Balancing minds, Transforming spaces

Research Booklet

TU Delft BK
Graduation Studio
Designing for an inclusive environment
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Exploring the role of architecture in destigmatizing psychiatric facilities in Albania.

Abstract

The goal of this study is to use architectural interventions to de-stigmatize Albanian psychiatric hospitals. The study is divided into two parts, with the first focusing on meeting user demands and the second enhancing society perceptions. Prioritised guidelines were produced using evidence-based studies and fieldwork in Albanian psychiatric facilities, with Maslow's hierarchy of needs as the foundation. A survey gathered information about social perceptions and recommendations for increasing community engagement. Creating inclusive settings necessitates customised design interventions to accommodate various user groups. Greenery arose as a prominent motif, followed by intuitive organisation, several layers of privacy and security to enable user autonomy, a non-institutional design, positive diversions, and so on. Integrating educational and community spaces into psychiatric clinics helps reduce national stigma and foster innovation.

Glossary

Acute care: *Immediate and short-term medical treatment provided for patients with urgent medical conditions or injuries. Acute patients: Individuals requiring urgent or immediate medical attention due to severe medical conditions.*

Control Theory: *A psychological theory positing that individuals have an innate need to feel a sense of control over their environment and experiences, influencing their behavior and well-being (Lee & Brand, 2005; Evans, Cohen, Stokols, & Altman, 1987; Evans, Shapiro, & Lewis, 1993).*

EB: *Evidence-Based, referring to practices or interventions grounded in scientific evidence and research findings.*

EBD*: Evidence-Based Design, an approach to architectural design that integrates scientific evidence and research findings to create built environments that promote health, well-being, and productivity.*

Environmental Cognition Theory: *A theoretical framework that explores how individuals perceive, understand, and interact with their environment, emphasizing cognitive processes such as attention, memory, and spatial reasoning (Kaplan, Kaplan, & Ryan, 1998; Ulrich, 1999, 2001; Zeisel, 2006).*

Environmental Preference Theory: *The theory that individuals have preferences for certain environmental features and settings based on their aesthetic, sensory, and functional qualities (Kaplan, Kaplan, & Brown, 1989).*

Environmental Press Theory: *A theoretical framework that suggests individuals' behavior and well-being are influenced by the demands and constraints (press) of their environment, particularly relevant in understanding the experiences of older adults in residential settings (Lawton, 1998).*

Environmental Stress Theory: *A theoretical perspective that examines how environmental factors contribute to stress responses in individuals, influencing their physical and psychological well-being (Pearlin et al., 1981).*

Environmental stress: *The physiological and psychological responses individuals experience when exposed to adverse environmental conditions or stressors.*

General Adaptive Syndrome (GAS): *A theoretical framework proposing that individuals experience stress responses involving various physiological and psychological reactions when confronted with stressors (Selye, 1956)*

ICU adjacent gardens: *Outdoor spaces located near Intensive Care Units, designed to provide a healing environment and positive distractions for patients, families, and healthcare providers.*

ICU: *Intensive Care Unit, a specialized hospital unit providing intensive medical care for critically ill patients.*

OHE framework: *Stands for "Object-Health-Environment" framework, a conceptual model that considers the relationships between objects, human health, and the environment in architectural and design contexts (Sakallaris, 2015).*

Place Attachment Theory: *The concept that individuals develop emotional bonds and connections with specific places, influenced by their experiences, memories, and social interactions within those environments.*

Positive distraction: *Intentional design elements or interventions in the environment that divert attention away from negative stimuli, promote relaxation, and enhance well-being.*

Privacy, Personal Space Concepts: *Concepts related to individuals' need for privacy and personal space, which vary across cultures and contexts but generally involve controlling access to oneself and one's personal belongings.*

Psychiatric facility: *A specialized healthcare institution designed for the diagnosis, treatment, and care of individuals with mental health disorders.*

Supportive Design Theory: *The idea that the design of environments, including architectural features and spatial layouts, can enhance individuals' sense of comfort, safety, and social support. Credited to Roger K. Ulrich.*

Therapeutic Environment Theory: *The concept that the physical environment can be intentionally designed to promote healing, well-being, and psychological restoration in individuals receiving medical treatment or therapy (Kaplan, Kaplan, & Ryan, 1998; Ulrich, 1999, 2001; Zeisel, 2006).*

Table of Content

01

Introduction

Background

The architecture of psychiatric hospitals is often referred to as ‘architecture of madness’ (Yanni, 2007). This phrase, which can be heard echoing through the pages of books and the halls of academic debate, alludes to the complex link between architectural design and public perception of psychiatric institutions. In a society where the media holds enormous power, portrayals of people with psychiatric problems can be exaggerated, inaccurate, and, at times, mocking. Such images add to the stigma associated with mental illness, propagating beliefs that can have a long-term impact on the health and well-being of the same people these institutions seek to serve, treat and rehabilitate (Srivastava et al., 2018) .

Traditional psychiatric care hospitals often embody an institutional and clinical atmosphere that inadvertently reinforces stigma. One prominent aspect of this stigma is the perception of psychiatric hospitals as institutions of confinement and control, rather than places of healing and support accredited to healthcare facilities. Patients, their families, and pscyhiatric healthcare providers are confronted with an environment that fails to address their diverse needs and perpetuates feelings of alienation and marginalization (Brown & Davis, 2019). According to the source, persistent stigma not only impacts the quality of care but also hinders individuals from seeking the help they need, exacerbating the global mental health crisis.

Given that health and well-being are human rights and a significant driver of social and economic progress, it is critical for society to. However, eliminating the deeply established stigma associated with psychiatry remains a difficult undertaking. Individuals suffering from mental diseases have always been subjected to society’s bias, which includes persistent stereotypes, pervasive ignorance, discrimination, and self-stigmatization. This communal bias has created considerable worry among patients that they may be wrongly classified or rejected. Equally concerning is the anxiety that surrounds mental health services, which drives many people to avoid receiving the care they urgently deserve (Bil, 2016). This not only has an impact on the individuals affected, but it also casts a long shadow over the well-being of their loved ones, who bear the burden of caring for their family members’ health (Chang et al., 2016).

"Despite decades of deinstitutionalization, still 63% of the world's psychiatric beds remain in large pscyhiatric hospitals, known for anti-therapeutic environments and human rights violations, taking up 67% of total spending (World Health Organization, 2011). Data from the World Health Organization's Mental Health Consortium Surveys show that, in developed countries, 35–50% of people with serious mental illnesses living in the community had not received treatment in the year prior to the survey. In developing countries, unmet need was as high as 85% (The WHO Mental Health Survey Consortium, 2004)" - Stuart, 2016.

The gap between developed and developing countries, such as Albania, highlights the intricate interaction between societal, cultural, and architectural components in destigmatization efforts. Although there has been progress on a global scale, it is still critical to address the unique challenges that poor countries face in de-stigmatizing mental hospitals.

Albania is one of the many developing countries struggling with meeting the needs of their psychiatric patients. The combined mental health institutions' current capacity of available beds for a population of 2.812 million is roughly 635 beds (see Table 01), however the media reports that these hospitals not only meet their capacities but exceed them by double or triple (Hasanalliaj, 2019).

Limited access to mental health services, social taboos, and a lack of public awareness perpetuate the stigmatization of individuals seeking mental health support (Albanian Ministry of Health, 2019). Additionally, architectural design in psychiatric facilities often lags behind, with many structures reflecting a historical legacy of institutionalization rather than user-centric, therapeutic design (World Health Organization, 2017). For example, the hospital in Elbasan, lacks the infrastructure to create an adequate therapeutic environment for long-term psychiatric patients (see Figures 1,2). A report published by the Council of Europe's Committee for Prevention of Torture on Tuesday after a three-day visit to Albania said that there is an urgent need to establish a specialized forensic psychiatric facility in the country to accommodate and treat male and female forensic psychiatric patients (Sinoruka, 2022). In 2020, Albania lost a case at the European Court of Human Rights over the degrading treatment of a mentally ill person at the prison hospital in Tirana, and the Strasbourg court asked Albania to build a special hospital as soon as possible (Sinoruka, 2022).

According to Kurani (2023), there is a great deal of potential for the design of healthcare settings, especially those that are intended to provide for mental health treatment, to influence how people feel and behave. Another study shows that architecture can impact how patients receive mental health treatment has been found to influence how patients perceive their emotional wellbeing (Sui et al., 2023). A positive atmosphere in psychiatric hospitals in developed countries, has led to radical changes in hospital care as the main cause of changes in the psychiatric care system, thereby improving the care provided in psychiatric patient care centers (MA et al., 2022). By adopting a holistic perspective, we may reimagine these areas as therapeutic havens that not only promote patients' wellbeing but also confront cultural prejudices and mental health myths (Liddicoat et al., 2020).

This investigation is motivated by a deep commitment to using the transformational potential of architecture to promote recovery, inclusion, and dignity, fitting to a healthcare environment, in the psychiatric institutions in developing countries like Albania. Drawing from literature research, fieldword, user experience and societal perception the aim is to provide complete architectural guide.

-line suggestions including a wider scope of architectural elements that influence the stigmatization of a mental health institutes in Albania and serve as a reference for a similar socio-economical context.

Figure 1: Dinning room in the Psychiatric Hospital of Elbasan, Albania. Courtesy of Hoop voor Albanie

Figure 2: Patient Room in the Psychiatric Hospital of Elbasan, Albania. Courtesy of Hoop voor Albanie

Problem Statement

Contemporary studies and architectural designs for psychiatric facilities predominantly stem from the context of developed countries, where access to resources and expertise is more abundant (Wainberg et al., 2017). While these initiatives have yielded meaningful progress in reducing the stigma associated with mental health, a crucial disparity exists in their applicability to developing countries, which face unique challenges and constraints.

A fundamental concern is the disparity between the reality of the economy and infrastructure. Developed countries often boast well-funded mental health infrastructure, enabling sophisticated architectural solutions (Rathod et al., 2017). These designs prioritize modern technology, aesthetic appeal, and extensive facilities that contribute to a supportive and welcoming environment for mental health service users. However, the applicability of such designs to poorer countries like Albania is limited due to financial limitations, scarce resources, and infrastructural inadequacies.

Tight budgets, outdated infrastructure, and understaffing are common challenges faced by architectural designers of mental health facilities, especially in developing countries like Albania where healthcare resources are few (Suli et al., 2004). Comparisons between high- and low-income countries show a significant difference in the presence of a mental health workforce of psychiatrists, nurses, psychologists, and social workers (Rathod et al., 2017). These factors inevitably influence the design choices made, leading to spaces that, while functional, may inadvertently reinforce stigmatization. The discrepancy between the architectural designs tailored to the economic robustness of developed countries and the constrained reality of their developing counterparts highlights the need for more context-specific solutions.

Furthermore, cultural factors play a pivotal role in mental health stigma (Crowe et al., 2011). Designs rooted in developed countries may not consider the cultural norms, values, and perceptions unique to developing countries. The absence of cultural sensitivity in architectural design can lead to designs that inadvertently perpetuate stigma or create a sense of cultural alienation, ultimately impacting the effectiveness of mental health care (Kirmayer & Pedersen, 2014).

"Recent debates on global mental health have raised questions about the goals and consequences of current approaches. Some of these critiques emphasize the difficulties and potential dangers of applying Western categories, concepts, and interventions given the ways that culture shapes illness experience. The concern is that in the urgency to address disparities in global health, interventions that are not locally relevant and culturally consonant will be exported with negative effects including inappropriate diagnoses and interventions, increased stigma, and poor health outcomes." – Kirmayer & Pedersen

To address this critical disparity, it is essential to recognize that a one-size-fits-all approach to architectural design for psychiatric facilities is insufficient (*Kirmayer & Pedersen, 2014*). Even though the achievements of developed nations provide insightful information, these achievements need to be translated into solutions that are tailored to the unique context of developing nations and take into consideration the cultural, economic, and infrastructure factors at play.

Furthermore, research conducted for this thesis highlighted a scarcity of studies and literature on the architectural effects of psychiatric hospital architecture. While such research does exist, it often centers on specific demographic subsets or mental health conditions, leaving a gap in understanding how architectural elements can support the diverse needs of patients with in these facilities. To address the challenge, Evidence based research on general healthcare facilities can be used as a basis for architects, and later adapted to the additional needs and that a psychiatric care facility requires.

To address this issue, the research aims to tackle the stigmatization by offering evidence-based design principles on healthcare environments and discuss their application on psychiatric care hospitals for promoting healing, dignity, and inclusion for all. The goal is to address the different demands of users in Albania, improving their overall experience, thereby creating environments that promote recovery and inclusivity. Furthermore, the study aims to enhance society's and non-users' perceptions of mental health services.

PSYCHIATRIC HOSPITAL FACILITY	CAPACITY (BEDS)	ESTIMATED NEED BASED ON REPORTS ANNUALLY
ELBASAN	310	unknown
VLORE	200	498
QSUT, TIRANE (NON- RESIDENTIAL)	90	approx. 200
MENTAL HEALTHCARE SPECIALIZED FACILITY SHKODER	35	371
TOTAL	635	>1200

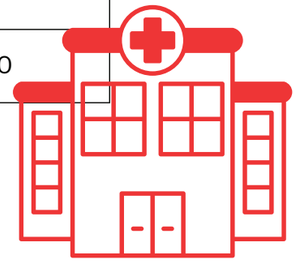


Table 1: Table showing the difference between the capacity of each psychiatric hospital in Albania and the exceeding reported demand of patients. Based on Information provided by Inva Hisnaliaj from Faktoje.al

Research Aim

The Goal of this research is to provide practical, user-centered architectural guidelines that destigmatize mental health hospitals in the socio-economical context of Albania. These guidelines will build environments that not only combat the stigma of mental health, but also empower and support users' different needs, resulting in a more compassionate and inclusive society. It intends to do this by:

1. **Research evidence based design choices and review their application to psychiatric care hospitals.**
2. **Identify guidelines to improve user experience**
3. **Identify ways to mprove society's perception**
5. **Consider contextual restrictions**
6. **Provide guidelines that decrease stigmatization**

Relevance

1. **Contextual Specificity:** While there exists previous research on architectural design in mental health facilities and destigmatization, the study's specific focus on underdeveloped countries, with Albania as a case study, adds a distinct perspective. Developing countries face unique issues and cultural dynamics that demand specific solutions that are sometimes overlooked by wealthier nations. This study specifically addresses these issues.

2. **Intersection of Multiple Disciplines:** This research bridges the fields of mental health, architecture, sociology, and cultural studies. The combination of these disciplines provides a comprehensive strategy that recognises the multidimensional nature of stigmatisation and architectural design's ability to have a significant influence.

3. **Cultural Sensitivity:** The emphasis on cultural sensitivity in the research is unique. It recognises that architectural design must connect with the cultural norms, values, and beliefs of the local population, making it uniquely attuned to the cultural fabric of Albania and other comparable situations.

4. **Real-World Impact:** This research is not purely theoretical; it is grounded in the tangible transformation of physical spaces. By offering realistic architectural design standards, this study has the potential to bring about actual change in the way mental health facilities are created and perceived in Albania and beyond

5. **User-Centric Approach:** The incorporation of user experiences and points of view in the study is unique. By actively incorporating mental health care users in the design process, it prioritises their voices and well-being, resulting in a user-centric research approach.

6. **Potential for Policy and Advocacy:** The study has the potential to affect policy and advocacy activities in the fields of mental health treatment and stigma reduction. It provides evidence-based recommendations to help shape government policy, architectural standards, and advocacy campaigns.

7. **Global Relevance:** While the study is based on the specific setting of Albania, its findings and recommendations have the potential for global application. Globally, developing countries face similar mental health difficulties and stigma, making your findings applicable to a wide range of situations.

02

Theoretical Framework

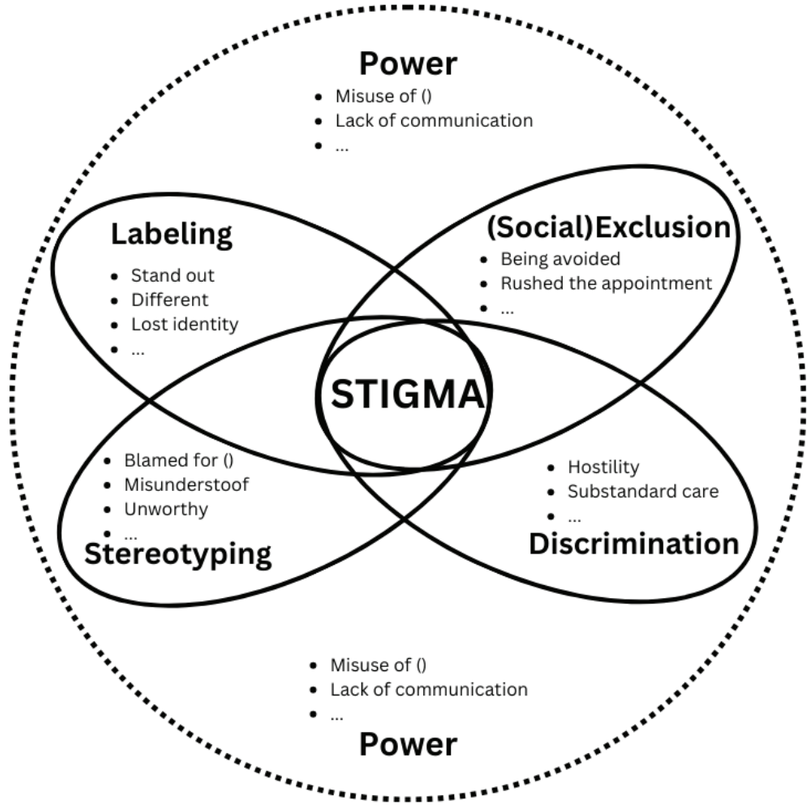


Figure 3: Visual representation of Stigma domains and its consequences (Brondani & Donnelly, 2017)

Theoretical Framework

The Stigma Theory

Erving Goffman's theory (Goffman, 1963) provides the foundation for comprehending the social stigma linked with psychiatric care hospitals. Stigma promotes unfavourable attitudes, discrimination, and marginalisation. Goffman's theory provides a useful framework for analysing how stigma manifests in society. Four types of stigma have been identified: self-stigma, structural stigma, stigma by association, and public stigma.

'Public Stigma' refers to the public's preconceived conceptions, discriminatory attitudes, and stereotypes concerning people with stigmatised conditions. It results in social isolation and the exclusion of stigmatised persons from many aspects of society. Architectural design considerations for psychiatric care hospitals can have an impact on public attitudes and perceptions of them. Public stigma can be reduced by incorporating positive design aspects into environments that are inclusive, welcoming, and non-institutional (Jarousse, 2023). *Contact Theory,* as proposed by Allport (1954) and empirically tested by Pettigrew and Tropp (2006), posits that intergroup contact, under certain conditions, can reduce prejudice and stigma. In the context of mental health facilities, this theory suggests that positive interactions between patients, staff, and the community can contribute to a reduction in stigma. Public perceptions can be positively impacted, for instance, by the use of warm and inviting colors (Mahnke, 1996), open and welcoming public areas, and architecturalelements that integrate the facility with the neighborhood.

'Self-stigma' occurs when people with stigmatised conditions internalise the public's unfavourable thoughts and ideas. Because of the stigma associated with their condition, people may experience emotions of guilt, low self-worth, and low self-esteem (CORRIGAN et al., 2009).This may lead to social disengagement and reluctance to seek help (*CORRIGAN et al., 2009*).This may result in social disengagement and a reluctance to ask for assistance (*CORRIGAN et al., 2009*). The design of mental health institutions can have an impact on the self-stigma that people seeking mental health care may face. Facilities designed with user-centered concepts in mind can potentially reduce self-stigma by providing a message of respect, dignity, and support to their users (Livingston et al. 2011). A more positive user experience can be created by considering privacy concerns, creating therapeutic settings using nature and art, and incorporating all of these components. Participatory Design principles, as addressed by Muller and Kuhn (1993) and Sanders and Stappers (2012), provide facility users, personnel, and the community a voice in the design process. *User-centered design* principles emphasise the active participation of users in the design process. Norman's (2013) research emphasises the importance of developing places that are responsive to users' wants and preferences. Engaging users in design decisions can assist to eliminate stigma by fostering a sense of inclusion (*Livingston et al., 2011*).

'Stigma By Association' occurs when individuals or groups are made to feel less acceptable because they are connected with someone suffering from a stigmatised condition. In the context of architecture, stigma by association may refer to how architectural decisions made for mental health facilities effect the people and communities associated with those facilities, as per your research. For example, stigma may be felt by the families of persons receiving mental health care, medical workers, and the general public. To create a therapeutic atmosphere, literature on *architectural psychology* will be used. *Architectural psychology* explores the impact of architectural design on human behavior and well-being. Scholars such as Ulrich (1991) have demonstrated the importance of factors like natural light, access to nature, and spatial layouts in creating healing environments.

'Structural stigma' includes the injustices, laws, and customs at the societal level that lead to the marginalization of people who are stigmatized (Corrigan & Lam, Citation2007). Inequalities in educational and employment opportunities, access to healthcare, and discriminatory laws are all part of it. Structural stigma makes it harder for people to access resources and support and reinforces stigma both in the public and in one's own mind. By looking at potential effects of Albania's socioeconomic, cultural, and architectural context on design choices, the research's feasibility evaluation can address structural stigma. This thesis will investigate if the capacity to establish stigma-reducing environments in mental health facilities is impacted by structural injustices, such as financial, technological, knowledge or architectural limitations. However, political influences are outside of the scope of this research.

