often victims of life crisis and need assistance before re-entering society. The U.S. Conference of Mayors conducted a study in 2008 to provide a breakdown of homeless individuals in the U.S. by race. This study provided that: 42 percent are African American, 39 percent White, 13 percent Hispanic, 4 percent Native American, and 2 percent Asian. These statistics will differ depending on where the study is done, but for a general idea and the purpose of this study we will use these percentages.

Figure 1: Breakdown of the United States Homeless Population by Race



Source: Calculated by the U.S. Conference of Mayors in 2008

According to the National Coalition for the Homeless, most studies have shown that single homeless adults are more likely to be male than female. In 2007, 23 percent of homeless people were members of families with children (Homeless Families with Children, 2009). Children may be the most affected by homelessness because of the lack of assistance they need. In 2009 it was reported that 1 child in every 50 would experience homelessness (National Center on Family Homelessness, 2009). A national survey in 2003 reported that 39% of the homeless population consisted of children and predicted it to be the quickest growing segment (Pable, 2005). Since 2003 the number of homeless children has increased. With children being the fastest-growing sector of the homeless, it is essential that programs and inspirational environments are provided to improve their future.

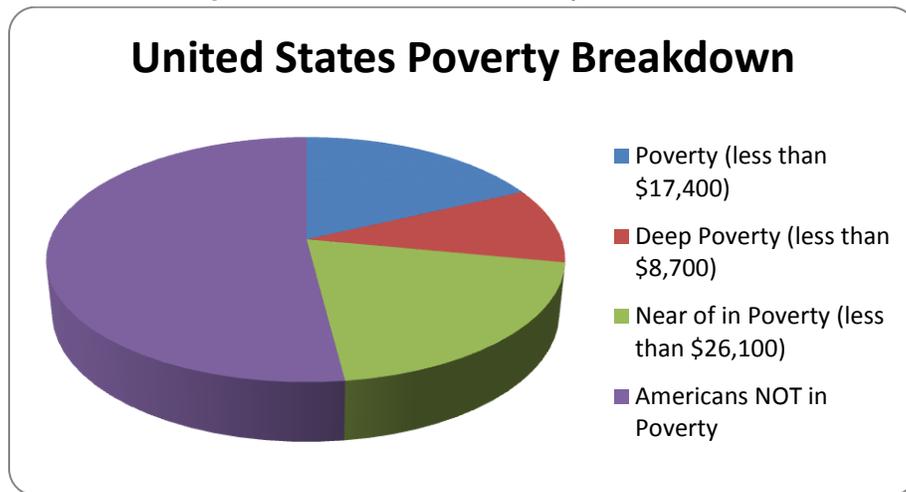
Looking at the statistical information on the number of homeless people in the U.S., the question of why arises. There are many different reasons people find themselves battling homeless and each person's underlying story differs. Two trends that have been largely responsible for the increasing homeless population are the shortage of affordable housing, and the widening gap between the minimum wage and a realistic living wage (Davis, 2004).

Affordable housing is scarce and continuously decreasing; while personal incomes are decreasing due to the economic state, pricing of rent is increasing, leaving many individuals without an adequate financial option for their current situation. There is a defined link between substance abuse and homelessness; however addiction does not explain homelessness and should not be an immediate assumption. Many homeless people who have substance abuse problems never receive treatment because programs are underfunded or in some cases not accessible. Homeless people coping with mental illnesses and disabilities often do not need institutionalized, but rather need medical support and supportive housing within the community (U.S. Department of Health and Human Services, 2003). However, due to low budgets and current economic circumstances medical assistance is seldom offered. Other factors that can impact homelessness include; housing foreclosure, lack of job security, domestic violence, and low incomes (National Coalition for the Homeless, 2009).

Poverty in the United States

In 2010, 46.1 million Americans were considered poor, living on less than 17,400 dollars a year for a family of three (US Census Bureau, 2011). Chart 2 breaks the term poverty down into three sub-categories: poverty (living on less than \$17,400), deep poverty (living on less than \$8,700), and near or at the poverty line (living on less than \$26,100). Although deep poverty looks like a small portion of Americans, it actually represents 20.5 million people.

Figure 2: United States Poverty Breakdown

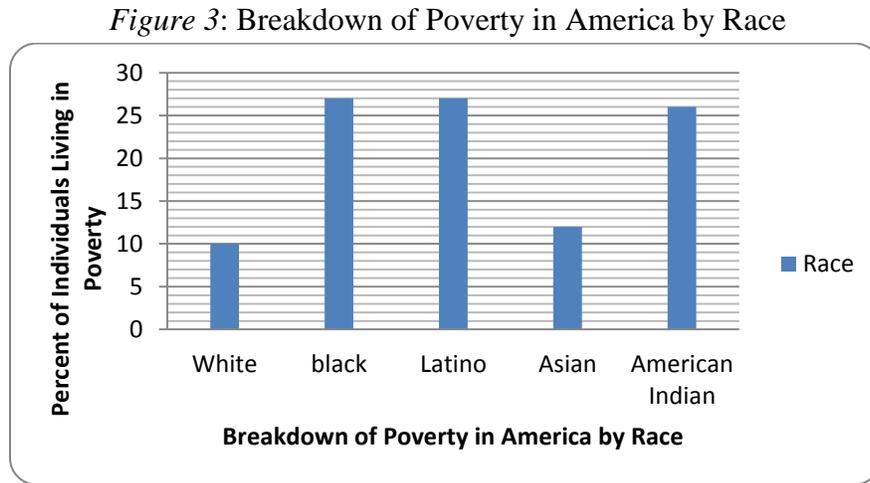


Source: U.S. Census Bureau's Current Population Survey, 2011.

The U.S. Census Bureau compiles statistical information on individual poverty and household poverty rates. Individual poverty is an adult or married couple relying on their own income to support self and children under 18. Household poverty covers all members of a household, related and unrelated. In 2012, The National Law Center on Homelessness and Poverty reported almost half of the individuals considered homeless work full-time jobs, but do not earn enough money to afford housing along with other necessities. The National Law Center on Homelessness and Poverty, also reported that over 30 million people live at or below the poverty line in the United States, which could result in an extreme increase in homelessness at any time. The increase in poverty is caused by eroding employment opportunities and declining value and availability for public assistance.

Similar to the rates of homelessness the race breakdown will differ depending on geographical location. The U.S. Census Bureau's 2011 survey presented; Black, Latino, and American Indian individuals have the highest poverty rates in America. Chart 3 gives a more

in depth breakdown of poverty by race in America. As shown, white Americans have the lowest poverty rate as of 2011.



Source: U.S. Census Bureau’s Current Population Survey, 2011.

Homeless Shelters Current Design State

Homeless shelters should be welcoming and comforting, as they often act as a homeless person’s first point of contact with an organized societal response to their current situation. The physical environment plays an important role in a person’s acceptance or rejection of receiving help. In many cases, a shelter is the first point of contact therefore, the space needs to be designed to present a positive first impression for the homeless to accept the shelter and eventually accept assistance to re-enter society. The process of accepting a homeless shelter and accepting help from strangers may take some homeless individuals longer than others; how the shelter presents itself will influence how individuals react to the assistances being offered.