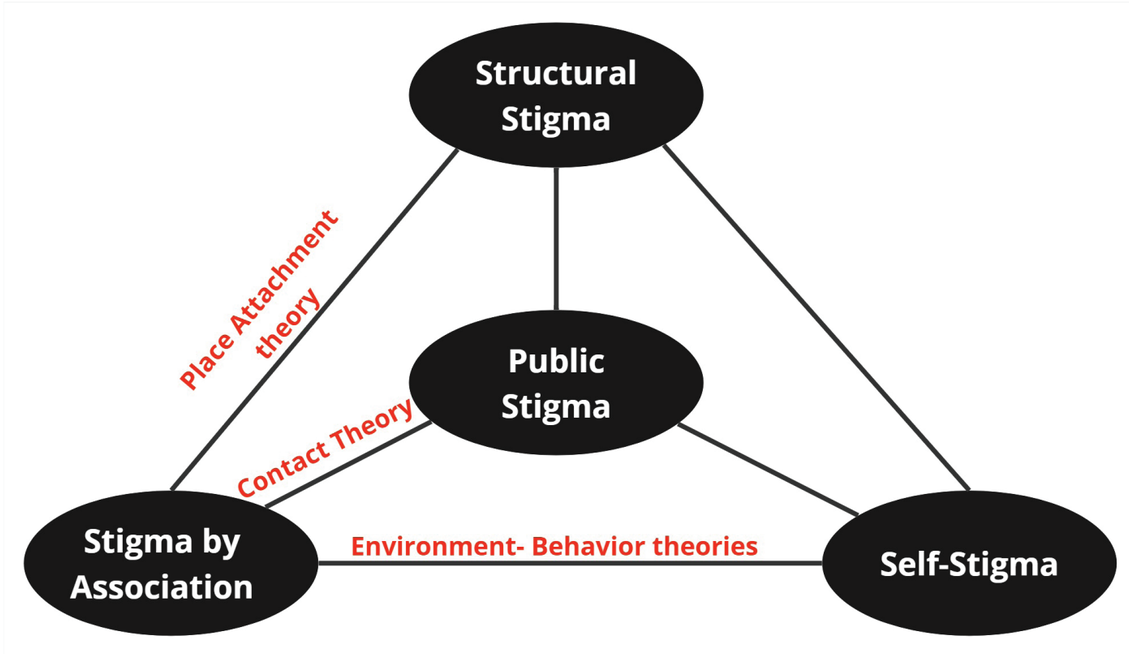


Figure 4: Goffman's Stigma Theory Diagram. Based on (Prydor & Reeder, 2011)

Reducting Stigma Through Architecture.

Goffman's seminal work, "Stigma: Notes on the Management of Spoiled Identity" (Goffman, 1963), provides valuable insights into the concept of stigma and its profound impact on individuals coping with mental illnesses. However, addressing the complexity of stigma in architecture presents a challenge, as direct influence is primarily exerted on the built environment. Additional theoretical frameworks are required to bridge the gap between stigma by association and other forms of stigma, thereby suggesting design strategies to mitigate the stigmatization of psychiatric hospitals. This will help in addressing the issue comprehensively.

Self Stigma: Environment Behaviour Studies

In her book "Environment-Behavior Studies for Healthcare Design," Suining Ding offers a comprehensive exploration of environmental factors and their influence on user experience in healthcare settings. Drawing from Ding's work, architects can craft environments that not only better cater to user needs but also contribute to countering self-stigma among users.

The book delves into core EB theories and their application in healthcare design, aiming to promote health and well-being through evidence-based approaches. It addresses the need for integrating research into design decisions and targets students and practitioners in interior design and architecture. The EB theories included are as follows:

Environmental Cognition Theory.
Environmental Stress theory
Therapeutic Environment theory
Environmental Press theory,
Supportive Design Theory
Privacy, Personal Space Concepts
Control Theory
Environmental Preference Theory
Place Attachment Theory
Environmental Affordance

Hierarchy of User Needs

Maslow, 1970b

Maslow's Hierarchy of Needs serves as a foundational theory in understanding human motivation and well-being, which can significantly inform the development of architectural guidelines aimed at enhancing user experience within a building. By considering the diverse needs and priorities outlined in Maslow's hierarchy, architects and designers can create environments that not only meet basic physical requirements but also foster psychological, social, and even spiritual fulfillment.

This theory suggests that individuals must first meet their basic physiological and safety needs before moving on to higher levels of fulfillment, such as social belonging, self-esteem, and self-actualization (see Figure 5). When applied to architecture and design psychiatric hospital, this theory suggests that buildings and spaces should prioritize safety, security, and functionality as fundamental elements.

Architectural guidelines can be developed to ensure that buildings provide safe and secure that meet the physiological and safety needs of occupants, laying the groundwork for positive user experiences.
By aligning architectural guidelines with the principles of Maslow's Hierarchy of Needs, designers can create environments that support the holistic well-being of occupants, enhance user experience, and contribute to a sense of fulfillment and satisfaction in the spaces we inhabit.

Public Stigma and Contact Theory

Gordon A. Allport, 1954

Gordon Allport proposed contact theory, which states that interpersonal contact between members of different groups can reduce prejudice and improve intergroup relations. This theory contends that direct interactions between users and members of the community can result in increased understanding, empathy, and acceptance. In the context of a psychiatric hospital, applying contact theory entails creating scenarios in which patients interact with people from their community.

Structural Stigma and Place Attachment Theory

various: Various, J. Douglas, R. Ulrich, Yi-Fu Tuan

According to place attachment theory, people form emotional bonds with specific places as a result of their experiences, memories, and interactions there. These emotional connections can result in feelings of security, belonging, and identity linked to the environment. In the case of psychiatric hospitals in Albania, it can be hypothesized that society's impression towards the facility can be improved under specifc conditions, when attached to the facility.

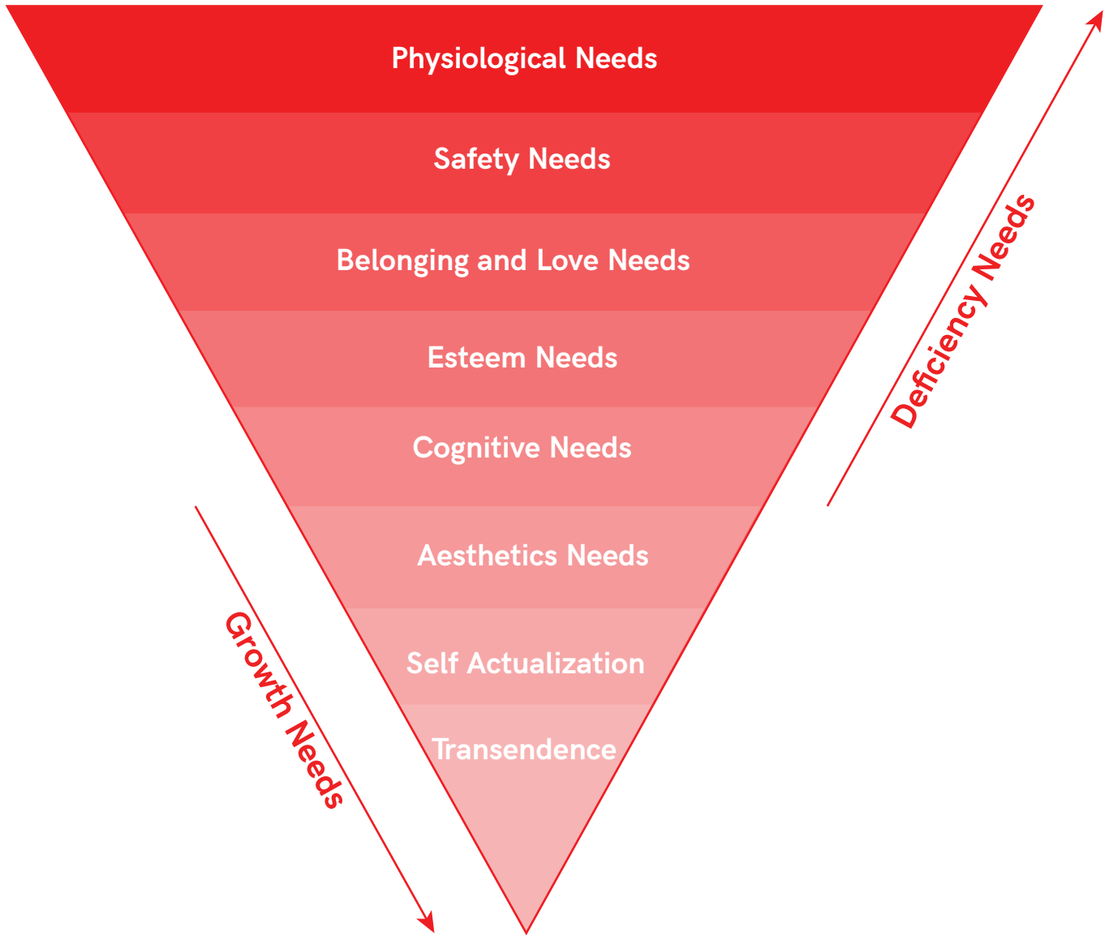


Figure 5: Hierarchy of User Needs based on Maslow's Hierrchy of Needs ,1970b

Research Question

How can architectural design strategies reduce self-stigma, public stigma, and structural stigma in psychiatric care hospitals in Albania?

Self-Stigma: What architectural design strategies can improve the user experience in psychiatric care hospitals to reduce self-stigma among patients in Albania?

Public Stigma: How can architectural design facilitate positive interactions between patients and the community to reduce public stigma in Albanian psychiatric care hospitals?

Structural Stigma: What architectural design features can make psychiatric care hospitals valuable community assets to reduce structural stigma in Albania?

Flowchart Diagram

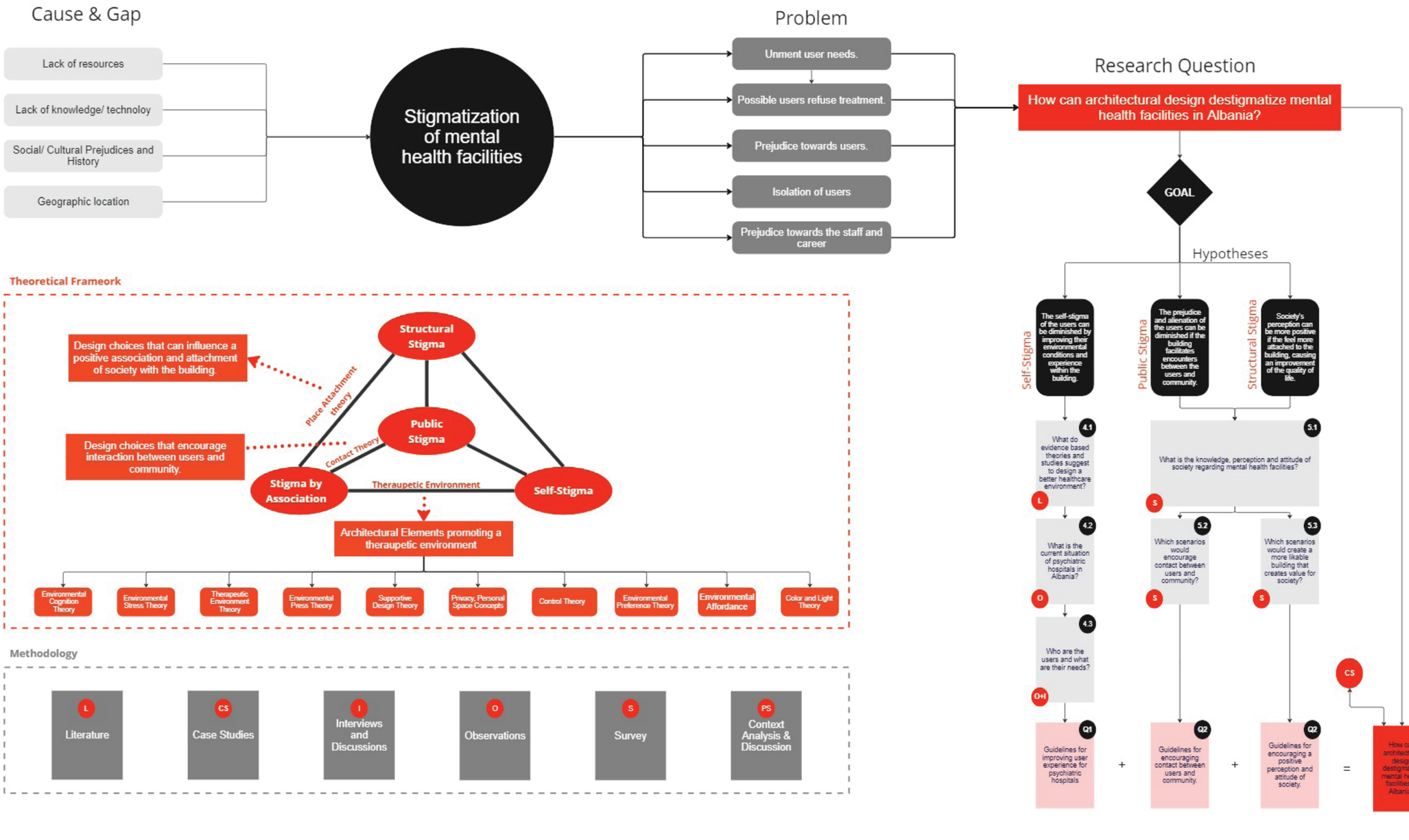


Figure 6: Flowchart diagramof the research

03

Methodology

This study uses a thorough mixed-methods approach that was thoughtfully created to examine the complex interactions that exist between user experience, architectural design, and stigma reduction in mental health facilities within the particular sociocultural context of Albania. Informed by existing theories and practices, the research aims to provide practical, user-centered architectural guidelines for destigmatization, catering to the diverse demands of facility users. The research design is made up of several connected parts that work together to contribute different angles to the overall investigation.

Literature Review

The literature review heavily relies on Suining Ding's book, 'Environment-Behavior Studies for Healthcare Design', which explores the integration of various Environmental Behavior Theories into the built environment, especially in medical facilities. The author provides insights into how research evidence and evidence-based design can inform healthcare design, offering design guidelines for each theory.
The theories discussed are applicable to psychiatric hospitals, although some studies or sections may be too specific for short-term acute patients, such as the elderly with dementia or long-term patients. Nonetheless, more general studies on elderly or visually impaired individuals are included, recognizing that psychiatric patients may belong to these demographics and experience similar challenges.
Other indepened studies or books have also been integrated such as Mahnke (1996).

Filedwork

The primary methods of gathering data are site visits, architectural analysis through observation, and staff and user interviews. The multidimensional perspective provided by photographs, sketches and floor plans enhances the qualitative data by visually documenting the architectural aspects. To make the fieldworkk research possible a board representative for each of the locations is contacted, to gain permission to conduct the study.

Location and Evaluation

The fieldwork research alongside the context case studies will be conducted in all three psychiatric hospitals of Albania: 'Ali Mihali' psychiatric hospital in Vlore, the psychiatric hospital of Elbasan and the 'Xhavit Gjata' in Tirana. This research excludes the psychiatric hospital in Shkodra.
Each of these context based case studies will be evaluated regarding the creation of stigma through the information provided by the literature research .

Observation

During the fieldwork, an observational analysis will be conducted by the researcher. During the observational analysis the architecture of the locations will be observed in order to draw conclusions based on the literature research and valuate the stigmatization of the mental health facility. Furthermore, the different users will be observed based on how they interact with the space and their surroundings, as well as other users. These observations will be translated into sketches, maps and text.

Informal Discussions

Originally the aim of this thesis was to conduct in depth interviews which would be recorded and transcribed. However, as requested by the administration, these interviews were conducted in the form of informal discussions, without any possibility to record or take pictures. Notes regarding the main results and conclusions of these conversations can be found in Fieldwork Booklet. While this is not an ideal methods for data collection, the author solemnly declares that all data presented in this research paper were collected reported with honesty and integrity. No data were fabricated, manipulated, or falsified in any way by the author. The findings presented herein are true and accurate representations of the discussions conducted during the course of this study in each of the facilities.

Survey

The survey consists of a series of online questions aiming to porvide information regarding the opinions of Albania's citizens on psychiatric facilities in the country, and their opinion on how it can be improved. Furthemore, the survey is used to prove the relevance and feasiblity of the hypotheses provided by the Contact Theory and The Place Attachment theory.
The survey consists of multiple choice questions and open-end ones.
All participants are given information regarding the search and informed of full confidentiality of their personal information. Additionally, apart from the first few questions, participants are allowed to not anser questions if they do not wish too. Furthermore, they are provided the space to offer suggestions, make requests or critique the survey.

Case Study

The thorough examination of several case studies of mental health facilities around the world forms the basis of the empirical research. The case studies showcase a wide range of facility types, architectural styles, and user requirements. Each of the case studies is selected on the basis of employing design strategies that aim to create a therapeutic environment

Ethical Considerations

The research is conducted in accordance with the highest ethical standards. Ethical considerations are integrated into all stages of the study process, ensuring that participants' rights and well-being are protected. The following ethical criteria govern the research:

- **Informed Consent:** All participants, including interviewees and expert panel members, receive detailed information on the research aims, procedures, and roles. They are advised to give their informed consent before participating in any study activities.

- **Confidentiality:** The confidentiality of participants is strictly preserved. Any personal or sensitive information supplied during interviews is anonymized and secured, ensuring that participants' privacy and identity are secure. This will be accomplished by supplying fictitious names and an abstract visual depiction of the individuals.

- **Privacy:** Interviews are conducted in settings that prioritize the privacy and comfort of participants. This includes providing secure and confidential spaces for interviews, enabling participants to express their views without reservation.

- **Debriefing:** Participants are debriefed after their involvement in the research, offering an opportunity to address any concerns or questions. This practice fosters transparency and ensures participants leave the research process feeling informed and valued.

- **Voluntary Participation:** Participation in the research is entirely voluntary. Participants are free to withdraw at any time without repercussions.

- **Beneficence:** The research aims to benefit society by contributing to the destigmatization of mental health facilities and the creation of more user-centered designs. While minimizing harm is prioritized, the research is designed to enhance understanding and improve the well-being of users.

Limitations

The research acknowledges certain limitations inherent in its design and execution. These limitations are important to consider when interpreting the findings and implications:

- **Contextual Specificity:** The study focuses on mental health facilities in Albania, which may limit the findings' applicability to other cultural or geographical situations. The architectural, socioeconomic, and cultural characteristics that distinguish Albania impact the research findings.

- **Subjectivity:** The qualitative nature of the research, including user discussions and author observations and understanding, introduces a degree of subjectivity in the data. Participants' perspectives and interpretations play a significant role in shaping the findings.

- **External Factors:** External influences, such as changes in healthcare laws or architectural restrictions, may have an impact on the viability of future design choices and recommendations. These elements, including political factors in general, are beyond the scope of this study. Important laws and regulations will be provided as informed by the interviewed professionals and psychiatric hospital staff.

- **Bias and Assumptions:** The study may accidentally add biases and assumptions. Awareness of potential biases is essential for a thorough and nuanced assessment of the data.

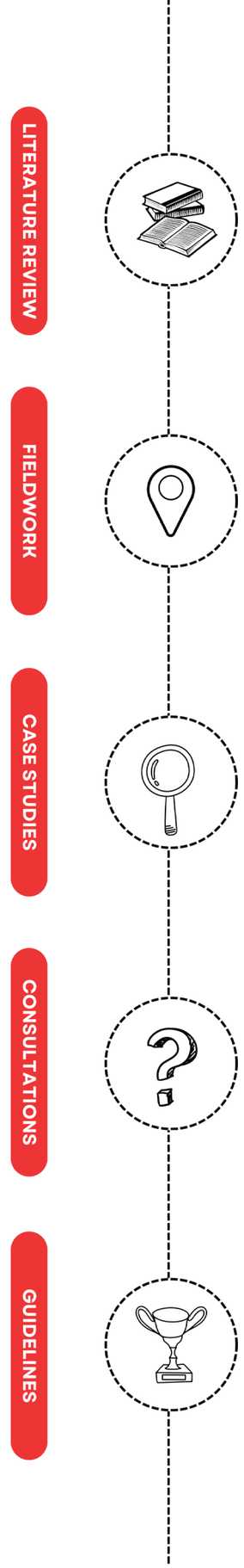


Figure 7: Research Process

04

Part I

Improving User Experience to Address Self-Stigma in Psychiatric Care Hospitals

4.0 Introduction

In societal perception, psychiatric hospitals are often viewed more as places of restriction than as healing environments (Ahad, Sanchez-Gonzalez, & Junquera, 2023). This perception contributes to the self-stigmatization of the patients and other users of these facilities. A study on the prevalence of self-stigma among psychiatric patients found that self-stigma is widespread and significantly impacts patients' self-esteem and treatment outcomes (Maharjan & Panthee, 2019).

Therefore, the first chapter explores how architectural design strategies can contribute to reducing self-stigma by creating therapeutic environments that prioritize dignity and well-being over institutional constraints.

Beginning with an overview of evidence-based theories in healthcare environments, this chapter integrates findings from a fieldwork study conducted across multiple psychiatric facilities in Albania. By synthesizing theoretical insights with practical observations, it aims to propose design strategies that enhance the user experience, foster comfort, and empower patients. These strategies are essential steps toward creating a supportive and stigma-free environment within psychiatric care settings.

4.1 Literature Review on Environmental Design Theories

Suining Ding's publication, "Environment-Behavior Studies for Healthcare Design," extensively examines how environmental elements impact user interaction within healthcare environments. Architects can utilize Ding's insights to create spaces that address user requirements and combat self-stigma among individuals.
Ding's book explores fundamental EB theories applied to healthcare design, with a focus on enhancing health and well-being using evidence-based methods. It emphasizes the importance of merging research with design decisions and targets interior design and architecture students as well as professionals. According to Ding, the aim of the book is to serve as a textbook or manual for architects and students to implement architectural design guidelines supported by research rather.
The chapter of literature research will review all the multiple theories and research compiled by ding and the guidelines set by each and supported by research. Additional sources have been included when supporting the claims of the reviewed theories. Considering that these are guidelines for general healthcare, observations and discussions during fieldwork will be used to discuss and assess its relevance for the context of psychiatric hospitals in Albania.
An extensive summary of the following literture research can be found in the Appendix.

Figure 8: Book Cover of Environment-behavior studies for healthcare design by Suining Ding, 2023

4.1 Environmental Cognition theory (Wayfnding theory)

Based on the empirical evidence from EB studies reviewed by Ding, creating a wayfinding system integrating visual cues, such as colors and landmarks, and providing an intuitive floor configuration is vital for optimal navigation in complex healthcare facilities.
According to Arthur and Passini (1992), effective wayfinding design in healthcare facilities promotes healing, reduces stress, and improves visitor safety and cognitive skills. Ulrich et al. (2010) and Marquardt (2011) highlight the significance of early integration of wayfinding components into design processes, emphasizing intuitive floor plans and environmental cues.
Carpman, Grant, and Simmons (1993) advocate for a comprehensive wayfinding system that includes clear signage and electronic displays, whereas Rooke et al. (2009) propose embedding physical forms for intuitive navigation. Baskaya et al. (2004) stress the importance of using landmarks and visual cues, particularly in symmetrical buildings. Multiple evidences highlight the importance of environmental cues such as landmarks, colors, and signage in wayfinding (Baskaya et al., 2004; Devlin, 2014; Huelat, 2007; Marquardt, 2011; Marquardt & Schmieg, 2009).
Additionally, design elements such as lighting, signage, materials, and decorative elements affect wayfinding, with inappropriate placement causing difficulties (Rousek et al., 2009). Environmental interventions to enhance wayfinding performance involve floor plan design and configuration, as well as environmental visual cues such as signage, furnishings, lighting, and colors.