When homeless shelters began, they were not designed to serve a specific population of people. Instead, they were set up as emergency facilities in basements, hallways, and stairways of public buildings. The homeless users slept on chairs, stairs, tabletops, and even the floor because they essentially wanted shelter. Comparable to the worst of shelters in

today's society, there was little to no privacy in the facilities and sanitation was rarely thought of as being important. As shelters evolved over time and more people began using the space, structures were moved from basement locations to secondary-use structures (Davis, 2004). Shelters are currently placed in buildings known as secondary-use structures or structures that have formerly served other purposes such as warehouses, office buildings, or schools. These pre-used spaces are not designed to properly influence the homeless. Homeless shelters are commonly geographically placed within rundown downtown neighborhoods and far from nicer communities. Many individuals who live in nicer neighborhoods have a "not in my backyard" mindset and do not want a homeless shelter built or placed in their community. These individuals fear that a shelter will bring high levels of crime, drugs, and substance abuse to the community. Occasionally, we run across a shelter that is more humane, cleaner, or safer than the "typical" idea people have of a shelter; however, for the most part people see homeless shelters as a place to avoid (Davis, 2004).

Sam Davis, an architect who has spent many years researching homeless shelter design, writes, "The notion of warehousing the poor is more reality than metaphor." The homeless do not react well to being shoved into old, rundown facilities. When shelters are placed in these poorly maintained buildings, a low regard for the building users is communicated and homeless individuals are less likely to use the space; the shelter then becomes a last resort and results in individuals sleeping on public streets, in boxes, and in local parks. Only the most desperate individuals are willing to enter these shelters due to weather or dangerous circumstances of life on the streets. Like all public housing offered in the United States, homeless shelters provide users with the barest minimum, with no extra amenities because that is the easiest solution (Davis, 2004).

A person's safety, whether homeless or not, is crucial to how he or she acts in an environment and social situation. Current shelters lack safety features not only for the homeless, but also for the employees and volunteers who use the space regularly. A number of shelters do not screen for drugs or alcohol because it is difficult and time-consuming, and there are too many homeless people waiting to enter the space, creating a vulnerable environment. Putting a combination of individuals into this type of environment makes them vulnerable to dangerous situations. Employees, volunteers, and anyone else working at the shelter should feel safe at all times, and no one should ever be left alone with the homeless. Homeless people leaving the streets to use the space should be reassured that the space is safer than life on the streets; however, this is not always the case currently. By providing adequate safety to the employees and the homeless users, the shelter will offer a more comforting environment and the community surrounding the shelter will be more accepting of the space.

Most homeless shelter facilities are government funded, offering little to no money for programs, services, or improvements for the space. Shelters are required to find voluntary funding or raise money to provide any type of programs or benefits to the facility users. With little to no money to improve and update the environment, the homeless often do not want to use the space because of how it presents itself. This makes the current state of many homeless shelters in the United States poor and unattractive. Individuals are less interested in volunteering in a space that is not clean, safe, or able to provide the tools necessary to help the homeless. This leads to the shelter's inability to provide programs and benefits to the homeless due to the lack of assistance.

Interior Designers

The defined role of an interior designer or design team on a project is often misunderstood by many individuals who are uneducated on the profession. In many cases people understand interior design to be interior decorating, which can be classified under these three headings: floor decoration; wall, window, and door decoration; and ceiling decoration (Kelly, 1921). Interior designers have made a professional effort over the years to walk their clients through details and the design process and to incorporate themselves during the early stages of construction or remodeling in an effort to help change the image of a traditional designer's role (Harrell, 1998). The goal of a designer should be to fully understand a client's needs and wants in the early stages of a project in order to make the best possible recommendations and offer effective design solutions. Previously, it has been routine to bring interior designers into a project at the end, long after the architect has designed the building and established a floor plan and the general contractor has completed a large portion of construction; at this point, a designer would be unable to make significant changes; rather, they are required to work within the established parameters (Harrell, 1998). This process causes a number of issues to the designer and makes his or her position on the project less beneficial. By incorporating interior designers and fully using their evidence-based knowledge during early planning stages, the designer will have adequate time to make necessary recommendations and changes to the project and influence aspects of the design from the beginning.

When facility clients hire interior designers to work on a project, they consider and examine the designer's ability to connect, coordinate, integrate people, and choose elements

and colors, and meet client needs, and so on. Facilities expect that the designer will have an understanding of design, a design specialization, and experience in professional training, previous work experience, professional referrals and references, and be effective at cost control. Each facility is going to consider an interior designer's role slightly differently and facility clients will define each of the listed factors differently.

As the role of a designer changes slightly from business to business, it is important that the general definition and understanding of services are similar and properly communicated to the client. When rating the value of an interior designer, only 17 out of 52 commercial contract clients rated their designers "very necessary" to the project (McMorrow, 1997). This is due to the miscommunication and lack of understanding about the abilities of interior designers. Interior designers can change this mindset of facility clients by being more involved from the beginning stages of planning. By changing this image and shifting towards a more incorporated design strategy, designers will be seen as an essential part of the team. Most importantly, designers need to be able to design a space that works for a company, not only now but also down the road (Harrell, 1998).

Contributions of a Designer

Architecture and design are not two of the professions that most people consider when addressing the issue of homelessness. However, these experts can play a monumental role in creating homeless shelters that positively impact the homeless and better serve the community. As the design community grows and evolves the role of interior designer's changes. Designers should have a feeling of obligation to design adequate spaces for people in need. Individuals living below the poverty line, who are living on the streets, need a safe place to sleep at night just like anyone else. Jill Pable (2007) wrote that homeless shelters

should possess an architectural design that fosters a counterbalancing sense of healing and refuge from this distress of life on the streets. Interior designers have the ability through evidence-based design, educational knowledge, and homeless studies to create spaces that result in positive outcomes.

Homeless shelter facilities are not as easy to classify when looking at design teams. The design team that takes on the project of creating a homeless shelter needs to fully understand the issue of homelessness and what accompanies it. The design team must also be able to educate the surrounding community on how it will be safe, beneficial, and effective to improve society. Although any single homeless shelter will not be able to accommodate everyone, by fully understanding the diversity of needs required within a shelter, the design team will be able to create an environment that accommodates the largest percent of the population.

Incorporation of Sustainability

Within the last 20 years, architects and designers have established that sustainable development and incorporation is a vital topic for future trends, needs, and production. Initially, the awareness of sustainability came from the idea that land development was degrading the world's natural resources, including both renewable and nonrenewable resources such as oil, natural gas, coal, and minerals. Sustainability also addresses the idea of environmental ethics, which is defined as the study of conduct that is right and wrong with respect to natural resources (Winchip, 2007). Since mankind has populated the planet, natural resources are being depleted and continue to at high rates. By educating individuals on sustainable design, methods of incorporation, and the purpose of building conservation and reuse, the outcome will be healthier for the planet and the space users.

Sustainability in the design world is a topic that is not going away anytime soon. The future of sustainable design depends on people who are aware of the comprehensive design strategies to create a sustainable society. “Sustainable design is taking all ecological, social and economic concerns into account in product and service systems, meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Keitsch, 2012). To better understand sustainable design, it is the designer’s responsibility to meet the needs of the present without compromising the ability of future generations to meet their needs (Kwong, 2004). Sustainable design practices require interior designers to develop a set of principles to serve as a guide when making decisions related to interiors. Requests for environmental design will continue to grow as natural resources continue to diminish, costs of energy increase, and the extensive environmental damage continues to be visible.