Figure 9: Example of a wayfindings system using letters and colors.

4.2 Environmental Stress theory, therapeutic Environment theory, and Environmental Press theory

In this chapter Ding discusses the environment's impact on patient wellbeing. Research by Rubin, Owens, and Golden (1998) confirms the significant impact of the physical environment on clinical outcomes for patients. Similarly, studies by Ulrich (1984a, 1991, 2001), Ulrich et al. (2008), and Zimring, Joseph, & Choudhary (2004) further underscore the correlation between the physical environment and patient medical outcomes, as well as staff efficiency in healthcare settings.

4.2.1 Environmental Stress Theory

Researchers like Hans Selye, known for his work "The Stress of Life" (1956), pioneered the understanding of stress, introducing the concept of General Adaptive Syndrome (GAS). His findings, discussed in various publications (Cohen, 1986; Evans, 1984; Moore, 2020; Ulrich, 1984, 1991, 2020), revealed the body's universal response to environmental insults.
Stress, defined as an imbalance between environmental demands and response capabilities, has garnered significant attention due to its profound impact on well-being (Cohen, 1986; Evans, 1984). Stressors like crowding, noise, and air pollution can induce stress in individuals (Cohen, 1986; Evans, 1984). Roger Ulrich's Theory of Supportive Design, developed in the 1990s, underscores the importance of healthcare design in reducing stress and promoting well-being (Hamilton & Watkins, 2008).
Recent studies, such as Ulrich et al. (2020), demonstrate that natural environments, like outdoor gardens, near intensive care units (ICUs), can significantly alleviate stress in family members of ICU patients. Conversely, poor healthcare facility design neglects psychological and social needs, impeding patient recovery (Ulrich, 2000).
Ulrich's landmark study (1984) indicated that patients with views of nature recovered faster than those with views of brick walls. Exposure to natural environments has consistently shown stress-reducing effects (Parsons, 1991).
In summary, stress theory in environment behavior (EB) studies has greatly influenced healthcare design research, emphasizing the

need for supportive environments to enhance patient outcomes and well-being. EB studies contribute to healthcare design through theoretical frameworks, models, and research methods.

Supportive Design

Ding discusses the Theory of Supportive Design, which emphasizes creating environments that go beyond functional efficiency and building codes, aiming to promote wellness (Ruga, 1989; Ulrich, 2000). This approach recognizes the role of the physical environment in fostering patient recovery and coping with illness-related stress (Ulrich, 1991, 2000, 2001).
Healthcare environments should provide a sense of control, access to privacy, social support, and positive distractions to effectively address patient stress (Ulrich, 1991, 2000, 2001). Andrade et al. (2017) studied the relationship between supportive design features and patient stress, finding that favorable design elements correlated with reduced stress levels. The study confirmed the importance of control, privacy, social support, and positive distractions in alleviating stress for patients and caregivers (Andrade et al., 2017).

Perception of Control and Privacy

Environmental control refers to individuals' perceived ability to influence the physical environment they occupy (Lee & Brand, 2010). Studies comparing single private patient rooms with multi-bed patient rooms show that private rooms offer greater privacy and control (Chaudhury et al., 2005). Patients in private rooms can adjust environmental conditions according to their preferences, such as noise, visual access, temperature, and TV control (Patterson et al., 2017).
Additionally, multiple studies have found that patients' preferences in a health care environment can be accommodated by Ulrich's supportive design theory, including patients' privacy and control (Andrade et al., 2017; Devlin, Andrade, & Carvalho, 2016).
While the role of daylight is crucial, Ding argues that critical review of evidence does not suggest that having control over it reduces stress. While control over the environment is valued, its impact on stress reduction depends on design features that promote social support and positive distractions (Andrade et al., 2017). Control alone may not reduce stress, as demonstrated in previous research (Andrade & Devlin, 2015). Individual differences in the desire for control may moderate the relationship between control and stress (Andrade & Devlin, 2016).
Overall, environmental control may be less relevant than conditions fostering positive distraction and social support (Andrade et al., 2017).

Access to Social Support

In the theory of supportive design, social support is crucial for patient well-being. Studies by Cohen & Syme (1985) and Sarason & Sarason (1985) consistently show that strong social support lowers stress and promotes wellness. Ulrich (1991) emphasizes integrating social support into stress-reducing design theories.
Patterson et al. (2017) found that patients prioritize connection to others and quick access to belongings. Design strategies include providing convenient accommodations for patient families, comfortable waiting areas, and outdoor spaces for social interaction.

Positive Distractions

In evidence-based studies, positive distractions play a crucial role in healthcare environments. Defined by Ulrich (1981), positive distractions are elements that evoke positive feelings, capture attention, and prevent worrisome thoughts. Various forms of positive distractions, such as water features, landscapes, and artwork, have been identified in recent studies (Hathorn & Nanda, 2008; Kaplan & Kaplan, 1989; Marcus, 2007; Marcus & Barnes, 1999; Nanda et al., 2011; Ulrich & Parsons, 1992).
Nature, as a key positive distraction, has long been recognized for its stress-reducing effects (Marcus, 2007; Sternberg, 2009; Ulrich, 1984a; Ulrich, 1981). The integration of nature into healthcare settings dates back to ancient Greece, with the belief that natural views alleviate stress (Ulrich, 1991). Research continues to support the stress-reducing and restorative effects of visual contact with nature (Ulrich & Parsons, 1992). Table 4.1 summarizes stress-related research findings in healthcare environments discussed in this chapter.

4.2.2 Therapeutic Environmnent

The Therapeutic Environment theory draws from environmental psychology, psychoneuroimmunology, and neuroscience, emphasizing the impact of the built environment on human well-being (Kaplan, Kaplan, & Ryan, 1998; Ulrich, 1999, 2001; Zeisel, 2006). Studies have highlighted correlations between environmental characteristics and occupants' well-being (Day, Carreon, & Stump, 2000; Marquardt, Bueter, & Motzek, 2014). In healthcare facilities, the physical environment significantly influences patient outcomes, satisfaction, safety, staff efficiency, and organizational outcomes (Devlin & Arneill, 2003). To support patients' therapeutic and healing processes, healthcare design must offer a humane environment alongside clinical interventions (Canter & Canter, 1979).

Nature, Daylight and Window views

Recent studies have confirmed nature as a significant positive distraction and stress-reducing factor (Marcus, 2007; Sternberg, 2009; Ulrich, 1984a; Ulrich, 1981; Ulrich et al., 2020), supporting the traditional belief in nature's therapeutic effects (Ulrich & Parsons, 1992). Research underscores the benefits of healing environmental elements, including nature presence, reduced noise and crowding, soft lighting, and music availability (Sherman et al., 2005). Design features like natural lighting and views improve staff work-life quality (Mroczek et al., 2005), with daylight and window views significantly reducing occupational stress (Leather et al., 1998). Moreover, nurses exposed to nature views report lower stress levels (Pati et al., 2008), and increased daylight exposure correlates with higher job satisfaction (Alimoglu & Donmez, 2005). Access to daylight and nature views enhances wellness and job performance for medical staff (Zadeh et al., 2014). Daylight has been shown to boost cognitive performance (Münch et al., 2012) and reduce patients' length of stay (Joarder & Price, 2013). Healthcare facilities increasingly incorporate abundant daylight and window views, exemplified by designs like those in Baylor Medical Center in McKinney, Texas, and Midland Memorial Hospital.

Lighting

Malkin (1992) identifies key dimensions in healthcare design including scale, spatial relationships, materials, acoustics, lighting, and special population needs. Lighting, crucial for creating a healing environment, influences various health outcomes such as depression reduction and improved sleep (Urlich et al., 2004). Occupants in healthcare settings prefer natural light or clear lighting conditions, impacting their well-being (Leather et al., 1998; Verderber, 1986). Lighting affects human health by regulating circadian rhythms, crucial for healthcare workers' alertness (Joseph, 2006b). Considerations for lighting quality are vital for diverse populations, including the elderly and pediatric patients (Sherman, Shepley, et al., 2005). Studies advocate for improvements in lighting design, emphasizing softer, more residential-like lighting to enhance therapeutic environments (Devlin & Arneill, 2003; Gaminiesfahani, Lozanovska, & Tucker, 2020). Lighting serves as a crucial design element in multisensory treatment rooms, as seen in projects like the Robert Wood Johnson University Hospital emergency department.

Noise Control

Ulrich et al. (1991) highlight "stress recovery" or "restoration" as central concepts in environmental stress theory, which involves positive changes in psychological states. Studies emphasize the impact of noise on stress, blood pressure, and heart rate in healthcare settings (Sherman et al., 2005; Urlich et al., 2004). Poor sleep quality in healthcare environments exacerbates stress (BaHammam, 2006; Do□an et al., 2005; Giménez et al., 2017; Reid, 2001), prompting interventions like acoustic improvements and single occupancy rooms to mitigate noise and lighting disturbances (Hagerman et al., 2005; Philbin & Gray, 2002; Ulrich, 1991).

Art in the Theraupetic Environment

Artwork in healthcare environments provides therapeutic benefits by serving as positive distractions. Emotionally positive visual art, particularly depicting restorative nature scenes, can alleviate anxiety and agitation in mental health patients (Nanda et al., 2011). W

Figure 10: Window Views from Infusion Center in UPMC Memorial Hospital/Ambulatory Care Building: "UPMC Memorial," Designed by Stantec, Photo Courtesy of Jeffery Totaro

Figure 11: Photo showing artwork integrated into the walls of a pediatric hospital. Nicolas Party for Children's Hospital Los Angeles. Image courtesy RxART

Figure 12: Healing garden in Horatio's Garden, Queen Elizabeth national spinal injuries unit, Glasgow. The garden includes a variety of flowers to create variety in colors and smells for a better sensory experience. Courtesy of Queen Elizabeth University hospital

Similarly, visual arts in children's hospitals enhance experiences for children and families (Ullán & Belver, 2021). Themes such as waterscapes, natural landscapes, flowers, and gardens, along with figurative art displaying positive facial expressions, are known to reduce stress and aid pain relief (Huisman et al., 2012; Ulrich & Charmel, 2003). Nature-based video and still art also contribute to patient experience by reducing anxiety and stress (Nanda, 2011). These simple visual interventions, including video or still art, can improve patients' waiting experiences in emergency department waiting rooms (Nanda, 2011).

Healing Gardens

Healing gardens, highlighted in various studies, contribute significantly to creating therapeutic environments in healthcare settings. Gardens offer calming views, reduce stress, and enhance medical outcomes when well-designed. Viewing nature induces positive emotional, psychological, and physiological changes, decreasing negative emotions like anxiety (Hartig et al., 2003; Ulrich, 1979, 1991; Van den Berg et al., 2003). Healthcare designs often integrate gardens based on their practical, restorative, and therapeutic benefits (Marcus, 1999; Marcus & Barnes, 1999; Naderi & Shin, 2008; Sherman, Varni, et al., 2005; Ulrich, 1999). Post-occupancy evaluations indicate reduced stress and improved emotional well-being for patients and families using hospital gardens (Sherman, Varni, et al., 2005; Whitehouse et al., 2001). Access to nature, whether through gardens or murals, positively impacts physical and emotional measures, including pain and stress reduction (Pearson et al., 2019; Sherman, Shepley, et al., 2005; Sherman, Varni, et al., 2005). Pediatric patients also benefit from nature's mood-enhancing effects (Sherman, Shepley, et al., 2005). Well-designed gardens provide restorative views, social support, and escape from clinical environments, enhancing outcomes (Ulrich, 1999; Ulrich et al., 2008). Gardens for pediatric facilities should include nature elements and features for both relaxation and active play (Sherman, Varni, et al., 2005). The Texas Center for Proton Therapy's healing garden exemplifies a space for relaxation and stress relief for patients and caregivers.

4.2.3 Environmental Press theory

M. Powell Lawton (1998) discusses three early theoretical frameworks for environment and aging, emphasizing their implications for designing residential settings for the aged. *The Competence-Press Model* by Lawton and Nahemow (1973) describes the relationship between individual competence and environmental challenge, suggesting that less competent individuals are more impacted by environmental challenges. *Kahana's (year) Person-Environment Congruence Model* emphasizes favorable outcomes when person and environment characteristics align, while the *Stress-Theoretical Model* explores dynamic person-environment interactions.
While this part of theprimarily addresses the needs of the elderly in long-term care facilities, many of the design principles and recommendations can be adapted to support psychiatric patients, particularly those with cognitive impairments, in healthcare settings.

Orientation and wayfinding

Spatial skills tend to decline with age, impacting residents' ability to navigate long-term care and assisted living facilities (Rule, Milke, & Dobbs, 1992). The configuration of these facilities significantly influences residents' orientation and independence. Monotonous architectural designs, long corridors with numerous doors, and limited access to windows contribute to confusion and disorientation (Joseph, 2006a; Passini et al., 2000). Research suggests that I-shaped corridors may lead to a higher loss of identity and vitality compared to other layouts (Chaudhury et al., 2018). Despite color-coded floors, residents often rely on furniture and wall numbers for orientation, emphasizing the importance of effective signage (Passini et al., 2000). Floor patterns and dark lines can further disorient individuals and cause anxiety in such environments. These findings can apply to the situation of psychiatric hospitals where patients can be senior citizens or are likely to have cognitive

Homelike institutional features

Early studies in long-term care facilities demonstrated that homelike environments are associated with improved emotional and intellectual functioning, increased social interaction, autonomy, and reduced agitation (Annerstedt, 1994; Cohen-Mansfeld & Werner, 1998). Recent research corroborates these findings, showing that residents in homelike environments exhibit improved overall performance, reduced agitation, anxiety, and social withdrawal (Day & Cohen, 2000; Schwarz, Chaudhury, & Tofe, 2004; Zeisel et al., 2003). A warm and colorful ambiance in these environments further supports engagement in daily activities and informal social interaction (Campo & Chaudhury, 2012; Day & Cohen, 2000; Milke et al., 2009). Staff and family members also recognize homelike environments as crucial for decreasing behavioral disruptions and enhancing residents' quality of life (Garcia et al., 2012; Gnaedinger et al., 2007). Non-institutional design features are consistently advocated to promote resident well-being in institutional settings (Joseph, 2006a).

Autonomy, Control, Choice, and Social Interaction

Personal autonomy is highlighted as a significant aspect of elderly individuals' quality of life in long-term care and assisted living facilities, synonymous with terms like control, choice, and personal autonomy (Schwarz, 1999). Older adults in these settings may reduce social interaction voluntarily due to privacy concerns or involuntarily due to environmental factors (Rule et al., 1992). Studies indicate a link between privacy and control over social interaction, emphasizing the importance of single rooms to regulate privacy and social engagement (Ittelson, Proshansky, & Rivlin, 1972; Pinet, 1999). Unit size in these facilities significantly influences residents' behavioral and psychological outcomes, with smaller units fostering more social interaction and participation in activities (de Rooij et al., 2012; Smith, Mathews, & Gresham, 2010; Zeisel et al., 2003). Furniture arrangement in public spaces can further enhance social interaction, especially when grouped flexibly (de Rooij et al., 2012; Smith, Mathews, & Gresham, 2010; Zeisel et al., 2003). Additionally, the creation of small-scale dining areas with homelike décor is associated with reduced anxiety, agitation, and increased social interaction among residents

(Roberts, 2011; Schwarz et al., 2004).

Sensory Stimulation

Ding reviews research literature that emphasizes sensory stimulation as a critical theme, particularly regarding noise and lighting concerns in healthcare facilities. According to the World Health Organization (1999), recommended sound levels for healthcare ward rooms and residential dwellings are 30–40 dB and 35–45 dB, respectively. However, noise levels in nursing homes often exceed these standards, ranging from 52 to 57 dB in residents' rooms and 59 to 60 dB in common areas. Increased noise levels correlate with reduced social interaction and heightened agitation. Furthermore, exposure to bright light throughout the day has been linked to increased total sleep duration, reduced restlessness, and modest improvements in mood, cognition, and functional decline. Higher lighting levels during the daytime are associated with enhanced sleep quality and mood. (Sources: Bharathan et al., 2007; Joosse, 2011, 2012; Garcia et al., 2012; Sloane et al., 2007; Van Hoof et al., 2009).
Sensory garden can be beneficial for psychiatric care patients (Albuquerque, 2023). For instance, sensory gardens benefit individuals with autism by minimizing sensory overload and providing a tranquil therapy space. For those with ADHD, these gardens aid focus and mental calmness amid natural surroundings, countering technological overstimulation.

Figure 13: Photo from Dartmouth Hitchcock Medical Center Patient Pavilion, showing the arrangement of furniture in the lobby. Courtesy of Dartmouth Hitchcock Medical Center Lobby

Figure 14: Sensory Room for patients with prolonged disorders of consciousness. Courtesy of Royal Hospital for neuro-disability. Colour-shifting lights, projected images and sounds, tactile objects, and even scents can both stimulate patients and help them relax.

Figure 15: Image showing art and colors incorporated within a medical facility. Courtesy of Perkins&Will

4.3 Privacy, Personal Space, Territoriality, and Crowding

Privacy, personal space, and territorial behavior are interconnected concepts crucial for understanding human behavior in built environments. According to Ding privacy, defined by as selective control of access to oneself or one's group, includes physical, psychological, social, and informational dimensions. Physical privacy, facilitated by elements like doors and windows, relates closely to personal space and territoriality, as proposed by Altman (1975). Edward Hall's work defines personal space through intimate, personal, social, and public zones, while Robert Sommer emphasizes personal space as an emotionally charged boundary. Cultural backgrounds influence perceptions of privacy and personal space. Understanding these concepts is vital for designing environments that balance individual autonomy with social interaction within a psychiatric care hospital.
The chapter highlights the importance of privacy, interpersonal distance, and cultural factors in human interactions, as emphasized by Environment-Behavior (EB) studies. It discusses privacy in physical and speech dimensions, intertwined with personal space, territoriality, and crowding. EB research elucidates their significant impact on human-environment experiences, informing healthcare design research. Design interventions can address privacy, personal space, territoriality, and crowding concerns, providing insights for healthcare design practice.

Figure 16: Personal Space in the Open Lobby in Kentucky Children's Hospital, Designed by HGA, GBBN, Photo Courtesy of Halkin Mason Photography.

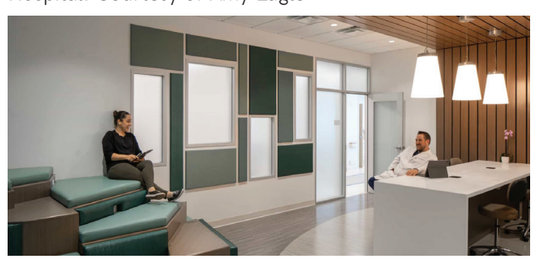
Territoriality and Crowding

Ding argues how territoriality, personal space, privacy, and crowding are distinct yet interrelated concepts crucial in understanding human behavior. Territoriality involves defending fixed geographic spaces, while personal space refers to the invisible boundary individuals carry. Privacy grants access to oneself and encompasses visual, auditory, or informational aspects. Crowding, a response to density, leads to discomfort and stress. Cultural factors influence reactions to density and proximity. Research in healthcare design integrates these concepts, aiding in effective environmental interventions (Bechtel, 1997; Sommer, 1969; Altman, 1975; Gove, Hughes, & Galle, 1979; Freedman, 1979).

Sound Privacy in the Patient Room

Research on privacy in healthcare settings is limited, with a focus on physical aspects like sound control (Leino-Kilpia et al., 2001). Studies on noise levels in hospitals highlight noise as a significant stressor for patients (Bayo, García, & García, 1995; Griffn, 1992; Hilton, 1985). More research on physical privacy in patient rooms indicates higher satisfaction among patients in private rooms (Bobrow & Thomas, 2000; Burden, 1998; Clipson, 1973; Morgan, 1999; Solovy, 2002). Roommates in shared rooms can lead to dissatisfaction due to noise and other factors (Chaudhury, Mahmood, & Valente, 2005). Additionally, inadequate speech privacy may affect patient satisfaction and healthcare outcomes (Barlas, Sama, Ward, & Lesser, 2001). Single-bed rooms offer better speech privacy compared to multi-occupancy rooms (Ulrich et al., 2008b), while hard-wall partitions are preferred over curtains when single rooms are unavailable (Barlas et al., 2001; Karro et al., 2005; Mlinek & Pierce, 1997).

Figure 17: Staff Respite area in Royal Liverpool University Hospital. Courtesy of Amy Eagle



Personal Space in the Respite Areas

Personal space, defined by Sommer (1969), is crucial for privacy in healthcare environments. Physicians require personal space in indoor gardens for relaxation before operations, while nurses need outdoor spaces for breaks. Patients in waiting rooms seek personal areas for private conversations. Studies reveal patients' preference for personalized rooms (Hesselink et al., 2020) and stress reduction in respite settings with nature elements (Ulrich et al., 2020). MacAllister, Zimring, and Ryherd's study (2016) links spatial environmental variables to health outcomes. Privacy-related variables include acoustics, room type, visibility, and layout. Barnes (2006) emphasizes the importance of diverse spaces in long-term care facilities to accommodate residents' need for personal space and social interaction.

Territoriality and crowding in Long-term care facilities and emergency departments

Various studies in EB research have explored territorial behavior and crowding within healthcare settings. Morhayim (2019) reveals that areas near patient rooms are used for non-private activities, while Algase et al. (2011) highlight higher crowding estimates in nursing homes, especially during routine activities like meals. Crowding in emergency departments (EDs) remains a significant concern, linked to adverse outcomes such as patient dissatisfaction and medical errors (Hwang et al., 2011; Lin et al., 2013). Valipoor et al. (2021) demonstrate that adding dedicated triage spaces reduces length of stay and hallway congestion in EDs. These findings underscore the importance of addressing crowding to improve healthcare quality and patient outcomes.