Incorporating sustainable principles into the design of homeless shelters is just as important as incorporating it into any other facility or household building. When approaching the topic of sustainability for a building, designers must look at the payback principles, defined by Winchip as a strategy for comparing short-term and long-term costs of a product or service. By using the payback principle, building owners will gain a sense of the building’s energy consumption, capital investments, operational costs, and lifetime maintenance (Winchip, 2007). Designers can also introduce the benefit-cost analysis, which will compare the cost and the benefits of the design plan (Kwong, 2004). Both the payback principle and benefit cost-analysis educate clients and end users on the economic benefits of incorporating sustainable elements.

The health benefits that are being recorded from the use of sustainable design elements are surpassing the upfront costs people are avoiding when planning to design

sustainably. By improving the indoor environment, employees will be healthier, have a more positive self-image, and their overall quality of life will improve (Kwong, 2004). People are becoming more and more aware of the indoor air quality and how it is affected by outdoor pollutants. In the past ten years it has become a rising issue that indoor air pollutants are affecting space occupants. These indoor air pollutants come from interior materials and substances used in the space. Research has even indicated that some indoor environments have higher levels of pollutants than the air outside due to the materials used within the space. People spend about ninety percent of their time indoors; therefore, this is an important consideration when choosing materials for any space. Health problems directly associated with indoor air contaminants vary person to person depending on individual health, age, and the chemical exposure itself. The effects these pollutants can have on people range from minor irritation to death, depending on the chemical type, the amount in the space, and the individual contact (Winchip, 2007). These chemicals are found in everyday materials that are sometimes overlooked by facility owners when trying to stay on budget or cut costs. However, with increased absenteeism and individuals suffering from sick building syndrome (SBS), the upfront savings is defeated and space occupant's health suffers.

There have been a number of studies done that focus on the impact of indoor environmental quality (IEQ) on people. The studies report that daylight impacts human performance, and the more daylight a person is exposed to on a daily basis, the happier that person will be, resulting in a better work outcome. These studies have also examined the impact of indoor air quality, and results have shown that indoor air quality can negatively affect people in a space over a period of time. The indoor air quality can affect health, performance, productivity, absenteeism, and overall employee satisfaction. The building's

ventilation rates, thermal comfort, and humidity impact the perceived air quality and sick building syndrome symptoms also affect how a person feels about the environment. To help encourage benefits associated with healthier ventilation systems, pleasant views, and passive solar energy, some buildings are being designed to interact with the natural environment. By incorporating the natural environment into a building's design, people's perceptions of the space will be positively affected. Research has also shown that individuals like to have personal control over their thermal comfort, ventilation, and space lighting. By giving space users the ability to control their environment, the perceived air quality will improve (Winchip, 2007). Personal control can be achieved through providing task lighting, offering separate office thermostats and the ability to open windows, and so on.

For facility owners, it is important for design teams to point out the benefits of sustainable design. With the growing interest and evidence being developed on the benefits of sustainable design, it is crucial to start incorporating these principles into homeless shelters for the long-term success of the building. Many design teams already have an understanding of sustainable design principles and the positive impacts these features have on the space and users. Therefore, providing the homeless facilities with these features prepares them for the future, while impacting the current environment as minimally as possible.

Universal Design Impact

Universal design impacts all types of design. In the beginning of the 20th century, the average human lifespan was only 47 years, but today the average has increased to 76 years. In addition to the general population living longer, more of those people struggle with disabilities, including veterans. According to a study by the National Coalition for the

Homeless, published in July 2009, 40 percent of homeless men have served in the armed forces, meaning that individuals within that 40 percent are potentially disabled veterans. The Substance Abuse and Mental Health Services Administration has documented that 20 to 25 percent of the homeless population in the United States suffers from a form of mental illness, affecting an individual's ability to carry out essential aspects of daily life. Even with the advances in design and knowledge we have about people with disabilities, many spaces are not designed with the capability for total accessibility, including homeless shelters.

Ronald L. Mace, founder and director of The Center for Universal Design, created the term "universal design" to describe a concept of designing all products and the built environment to be aesthetic and usable to the greatest extent possible by everyone, regardless of age, ability, or status in life. In many cases, the ability to use a wheelchair throughout a homeless shelter would be extremely unlikely due to the number of people in the space and the lack of space planning used when the space was initially created or renovated.

By using the seven principles of universal design to evaluate an existing space, guide a design process, and educate designers and consumers about creating a more usable environment both the shelter and the homeless will benefit. Created by a group of experts, the principles of design are (The Center for Universal Design, 1997):

1. Equitable Use: the design is useful and marketable to people with diverse abilities;
2. Flexibility in Use: the design accommodates a wide range of individual preferences and abilities;
3. Simple and Intuitive Use: use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level;

4. **Perceptible Information:** the design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities;
5. **Tolerance for Error:** the design minimizes hazards and the adverse consequences of accidental or unintended actions;
6. **Low Physical Effort:** the design can be used efficiently and comfortably and with a minimum of fatigue;
7. **Size and Space for Approach and Use:** appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

The seven principles of universal design offer guidance and assistance to design teams to ensure that spaces are created for the widest variety of users by integrated universal design principles in the space. The concept of universal design will continue to grow as people gain more knowledge about how to create universally user-friendly spaces. The term will evolve to have a growing definition as human needs change over time.

Universal design has a substantial impact on the design of homeless shelters. Designing the indoor environment of a shelter to be accessible by the widest variety of individuals possible gives many more homeless people the option to use the space. Homeless people, even those with disabilities, should feel welcomed and able to use a public space, especially a shelter. Implementing these principles warrants that the design team is creating the best possible environment for everyone.

Looking to the Future of Homeless Shelters

It is important to consider what can be done in the future regarding design and the built environment. Over time, the built environment has progressed and changed drastically,

effecting natural resources, urban environments, and society. Homeless shelters have one opportunity to make a first impression on homeless individuals and the surrounding community. By creating a negative first impression, many homeless individuals may choose to turn around and leave rather than using the space as it is intended.

Historically, shelters in the United States concentrate on the shelter function and push aside the importance of longevity, and the need to provide the users comfort (Davis, 2004). Although shelter function is important, as designers we now have the ability to offer much more to humans through design. Incorporating universal and sustainable design principles is important for the functionality of a space. When using secondary-use structures to re-create a homeless shelter it is important to focus first on the functionality of the space and then the incorporation of universal and sustainable design principles to offer the best possible solution. Designers have the ability to create functional spaces that ensure longevity and comfort.

When considering the future, it is essential that design teams are creating shelter environments to improve the perceived opinion of homeless shelters in the United States. The ability to create a space with guaranteed longevity will not only benefit the building owners and users, but also the natural environment. The longevity of a space and its interior components depends on the types of materials, furniture, and products used within the space. Interior designers have the resources and knowledge to select materials, furniture, and products that will withstand the number of users, and natural wear and tear within a shelter. By using products that have a longer lifespan, building owners will save money replacing items, and the users will be pleased with the durability and quality of products within the space.

Summary

This chapter takes an in-depth look at the available literature on homelessness, design, and necessary design implementations to create the best possible homeless shelter. The literature provides that the homeless population needs housing assistance, and changes to existing facilities need to be made to adequately provide the necessary support homeless individuals need to re-enter society. Sam Davis, an architect who has worked on numerous homeless shelters, supports the use of architects and design teams on homeless shelter projects. He also provides design solutions and personal opinions in his book, “Designing for the Homeless.” Other research supports the design solutions outlined and recommended by Davis.

By reviewing the available literature on homeless shelter design, it has been proven that using evidence-based design and incorporating not only basic necessities, but also programs and personal assistance, improves a person’s experience in the space and gives homeless a better chance at re-entering society, and staying off the streets in the future.

Chapter 3: Design and Methodology

Introduction

This chapter discusses the research topic, taking an in-depth look at the problem statement, objective, and research methodology. The material collection procedure used will be explained, as well as, the population and sampling used to obtain data. After reading this chapter the purpose of the study should be well understood.

Problem Statement

While it seems important and necessary to involve interior designers on the construction of buildings being created, renovated, or transformed into shelters, the question arises; will homeless individuals, shelter staff and volunteers see a difference in the behavior, attitude, and success rate of homeless people? To answer this question, shelters with the use of designers will need to be created, maintained, observed, and reported on.

Study Objective

Designing for the homeless is not a typical service provided by interior designers. Based on the number of people in the United States suffering from homelessness and the increasing demands for construction of homeless shelters, there is a need to provide interior design services when creating these environments. In many current situations, homeless shelters are government funded and have very low budgets to work with. Designers may not even be incorporated into the project to assist with designing the facility spaces. The objective of this case study is to determine whether or not using interior design theories and research on previous homeless shelters has influenced the homeless more positively than the shelters that do not incorporate interior designers into the preliminary planning.

Research Methodology

The overall research methodology used is a descriptive-qualitative approach. A descriptive-qualitative approach is used with the intent of answering basic questions about homelessness, shelters, and design, while also providing a descriptive analysis of the study topics. The qualitative-descriptive approach provides designers with the necessary information to make decisions about homeless shelter design, based on evidence. By comparing the available literature on homelessness, shelters, and design principles, solutions for the future can be recommended from this study.

Material Collection Procedure

To collect the materials used to present this research; the Internet, print text, previous research, and case studies were used. Due to the nature of homelessness and the unlikelihood of being able to observe the same specific individuals on a daily basis, no human subjects were used in this case study. Because there are no human subjects involved in the study, no interviews were conducted to obtain information. The information provided is strictly from a literature review.

Population and Sampling

Due to the fact that no human subjects were involved in this study, the study population is non-existent. For the purpose of this study, there was no need for population and sampling. As an alternative, three shelters were chosen to be examined, and the shelter design features are compared to make suggestions for future homeless shelters.

Summary

The purpose of this study is to determine the best possible solution for homeless shelter design. To find out how interior designers can contribute to the creation of shelters

and what necessary elements are needed to create a successful environment for the homeless, employees, and volunteers. By taking an in-depth look at three successful shelters that incorporated architects and design teams in the process; the shelters are analyzed and recommendations for future homeless shelters are made.

Chapter 4: Presentation of Data

Introduction

Three homeless shelters were evaluated to conduct this study. The homeless shelters are all relatively new construction and incorporate sustainable features throughout. This chapter will look at each shelter, shelter design features, and how functional the space is for its users. The purpose of this chapter is to present the literature collected and look at the experiences of the homeless, employees, and volunteers who use the space on a regular basis. This chapter will provide you with the information available on each homeless shelter being analyzed and the design elements relevant to this study.

By looking at Homeless Shelter 1, Homeless Shelter 2, and Homeless Shelter 3 in-depth we can see what strategies were useful to the shelter users, and what strategies could be changed or improved in future shelters. The design features being considered include the following:

- Space planning/ floor plan layout
- Availability to outdoors/ nature
- User safety
- Sustainable elements
- Universal design relevance
- Space use or rooms available for use
- Programs offered to users

By looking at the information available about these specific design features within each building, it will be easier to compare the shelters to determine what strategies work best.

The available information about the number of users and facility success thus far will also be reviewed.

Homeless Shelter 1

Homeless Shelter 1 is The Joan Kroc Center at Saint Vincent de Paul Village in San Diego, California. Also referred to as JKC, the center was built in 1983 and cost around \$11 million dollars. Father Joe Carroll, known as “Father Joe” raised most of the money privately to fund the building of the shelter. The building itself is 11,510



Figure 4: Joan Kroc Center at Saint Vincent de Paul Village

square feet and three stories high with an interior courtyard, and underground security parking. JKC was created as a transitional housing center for up to 70 families and has a separate area for transitional housing for up to 65 single women. The center also offers a reunification room for residents working to reunify with their children (svdpv.org, 2011). The shelter can accommodate a total of 350 people and serves over 1,300 meals daily (Davis, 2004). Since 1983 when it was originally build, JKC has continued to add on to accommodate a growing homeless population.

The Joan Kroc Center was designed by Fred A. De Santo and the architectural firm, Krommenhock, McKeown & Associates. They designed the building in the Spanish mission style, a common architectural style in California. The design originally took advantage of the center’s bell tower chapel and courtyard, offering the homeless a center of faith. The space is considered a sanctuary, a protected place for the most vulnerable, in which they can receive

sustenance, shelter, and renewed spirit. Father Joe believes that creating a space and implementing good architecture is critical to helping the homeless, regardless of the price. During the construction process the architecture team often recommended ways to reduced costs. However, Father Joe saw cost savings as being counterproductive and insisted on the shelter offering the best possible environment for the homeless. Father Joe stayed involved throughout the entire design process and assisted in every design element within the space (Davis, 2004).

Many people saw Father Joe's vision as being too large and too expensive, and program consultants had expressed doubt that doctors would be willing to volunteer their time. Within weeks of the Joan Kroc Center's completion and opening, they realized the space was too small to meet the demand. The clinic was too small, not only for the amount of homeless individuals who needed to be seen, but also the number of doctors who were willing to volunteer. In the years since its initial completion Father Joe has added several buildings and expanded the programs, creating a homeless village (Davis, 2004).

Santo took advantage of sustainable options when creating the shelter; for example, the bell towers are part of an energy-efficient ventilating system that takes advantage of prevailing breezes, reducing the need for air conditioning, essentially lowering the buildings operational costs (Davis, 2004).

JKC also offers an endless list of amenities to the homeless including; a kitchen and dining room, which converts into a basketball court, on-site laundry facilities, television lounges, quiet areas/ study rooms, indoor and outdoor play and relax areas, a multi-media teen space, meeting rooms, staffing offices, and addiction treatment rooms. The building offers homeless people a one-stop center that is anticipated to address all rehabilitative needs

in one space. Everything this shelter offers to an individual influences their ability to re-enter society and be successful. The Joan Kroc Center offers childcare, family literacy, and parenting classes to help families restructure. The facility utilizes the use of volunteer doctors, social workers, and psychologists to offer homeless people a range of clinic services, such as assessments, addiction treatment, and mental health services, like individual, group and children's therapy. A career and educational center offers education on job skills and computer literacy to facility users and partners on site with local community colleges to provide adult educational options and GED prep. The homeless also have access to case management services, a medical clinic, dental and psychiatric care, and a chaplaincy program (svdpv.org, 2011).