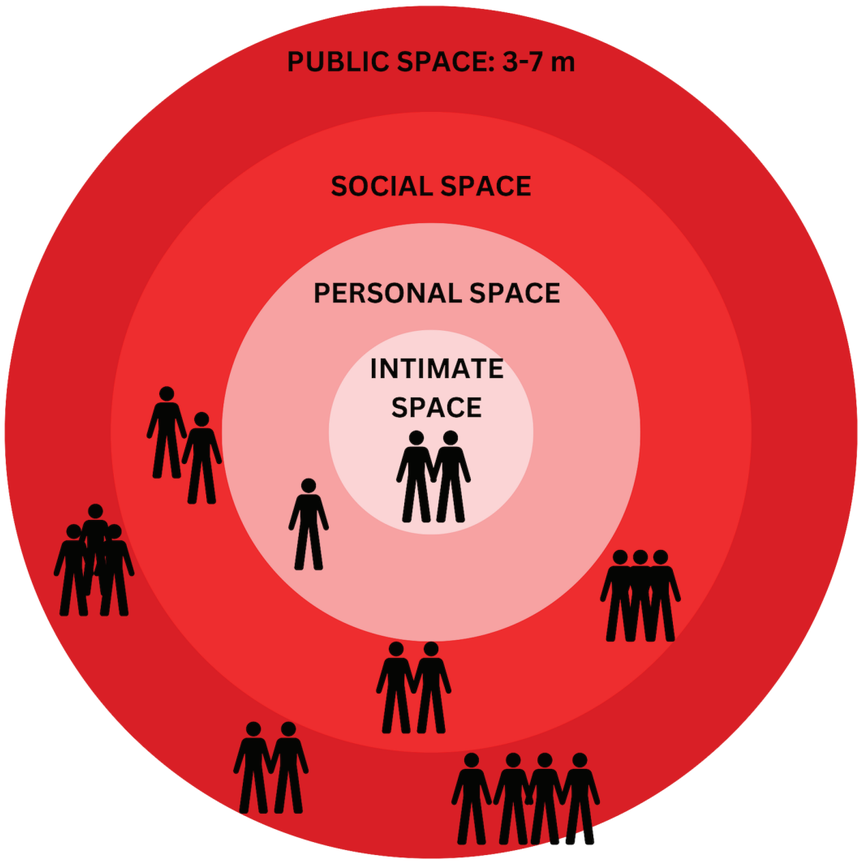


Figure 18: Four Basic Zones of Interpersonal Distance (Based upon Hall, 1966) inspired by Suining Ding (2023)

4.4 Control Theory

In her book, Suining Ding emphasizes the significance of control within built environments, reflecting humans' inherent need for control over their surroundings. Control, defined as the ability to regulate exposure to one's environment, has been extensively studied, demonstrating its positive impact on individuals' well-being (Lee & Brand, 2005; Evans et al., 1987). Evans et al. (1993) delineate four dimensions of control: environmental affordances, behavioral competencies, control cognitions, and control motivations, illustrating the multifaceted nature of control perception. However, dysfunctional control may arise when there's a mismatch between environmental affordances and individual competencies or motivations (Evans et al., 1993). Despite its generally positive influence, lack of control can lead to negative consequences, particularly evident in healthcare settings where patients face unfamiliar and stressful environments (Andrade & Devlin, 2016). While the notion that more control is better is widespread, recent studies suggest that individual preferences and characteristics may modulate the effects of control, with high desirability for control correlating with stress reduction in controlled environments (Andrade & Devlin, 2016; Evans et al., 1993).

Control in Single Room vs Shared Rooms

Control emerges as a pivotal element in therapeutic environments, with patients expressing a strong desire for influence over treatment, ambient conditions, privacy, and assistance (Hesselink et al., 2020). Optimal healing environments prioritize interpersonal support, facilitating convenient contact with caregivers and family members. Single-occupancy patient rooms have garnered attention for meeting these needs effectively. Literature reviews by Ulrich et al. (2008) and Van de Glind et al. (2007) underscore the benefits of single-bed rooms, which afford patients greater control over environmental factors like lighting, sound, and privacy (Chaudhury, Mahmood, & Valente, 2005; Ulrich et al., 2008; Van de Glind et al., 2007). Studies, such as Langer's (1983) research in nursing homes, highlight that individuals with control over their surroundings experience better health and well-being, emphasizing the profound impact of control in long-term care facilities for the elderly.

Control over Light, Temperature and Lighting

Healthcare settings expose patients to stressors from illnesses and their physical/social environments, emphasizing the importance of providing patients with a sense of control over their surroundings (Ulrich, 1991). The theory of supportive design underscores the necessity of patient control, which can be hindered by noisy environments, confusing wayfinding systems, and limited control over lighting and temperature (Andrade & Devlin, 2015; Ulrich, 1991). Research by Ulrich, Simons, & Miles (2003) suggests that patients' blood pressure decreases when they have control over the television in their rooms. Studies also highlight the stress-reducing effects of patient control over environmental variables such as bed position, air temperature, lights, sound, and natural light (Huisman et al., 2012; Steptoe & Appels, 1989). A study on evidence-based design (EBD) principles in healthcare facilities found extensive implementation of user control features like temperature, lighting, and natural light, aiming for optimal patient outcomes (Bingham et al., 2020).

Supervision and control over patients - Decentralized Nurse Stations

Ding mentions that Control Theory in healthcare design addresses patients' and caregivers' needs for control and supervision. Nurses often face stress and burnout due to their high responsibility and low control roles, compounded by poorly designed work environments lacking break areas (Chaudhury, Mahmood, & Valente, 2009; Shumaker & Pequegnat, 1989; Ulrich, 1991; Williams, Dawson, & Kristjanson, 2008). Control and supervision over patients are central to nursing, rooted in historical practices (Kramer & Schmalenberg, 2003; Thomson & Goldin, 1975). The debate between central and decentralized nurse stations revolves around information management and patient supervision effectiveness. Decentralized stations with nurse alcoves outside patient rooms offer enhanced supervision (McCullough, 2009).

Control of patient falls, patient safety, walking distances, and communication

Decentralized nurse stations, combined with nurse alcoves outside patient rooms, offer advantages such as preventing patient falls, enhancing patient safety, and increasing nurse accessibility to patients, as supported by research (Copeland & Chambers, 2017; Fay et al., 2017; Durham & Kenyon, 2019). However, concerns about declining teamwork and feelings of isolation in decentralized units have been raised (Pati et al., 2015; Zborowsky et al., 2010). Studies suggest a "hybrid" nursing design model, combining centralized and decentralized elements, to address these issues (Fay et al., 2019; Zborowsky et al., 2010). The hybrid model involves various combinations of components like central stations, sub-nurse stations, nurse alcoves, and mobile workstations (Cai & Zimring, 2012). This approach aims to optimize patient supervision while fostering teamwork and collaboration.

4.5 Environmental Preference

Environmental Preference Theory, as proposed by Kaplan, Kaplan, and Brown (1989), asserts that individuals favor engaging and visually appealing built environments over simplistic ones. Kaplan (1987) identified four key principles: complexity, coherence, legibility, and mystery. This theory guides research on the relationship between environment and well-being, especially in healthcare settings, where preferences for access to nature, daylight, and calming window views have been noted (Ulrich, 1993; Kaplan & Kaplan, 1989; Ulrich, 1984).
Studies by Thake et al. (2017, 2020) examine preferences for nature scenes and their role in emotional restoration. Lu, Cai, and Bosch (2017) found variations in patient privacy preferences in healthcare settings. Research underscores the impact of physical attributes and environmental features on patient well-being and medical outcomes.

Preference of natural scenes

The belief in nature's therapeutic benefits dates back to ancient civilizations like Greece and Rome, where healing temples were set in natural, serene environments (Sternberg, 2009). Ancient Egyptian and Chinese gardens also served as vital connections to nature (Ulrich, 1993). Modern research, underpinned by theories like the Stress Recovery Theory (Ulrich, 1983) and Attention Restoration Theory (Kaplan, 1995), underscores nature's role in reducing stress and enhancing well-being (Hartig et al., 2003). Healthcare design reflects these findings, with gardens integrated to offer patients restorative views and stress relief (Marcus, 1999; Ulrich et al., 2008). For instance, the healing garden at UPMC Memorial Hospital provides patients and caregivers with natural light and a calming environment (Sherman et al., 2005).

Preference of visual arts - Positive Distractions

Research underscores the significant impact of positive distractions, such as visual art, on patient outcomes in healthcare settings (Nanda et al., 2011; Ulrich & Charmel, 2003). Art, particularly calming nature scenes, can positively influence health outcomes and reduce stress and anxiety (Ulrich, 1991; Ulrich et al., 2003). Studies demonstrate that nature scenes and virtual reality interventions can alleviate pain, anxiety, and restless behavior in patients (Diette et al., 2003; Miller et al., 1992; Nanda, 2011; Schneider et al., 2003). For instance, artwork at Virtua Samson Cancer Center and custom murals in pediatric units at UPMC Harrisburg contribute to stress reduction and patient well-being. Preferences for appropriate visual stimuli vary by age group, with nature elements being generally preferred, especially in pediatric settings (Nanda et al., 2009). Certain types of artwork, such as representational images with positive emotional themes, are associated with stress reduction and improved outcomes (Ulrich et al., 2003). However, abstract or emotionally challenging images may evoke negative reactions among patients.

Preference of physical attributes in the hea;thcare environment

Research in healthcare environments reveals user preferences for physical attributes such as privacy, comfortable seating, and positive distractions, enhancing perceptions of care quality (Panda, Garg, & Shah, 2015; Jafarifroozabadi et al., 2021; Arneill & Devlin, 2002). Studies show children prefer music, interactive activities, and visually stimulating elements in pediatric dentistry waiting areas (Panda et al., 2015). Well-furnished, well-lit environments correlate with higher perceived quality, satisfaction, and reduced anxiety (Becker & Douglass, 2008). Patient-centered care emphasizes the importance of design interventions for patient-friendly environments (Carpman, Grant, & Simmons, 1993; Malkin, 1992). Patients expect supportive room designs offering comfort, connection, and control over the environment (Patterson et al., 2017; Devlin & Arneill, 2003; Kotzer et al., 2011).

Preference of Daylight and Window Views

Multiple studies underscore the importance of healthcare design in promoting positive patient outcomes and staff well-being (Altimier, 2004; Chaudhury et al., 2006; Kamali & Abbas, 2012; Mahmood et al., 2011; Sternberg, 2009). Roger Ulrich's seminal study in 1984 demonstrated that patients heal faster in hospital rooms with natural views (Ulrich, 1984). Rubin et al. (1997) found suggestive evidence linking designed environments to clinical outcomes. Elements such as nature presence, reduced noise, soft lighting, and music benefit patients' healing (Sherman, Shepley, & Varni, 2005). Specific physical attributes like natural light and live music improve staff perception of work quality (Mroczek et al., 2005). Natural light and window views enhance employee satisfaction and reduce stress (Leather et al., 1998; Aries, Veitch, & Newsham, 2010). Nurses with access to daylight report lower stress levels and higher job satisfaction (Pati, Harvey, & Barach, 2008; Alimoglu & Donmez, 2005). Maximizing access to nature views and daylight improves nursing staff wellness and job performance (Zadeh et al., 2014). Daylight has been found to enhance cognitive performance in healthcare environments (Münch et al., 2012).

Figure 19: Simulation of nature in through ceiling art as Positive Distraction in Virtua Samson Cancer Center, Designed by Francis Cauffman Architects, Photo courtesy of Jeffery Totaro.

4.6 Environmental Perception, Place Attachment Theory, and Environmental affordance theory

4.6.1 Environmental Perception (Gestalt Theory)

Environmental perception draws from Gestalt Theory and James J. Gibson's Ecological Approach to Visual Perception (Gibson, 1979; Bechtel, 1997). Gestalt Theory explains how individuals organize stimuli, emphasizing that the whole is greater than its parts (Bechtel, 1997; Kopec, 2006; Lang, 1987). Gestalt laws include Closure, Similarity, Proximity, Symmetry, Continuation, and Figure-Ground principles (Kopec, 2006). These theories inform design recommendations for accommodating diverse perceptions in healthcare and other environments.

4.6.2 Place Attachment Theory

Place attachment refers to the emotional bond individuals develop with a geographic area (Hay, 1998). It involves feelings of belonging and forms a part of one's identity (Nussbaumer, 2009). Components like biological, environmental, psychological, and sociocultural factors influence place attachment (Low & Altman, 1992). Reasons for attachment include the deep meaning of settings, their relation to identity, and their restorative nature (Nussbaumer, 2009). Place attachment contributes to well-being through characteristics, opportunities, and a sense of belonging (Kopec, 2006). Zavotka and Teaford (1997) proposed the Social Space Attachment Model, highlighting privacy, continuity, and personalization in shared spaces (Rubinstein, 1989; Zavotka & Teaford, 1997). Designing social spaces in assisted living facilities enhances residents' attachment (Boschetti, 1990, 1995; Rubinstein & Parmelee, 1992). Studies explore emotional embeddedness, security, self-identity, and well-being relative to place attachment (Brown & Perkins, 1992; Boschetti, 1995; Rubinstein & Parmelee, 1992).

4.6.3 Environmental Affordance Theory

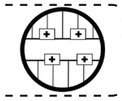
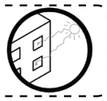
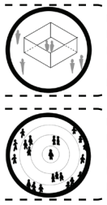
Environmental affordance theory, rooted in Gibson's work, explores how environments offer opportunities for action and influence human behavior (Gibson, 1977, 1979). Affordances represent the functional potential of environmental features and can promote, constrain, or be insignificant to human actions (Topo et al., 2012). Through affordances, individuals perceive environments as supportive or not of their needs and actions. Studies show how affordances impact human behavior in various settings, such as healthcare environments for dementia patients and spaces encouraging family involvement in patient care (Bardenhagen & Rodiek, 2016; Choi & Bosch, 2013). While the built environment shapes potential behavior through affordances, not all affordances are perceived or utilized by individuals, depending on their experiences, motivations, and cultural backgrounds (Day et al., 2000; Marquardt, 2011). Understanding the interplay between perception, cognition, and environmental affordances is crucial for designing supportive environments (Choi & Bosch, 2013).

4.7 Color, Environment and Human Response

In his book "Color, Environment, and Human Response," Mahnke delves into the impact of color and environment on human behavior. He suggests that earth tones are most conducive to creating a calming atmosphere. Studies he cites indicate a preference for walls adorned with natural elements like wood or natural stone over those with vibrant colors. Concrete, when gray, can appear monotonous, while excessively bright colors may be off-putting. For instance, intense red hues have been linked to increased aggression and anxiety, while yellow can be overly stimulating. However, toned-down versions of these colors can offer excitement and enhance productivity, respectively.
Mahnke also notes the calming effects of blue light on patients, making blue a preferred choice for creating serene environments. Green is commonly associated with healing properties, although Mahnke warns against using bright green or shades of bright mint, which might prove irritating to patients.

KEY TAKE AWAYS

EB DESIGN STRATEGIES

1	**Wayfinding Systems:** Implementing clear and intuitive wayfinding systems using visual cues such as colors and landmarks can promote healing, reduce stress, and improve safety (Arthur & Passini, 1992; Ulrich et al., 2010).	
2	**Intuitive Circulation:** Designing intuitive pathways with simple, direct routes and clear signage can reduce confusion and disorientation, especially for patients with cognitive impairments (Baskaya et al., 2004).	
3	**Decentralized Nurse Stations:** Using decentralized nurse stations can increase accessibility and visibility while maintaining privacy, improving supervision and reducing stress for both patients and staff (McCullough, 2009).	
4	**Non-Institutional Design:** Utilizing residential-style furnishings, warm colors, and natural materials can create a home-like atmosphere, reducing feelings of confinement and improving patient comfort, thus promoting emotional well-being (Joseph, 2006a).	
5	**Natural Materials and Colors:** Incorporating natural materials such as wood and stone in the design can create a calming environment and help connect patients with nature, reducing stress and anxiety (Marcus & Barnes, 1999; Mahnke,1986).	
6	**Abundant Daylight:** Maximizing the use of natural light through large windows and skylights can improve mood, reduce stress, and shorten hospital stays for patients (Ulrich, 1984).	
7	**Access to Greenery:** Providing access to gardens and green spaces can promote emotional and physical well-being, offering restorative benefits and reducing stress (Ulrich, 1999; Marcus, 2007).	
8	**Intimate Spaces:** Creating small, intimate areas for personal reflection and privacy can help patients feel safe and secure, which is crucial for their mental health recovery (Andrade et al., 2017).	
9	**Multiple Layers of Privacy:** Ensuring multiple layers of privacy, from private rooms to semi-private communal areas, can cater to varying patient needs, promoting autonomy and reducing stress (Ulrich et al., 2008).	
10	**Biodiversity:** Incorporating diverse plant species in outdoor and indoor spaces can enhance the therapeutic effect of green spaces and improve the overall environmental quality (Hartig et al., 2003).	
11	**Artwork and Positive Distractions**: Including artwork, music, and interactive activities as positive distractions can significantly reduce stress and anxiety, providing mental stimulation and a sense of normalcy (Nanda et al., 2011).	
12	**Homelike Furniture:** Furnishing spaces with comfortable, home-like furniture can enhance patient comfort and reduce agitation, promoting a sense of well-being (Annerstedt, 1994).	
13	**Single (minimum) Patients Rooms:** Providing single occupancy rooms can ensure privacy and control, allowing patients greater control over their environment, improving privacy and reducing stress (Chaudhury, Mahmood, & Valente, 2005).	
14	**Family Zones:** Designing areas where patients can comfortably interact with their families can support social interactions, which are crucial for patient recovery and well-being (Cohen & Syme, 1985).	
15	**Noise Control Wall Divisions:** Using wall divisions and materials that control noise can create a calm environment, as reducing noise levels is essential for stress recovery and ensuring restful sleep (Ulrich et al., 2004).	
16	**Respite Spaces for Caregivers:** Providing quiet, comfortable spaces for caregivers to rest and recharge can help reduce caregiver stress and prevent burnout, enhancing the quality of care they provide (Chaudhury, Mahmood, & Valente, 2009).	

4.8 Reviewing the implementation of EB Design strategies in context

4.8.1 Current Situation of Albanian Pscyhiatric Hospitals

In the realm of psychiatric care, different types of facilities stand as pivotal institutions, each serving distinct purposes tailored to different needs (WHO, 2022).

a. Inpatient Psychiatric Units: These units are often part of general hospitals or standalone psychiatric hospitals. They offer 24/7 care for individuals experiencing acute psychiatric crises. Inpatient units provide a safe and structured environment for assessment, stabilization, and intensive treatment under the supervision of psychiatrists and mental health professionals.

b. Psychiatric Emergency Departments (EDs): Psychiatric EDs cater specifically to individuals experiencing acute mental health crises. They provide immediate assessment, crisis intervention, and stabilization services for individuals in distress. Psychiatric EDs often have specialized staff trained in managing psychiatric emergencies and coordinating appropriate follow-up care.

c. Residential Treatment Centers: Residential treatment centers offer longer-term care for individuals requiring intensive psychiatric treatment and support beyond acute stabilization. These facilities provide a therapeutic environment where patients receive comprehensive psychiatric care, medication management, therapy, and life skills training to facilitate recovery and rehabilitation.

While usually these functions are placed within distinct facilities, in Albania, the delineation between different mental health functions and facilities often blurs, presenting a unique landscape within the country's healthcare system.
In Elbasan, while officially designated as a hospital (it is officially called 'The Psychiatric Hospital of Elbasan'), the institution primarily emphasizes residential treatment over acute psychiatric care as observed during the fieldwork. This emphasis underscores its commitment to providing extended care and support for individuals requiring intensive psychiatric treatment beyond the acute phase of their conditions.
Conversely, mental health facilities in Tirana's 'Xhavit Gjata' Psychiatric Hospital' and Vlora's 'Ali Mihali' Psychiatric Hospital embody a mixture of functions, encompassing elements of both acute psychiatric care and residential treatment. However, it is important to note that Tirana is part of the university hospital 'Nene Tereza' .
A drawback of these facilities is that they were built to handle the capacity of past demand. In the case of Tirana, 'Xhavit Gjata' was built for a population that did not exceed that only reached 250,000 in the 80s, while the capital's current population exceeds 1 million (almost half of the country's population).
Observations at the mental health facilities revealed a consistent impression of hospitals rather than therapeutic spaces. The prevailing perception of mental health institutions as clinical and isolating may be strengthened by this early impression, which could lead to stigmatization. Though the Vlora hospital (restored in 2016) is by far the most up-to-date and well-kept, there is varying degrees of structural deterioration in the buildings in Tirana and Elbasan. Concerns concerning the suitability of the physical setting for mental health care are raised by the necessity for additional restoration and development, especially in Elbasan (last restored in 2006). There are plans of restoration for the Buildings in Vlora (see Figures XX and XX) and Tirana. The building in Elbasan receives a d lot of funding and volunteers particularly from the Netherlands and the organization called 'Hoop voor Albanie'. To gain more insight regarding these particular facilities and see the images produced during the filedwork, please refer to the 'Fieldwork Booklet' by the author found in the TU Delft repository.