To ensure safety and make the homeless users feel as protected as possible the facility is monitored by dozens of security cameras, operated by a computer-based mechanical system. The bedrooms were designed using electronic keys to help the shelter save money by avoiding costs for lost keys (Davis, 2004). Davis describes the security as compensation to what the homeless give up in privacy and personal freedom; they receive back in the high level of services and security offered by The Joan Kroc Center. For security purposes the center also has German Shepard's that patrol the grounds and are regularly tested by posing homeless individuals, also described as "undercover" homeless.

Father Joe has been discouraged by individuals who think the facility simply will not work on a number of occasions. However, Father Joe continues to grow the Center that now referred to as a village, and he believes that it is an influential environment for the homeless. Father Joe claims that 80 percent of those who undergo the entire program successfully move

on to permanent housing and an independent life off the streets (Davis, 2004). The village also has a full occupancy of users on a daily basis and servers the local community.



Figure 5: Saint Vincent de Paul Village

Homeless Shelter 2

Homeless Shelter 2 refers to the Bridge Shelter in Dallas, Texas. The Bridge Shelter is a housing recovery and assistance center for homeless people. Completed in 2008, this center is making strides in improving the social services for homeless people in Dallas. Since opening, the building has received two big awards: the American Institute of Architects' (AIA) 2009 National Housing Award and the American Institute of Architects Housing and Urban Development (HUD) Secretary Award (Straczynski, 2010). The architects designed this building to empower both the chronic and newly homeless to come off the street and receive the necessary help and treatment needed to re-enter society.

As previously stated, many homeless shelters are located in old warehouses or rundown buildings, which is exactly what the architects and designers aimed to avoid when designing this shelter. The following quote from the Rich Archer, FAIA, LEED-AP, and founding principal of



Figure 6: The Bridge Shelter

Overland Partner Architects, the firm behind this project, explains exactly what his team was trying to achieve through the design; “With our design, we aimed to not only create a facility that provides the most basic human need, shelter, but to also create a space that encourages and welcomes outside organizations, volunteers and donors to provide the helping hands that our homeless population needs” (Straczynski, 2010).

Taking a more in depth look at the design features in the building it is obvious that this space was created for success. The building was designed with a close attention to detail, ensuring the space would be a place of inspiration for its users. The Bridge has translucent walls that allow for natural lighting in residential areas, with stained glass art in some areas. The wall panels are inscribed with poetry written by homeless individuals for encouragement and remembrance. The Bridge offers a one-story welcome building, three-story service building, dining hall, storage facility, and an open-air pavilion for homeless, employees, and volunteers.

The building is certified under the United States Green Building Councils LEED Silver certification. Built on an underused brownfield site, the entire space incorporates many sustainable amenities to earn this certification and become the largest assistance center to earn a LEED ranking. One of the most obvious features when first seeing the building is the incorporation of natural day lighting, the building offers around 90 percent of occupied space outdoor viewing; taking full advantage of natural daylight and offering a beautiful translucent light to downtown Dallas during the evenings. The building integrates a large vegetation roof over the dining area with an outdoor eating area that is an extension of the courtyard. To conserve water, a greywater recycling system was installed that saves \$1.5 million gallons annually (Straczynski, 2010). To support the local climate and community, low-irrigation plants were used in the landscaping, minimizing the use of an irrigation system. Building materials were used based on their individual environmental impact, including 100 percent low VOC materials, 20percent local materials, and 40 percent of the materials used contained recycled components; a waste management program also allowed that 70 percent of the construction waste was recycled (Straczynski, 2010).

In July 2009 the AIA Housing Awards announced that the Bridge Shelter proves that shelters should not and do not need to be isolated, rather integrated into the community and they serve as civic buildings representing the compassion of society. This shelter is a great example of how knowledge based design can be used to improve a shelter to more effectively serve the needs of the less fortunate, by also improving the surrounding community.

No one in the Dallas area was quite sure of the success this shelter would have, however Rich Archer, a member of the design team stated that, “Since the doors to The Bridge opened, the center has been more successful than anyone anticipated. It has been

widely accepted by homeless people, and the facility, which was designed for 400, now handles up to 1,000 people a day” (Straczynski, 2010).

Homeless Shelter 3

Homeless Shelter 3 refers to the Boulder Shelter for the Homeless in Boulder, Colorado. The shelter started in 1987 in response to the death of a local homeless veteran who died of exposure to the bitter climate in the city. In 2003 the shelter began expanding and opened a new facility to house the shelters core Winter Shelter and Transition programs. The shelter is a nonprofit organization and relied on people within the community to continue its services. This shelter offers services to veterans, battered women, chronically sick, mentally and developmentally disabled, and many others (Bouldershelter.org, 2013). The Boulder Shelter is currently known as a temporary shelter, assisting people off of the streets and offering a warm bed and a hot meal. However, in 2011, the executive director stated that they would continue working to enhance services like transition programs, housing programs and providing long-term solutions to help people in crisis.



Figure 10. Boulder Shelter for the Homeless

In 2011 the Boulder Shelter provided 1,015 individuals with shelter, 36,859 beds at night, 83,889 meals, 2,402 case management contacts, and many other services (Boulder Annual Report, 2011).

The facility addition added in 2003 is a LEED compliant structure and is also one of the first green shelters built in the United States. The building includes a geo-exchange heating and cooling system, which is a system that takes advantage of the constant temperatures of the ground and uses those temperatures to heat or cool the space. A 10KW photovoltaic system is used; it is a solar electric system that is made up of photovoltaic solar cells that provides the facility with electricity (Energy Basics, 2011). The facility implemented automatic light switches with sensor technology that automatically turn off if a room is unoccupied for a specific amount of time and skylights to provide natural lighting during the day. All plumbing fixtures used within the space are low-flow, and front loading washing machines were installed in order to use less water. The landscaping, where many buildings waste a lot of their water, is designed to compute and reuse rain water. The plants used in the landscaping are also native and low water use trees and shrubs. Making the facility even more sustainable is it's location on a major bus line, giving users access to community transportation on a regular basis.

Due to the fact that assistant outreach programs already existed in the Community when the Boulder Shelter was created, the shelter does not offer job training or assistance to facility users. Rather, they partner with local organizations within the community to get homeless individuals help. The shelter also closes between 8:00am and 5:00pm, inviting users back at 5:00pm each evening. Individuals using the shelter for overnight stays are only allotted up to 90 days each winter season, however if they are part of the transitional program

they are able to stay for up to 9 months (bouldershelter.org, 2013). During the day because the shelter is empty, the board members decided to launch Street Fare, which is a bakery that specializes in miniature cupcakes and uses the shelter's kitchen through the day. The cupcakes are sold at local events in Boulder and even catered to special events. Through this social venture some of the overnight residents have the opportunity for employment at the shelter during the day. The money made from selling these gourmet cupcakes year young goes to funding the shelter services (Draper, 2013).