Figure 20: Sketch of the Xhavit Gjata psychiatric hospital in Tirana

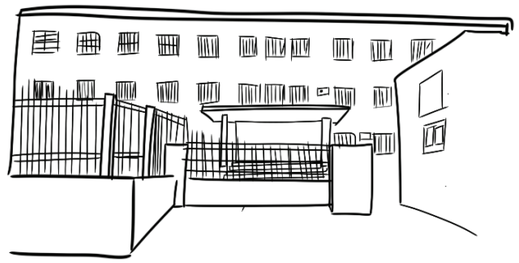


Figure 21: Sketch of the psychiatric hospital in Elbasan

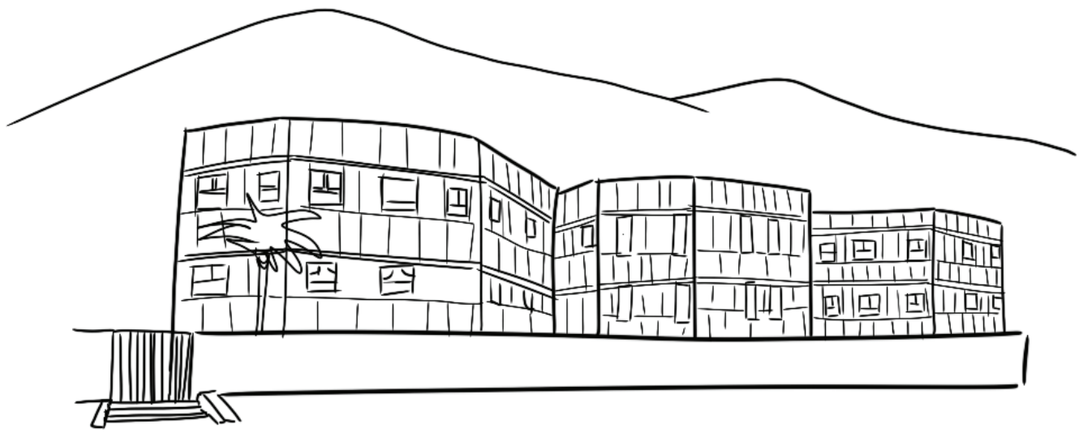


Figure 22: Sketch of the Alo Mihali psychiatric hospital in Vlore

4.8.2 Users of pscyhiatric hospitals

During fieldwork in Albanian psychiatric hospitals, insights were gathered on the dynamics of different user groups: patients, caregivers, visitors, and child patients. By examining each group's perspectives, challenges, and interactions, this research aims to illuminate the complexities in psychiatric care settings.

Users are divided into four subgroups:
Patients: Individuals requiring mental health support, treatment, and care.
Child Patients: Patients under 18, who may have different needs than adults.
Caregivers: Staff providing medical or supportive care, from therapy to daily assistance.
Visitors: Family members, acquaintances, or others accessing the facility without providing or receiving care.
Further subgrouping, such as separating medical staff from security officers, was not done due to limited participant availability. Despite being included in the fieldwork, child patients will not be addressed in this paper, focusing on adult patients.. This research includes observations of user interactions and discussions with caregivers and visitors. Direct patient contact was restricted to avoid disrupting recovery, so caregivers provided indirect insights into patient behaviors. Detailed maps of user interactions with spaces are available in the 'Fieldwork booklet'.

Patients

Patients are the primary demographic in psychiatric hospitals, seeking mental health support for conditions spanning from mood disorders to psychosis. Their experiences are crucial for assessing the quality of mental health services provided in a psychiatric hospital.
This research focuses on short-term psychiatric patients seeking brief evaluations or treatments for conditions such as acute psychiatric episodes, crisis intervention, or medication adjustments. These patients, referred to as acute care patients, require immediate and intensive interventions but are expected to leave the facility once stabilized, typically ranging between a few days to a few months. Unlike long-term psychiatric patients who need ongoing, extended care for chronic conditions, short-term care before returning to their normal environments. The key distinction lies in the duration and intensity of care required, with short-term patients needing brief, intensive treatment and long-term patients requiring prolonged, continuous care.

While the therapy and treatment of the patients is tailored to their diagnosis, the caregivers divided the patients into 4 types to cater to their needs :

TYPE 1: Calmer patients. These patients exhibited more calm and cooperative behavior and usually required less safety precautions and minimum monitoring. The goal is to treat the patients and provide a therapeutic environment.

TYPE 2: Patients that are dangerous to themselves (suicidal tendencies). These patients exhibited anxious, paranoid or depressive tendencies. They required moderate monitoring and benefited from group therapy and socialization. The immediate goal is to cheer and help the patient so that they continue to receive treatment.

TYPE 3: Patients that are dangerous to others (aggressive tendencies). They benefited from calmer, non-triggering spaces, requiring more restriction and isolation, as they could pose a threat or danger to other patients or staff. Caregivers required more security when dealing with these patients. The immediate goal is to calm down the patient so that they can continue to receive treatment.

TYPE 4: Out- patients: patients that only frequent the facility for day treatment and live in their own homes. What is important for these patients is efficiency, autonomy and a therapeutic environment. The goal is to provide treatment for the patient.

Nevertheless, as mentioned by caregivers in the visited hospitals the duration of a patients stay can last from a few days to months, depending on the severity of their condition. Furthermore, re-occurring patients are very common. Information regarding the needs of these users was obtained through observation and discussion with their caregivers during the fieldwork in the Albanian facilities. Patients' well-being in mental health hospitals is linked to a range of needs that include autonomy, safety, entertainment, and a sense of belonging, as concluded from the fieldwork.
The observed needs reinforce the importance of the guidelines showed by Suining Ding's book.
For instance, these users thrive in environments that respect their autonomy by providing rooms with little to no occupancy for privacy and fostering a sense of individuality. Furthermore, the literature study showed that the value of natural light cannot be overstated; windows with pleasant views play an important role in connecting patients with the outside world, which contributes to their overall sense of well-being. Through observation, it was pointed out that patients often prefer to stay close to windows and look outside. While using the space they always seem to gravitated towards windows .
Literature study also mentioned how particular shapes can enhance patient experience. For example, patients were using the courtyard more autonomously in the hospital of Elbasan, while they were required to be accompanied by a caregiver to go outside in the cases of the other two facilities. Moreover, a recurring theme across all the visited facilities was the patients' desire for entertainment and activities to distract themselves; in other words, the need for positive distractions. The availability or lack thereof of dedicated activity rooms significantly influenced the patients' mood. For instance, patients in Tirana appeared more agitated compared to those in Vlora. In Vlora, patients primarily engaged in activities like watching TV or utilizing the activity room, whereas in Tirana, the absence of such spaces may explain why patients seemed more distressed and inclined to confront their caregivers (see page XX in Fieldwork Booklet).Furthermore, according to caregivers in Vlora gardening and having private bathrooms per room, gave the patients a sense of autonomy and fullfillment as they were achieving something by themselves.
Finally, a necessary requirement for patients is the use of rubber-like materials for isolation rooms.

Caregivers

The second user group consists of caregivers, which includes medical professionals and support staff who are responsible for patient care, such as medical diagnosis, therapy, daily support, and upkeep of patients' hygiene and well-being.
During fieldwork within mental health facilities, a common concern among dedicated staff, particularly those responsible for the care of male patients, emerged: the absolute prioritization of safety. Similar to patients, caregivers in all the facilities mentioned that they are prone to injury caused by agitated patients. In fact, staff safety is perhaps the most critical factor contributing to their well-being and ability to carry out their duties.
The staff's commitment to ensuring patient safety is further emphasized by their constant vigilance and the need to patrol corridors regularly. Their work dynamic involves significant walking back and forth, driven by the necessity to monitor multiple patients simultaneously. Despite this, the existing building's functional design adequately accommodated their routine.
To enhance caregiver well-being, it is crucial to provide breakrooms where they can rest or socialize with colleagues, as recommended by the Environmental Stress Theory. This need was highlighted by caregivers in Tirana and Vlora, while the hospital in Elbasan already offered such a space.
A need of caregivers that seems to contradict that of patients is patient privacy in their rooms. Research mentions the importance of multiple layers of privacy and private patient bedrooms, however, caregivers in all the visited facilities mentioned how important it is for them to be able to view patients in their rooms while patrolling, to prevent injuries or accidents. In such cases, a middle solution is best, with a priority to patient safety, according to Maslow's pyramid of needs. Furthermore, caregiver's jobs can be made more efficient with de-centralized caregiver stations and efficient I, or H shapes,
Additionally, the main doors and corridors in all the facilities were designed to be wide to fit multiple people inside, and according to caregivers it facilitated carrying agitated patients, which normally would require multiple caregivers to do so for safety reasons.

Visitors

The last user group comprises 'visitors,' including family members, friends of patients, or any other individuals temporarily using the building to connect with patients or caregivers.
Among the visited facilities, only the one in Vlora offered seating spaces near the reception, where visitors often waited during their experience in a psychiatric building. However, these seats were un-derutilized, as visitors preferred to stay near the entrance door, seeking sunlight and an outside view. In discussions with two visitors, both family members of patients, they mentioned keeping busy with tasks like walking or smoking to ease feelings of nervousness.
Another significant need of visitors, underscoring their purpose in visiting such facilities, is the avail-ability of appropriate meeting spaces for them and patients. Typically, these meetings occur in pa-tient rooms, aligning with findings from the literature research on privacy theories. This user group requires private spaces for conversations with their loved ones who are patients.
In Vlora, one visitor expressed frustration that their parent, a patient at the hospital, shared a room with another individual. This arrangement hindered private family discussions, prompting a desire for more intimacy during their visits.

4.8.3 Requirements and restrictions of pscyhiatric care

In the previous section, evidence-based (EB) design strategies for healthcare facilities were dis-cussed. However, psychiatric hospitals present unique challenges that distinguish them from other healthcare settings. Psychiatric patients may be particularly vulnerable and sensitive to their surroundings due to the nature of their mental health conditions. This raises the question of how applicable these EB design strategies are to psychiatric hospitals and how they can be adapted to benefit patients without compromising their safety. It is important to note that devel-oped countries often have publicly accessed guidelines for designing psychiatric facilities. De-spite extensive research and inquiry, no publicly available document containing a comprehen-sive list of guidelines for designing psychiatric facilities in Albania was found. The absence of such guidelines highlights a significant gap in the standardization and quality assurance of men-tal health facility design in the country. The importance of having well-defined guidelines can-not be overstated, as they ensure that psychiatric facilities are designed to meet the specific needs of vulnerable patients, promoting safety, autonomy, and therapeutic effectiveness.
Furthermore, as a developing country, Albania faces financial constraints that may limit the im-plementation of guidelines similar to those in more developed nations. These economic limita-tions necessitate a tailored approach to psychiatric facility design that balances cost-effectiveness with the essential requirements of a therapeutic environment.
Fieldwork highlighted the issue of balancing safety and autonomy. Strategies required for safety are the presence of safety measures in window, safe furniture made out of non-harmful and du-rable materials, the presence of anti-suicide furniture and architecture, alongside the presence of multiple doors to allow or restrict circulation in specific spaces. While ensuring safety is cru-cial, it's equally important to preserve patients' autonomy and dignity. This balance is challeng-ing in psychiatric settings where patients may already feel a loss of control over their lives.
Fieldwork revealed diverse needs among psychiatric patients, ranging from varying levels of agitation, cognitive abilities, and autonomy. Patients' needs can fluctuate daily, adding com-plexity to providing care. Some patients may be calm and independent one day, but agitated and dependent the next, highlighting the importance of a flexible, person-centered approach.
The division between private and public areas in psychiatric facilities is also problematic. Private areas provide solitude and security, while public areas promote social engagement and community support. The fieldwork showed Designing environments that allow for both privacy and socialization is a significant challenge. Through the fieldwork findings, it can be argued that the stigmatization in psychiatric facilities is influenced by the interplay of safety versus autonomy and public versus private spaces, pre-senting the challenge of balancing the creation of a restrictive environment with that of a thera-peutic one.

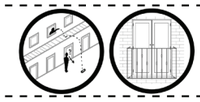
KEY TAKE AWAYS

1 **Caregiver Supervision:** Enhancing caregiver supervision can ensure patient safety and provide timely intervention, fostering a secure environment for both patients and staff.

2 **Safe Materials for Isolation Rooms:** Using safe, non-toxic, and durable materials in isolation rooms can minimize the risk of self-harm and ensure a safe environment for patients requiring isolation.

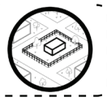
3 **Safe Furniture (Safe Materials):** Implementing furniture made from safe, durable materials can prevent injuries and create a safer environment for patients, reducing the risk of harm.

4 **Safety Measures in Windows:** Incorporating safety measures in window designs, such as shatterproof glass and secure locks, can prevent self-harm and unauthorized egress, ensuring patient safety.



5 **Multiple Levels of Restriction:** Implementing multiple layers of restriction based on patient needs can enhance safety by providing appropriate levels of security while maintaining patient dignity and autonomy. This can be done by having multiple doors that separate the spaces based on their levels of required safety and restriction.

6 **Protected Outdoor Space:** Designing protected outdoor spaces can provide patients with safe access to nature and fresh air, promoting relaxation and mental well-being while still being within the safety of the hospital.

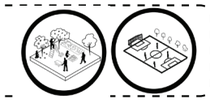


7 **Inclusive Circulation:** Creating inclusive circulation paths that accommodate patients with varying mobility needs can enhance accessibility and ensure all patients can navigate the facility safely and independently. Ex: elevators, ramps etc.

8 **Large Doors and Corridors:** Designing large doors and wide corridors can improve accessibility, facilitate the movement of patients and staff and enhance the overall functionality of the facility; including agitated patients and patients with more spatial needs.

9 **Sun protection:** Considering the abudance of sunlight in Albania, shaded outdoor spaces can improve the eperience of users. Furthemore, it is important that patients and caregivers can adjust the amount of light that enters the rooms to their preference.

10 **Outdoor activities and Sports Areas:** Providing designated sports areas and activities can encourage physical activity, promoting physical health and offering a constructive outlet for energy to keep patients busy, which is beneficial for mental well-being.Ex: sports field, gardening fields.



11 **Bathrooms per Room:** Including bathrooms in each patient room can enhance privacy, dignity, and convenience, contributing to a more comfortable and respectful patient experience.

12 **Opportunities for control:** Allowing patients opportunities to do activities autonomously, have opporunities to customize their own spaces, control over lighting etc., without risking their safety can make them feel less restricted and more in charge.

4.9 Guidelines for improving self-stigma

Designers and healthcare professionals must prioritize a patient-centered approach, creating environments that promote safety, autonomy, privacy, and social engagement while challenging stigma. Integrating EB design strategies with an understanding of psychiatric care complexities can support healing and recovery, helping to tackle the self-stigma of the users, particularly patients.

To combat self-stigma it's important that the implemented guidelines foster an impression of a therapeutic environment rather than a place of restriction. To better understand how each guide-line fits in this matrix of variables, Table 2 shows how each of the guidelines rates 'Low', 'Moderate' or 'High' in each category. The ideal scenario is to prioritize the guidelines that rate 'High' for a therapeutic im-pression and 'Low' for a restrictive one. However, not all these guidelines are equally important for patient wellbeing. To prioritize design guidelines, Maslow's hierarchy of needs can be used. With this categorization it shows that the guidelines that seemed less desirable for creating a therapeutic space such as the use of safe materials or safety measures in windows, being part of the 'Safety needs' category, are categorized as more important than most of the guidelines. Thus, it can be concluded that while creating a therapeutic is important for tackling self-stigma it should not be done to the extent of compromising patient's wellbeing.

Explanation for the Therapeutic-Restrictive Matrix

Therapeutic Atmosphere: A healing, supportive environment that promotes well-being, autonomy, and social interaction. Examples include abundant daylight, presence of greenery, and intimate spaces.

Restrictive Atmosphere: These elements are necessary for ensuring safety and security but can feel confining if not balanced with therapeutic elements. Examples include safety measures in windows, safe furniture, and materials in isolation rooms.

High: This guideline is effective in creating the respective impression or atmosphere for the patients.

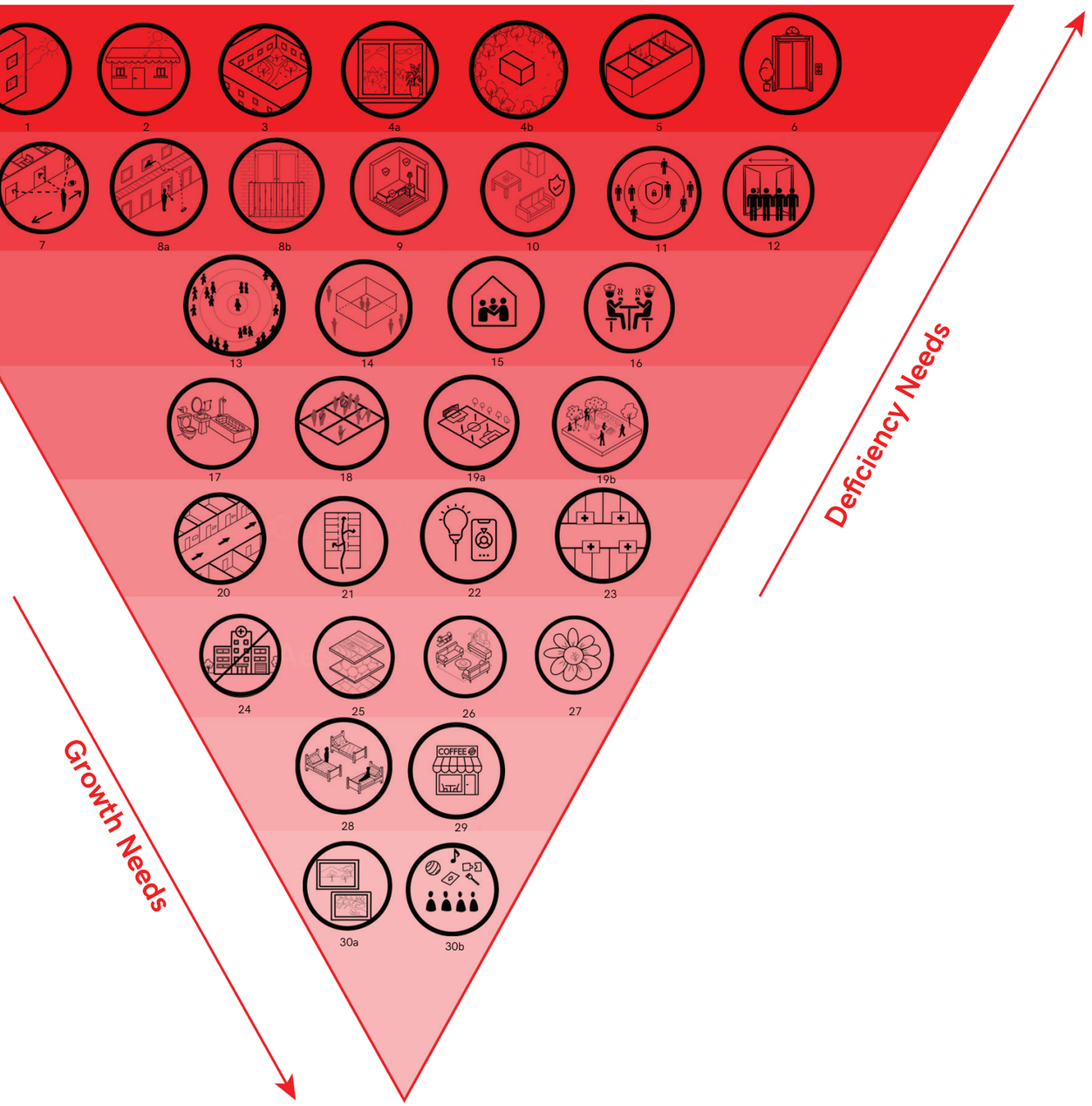
Low: This guideline rates low in creating the respective impression or atmosphere for the patient.

Moderate: This guideline may have a moderate impact on either therapeutic or restrictive qualities depending on their implementation and context. For instance, multiple levels of restriction can be moderately therapeutic if they provide graduated freedom based on patient progress.

Guideline	Therapeutic	Restictive
Abundant Daylight	High	Low
Sun Protection/ Shading	High	Low
Protected Outdoor Space	High	Moderate
Access to Greenery	High	Low
Noise Control Walls	High	Low
Inclusive Circulation	High	Low
Caregiver Supervision	High	Low
Safe Materials in Isolation Rooms	Low	High
Safe Furniture	Moderate	Moderate
Multiple Levels of Restriction	Moderate	High
Abundant Circulation Space	High	Low
Multiple Layers of Privacy	High	Low
Intimate Spaces	High	Low
Family Zones	High	Low
Respite Spaces for Caregivers	High	Low
Private Bathrooms per Patient Room	High	Low
Single Patient Rooms	High	Low
Outdoor Sports and Activity Spaces	High	Low
Wayfinding System	High	Low
Intuitive Design/ Circulation	High	Low
Control and Autonomy Options	High	Low
Decentralized Caregiver Stations	High	Low
Non-Institutional Design /Atmosphere	High	Low
Natural Materials and Colors	High	Low
Home-like Furnishing	High	Low
Biodiversity	High	Low
Spaces for Personalization and Identity	High	Low
Retail Spaces	Moderate	Low
Artwork and Positive Distractions	High	Low

Table 2: Table showing the effectiveness of each guideline to create a Therapeutic vs. Restrictive atmosphere. By Author.

Guideline Hierarchy



1. Abundant Daylight
2. Sun Protection/ shading
3. Protected outdoor space
4. Presence of greenery
5. Noise control walls
6. Inclusive circulation
7. Caregiver supervision
8. Safety Measures in Windows
9. Safe furniture and materials in isolation rooms
10. Safe furniture
11. Multiple levels of restriction
12. Abundant circulation space (large doors and corridors)
13. Multiple layers of privacy
14. Intimate spaces
15. Family Zones
16. Respite spaces for caregivers
17. Private Bathrooms per patient room
18. Single patient rooms (Minimum patients per room)
19. Outdoor sports and activity spaces
20. Wayfinding system
21. Intuitive Design/ Circulation
22. Control and autonomy options
23. Decentralized caregiver stations
24. Non-institutional design and atmosphere
25. Natural Materials and Colors
26. Home-like furnishing
27. Biodiversity
28. Spaces for personalization and identity
29. Retail spaces
30. Artwork and Positive Distractions

Figure 23: Hierarchy of Guidelines for improving user experience. By Author.