Summary

Information about Homeless Shelter 1: The Joan Kroc Center, Homeless Shelter 2: The Bridge Shelter and Homeless Shelter 3: Bolder Shelter for the Homeless was gathered through reviewing available literature on each building. Each building was chosen specifically due to its contributions to a sustainable future and the demographic location to view different climate settings. This chapter's purpose was to introduce and outline each of the homeless shelters being reviewed in this study. From the information available about the three shelters it is obvious that these shelters take advantage of sustainable elements and incorporate as many sustainable features as possible. Each shelter was looked at individually, and available design and sustainability elements were reviewed to compare the success of the shelters and help make recommendations for future shelter design.

Chapter 5: Analysis of Findings

Introduction

A descriptive qualitative approach will be used to examine the data provided by this study. Necessary literature has been reviewed and introduced to form a better understanding of the topic homelessness and what improvements need to be made in the United States to serve this population of individuals. In Chapter 4, you were introduced to each shelter, learning about the environment and background design concepts that influenced the shelter. This chapter will take an in-depth look at each shelter to evaluate what design features played a role in the success of users and what could be changed for future shelters to best suit the users.

Homeless Shelter Information

The homeless shelters used to complete this research are located in different parts of the United States. The Joan Kroc Center (Homeless Shelter 1) is located in San Diego, California. The Bridge Shelter (Homeless Shelter 2) is located in Dallas, Texas. Boulder Shelter for the Homeless (Homeless Shelter 3) is located in Boulder, Colorado.

Each shelters design layout and architectural styles were examined, as well as the programs offered to the homeless while using the space. The homeless shelters used in this study were all built during different time periods, by different architectural companies and design teams, incorporating different design principles. The constant is that each of these shelters incorporated what design elements they found necessary to help homeless individuals re-enter society. Each shelter has its own way of implementing sustainability into the practice as well as rehabilitation programs; however, the three shelters are built and designed completely different.

Analysis of Homeless Shelters

When creating new homeless shelters it is important for the design team to consider what is already known from prior experiences and incorporate new methods to provide a healthy, safe environment. When working within the government-funded buildings provided, many times it is difficult to design a space with the proper design elements, creating environments that do not fully address the social damage of being homeless (Pable, 2007).

As previously stated, a homeless shelter is most likely a homeless person's first point of contact with an organization that is working to help them. It is important for the shelters to be created with the mindset of fostering and nurturing homeless individuals back into society. Looking at the basic elements of each shelter, it is easy to compare what features work to benefit the homeless.

Improvements for Homeless Shelter 1

The Joan Kroc Center at Saint Vincent de Paul Village in San Diego, California has proven years of success assisting the homeless to re-enter society. Through the literature review it is relevant that JKC has incorporated the most appropriate design features to benefit the homeless, to the best of the architect's ability.

Homeless Shelter 1, The Joan Kroc Center at Saint Vincent de Paul Village located in San Diego, California was built the earliest of the three shelters, in 1983. JKC has continued to develop and create new buildings since the original completion date of 1983. Literature provides much detail about the architectural layout and design features provided by this facility. Taking advantage of a local architectural firm, JKC offers users the most inspiring experience available within the space. The facility has developed to a town-like setting since first opening and offers the homeless access to everything and anything that they could need.

By offering an endless number of programs and amenities, the facility can accommodate the widest variety of individuals possible. This shelter also takes safety precautions to extreme measures, ensuring all users are safe and can feel comfortable within the space, without feeling institutionalized. The facilities success over the years has continued to improve and the number of homeless individuals that are benefiting from using the space continuously increases.

Improvements for Homeless Shelter 2

Homeless Shelter 2, the Bridge Shelter in Dallas, Texas, the newest of all three shelters analyzed for this case study, has made huge strides since being completed in 2008. The shelter has provided information about the success of the space and the future expectations since opening. A group of architects and a design team was used to influence the outcome of the Bridge Shelter. Literature provides information about specific design elements within the space and also the list of sustainable features used to help build an environmentally friendly building. The building is LEED certified and strives to be as “green” as possible on a daily basis. Stated briefly through literature, the Bridge Shelter does offer individual growth programs and developmental help to the homeless; however, the information available about this is limited and the available literature focuses on the design elements of the space.

Improvements for Homeless Shelter 3

Homeless Shelter 3, Boulder Shelter for the Homeless in Boulder, Colorado is the most unlike the other two shelters analyzed for this case study. The Boulder Shelter for the Homeless was originally created in response to the cold climates in Boulder. The available shelter information presents that this shelter is the least developed out of the three shelters

analyzed. The shelter only started expanding in 2003, therefore it is much newer to the design features incorporated and the success or failures of the space are limited because of the time constraint. The most recent available statistical information is that in 2011 the Boulder Shelter provided 1,015 individuals with shelter, 36,859 bed nights, 83,889 meals, 2,402 case management contacts, and many other services (Boulder Annual Report, 2011). The facility addition took full advantage of incorporating sustainable features into the design. A design team was used in the creation of the shelter addition to incorporate design elements to help create a positive, influential space. However, unlike the other shelters analyzed in this study, the Boulder Shelter for the Homeless does not incorporate a wide variety of programs because of the availability of programs within the community. Whether homeless individuals take advantage of the community offered programs has not been previously tracked by the shelter and it would be hard to assume that these individuals feel comfortable going out into the community to ask for any type of assistance.

Designing for the Future of Homeless Shelters

It is difficult for someone to imagine what it would like to be homeless without actually experiencing it. For designers, it is important to try and understand and communicate with homeless individuals to develop the best possible design solutions to provide necessities. Since many necessities are taken for granted by people on a daily basis they have the potential of being overlooked when trying to incorporate design elements into a space. Designers should maintain a level of respect when addressing the elements necessary for a homeless shelter. If a shelter is designed poorly and unattractive, it will communicate a low regard for its users and homeless individuals will be less likely to use the space (Pable, 2007).

All three of the homeless shelters analyzed to create this case study offer different features and amenities to users. The importance of shelter design has been proven through the successful outcomes of the three shelters helping the homeless re-enter society. Homeless shelters need to continue to incorporate design teams when renovating or building from the ground up to provide the best possible outcomes. Due to the emotions a homeless person could be experiencing when entering the space, it is critical that these spaces are designed to convey qualities of a sanctuary and refuge to establish trust between the homeless and the facility staff and volunteers (Davis, 2004).

There is no exact way to design a homeless shelter to benefit every individual who seeks help through the facility; however, by implementing design features and understanding how the homeless feel and communicate designers can create a space that is most appropriate for the situation.

The Entryway

The entrance of a homeless shelter is just as important as the exterior presentation. The entrance provides the first impression of the spaces interior and conveys a message about the space. Creating a single entrance for everyone using the space encourages co-opting of passageways and territorial behaviors, which can cause a sense of discomfort in the homeless (Pable, 2007). Through the development of homeless shelters, (Sam Davis, 2004) found that homeless people want an open and public entryway to provide visual assurance that the shelter is not a prison. By providing an open entrance to the space, homeless can view bulletin boards, socialize, and observe as they wait to meet with someone privately. By providing bulletin boards, books, and newspapers at the entryway the stress of waiting can be

minimized (Pable, 2007). By providing a reception station and counseling areas in the open area, homeless individuals will be more accepting of assistance.

To ensure safety there should be more than one entrance to a homeless shelter. The facility staff, employees and volunteers should have a safe way to enter the building separate from the homeless. If applicable to the shelter, it would also be beneficial to have separate entrances and waiting areas for men, women, and families to provide a level of comfort. Many women and children may feel uncomfortable or scared being around men or other adults, therefore they could be separated immediately, rather than waiting until they are accepted and enter the space eliminates stress. This is also important when looking at means of egress within the space and ensuring that everyone could safely exit the space in the case of an emergency. By offering multiple entrances there would be multiple exits for people to safely and easily exit.

Public Spaces

Public spaces play an important role in any building type. These spaces are used by the majority of individuals in the space and do not provide a level of comfort. Public spaces should be designed to avoid the feeling of institutionalization. Public spaces should incorporate as many basic design features as possible, such as trash cans, recycling bins, water fountains, monitored restrooms, books, newspapers, clocks, access to snacks, etc. (Pable, 2007). These design features are usually taken for granted by many; however homeless people do not have access to these basic elements on the streets.

Evidence based design has provided designers with the knowledge needed to design the most effective spaces for specific health situations. With the knowledge and research already available designers can make proper suggestions for public space colors and material

use to eliminate stress and influence comfort. Providing public space users with visual access to the outdoors creates a social connection for the homeless and should be considered with creating public spaces (Davis, 2004). The Joan Kroc Center at Saint Vincent de Paul Village does an excellent job at utilizing the outdoors to impact the space users. The facility offers an interior courtyard so the homeless are not faced with seeing the public and society before they are mentally ready.

Bathrooms

Restrooms and shower areas are a difficult space to design within a homeless shelter due to the safety and privacy users expect. Homeless individuals may have drugs, alcohol, or weapons on them if they are not properly searched when entering the facility and providing them with a private restroom or shower gives them the ability to use substances or hurt themselves. This area may pose to be most challenging to a designer because requiring monitoring invades personal privacy and makes people feel uncomfortable, while searching people as they enter the facility may turn some homeless people away for fear of having property taken from them.

Sleeping Areas

The general nature of sleeping in a public space can be scary; being surrounded by strangers and having limited privacy may frighten many homeless individuals. However, spending the night on the streets is much more dangerous and with demographic location climate changes can be detrimental to a person's survival. There is also no guaranteed level of safety when spending the night on the streets, where a shelter can offer a level of safety and comfort. The most common type of sleeping arrangement in previous homeless shelters is the dormitory set up, offering little or no privacy to users and cramming as many

individuals into the space as possible (Davis, 2004). As codes and building regulations have evolved, there have been some requirements that force homeless shelters to only allow a specific number of individuals to sleep in a space based on the available square footage.

Realistically it is not possible to give each homeless individual or family a private sleeping room, therefore it is crucial to use design elements to create private, dormitory-like settings. This can be achieved through the use of temporary walls or permanent low walls (Davis, 2004). By creating a partition between the beds there is a sense of privacy and a higher level of individual comfort. The partitions should have the flexibility to move and be rearranged due to the nature of a homeless shelter and the space users.

Sleeping areas, like the facility entryway, should also consider the separation of men, women and families. Due to the number of homeless women and children who have suffered abuse, it is crucial that they feel comfortable where they are required to sleep. Depending on the facility size and space capabilities, this would be an important design element to take into consideration.

Storage

An overlooked area of many spaces created in the United States is the ability to access storage space. Many homes and commercial buildings lack adequate storage for people's things and necessary equipment and materials. Many homeless people have some belongings and although we may not see their belongings as necessary or worth keeping, they have a reason for wanting to keep it. It is important to make the homeless feel safe and this includes ensuring that their few items are safe and kept safe and available while they are using the space. This can be achieved through the use of lockers, assigned to each person as they come into the facility. By having an employee of the facility monitor keys and user

information to ensure safety and security, the homeless would have the option of securing their belongings in a locker while they take advantage of the facility programs, shower, eat, or participate in other activities.

Specialization Spaces

By offering the homeless as many amenities as possible within the homeless shelter, they will feel less pressure to leave the facility and seek help. Many homeless people may also not feel comfortable seeking help within the community and therefore avoid getting any kind of assistance. As provided through literature about all three homeless shelters used to create this study, offering specialized spaces has a positive proven impact on the homeless. One of the most important spaces to offer the homeless is a health or medical clinic. Due to the high number of homeless individuals suffering from health problems, both psychical and emotional, this is an important amenity that many homeless do not have access to (Davis, 2004). Another space that is often times overlooked when incorporating specialized spaces into a homeless shelter is a kennel or a space to house animals (Davis, 2004). Many homeless individuals have a pet and avoid shelters because they are emotionally attached to their animal and cannot take it into the facility. Pets are kept for companionship and protection when dealing with life on the streets, and by offering solutions to house these pets within a facility a homeless person can be more easily persuaded to leave the streets and take advantage of the shelter (Implications, 2005).

There are many different specialty areas that a homeless shelter can offer to its users. Though the three shelters were analyzed, the different specialty spaces depend on the architects and designers influencing the space amenities. Some specialty spaces that have

been seen to previously have a positive influence on the homeless including the following (Davis, 2004):

- Access to a bank or financial services
- Courtrooms and assistance
- Educational areas or classrooms
- Beauty parlor or barbershop
- Gym or workout facility
- Dining halls

Specialty spaces will depend on the size of the facility and the specific homeless individuals that will be using it. Many specializations cost money and require staff or volunteers to provide the proper care; therefore it is important for the facility to reach out to the local community for assistance staffing these areas.

Shelter Budget and Self Sustainment

In many cases the issue of budget reduces the ability for homeless shelters to offer all inclusive amenities to the homeless. Many shelters are funded by the government, which is why they end up in secondary-use structures with little to no resources to assist the homeless with anything other than a sleeping facility. More often, we are seeing shelters having donations and raising money to improve the space. The Joan Kroc Center is a perfect example of a self-sustaining shelter. The shelter is run completely by donations and has been since its first opening. People have continued to put money into improving, updating, and growing the homeless village that Joan Kroc Center has become.

Although, in a majority of cases, raising enough money to run a shelter solely on donations is not an option; other solutions are available. Boulder Shelter runs a bakery during

the day time to generate money and tie the homeless into the local community. The bakery started in recent years and employees homeless individuals who use the space at night. The workers sell cupcakes at local farmers markets and events within the community, creating an awareness and presence for the shelter, while also raising money.

With farmers markets becoming popular in many local communities all around the world, using the events as an opportunity to raise money could potentially benefit homeless shelters. Shelters can incorporate urban farming and employ the homeless individuals to take care of the farms. Each year they could work with local markets to sell the produce and raise money for the shelter. Depending on the geographical location and the farming season length, this option has the potential to raise money throughout the entire year.

Self-sustainment is an important topic when looking at homeless shelters because the government does not provide the funds to build elaborate spaces. By providing ways for the shelter to raise money and creating fundraising programs it has been proven that homeless shelters can self-sustain over long periods of time and through economic downturns.

Summary

The information provided in this chapter reiterates that Interior Design professionals should be included in the design process of homeless shelters. Homeless individuals benefit from having access to a space that provides necessities and programs to influence them back into society. The perceived view of how a homeless shelter should be designed and the standard on how it needs to be are tremendously different. By looking at these three homeless shelter examples, all offering different components to users it is relevant that good design influences good outcomes. Although there have been few shelters more recently with the funding to build sustainably and incorporate useful programs, many still struggle to provide

shelter overnight for individuals. There is room for improvement in the design of homeless shelters and by using available literature and evidence to improve these spaces, those improvements can be reached.