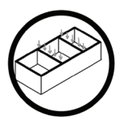
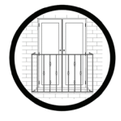
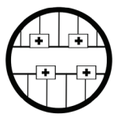
Icon	Guideline	Description	EBD Rationale	Fieldwork
	Abudant Daylight	Maximize the use of natural light through large windows and skylights. Avoid spaces without daylight.	Natural light improves mood, reduces stress, and can shorten hospital stays for patients (Ulrich, 1984).	Patients often preferred spending time near windows, indicating the positive impact of natural light on their well-being. Dark corridors were empty.
	Sun Protection & Shading	Implement sun protection measures to enhance comfort in outdoor and indoor areas.	Proper shading prevents glare and overheating, creating a comfortable environment (Cohen, 2001).	Areas with adequate shading were more frequently used by patients, highlighting the need for sun protection.
	Protected Outdoor Space	Design protected outdoor areas where patients can safely enjoy nature and fresh air.	Outdoor spaces promote relaxation and mental well-being (Marcus, 2007).	Patients at facilities with accessible outdoor spaces showed improved mood and reduced agitation.
	Access to Greenery	Incorporate plants and gardens within and surrounding the facility. Ex: windows looking at greenery, garden, plants etc.	Greenery has therapeutic benefits, reducing stress and enhancing well-being (Ulrich, 1999).	Patients engaged more positively in areas with abundant greenery.
	Noise Control Walls	Implement noise control measures with walls of proper insulation in patient rooms to create a calm and quiet environment.	Reducing noise levels is essential for stress recovery and ensuring restful sleep (Ulrich et al., 2004).	High noise levels were a common complaint, indicating the need for better noise control.
	Inclusive Circulation	Create circulation paths and add tools that accommodate patients with varying mobility needs. Ex: elevators, ramps.	Ensuring accessibility for all patients promotes independence and reduces frustration (Baskaya et al., 2004).	Patients with mobility issues struggled in areas without inclusive circulation paths. The presence of elevators made the job easier for caregivers.
	Caregiver Supervision	Design spaces that allow for effective caregiver supervision, ensuring quick response to patient needs.	Enhances patient safety and provides timely support (McCullough, 2009).	Observations showed that improved supervision areas led to better patient outcomes.
	Safety Measures in Windows	Incorporate shatterproof glass and secure locks to ensure patient safety. Put railings and other measurements to prevent jumping.		Lack of secure windows was a safety concern frequently mentioned by staff. When not present, windows did not open which is not ideal.
	Safe Furniture and Materials in Isolation Rooms	Ensure non-toxic, durable materials to prevent self-harm.All areas must be protected.	Reduces risk of injury and enhances patient safety (Marcus & Barnes, 1999).	Isolation rooms without safe materials posed significant risks to patients.
	Safe Furniture	Use furniture made from soft, durable materials and anti-suicide design to minimize injury risks.	Prevents accidents and ensures a safe environment (Joseph, 2006a).	Patients and staff reported injuries from unsafe furniture, indicating the need for improvement.Minimal furniture creates a sterile environment.
	Multiple Levels of Restriction	Implement varying levels of security to address different patient needs. Ex: multiple doors that restrict access		Facilities with graduated restrictions managed patient safety and autonomy more effectively. Being able to restrict spaces when neccessary for caregivers is ideal to avoid injury.

Table 3: Guidelines for reducing self-stigma.

Icon	Guideline	Description	EBD Rationale	Fieldwork
	Abundant Circulation Space (Large Doors and Corridors)	Design wide corridors and large doors to facilitate easy movement and improve accessibility.		Enhances mobility for patients with more spatial needs and for caregivers to assist patients. Narrow corridors caused congestion and stress, highlighting the need for spacious design.
	Multiple Layers of Privacy	Design various levels of privacy to cater to individual patient needs.Randing from private areas to common rooms	Promotes autonomy and reduces stress (Ulrich et al., 2008).	Areas varying levels of privacy can enhance a patient's ense of control and comfort.
	Intimate Spaces	Create small, private areas for personal reflection and privacy.	Helps patients feel secure and supports mental health recovery (Andrade et al., 2017).	Lack of intimate spaces led to increased patient agitation and discomfort.
	Family Zones	Designate areas where patients can interact comfortably with their families.	Supports social interactions, which are crucial for patient recovery and well-being (Cohen & Syme, 1985).	The lack of designated family zones hindered patient-family interactions and did not foster a sense of privacy between the patient and family members.
	Respite Spaces for Caregivers	Provide quiet, comfortable spaces for caregivers to rest and recharge.	Helps reduce caregiver stress and prevent burnout, enhancing the quality of care (Chaudhury, Mahmood, & Valente, 2009).	Caregivers expressed the desire for designated respite areas.
	Private Bathrooms per Patient Room	Provide private bathrooms in each patient room to maintain hygiene and privacy and enhance efficiency		Shared bathrooms were a frequent source of patient complaints, indicating a need for private facilities. When available, it made the morning hygiene routine more efficient and easier for caregivers.
	Single Patient Rooms (Minimum Patients per Room)	Provide single occupancy rooms to ensure privacy and control.When not possible, keep it at a minimum of occupants.	Allows patients greater control over their environment, improving privacy and reducing stress (Chaudhury, Mahmood, & Valente, 2005).	No patients had private rooms. It ranged from a three to seven occupants.
	Outdoor Sports and Activity Spaces	Include spaces for physical activities to encourage exercise and social engagement. Ex: sports fields, gardening.	Promotes physical health and provides a constructive outlet for energy (Nanda et al., 2011).	Lack of activity spaces led to increased patient restlessness and agitation.
	Wayfinding System	Implement clear and intuitive wayfinding systems using visual cues such as colors, text and landmarks.	Effective wayfinding promotes healing, reduces stress, and improves safety (Arthur & Passini, 1992; Ulrich et al., 2010).	Only found in the form of text.
	Intuitive Design/Circulation	Design intuitive pathways with simple, direct routes and clear signage.	Reduces confusion and disorientation, especially for patients with cognitive impairments (Baskaya et al., 2004).	Author required staff assistance to navigate throughout the public areas. Wards were very simple and easy to navigate, making it hard for patients to get lost.
	Control and Autonomy Options	Offer patients control over certain aspects of their environment to foster autonomy. Ex: lighting control, shading etc.	Enhances autonomy and reduces feelings of helplessness, promoting mental well-being (Lee, 1993).	

Icon	Guideline	Description	EBD Rationale	Fieldwork
	Decentralized Caregiver Stations	Implement stations that increase accessibility and visibility while maintaining privacy, ideally placed on opposite sides.	Improves supervision and reduces stress for both patients and staff (McCullough, 2009).	
	Non-Institutional Design and Atmosphere	Create a residential, welcoming environment that reduces feelings of confinement.	Reduces feelings of confinement and improves patient comfort, promoting emotional well-being (Joseph, 2006a).	Institutional design contributed to patient discomfort and anxiety.
	Natural Materials and Colors	Incorporate natural materials and calming earth colors to create a soothing environment.	Natural materials and colors create a calming environment and help connect patients with nature, reducing stress and anxiety (Marcus & Barnes, 1999; Mahnke,1996).	Caregivers expressed dislike over tiring colors. Bland colors appeared sterile.
	Home-like Furnishing	Use comfortable, home-like furniture to enhance patient comfort.	Homelike environments enhance patient comfort and reduce agitation, promoting a sense of well-being (Annerstedt, 1994).	Institutional mass-produced furniture contributed to a sterile atmosphere, whereas homelike furnishings improved comfort.
	Biodiversity	Incorporate diverse plant species in outdoor and indoor spaces. Facilitiate the presence of positive fauna ex: birds, butterflies, ladybugs.	Biodiversity in plant life enhances the therapeutic effect of green spaces and improves the overall environmental quality (Hartig et al., 2003).	Areas with diverse plant life were more frequently used by patients, suggesting enhanced therapeutic effects.
	Spaces for Personalization and Identity	Allow patients to personalize their spaces to enhance their sense of identity and belonging.	Personalization fosters a sense of ownership and identity, which can enhance emotional well-being (Cohen, 2001).	Patient rooms did not offer much spaces for personalization, especially if shared with many patients. Caregivers said that patient ejoy expressing their identity.
	Retail Spaces	Provide retail spaces to facilitate normalcy and community interaction.	Retail spaces can support patient independence and offer a sense of normalcy (Ulrich, 2008).	The absence of retail spaces limited opportunities for patients to engage in normal activities and interact with the community. Caregivers would occassionally accompy patients to such spaces outside of the facility. They were not present for visitors or family either.
	Artwork and Positive Distractions	Include artwork, music, and interactive activities as positive distractions. Ex: hanging paintings and imagery of nature, activity rooms, tv rooms.	Positive distractions can significantly reduce stress and anxiety, providing mental stimulation and a sense of normalcy (Nanda et al., 2011).	Lack of activity rooms led to more agitated patients, suggesting the need for positive distractions.

05

Part II

Improving Societal Perception by addressing Public and Structural Stigma

5.0 Theoretical Foundations and Community Insights

In an effort to improve the social perception of mental health facilities in Albania, this chapter explores the role of architecture in addressing Public and Structural Stigma. This research integrates Contact Theory and Place Attachment Theory as foundational frameworks, recognizing the importance of strategies that extend beyond clinical services to encompass the broader social narrative.

At the heart of this exploration for tackling Public Stigma lies Contact Theory, originating from Gordon Allport's work, which posits that increased contact between different groups can diminish prejudice. Within the context of mental health facilities, understanding the dynamics of social interaction becomes instrumental. By facilitating positive contact between the community and psychiatric institutions, this research aims to dismantle stereotypes and cultivate empathy. The goal is to suggest a list of guidelines for creating possible scenarios for such interaction by considering the willingness and opinions of Albanian citizens.

Grounded in environmental psychology, Place Attachment Theory explores the emotional bonds individuals form with physical spaces. Applied to mental health facilities, it provides insights into how communities can develop a sense of attachment to these institutions. This research investigates the elements contributing to meaningful connections with psychiatric centers, informing their design to resonate with the identity and values of the community. Likewise, the goal is to offer a list of guidelines of scenarios or elements that can foster such a connection to the building.

To bridge theory with practical application, a survey has been conducted to glean insights directly from the Albanian community. This survey aims to unravel the intricate nuances of public sentiments, exploring how individuals perceive mental health facilities, identifying factors influencing their engagement, and uncovering elements essential for cultivating a profound sense of attachment. By involving the community directly, this research ensures that their voices guide the destigmatization process, fostering environments that are inclusive and supportive.

Progressing through this chapter, the research will delve into the survey findings, drawing connections between theoretical frameworks and community responses. Each section contributes to a comprehensive understanding of how Contact Theory and Place AttachmentTheory can be harnessed not only to destigmatize mental health facilities but also to instill a sense of pride, belonging, and community ownership in these critical institutions. The survey results will focus as stepping stones for the design solutions that will be implemented as guidelines to improve social perception.

5.1 Survey Results

General Information

In total the survey has 96 participants. The study comprised mostly women, accounting for approximately 63% of the participants. Among the respondents, 45% were employed adults, whereas university students, including those with part-time jobs, constituted a slightly lower proportion. Additionally, 5% of the participants were under 18 years old, while a similar percentage represented the elderly population.

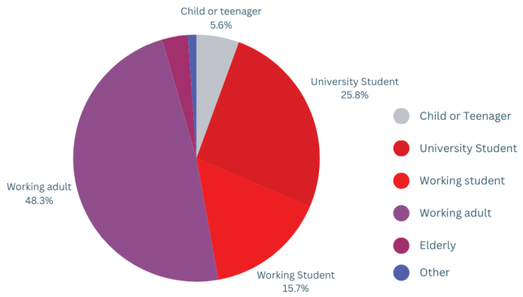


Figure 24: Chart showing the participant agegroup

What is their information regarding the-psychiatric hospitals in Albania?

A significant portion of the respondents, approximately 41%, reported having no information about psychiatric hospitals in the country, while 45% indicated having limited knowledge about them. About 18% stated that they knew someone who worked in a psychiatric hospital, whereas 8% reported knowing someone who had been a patient there. Interestingly, none of the participants had personally been a patient in these hospitals.
Furthermore approximately 43% of the participants were not familiar with any of the facilities included in the fieldwork of this study. While

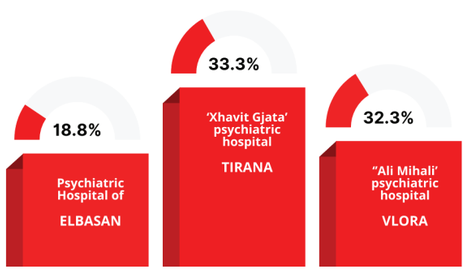


Figure 25:Participant familiarity with each of the facilities

around 33% claimed to be aware of the facility in Tirana, followed by 32% being aware of the facility in Vlore. Only 18% of the participants were aware of the hospital in Elbasan.

What is their perception on psychiatric hospitals?

Participants were asked to write what came into their mind when thinking of psychiatric hospitals. In general, they used negative words .. Similarly, they answered that the opinion of the society on such facilities is also very negative. When asked to provide what they believe could cause the stigmatization of these facilities, the most common answer was "lack of knowledge" or "ignorance".

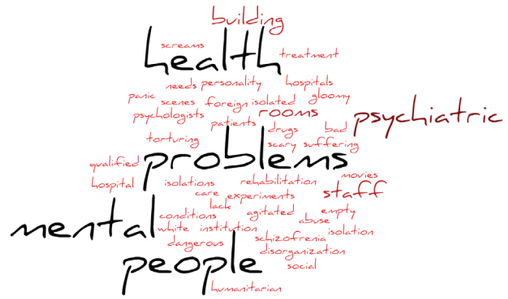


Figure 26: Word cloud based on participants' answers

Volunteering and sensibilization

The participants generally believe that educating and raising awareness about psychiatric hospitals and mental health is the most effective approach to combat stigmatization. When questioned about their willingness to volunteer at psychiatric hospitals, 47% responded affirmatively, 42% expressed a possibility, while only 10% declined. As for their motivation to volunteer, 81% of participants cited the desire to make a positive impact as their primary reason, followed by stigma reduction and socialization.

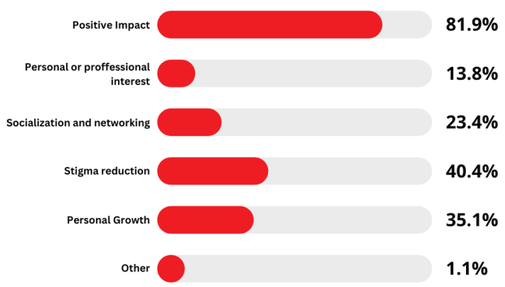


Figure 27: Barchart of participent reasons for volunteer-

5.2 Contact Theory

In which scenario in which are participants more likely psychiatric hospital/ center if they don't need care?

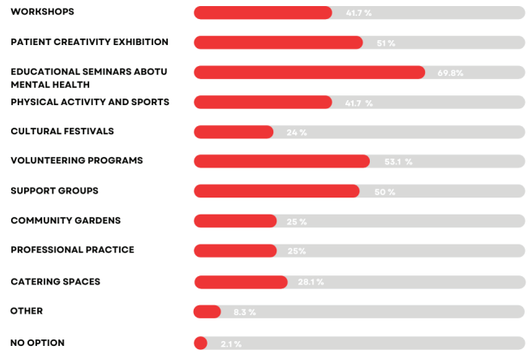
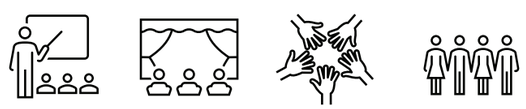


Figure 28: Barchart of participants' answers

To test the Contact Theory hypothesis, scenarios were developed to enable community interaction with users of psychiatric hospitals, aiming to reduce stigma and enhance perceptions. These scenarios were curated through online research of solutions implemented by other medical facilities, as well as brainstorming sessions.
Patients were presented with various scenarios and reasons for accessing these spaces to determine their preferences. Most patients expressed interest in attending mental health education classes, followed by volunteering programs and support groups. Additionally, patients showed enthusiasm for patient creativity exhibitions, with some expressing a desire to explore their minds through artwork.
Only 2.1 percent of participants indicated that no scenario would intrigue them to use a psychiatric hospital without needing medical services. This suggests that providing spaces and activities for community engagement with the facility, beyond treatment, is feasible. Some additional suggestions from participants included fundraising fairs, retail areas, and floral gardens.

Guidelines:



5.3 Place Attachment Theory

What would create a connection with the building for participants, making it more appealing, or improving their perception of it?

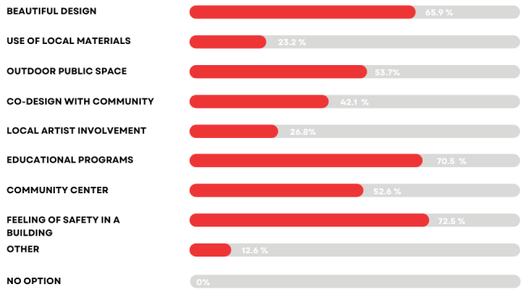


Figure 29: Barchart of participants' answers

Place attachment theory suggests that cultivating an emotional bond with a facility can greatly enhance its appeal and perception in society. Participants were presented with various solutions to improve their perception of the building. The most favored solution was creating a sense of safety within and around the building, followed by integrating educational elements and pleasing design features. Additionally, the inclusion of a community center and public gardens received approval from over half of the participants.
Notably, all participants believed that a viable approach could positively impact their perception, as indicated by voting. Patients particularly favored zen gardens and engaging architectural designs, citing the "slides of the pyramid of Tirana" as inspiration. Some emphasized reflecting national identity or architectural motifs to enhance attachment to the building.

Guidelines:

5.4 Addressing Public and Structural Stigma

Public and structural stigma surrounding psychiatric care facilities significantly impact their perception and integration within the community. This chapter explores how architectural design can address these forms of stigma in Albania, guided by community survey insights and theoretical frameworks such as Contact Theory and Place Attachment Theory.

Contact Theory suggests that increasing positive interactions between different social groups can reduce prejudice. The survey revealed the community's openness to engaging with psychiatric facilities through volunteering, mental health education classes, and community events. Thus, the results suggest that to address public stigma, architectural design should include dedicated spaces for volunteer activities, flexible educational spaces, and multifunctional areas like community centers and public gardens. These environments encourage regular interactions between the community and psychiatric facilities, helping to reduce public stigma.

Place Attachment Theory examines the emotional bonds people form with places, which can integrate psychiatric facilities into the community's social and cultural fabric. The survey indicated a preference for traditional architectural styles and cultural motifs in psychiatric facility design, reflecting local heritage and identity. Results suggest that to address this type of stigma, some architectural design choices are the incorporation of local architectural elements and cultural motifs, and creating facilities that serve multiple purposes, including cultural and social events. This approach embeds psychiatric facilities within the community's daily life, reducing structural stigma and promoting a sense of belonging.

Finally, by integrating architectural design with Contact Theory and Place Attachment Theory, psychiatric facilities in Albania can become welcoming, inclusive, and integral parts of the community. This approach can foster positive interactions, cultural resonance, and community engagement, thereby helping to reduce both public and structural stigma.

Figure 30: Sketch of a zen garden referenced in the survey .

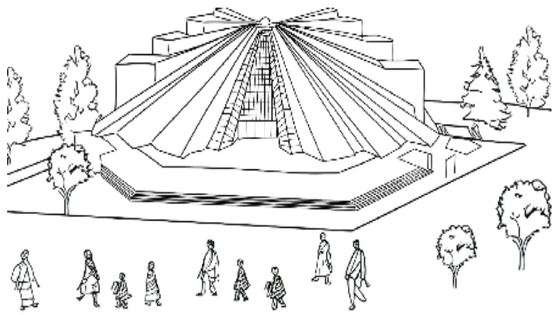


Figure 31: Sketch of the pyramid in Tirana, referenced in the survey.

Figure 32: Sketch showing traditional Albanian architecture in the form of the typical mountanous relief.

KEY TAKE AWAYS

1. **Provide Education :** Establishing mental health education classes to raise awareness and understanding regarding the topic of mental health and psychiatric facilities can help reduce public stigma.
2. **Exhibitions of Patient Creativity:** Hosting events or creating spaces for showcasing patients' artistic talents for the public to see to promote positive interactions and reduce stigma.
3. **Volunteering Programs:** Encouraging community members to volunteer, fostering empathy and engagement with the psychiatric facility.
4. **Support Groups and Workshops:** Facilitating support groups and creating spaces for workshops to provide social support can help reduce the feelings of isolation for patients and attract the interest of public.
5. **Feeling of Safety:** Ensurerin that design elements prioritize patient and staff safety, creating a secure and reassuring environment, while the exterior design of the facility creates a safe and calm impression for the public.
6. **Community Spaces:** Developing multifunctional indoor and outdoor community spaces within the facility can encourage interaction and integration.
7. **Quality Outdoor Park and Greenery:** Incorporating accessible green spaces and quality outdoor parks such as zen gardens, public squares or playgrounds, can help to enhance well-being and provide a calming environment.
8. **Beautiful Design:** Focusinng on aesthetically pleasing designs that reduce the institutional feel and promote a more welcoming atmosphere.
9. **Incorporating Traditional Architecture and National Identity in Design:** Integrating elements of traditional architecture, building techniques, and cultural motifs can help to foster place attachment and community pride.

Icon	Guideline	Description	Rationale	Type of Stigma it tackles
	**Provide Education**	Provide private patient rooms and bathrooms where possible.	Enhances privacy, reduces stress, and improves hygiene, promoting dignity and comfort.	Public Stigma
	**Exhibitions of patient creativity**	Use wall divisions and materials that control noise between patient rooms.	Reduces stress and anxiety by minimizing noise, creating a calm environment, allows patients to get adequate sleep.	Public Stigma
	**Volunteering programs**	Integrate access to green spaces and a biodiverse nature within the facility: ex: courtyards, surrounding vegetation, potted plants.	Access to nature and green spaces improves mental well-being, reduces stress, and provides a calming environment.	Physiological
	**Support groups and workshops**	Ensure windows and furniture are secure to prevent self-harm. Maximize caregiver monitoring.	Ensures patient safety by preventing self-harm and accident and facilitates the job of caregivers.	Safety
	**Feeling of Safety**	Design spaces with varying levels of restriction based on patient needs.	Provides tailored security levels to match different patient needs, ensuring safety without imposing unnecessary restrictions.	Safety
	**Community Spaces and quality outfoor parks**	Develop public spaces that foster connection: community centers, common rooms, shared classrooms.	Integrates the psychiatric facility into the community, promoting positive associations and reducing stigma.	Belonging and Love
	**Beautiful Building Design**	Designate areas where patients can interact comfortably with their families.	Supports social interactions and family visits, which are crucial for patient recovery and well-being.	Aesthetics
	**Outdoor Public Spaces and Gardens**	Create spaces of high quality vegetation, such as public gardens or other outdoor spaces.	Improve the perception of the location through aestheticsm biodiversity and health.	Aesthetics
	**National Identity and Tradiotional Architec-**	Encourage community members to volunteer at the facility.	Encourages community engagement and fosters empathy, reducing public stigma.	Belonging and Love

Table 4: Guidelines for reducing public and structural stigma.

06

Case Studies

Design Strategies and solutions

5.0 Case Studies: The cases of hospitals Vejle and Ballerup

This section explores three case studies that exemplify the implementation of therapeutic spaces in psychiatric facilities. The selected examples include the Psychiatric Hospital Vejle by Arkitema, and two competition submissions for Ballerup Hospital by different architectural firms: CREO ARKITEKTER and WE architecture, and RUBOW Arkitekter. These case studies are sourced from Denmark, a developed country with distinct climatic and socio-economic conditions compared to Albania. While these examples represent ideal scenarios that may not be entirely applicable in the Albanian context, they nonetheless offer valuable inspiration for designing spaces that reduce self-stigma.

Additionally, a search of architectural sites like ArchDaily and Dezeen reveals a lack of successful architectural designs for psychiatric hospitals in developing countries. This gap highlights a significant issue addressed by this thesis: the need for context-specific guidelines that cater to the unique challenges and constraints faced by developing countries like Albania. By examining these Danish examples, we can identify key elements and innovative approaches that could inform and enhance the guidelines proposed in the first chapter for addressing self-stigma in Albanian psychiatric facilities.

Psychiatric Hospital Vejle

Arkitema Architects

Denmark

What is interesting about this facility, is that it has achieved a significant 50 percent reduction in physical restraints, highlighting the positive impact of its healing architecture. It emphasizes outpatient treatment and accommodates patients with intensive behavioral conditions. The design prioritizes both patient recovery and staff well-being through features such as abundant natural light, accessible outdoor spaces, transparent ward layouts, and thoughtful spatial arrangements.

Strategically, the hospital's layout places extroverted functions such as the ER reception and children's psychiatry at the forefront, welcoming patients upon arrival, while withdrawing the wards within the building for privacy and tranquility. The overall circulation is based on a larger system, with wards clustered around the main circulation line, forming multiple layers of private outdoor space from the large shared garden, to courtyard per each volume.

Architecturally, the hospital seamlessly integrates with its natural surroundings, with masonry building units twisting to accommodate the surrounding landscape, fostering a sense of harmony and connection with nature.

The architects prioritized the therapeutic benefits of light, incorporating both natural and artificial sources throughout the building. Glass panels and interior courtyards maximize daylight penetration, while interior design elements facilitate light distribution. Additionally, the integration of 24-hour colored light therapy within the wards enhances patient comfort and supports natural circadian rhythms. Furthermore, glass windows in the interior rooms, not only serve to allow light in but also to provide transparency in the medical environment.

Some aspects that could be improved is the lack of variety of vegetation in the courtyards, which literature study suggested. Furthermore, there are multiple colors used in the interiors, however they do not seem to correlate to a way finding system. Additionally, there is an overuse for bright orange in the flooring, which is not a calm color to the eye.

Figure 33: Lobby in Vejle. Photo courtesy of MT Højgaard

Figure 34: Lobby in Vejle. Photo courtesy of Niels Nyygard

Figure 35: Image of one of the courtyard. Photo courtesy of Niels Nyygard

Figure 36: Image of patient rooms. Photo courtesy of Niels Nyygard

Figure 37: Image of patient rooms. Photo courtesy ofNiels Nyygard

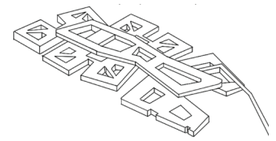


Figure 38: Diagram of building volume. By Author.

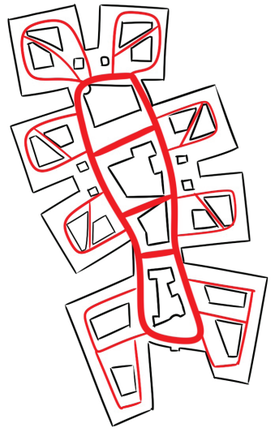


Figure 39: Circulation diagram showing how the ward circulations system integates with

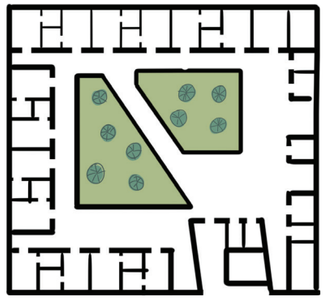


Figure 40: Ward floorplan. Inner courtyards create a sense of privacy while also offering light to the corridors. Patient rooms are located on the exterior for more sunlight and privacy.

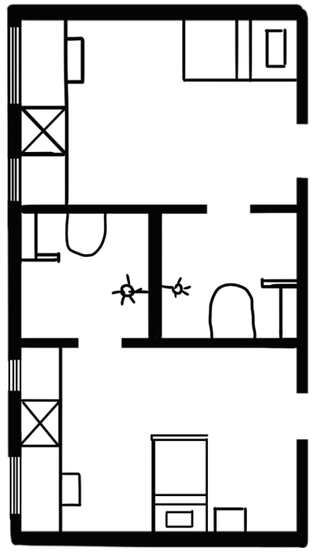


Figure 41: Diagram of building volume. By Author.

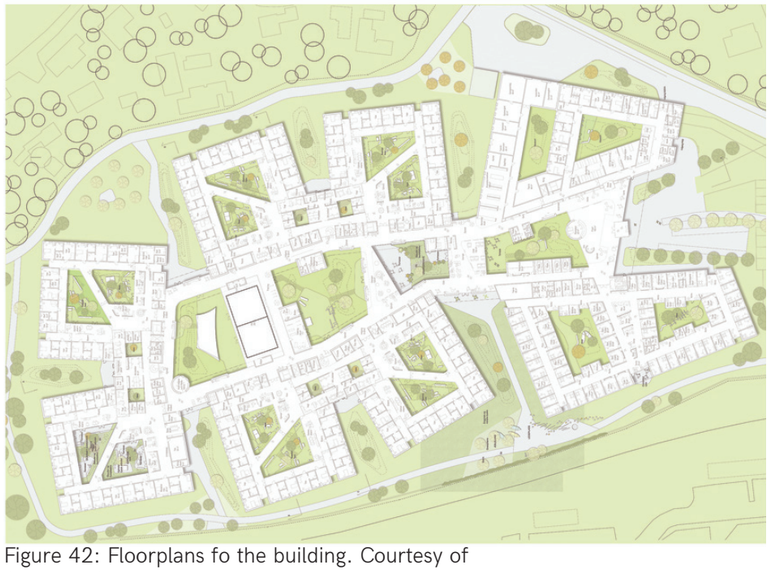


Figure 42: Floorplans fo the building. Courtesy of Arkitema Architects

Psychiatric Hospital Ballerup
CREO ARKITEKTER and WE architecture

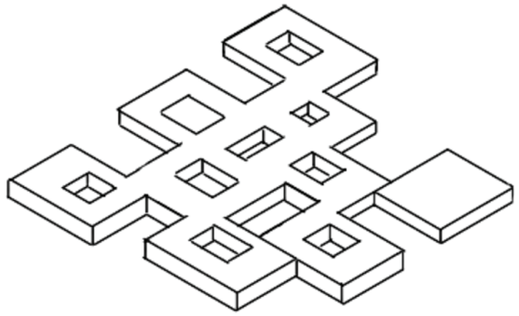


Figure 43: Drawing of proposal's volume. By author.

These case studies are two submissions competing for a psychiatric project in Denmark. Despite being designed by different architects, the two buildings share a similar approach. Both aim to de-instutionalize the facility by creating a home-like atmosphere and a program that mimics a "Village" setting. The first example achieves this through clustered courtyards, while the second option consists of grouped functions connected by a linear route.

In both cases, therapeutic environment theory and healing architecture concepts are evident, with the use of natural materials such as wood. However, the black façade of the second alternative may not be ideal for a healing environment compared to the first example. Nonetheless, considering Denmark's cold climate, this choice may have been made to absorb more heat.

Wayfinding is more intuitive in the second alternative due to its organized layout along one main linear route, contrasting with the clustered organization of the first alternative. Additionally, the varied shapes of volumes in the second option offer layers of privacy regarding outdoor spaces, with some volumes creating courtyards while others leave gardens semi-open. The first choice offers a higher sense of safety as all outdoor spaces are protected within courtyards.

Despite the different design choices, both examples convey a tranquil and therapeutic environment, moving away from the institutional feel commonly associated with psychiatric care facilities.

Figure 44: Render image of the exterior of the propposal showing a healing and calming atmosphere. Render courtesy of architects.

Figure 45 & 46: Render images of inner courtyards. The wooden walls and the variety of vegetation create a healing atmosphere.Courtesy of architects.

Figure 47 & 48: Render images of the interior spaces; reception and patient room. Wood is the predominant element and the walls have been replaced by windows looking into the courtyards, which creares a connection with nature. Courtesy of architects.

Figure 49: Render image of the exterior of the propposal. the chosen black color is not ideal for blending with the environment. Render courtesy of RUBOW architects.

Figure 48 & 49: Render images of inner courtyards and the main circulation line.Courtesy of RUBOW architects.

Psychiatric Hospital Ballerup
RUBOW Arkitekter

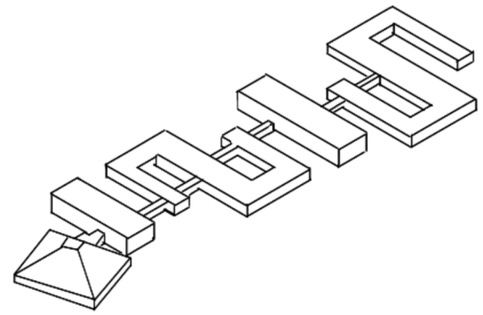


Figure 50: Drawing of RUBOW's proposal volume. By author.

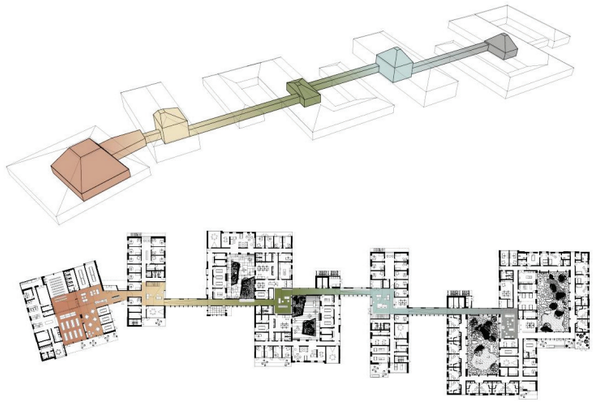


Figure 51: Circlation diagram of the proposal. All the different wards are connected together by a singular line ceating different layers of privacy for the inner gardens in each ward. Courtesy of RUBOW architects.

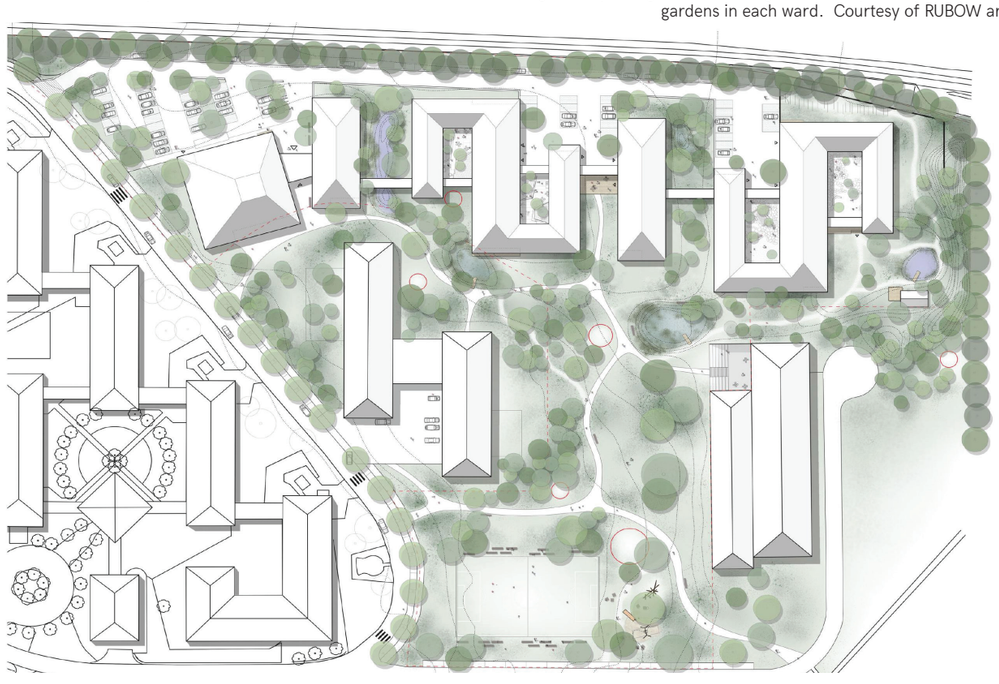


Figure 52: Map of the second proposal. Courtesy of RUBOW architects.

07

Conclusion

Integrating Strategies for De-Stigmatizing Psychiatric Hospitals in Albania

7.1 Integrative Strategies for De-Stigmatizing Psychiatric Hospitals in Albania

The aim of this research paper is to propose architectural guidelines that can address the stigmatization of psychiatric hospitals in Albania through architectural design.
To address stigma through architectural innovation, the research was divided into two parts. The first part delves into improving user experiences and diminishing self-stigma, while the second segment focuses on reshaping societal perceptions and fostering positive relationships with psychiatric facilities. While the second part explore the role of architecture to improve social perception by focusing on Public and Structural Stigma.
User needs were explored through a comprehensive literature review of various Evidence-Based Studies, as documented by Ding (2023), coupled with extensive fieldwork conducted across all psychiatric hospitals in the country. By integrating literature findings with practical insights, a set of guidelines was developed and prioritized based on Maslow's hierarchy of human needs (1970b).
Additionally, an online survey was conducted to gain insight on Albanian society's perceptions and gather suggestions for enhancing interactions between psychiatric users and the community, resulting in a supplementary set of guidelines.

7.2 Key Findings

Improving User Experience to address Self-Stigma

Through literature review of various Evidence-Based Studies, documented by Ding (2023), coupled with extensive fieldwork conducted across all psychiatric hospitals in Albania, several key design elements were identified as crucial for enhancing user experiences. These findings were integrated and prioritized using Maslow's hierarchy of human needs (1970b).

1. **Importance of Greenery:** Green areas have been shown to have a good impact healing environments in both literature and fieldwork. This was supported by patient behavior, carer conversations, and society attitudes, which showed a preference for gardens and Zen areas. Natural materials and colours, biodiversity, protected outdoor areas, greenery, and outdoor sports and activity areas are all pertinent guidelines.
2. **Inclusive Environments:** Creating an inclusive environment requires accommodating diverse user needs, including cognitive limitations, visual impairments, age groups, and varying objectives. Essential design interventions include wayfinding systems, adequate lighting, intuitive organization, and safety measures to ensure autonomy and safety for all users. This includes rules for open and welcoming circulation, soundproof walls, individual restrooms for each patient room, lots of open space for circulation, several levels of privacy, private areas, family areas, carers' rest areas, solitary patient rooms, control and independence choices, dispersed carer stations, non-institutional atmosphere and design, home-like furnishings, areas for individualization and identity, retail spaces, artwork, and positive distractions.
3. **Therapeutic Environment:** Ensuring a therapeutic environment requires factors such as abundant daylight, sun protection/shading, safe furniture and materials in isolation rooms, safe furniture, and multiple levels of restriction.

Improving Society's Impression through addressing Public and Structural Stigma

An online survey collected ideas for improving communication between mental health patients and the community as well as perspectives from Albanian society. This led to the creation of an additional set of rules.

1. **Contact Theory: I**ncreased contact between the community and psychiatric facilities can reduce 'Public Stigma'. Activities such as mental health education classes, volunteering programs, support groups, and patient creativity exhibitions were favored by participants, indicating a strong potential for positive community engagement.

2. Place Attachment Theory: Creating emotional bonds with psychiatric facilities can address Structural Stigma. Elements such as a sense of safety, educational features, pleasing design elements, community centers, and public gardens were identified as essential for fostering place attachment and improving societal perceptions.

7.3 Integrating Guidelines

By integrating the guidelines for self-stigma, public stigma, structural stigma, and stigma by association, a comprehensive strategy can be developed that addresses multiple dimensions of stigma through thoughtful architectural design.

7.3.1 Therapeutic and inviting spaces

Greenery and Nature

- **Abundant Daylight:** Incorporate large windows and skylights to maximize natural light and avoid dark spaces, which has been shown to improve mood and reduce stress.
- **Protected Outdoor Spaces:** Design outdoor areas that are safe and accessible, encouraging patients to spend time outside. This includes courtyards and gardens that provide a peaceful environment for reflection and relaxation.
- **Presence of Greenery and Biodiversity**: Integrate a variety of plant species both indoors and outdoors to create a calming and therapeutic atmosphere. Greenery can reduce anxiety and promote a sense of well-being.

Home-like Atmosphere

- **Natural Materials and Colors:** Use wood, stone, and other natural materials to create a warm and inviting environment. Calming colors can help reduce stress and make the space feel less institutional.
- **Home-like Furnishings:** Select carefully designed furniture that is comfortable and homely rather than institutional, but cannot be used to harm users. This includes sofas, armchairs, and decor that mimic a home environment but have anti-suicidal design and safe soft materials.
- **Non-Institutional Design:** Avoid sterile, clinical designs. Instead, create spaces that feel welcoming and familiar to make patients feel more at ease.

Privacy and Autonomy

- **Multiple Layers of Privacy:** Provide various levels of privacy from single patient rooms to intimate spaces for personal reflection. This helps cater to different needs and enhances a sense of safety and control.
- **Control and Autonomy Options:** Allow patients to have some control over their environment, such as adjustable lighting and temperature controls in their rooms.
- **Single Patient Rooms:** Where possible, provide single occupancy rooms to enhance privacy and allow patients more control over their space.

7.3.2 Community Engagement

Educational and Volunteer Programs

- **Mental Health Education Classes:** Offer classes to educate the public about mental health, aiming to reduce prejudice and increase understanding.
- **Volunteering Programs:** Create opportunities for community members to volunteer at the facility, fostering empathy and breaking down barriers between the public and psychiatric patients.

Public Events and Exhibitions

- **Patient Creativity Exhibitions:** Host events that showcase the artistic talents of patients, such as art shows or music performances. This can help humanize patients and foster community appreciation.
- **Community Events and Workshops:** Organize workshops and public talks that engage both patients and the community, promoting interaction and understanding.

Community Centers and Public Gardens

- **Community Center**: Incorporate a community center within the psychiatric facility that serves as a space for public events, meetings, and activities. This helps integrate the facility into the community.
- **Public Gardens:** Develop gardens that are open to the public, providing a shared space where patients and community members can interact informally.

7.3.3 Safety and Accessibility

Inclusive Design

- **Wayfinding Systems:** Implement clear and intuitive wayfinding systems using colors, symbols, and landmarks to help patients and visitors navigate the facility with ease.
- **Intuitive Circulation:** Design pathways that are straightforward and easy to follow, minimizing confusion and disorientation, especially for those with cognitive impairments.
- **Safety Measures in Windows and Furniture:** Ensure that windows are secure and furniture is designed to prevent self-harm, without making the space feel overly restrictive.

Caregiver Support

- **Decentralized Caregiver Stations:** Place more than one caregiver stations throughout the wards to ensure that staff are easily accessible to patients, enhancing supervision and support.
- **Respite Spaces for Caregivers:** Provide quiet, comfortable spaces where caregivers can rest and recharge, helping to prevent burnout and maintain high-quality care.

7.3.4 Cultural Integrxation

Traditional and National Identity

- **Traditional Architectural Styles:** Incorporate elements of traditional Albanian architecture to create a sense of familiarity and pride for patients and the community.
- **Cultural Motifs**: Use cultural motifs and art in the design of the facility to create a space that resonates with the local population, enhancing place attachment and reducing stigma by association.

7.4 Prioritizing the integrated guidelines

To effectively prioritize the integrated guidelines, Maslow's hierarchy of needs is will be used as shown in Table XX. This approach ensures that fundamental safety and functional needs are prioritized first, followed by enhancements for the therapeutic environment and community engagement. Furthermore, this method provides a clear and structured way to implement the integrated guidelines, ensuring that the most critical aspects are addressed first while also planning for long-term improvements.

Maslow's Hierarchy Level	Guidelines
Physiological Needs	Private Bathrooms per Patient Room, Noise Control Walls, Greenery and Nature
Safety Needs	Safety Measures in Windows and Furniture, Multiple Levels of Restriction, Decentralized Caregiver Stations
Belonging and Love Needs	Inclusive Design, Family Zones, Community Centers and Public Gardens, Support Groups,
Esteem Needs	Multiple Layers of Privacy, Respite Spaces for Caregivers, Home-like Furnishings, Control and Autonomy Options
Cognitive Needs	Abundant Daylight, Mental Health Education Classes
Aesthetic Needs	Natural Materials and Colors, Traditional Architectural Styles, Cultural Motifs
Self-Actualization	Mental Health Education Classes Volunteering Programs
Transcendence	Patient Creativity Exhibitions

Table 5: Table showing how each integrated guideline fits in Maslow's Hierarchy of guidelines.

7.4 Addressing Practical Challenges

Implementing architectural guidelines to de-stigmatize psychiatric hospitals in Albania presents a set of practical challenges. These challenges include financial constraints, existing psychiatric care infrastructure limitations, cultural considerations, and the need for stakeholder collaboration. The following are suggested strategies for effectively addressing these challenges:

7.4.1 Economic Restraints

Challenge: Limited financial resources can restrict the ability to implement comprehensive architectural changes.
Solutions:

- **Prioritization of Interventions:** To focus on high-impact, low-cost interventions initially. For example, improving natural lighting and incorporating greenery are cost-effective yet highly beneficial changes.
- **Phased Implementation:** The implementation of guidelines in phases; first with essential features that address safety and basic needs, and gradually incorporating more complex and costly elements.
- **Funding and Grants:** To seek funding from international organizations, NGOs, and governmental grants dedicated to healthcare improvements and to highlight the potential long-term savings in healthcare costs due to improved patient outcomes.
- **Public-Private Partnerships:** To encourage partnerships between the government and private sector to share the financial burden and benefit from private sector efficiency.