Chapter 6: Conclusion

Contributions to the Discipline

The primary target audience of this research study is designers, architects, and other individuals who partake in the process of building homeless shelters. The study is intended to provide these individuals with the information needed to base an educated decision when designing and providing services within a shelter. The research adds to a sparse body of literature currently available on the topic, particularly because it is an underdeveloped research topic.

When shelters are being redesigned or built from the ground up it is crucial that design teams take into account the measures necessary to properly influence these individuals back into society. If this study results in design teams adequately creating shelters to benefit the homeless and implementing necessary design elements other disciplines will be impacted such as:

- Employers within the local communities will have more opportunities to hire individuals with educational and skill training received at the shelter,
- Children at the shelters will continue to receive a proper education, making their transition back into society less stressful or noticeable by other students and teachers,
- Volunteer opportunities will be available to local community members to help staff the shelter and rehabilitate the users back into successful life paths,
- The number of homeless individuals in the United States will progressively decrease, improving the overall economy,
- The homeless shelters will be visually appealing to the community and less frightening than perceived in the past,

- Additional internship and co-op educational work experience opportunities would be available to interior design students interested in working in that line of work,
- Designers under all specialties can benefit from ongoing research focused on the homeless, a large population of individuals in the United States.

Limitations of the Study

There are many limitations with this study. Due to the nature of homelessness, inconsistency of regular facility users and the time constraint of this study no human subjects were involved in gathering this information. There was no population used for sampling, therefore the gathered information and recommendations are based strictly off of a qualitative literature review.

Implications for Further Research

Implications for future research are necessary to make adequate recommendations for design changes to homeless shelters. Future research should consist of surveys with questions relevant to gather information about current shelter space, interviewing individuals who use the space and collected quantitative data. The individuals that could potentially be interviewed to collected quantitative data include employees, volunteers, and capable homeless individuals. Questions used to conduct interviews would be customized for the type of homeless shelter being examined and the author's general knowledge about the space and its users. By collecting this information and sampling a large part of the population within different areas of the United States, more accurate recommendations can be made in the future using statistically significant information.

References

- Bassuk EL, Weinreb LF, Buckner JC, Browne A, Salomon A, Bassuk SS. The Characteristics and Needs of Sheltered Homeless and Low-Income Housed Mothers. *JAMA*. 1996;276(8):640-646. doi:10.1001/jama.1996.03540080062031.
- Boulder Shelter for the Homeless. (2011). You & the shelter together: holding up ladders. Boulder Shelter for the Homeless Annual Report 2011. Retrieved from: http://www.bouldershelter.org/pdf/annual_report_2011.pdf
- Boulder Shelter for the homeless (2013). About the shelter: our green building. Boulder Shelter for the homeless. Retrieved from: <http://www.bouldershelter.org/about.green.html>
- Bridgenorthtexas.org. The Bridge. Retrieved December 20, 2012, from <http://www.bridgenorthtexas.org/>
- Collins. (2013) Collins English Dictionary. Retrieved on January 28, 2013 from <http://www.collinsdictionary.com/dictionary/english/shelter>
- Davis, S. (2004). *Designing for the homeless: Architecture that works*. Berkeley & Los Angeles, CA: Regents of the University of California Press. ISBN: 0-520-235258-8.
- Draper, E. (2013). Boulder shelter for the homeless a community wide enterprise since 1987. Denver Post. Retrieved from: http://www.denverpost.com/lifestyles/ci_22301079/boulder-shelter-homeless-communitywide-enterprise-since-1987
- Hamilton, K. E., Watkins, D. H. (2009) *Evidence-based design for multiple building types*. Hoboken, NJ. John Wiley & Sons, Inc. ISBN: 978-470-12934-0.

- Harrell, L. (1998). Redesigning the designer's role. *Journal of Business*, 13(11), 0-A1.
Retrieved from
<http://ezproxy.emich.edu/login?url=http://search.proquest.com/docview/220889018?accountid=10650>
- Harmon, S. Koomen., Kennon, K. E. (2005). *The codes guidebook for interiors*. 4th ed, Hoboken, N.J.: John Wiley & Sons, Inc.
- Jordan, W.A. (2008). *Universal design for the home: great looking, great living Design for all ages, abilities and circumstances*. Beverly, Massachusetts: Quarry Books.
- Keitsch, M. (2012), Sustainable architecture, design and housing. *Sust. Dev.*, 20: 141–145.
doi: 10.1002/sd.1530
- Kelly, A. Ashmun 1849-1928. (1921). *The expert interior decorator*. (2d ed.) ... Paoli, Pa.: Kelly.
- Kwong, B. (2004). Quantifying the benefits of sustainable buildings. *AACE International Transactions*, , RI101-RI106. Retrieved from
<http://ezproxy.emich.edu/login?url=http://search.proquest.com/docview/208173206?accountid=10650>
- Macartney, S. & Mykyta, L. (2012). Poverty and shared households by state: 2011. *U.S. Census Bureau*. Retrieved from: <http://www.census.gov/prod/2012pubs/acsbr11-05.pdf>
- McMorrow, E. (1997). The value of interior designers. *Facilities Design & Management*, 16(2), 7-7. Retrieved from
<http://ezproxy.emich.edu/login?url=http://search.proquest.com/docview/216013613?accountid=10650>

- Miller, K., Herzberg, G., Ray, S. (2006). Homelessness in America: perspectives, characterizations, and considerations for occupational therapy. The Haworth Press, Inc.
- Pable, J. (2007), Interior Design Homeless shelter design: a psychologically recuperative approach. *Journal of Interior Design*, 32: 93–108. doi: 10.1111/j.1939-1668.2007.tb00543.x
- Straczynski, Stacy. (2010). Homeless Assistance Center Gains LEED Silver Certification. Retrieved October 25, 2012, from http://www.contractmagazine.com/contract/ls/Archived-Article-1403.shtml?articletitle=DESIGN-DESIGN NEWS_Homeless Assistance Center Gains LEED Silver Certification_347.xml
- The center for Universal Design, *The Principles of Universal Design* (1997). RERC on Universal Design and the Built Environment [Brochure]. Raleigh, NC: Connell, B.R., Jones, M., Mace, R., Mueller, J., Mullick, A., Ostroff, E., Sanford, J., Steinfeld, E., Story, M., Vanderheiden, G.
- U.S. Department of Energy. (2013). Photovoltaic systems. U.S. Department of Energy: Energy efficiency & renewable energy, energy basics. Retrieved from: http://www.eere.energy.gov/basics/renewable_energy/pv_systems.html
- Village News. (2011). St. Vincent De Paul Village. Retrieved December 14, 2012, from <http://www.svdpv.org/jkc.html>
- Wasserman, J.A. & Clair, M.J. (2011) Housing patterns of homeless people: the ecology of the street in the era of urban renewal. *Journal of Contemporary Ethnography*. DOI: 10.1177/0891241610388417.

Winchip, S. (2007) Sustainable design for interior environments. New York, NY. Fairchild Publications, Inc. ISGBC 978-1-56367-460-0.