7.4.2 Existing Infrastucture Limitations

Challenge: Many psychiatric facilities in Albania may have outdated infrastructure that is not conducive to modern design principles.
Solutions:

- **Retrofitting Existing Buildings:** To identify and prioritize, when possible, retrofitting opportunities that can enhance existing structures without requiring complete rebuilds. For example, adding window treatments to improve natural lighting or installing noise-reducing materials.
- **Modular Additions:** By using modular construction techniques to add new sections to existing buildings. This can be a cost-effective way to enhance functionality without significant disruption.
- **Utilizing Local Materials:** By using locally available materials and construction techniques to save money and ensure compatibility with existing structures and local climate.
with existing structures and local climate.
- **Designing new infrastructure:** In the case that the existing infrastructure is not adequate, designing new infrastructure following the guidelines may be more efficient.

7.4.3 Cultural Considerations

Challenge: Cultural beliefs and stigmas surrounding mental health can influence the acceptance and effectiveness of architectural changes.
Solutions:

- **Community Engagement:** Involve the community in the planning and design process to ensure that the changes reflect local values and address specific cultural stigmas.
- **Cultural Sensitivity in Design:** Incorporate traditional architectural styles and cultural motifs that resonate with the local population. This can enhance place attachment and reduce stigma by association.
- **Educational Campaigns:** Run parallel educational campaigns to raise awareness about the benefits of the new designs and reduce mental health stigmas. Use the renovated spaces for community events to demonstrate their positive impact.

7.4.4 Stakeholder Collaboration

Challenge: Successful implementation requires coordination among various stakeholders, including government bodies, healthcare professionals, architects, and the community.
Solutions:

- **Interdisciplinary Teams:** Forming interdisciplinary teams that include architects, healthcare providers, patients, and community representatives, ensures that all perspectives are considered in the design and implementation process.
- **Clear Communication Channels:** To establish communication channels among stakeholders to facilitate collaboration and address issues promptly.
- **Regular Feedback Mechanisms:**
Through the implementation of the feedback from all stakeholders during and after the implementation process. , necessary adjustments can be made.

7.4.5 Maintenance and Sustainability

Challenge: Ensuring that the new designs are maintained and sustainable over the long term.
Solutions:

- **Training for Staff:** By providing training for facility staff on maintaining new design elements and using them to their full potential.
- **Sustainable Design Choices:** Choosing sustainable materials and design options that will require less maintenance and last longer is ideal.
- **Ongoing Evaluation:** It is important to conduct regular evaluations of the facilities to assess the effectiveness of the design changes and make improvements as needed.

Recommendations for future research

This research provides a modest approach to the complex topic of architectural design in de-stigmatizing psychiatric care hospitals. While this thesis offers initial insights, it briefly touches upon the subject and highlights the necessity for more comprehensive research to yield deeper and more insightful results.
Future studies should include extensive socio-historical research on Albanian history and the socio-political factors that contribute to stigma. The limited scope of this study, which primarily involved a survey of 100 people and some information from existing research, underscores the need for broader and more detailed investigations.
Moreover, a thorough analysis of the financial implications of implementing various design guidelines is crucial. Detailed research on the costs and pricing for each design intervention is necessary to propose ideal solutions tailored to specific locations. Understanding the economic feasibility of these design strategies will ensure that proposed solutions are practical and sustainable.
As an MSc student in architecture, my objective was to lay the groundwork for understanding how design can impact stigma in psychiatric care settings to create design guidelines that form the basis of my architectural design proposal. However, addressing this multifaceted issue fully would benefit from interdisciplinary research that goes beyond the architectural perspective, incorporating insights from sociology, history, and political science. Such an approach could provide a more comprehensive understanding and effective solutions for reducing stigma in psychiatric care facilities.

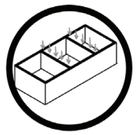
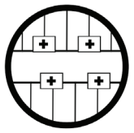
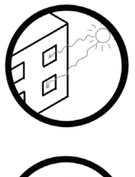
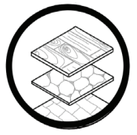
Icon	Guideline	Description	Rationale	Type of Need
	**Private patient rooms and Bathrooms**	Provide private patient rooms and bathrooms where possible.	Enhances privacy, reduces stress, and improves hygiene, promoting dignity and comfort.	Physiological
	**Noise Control Walls**	Use wall divisions and materials that control noise between patient rooms.	Reduces stress and anxiety by minimizing noise, creating a calm environment, allows patients to get adequate sleep.	Physiological
	**Greenery and Nature**	Integrate access to green spaces and a biodiverse nature within the facility: ex: courtyards, surrounding vegetation, potted plants.	Access to nature and green spaces improves mental well-being, reduces stress, and provides a calming environment.	Physiological
	**Safety Measures**	Ensure windows and furniture are secure to prevent self-harm. Maximize caregiver monitoring.	Ensures patient safety by preventing self-harm and accident and facilitates the job of caregivers.	Safety
	**Multiple Levels of Restriction**	Design spaces with varying levels of restriction based on patient needs.	Provides tailored security levels to match different patient needs, ensuring safety without imposing unnecessary restrictions.	Safety
	**Decentralized Caregiver Stations**	Place caregiver stations throughout the facility for easy access.	Enhances supervision and support, ensuring immediate assistance and improved safety for patients and staff.	Safety
	**Inclusive Design**	Implement clear and intuitive wayfinding systems and intuitive circulation.	Promotes social interactions and inclusivity, reducing feelings of isolation and enhancing community engagement.	Belonging and Love
	**Family Zones**	Designate areas where patients can interact comfortably with their families.	Supports social interactions and family visits, which are crucial for patient recovery and well-being.	Belonging and Love
	**Community Centers and Public Gardens**	Develop public spaces that foster connection: community centers and public gardens within the facility.	Integrates the psychiatric facility into the community, promoting positive associations and reducing stigma.	Belonging and Love
	**Volunteering Programs**	Encourage community members to volunteer at the facility.	Encourages community engagement and fosters empathy, reducing public stigma.	Belonging and Love

Table 6: Integrated guidelines for reducing stigma. Includes a integration of the self, public and structural stigma discussed in the previous chapters.

Icon	Guideline	Description	Rationale	Type of Need
	**Home-like Furnishings**	Use comfortable, familiar furniture to create a home-like atmosphere.	Reduces feelings of confinement and enhances patient comfort, creating a more welcoming environment.	Esteem
	**Respite Spaces for Caregivers**	Provide quiet, comfortable spaces for caregivers to rest and recharge.	Helps prevent burnout and maintains high-quality care by providing caregivers with spaces to rest and recharge.	Esteem
	**Control and Autonomy Options**	Allow patients to control aspects of their environment, such as lighting and temperature.	Provides various levels of privacy to cater to different needs, enhancing a sense of safety and control.	Esteem
	**Multiple Layers of Privacy**	Provide various levels of privacy, from single patient rooms to intimate spaces for personal reflection.	Ensures patient safety by preventing self-harm and accident	Safety
	**Abundant Daylight**	Incorporate large windows and skylights to maximize natural light and avoid spaces without natural light.	Improves mood, reduces stress, and promotes a sense of well-being through natural light exposure.	Cognitive
	**Natural Materials and Colors**	Use wood, stone, and other natural materials along with calming colors.	Creates a warm and inviting environment, reducing stress and making spaces feel less institutional.	Aesthetic
	**Traditional Architectural style and technique**	Incorporate elements of traditional architectural styles in the design.	Creates a sense of familiarity and pride, enhancing place attachment and reducing stigma.	Aesthetic
	**Cultural Motifs**	Integrate cultural motifs and art in the design of the facility.	Incorporates cultural elements that resonate with the local population, enhancing place attachment.	Aesthetic
	**Mental Health Education Classes**	Create spaces fot classes to educate the public about mental health.	Educates the public about mental health, fostering understanding and empathy, and reducing stigma.	Self-Actualization
	**Patient Creativity Exhibitions**	Host events that showcase the artistic talents of patients.	Showcases patients' artistic talents to the broader community, promoting positive interactions and reducing stigma.	Transcendence

Conclusion

This thesis has explored the role of architecture in de-stigmatizing psychiatric hospitals in Albania, a country facing unique socio-economic challenges and cultural perceptions regarding mental health and psychiatric care facilities. The complex topic of stigma is tackled by exploring its subdivisions according to Goffman's theory. By integrating theoretical frameworks such as Contact Theory and Place Attachment Theory, and through extensive fieldwork and community surveys, this research has developed a set of guidelines aimed at reducing self-stigma, public stigma, and structural stigma within psychiatric care facilities.

In addressing self-stigma, the thesis proposed evidence-based design strategies that enhance user experience within psychiatric facilities. These guidelines focus on creating therapeutic environments that promote dignity, comfort, and empowerment for patients, to counteract the general impression that psychiatric hospitals are spaces of restrictions. Key elements such as abundant natural light, greenery, non-institutional design, and privacy were emphasized to foster a more supportive and stigma-free environment.

For public stigma, the survey highlighted the importance of facilitating positive interactions between the community and psychiatric facilities. By designing spaces that encourage volunteer activities, mental health education, and community engagement, the proposed guidelines aim to bridge the gap between psychiatric patients and the broader community, fostering empathy and understanding.

Structural stigma was tackled through the integration of traditional architectural styles and cultural motifs, which help embed psychiatric facilities within the local cultural and social fabric. This approach not only enhances place attachment but also promotes a sense of community pride and acceptance of mental health institutions.

The case studies from Denmark, including the Psychiatric Hospital Vejle by Arkitema and two competition submissions for Ballerup Hospital, provided ideal examples of therapeutic spaces. These examples, although from a different socio-economic and climatic context, offered valuable insights and inspiration for designing psychiatric facilities in Albania. The lack of similar examples and references in developing countries, as noted from architectural sites like ArchDaily and Dezeen, underscores the significance of this research in filling a critical gap.

Through this comprehensive approach, the thesis underscores the transformative potential of architectural design in de-stigmatizing psychiatric care facilities. By prioritizing user needs, fostering community involvement, and integrating cultural elements, the proposed guidelines aim to create inclusive, safe, and therapeutic environments that challenge stigma and promote mental well-being.

In conclusion, this research provides a strategic roadmap for leveraging architectural design solutions to reduce stigma in psychiatric care hospitals in Albania. While acknowledging the limitations and context-specific challenges, it offers a hopeful vision for the future of psychiatric care in the country, where architecture plays a crucial role in promoting dignity, inclusivity, and societal acceptance.

Together, let us endeavor to construct a future where every individual feels dignified, supported, and empowered on their journey towards well-being.

Appendix

Topic of discussion	Summary of EB research	Sources	Theoretical Groundwork	Book Design Guidelines	Context Application and Relevance
Floor Plan Confgurations for Wayfnding	Floor plan configurations significantly affect wayfinding performance. Simplified layouts with fewer directional changes tend to facilitate wayfinding behavior. Conversely, symmetrical layouts and repetitive patterns can cause confusion and disorientation. Incorporating distinctive landmarks can assist in wayfinding. Early consideration of wayfinding during the design process is crucial, and it should be integrated into floor plan configurations to offer intuitive guidance.	Arthur and Passini (1992), Basaya et al. (2004), Carpman et al. (1993), Devlin (2014), Haq et al. (2003), Huelat (2007), Marquardt (2011), Marquardt et al. (2009), O'Neill et al. (1991), Passini (1992), Rooke et al. (2009)	Environmental Cognition Theory	1. Intuitive Floor Confguration/ Building Typology 2. Design landmarks and reference points, including objects, cafeteria etc 3. Reference points for symmetrical floorplans	1. Applicable for varous healthcare including, psychiatric, acute, children's hospitals, longterm etc.
Environmental Visual Cues for Wayfnding	Two approaches enhance wayfinding: floor plan configurations and environmental cues like color, lighting, and signage. Signage can complicate wayfinding if misused or misplaced, while improper lighting and inconsistent colors may mislead. Effective use of colors can help distinguish various parts of the building and improve wayfinding performance.	Baskaya et al. (2004), Carpman et al. (1985), (2016), Devlin, (2014), Epstein et al. (2014), Haq et al. (2003), (2005), Marquardt (2011), O'Neil et al. (1991), Passini (1992), Rousek et al. (2009), Vilar et al. (2014)	Environmental Cognition Theory and Environmental Perception Theory	1. Color and color contrast 2. Color Pattern and Pictograms 3. Large floor Numbers 4. Lighting design	These solutions are feasible for the scenario of Albania, considering that they are not an expensive solution.
Wayfnding for Elderly and People with Visual Impairment	Wayfinding research focuses on individuals with cognitive and sensory limitations. Certain floor patterns and dark surfaces can disorient and cause anxiety. Elevators pose significant anxiety-inducing barriers for those with dementia. The circulation system and floor plan configuration notably affect the elderly's orientation and wayfinding performance. Decorative elements often disrupt wayfinding, and lighting changes can mislead individuals with vision impairment. Design elements like shiny tiles or changing patterns on floor surfaces present additional challenges for visually impaired individuals.	Bosch et al. (2017), Chaudhury et al. (2018), Legge et al. (2013), Marquardt (2011), Marquardt et al. (2009), Mobley et al. (2017), Passini et al. (2000), Rousek et al. (2009)	Environmental Cognition Theory and Environmental Perception Theory	1. Simple Corridors in Floor Confguration: I or H shaped buildings 2. Simple Paths 3. Daylight 4. Avoidance of elevators when possible 5. Color cues and color coding 6. Sufficient lighting per task 7. Signage 8. Floor Pattern: impairment.	While this research reviews specifc target groups such as elderly and the visually impaired, it is important to notice that psychiatric patients can also be elderly citizens or visually impaired individuals. Thus, it is important for these guidelines to be take into consideration for designing and inclusive environment and balancing user needs.
Signage, Information Desk, and Interactive Touch Screen Map	Signage, information desks, and interactive touch screen maps are crucial for wayfinding, along with floor plan configurations and environmental cues. Redundancy in communication helps compensate for memory loss and spatial understanding challenges. Consistency in signage colors and institutional branding enhances effectiveness. Information desks facilitate interaction for visitors. Wayfinding interface systems should be user-friendly, accessible, and intuitive.	Baskaya et al. (2004), Bosch et al. (2017), Devlin (2014), Ding (2015), Harper et al. (2019), Kalantari et al. (2017), Legge et al. (2013), Passini et al. (2000), Rodrigues et al. (2019), Rooke et al. (2009), Tüzün et al. (2016)	Theory and Environmental Perception Theory	1. Digital Signage: 2. Consistent Colors on Signage 3. Simple Language and Terminology 4. Efficient Illumination and Legibility 5. Symbols and Pictograms: 6. Signage Placement: Signage should be placed within the feld of vision of visitors.	1. Digital Signage might be an expensive solution, and in the case of Albania physical signage might be a more suitable alternative, The rest of the guidelines are general and applicable for the scenatrio of psychiatric hospitals.
Sense of Control and Access to Privacy	The research indicates that patients express a desire to regulate the noise and visual exposure from the corridor outside their room, prevent unauthorized individuals from peering into their space, safeguard their personal belongings, adjust the room temperature according to their preferences, and manage the television within the patient room.	Cartland et al. (2018), Nejati et al. (2016), Patterson et al. (2017), Ruga (1989), Ulrich (1991, 2000, 2001, 2008)	Environmental Stress Theory, Supportive Design Theory	1. Private Patient Room 2. Privacy in the Patient Room and Bathroom, **enable patients to see who is entering the room** 3. Control of Temperature, Lighting, and TV: Easy access to electrical power. Many accessible electrical outlets. 4. Control of Bed and Other Furniture: *Adjustable bed and furniture that patients can adjust without asking for help.* 5.Personal Storage and Personalization of the Patient Room.	1. Whileprivate rooms are most preferred by patients, shared rooms might be more cost-effective for materials and staff allocation and supervision. In such shortage alternative is shared rooms of 2 patients. 2. Single patient rooms are more expensive if they are built with a private room. 3. Limited to budget. Electrical outputs can be dangerous for psychiatric patients. 4. Psychiatric patients should have some control to their furniture to give them autonomy, but as fieldwork research showed this should be limited especially with furniture that patients can use to cause harm to themselves or others. 5. Personal Storage and personalizion of their room can improve patient well being and can be inplemented in this scenario.

Directly applicable toa psychiatric hospital in Albania.

Suggested alternations due to contradictions, budget restriction, or other.

**Note: Book Design guidelines are suggested by Suining Ding in her book and are applicable to a wide range of medical facilities.The context application column evaluates its application for psychiatric hospitals in Albania or a similar context.

Topic of discussion	Summary of EB research	Sources	Theoretical Groundwork	Book Design Guidelines	Context Application and Relevance
Positive Distractions	Another essential consideration in evidence-based studies involves integrating positive distractions within healthcare settings. Studies indicate that incorporating positive distractions can effectively reduce stress levels for both patients and caregivers. Recent research has highlighted various forms of positive distractions, including water features, landscapes, and artwork within healthcare environments.	Andrade et al. (2017), Cartland et al. (2018), Hathorn & Nanda (2008), Kaplan and Kaplan (1989), Marcus 2007, Marcus and Barnes (1999), Nanda et al. (2011), Nejati et al. (2016), Patterson et al. (2017), Ruga (1989), Ulrich (1984, 1991, 2000, 2001), Ulrich and Parson (1992)	Environmental Stress Theory, Supportive Design Theory	1. Displayed Artworks: especially nature theme. 2. Window Views to Nature: Designing windows that allow to access to nature as much as possible in a healthcare environment. 3. Light and Sun: Designing a space that can be exposed to light and sun. 4. TV for Entertainment	1. Applicable for psychiatric facilities. While TVs per patient room might not be realistic, these facilities should include shared TV rooms and for other activities.
Access to Social Support	A fundamental element of supportive design theory involves offering social assistance to patients, which has remained consistently pivotal in stress and wellness investigations within healthcare settings. Evidence-based studies in healthcare have proposed various recommendations concerning how physical attributes can mitigate stress in such environments, such as incorporating family zones within patient rooms and creating respite areas for caregivers.	Andrade et al. (2017), Cartland et al. (2018), Cohen (1986), Cohen & Syme (1985), Kaplan & Kaplan (1989), Nejati et al. (2016), Patterson et al. (2017), Sarason & Sarason (1985), Ulrich (1991, 2000, 2001)	Environmental Stress Theory, Supportive Design Theory	1. Family Zone in Private Patient Room: Designing a family zone in a patient room. Providing a place that family members can stay overnight (e.g., sofa bed and storage space). 2. Family Waiting Room providing prominent nature elements, such as plants and daylight. 3. Family waiting room with comfortable seating to seek privacy and socialization and offers access to other positive distractions, such as food and shops. 4. Café and Giftshop for visitors	1. This guideline is important in the case of child patients. In the case of adult patients, especially for shared rooms it might not be feasible when considering budget. Furthermore, it might be dangerous for family members. A solution would be to have guest rooms with beds or comfortable chairs where visitors can stay overnight. 2. Other guidelines are applicable and feasible for the case of psychiatric hospitals.
Respite Environment	Research and theoretical frameworks indicate that a garden abundant in nature offers potential as a soothing space that may alleviate stress symptoms among families of ICU patients. The terms "stress recovery" and "restoration" are used synonymously in this context. Studies demonstrate that stress levels notably decreased in both outdoor and indoor garden settings. Breaks in outdoor gardens yield significantly greater improvements compared to indoor spaces.	Andrade et al. (2017), Cartland et al. (2018), Kaplan & Kaplan (1989), Marcus 2007, Marcus & Barnes (1999), Nejati et al. (2016), Patterson et al. (2017), Ulrich (1991, 2000, 2001), Ulrich et al. (2020)	Environmental Stress Theory	1. Outdoor Garden 2.Atrium/Café 3. Staff Break Room 4. Indoor Garden if climate not appropriate for an outdoor one	All design suggestion are applicable to the scenario researched in this thesis.
Nature, Daylight and Window Views	Hospital employees highly favor the introduction of natural light into healthcare settings. Incorporating nature elements and offering window views in these environments can contribute to stress reduction. Research indicates that natural light provides significant physical and mental health benefits for both patients and medical staff. Studies suggest that patients' length of stay may decrease with increased exposure to daylight.	Aries et al. (2010), Hartig et al. (2003), Joarder and Price (2013), Marcus, (2007), Munch et al. (2012), Mroczek et al. (2005), Pati et al. (2008), Shepley et al. (2012), Sherman et al. (2005), Sternberg (2009), Ulrich (1981, 1984), Ulrich et al. (1992, 2020), Van de Berg et al. (2003), Zadch et al. (2014)	Therapeutic Environment Theory, Environmental Stress Theory, OHE Framework	1. Home Like Environment 2. Access to Nature and Views 3. Lighting: Providing appropriate lighting level for caregivers, and controllable soft lighting for patients. 4. Noise Control: 5. Window Views to Nature 6. Maximum daylight and Sun	All design suggestion are applicable to the scenario researched in this thesis.
Lighting	Lighting significantly contributes to creating a healing environment and has been linked to various health outcomes. The quality of lighting is particularly crucial for diverse populations, including the elderly, who spend extended periods indoors, and pediatric patients, whose perceptions and responses to lighting differ.	Deviln et al. (2003), Gaminiesphani et al. (2020), Joseph (2006b), Koch (1991), Leather et al. (1998), Malkin (1991), Shepley (2004), Sherman et al. (2005), Ulrich et al. (2004), Verderber (1986)	Therapeutic Environment Theory, OHE Framework	1. Bright Lighting Level for Caregivers/ task specific 2. Adjustable Lighting for Patients	Important for the case of psychiatric hospitals. Adjustable lighting systems per room might be expensive to be implemente.

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Noise Control	Numerous evidence-based studies in healthcare settings highlight that noise can elevate stress levels, blood pressure, and heart rate, hindering restoration and stress recovery. Poor sleep quality in healthcare environments is influenced by factors such as noise, light, and interactions between staff and patients. Improving sleep quality is crucial for stress recovery, prompting the development of environmental interventions to minimize nighttime noise and disruptive staff-patient interactions.	Battamman (2006), Dogan et al. (2005), Gimenez et al. (2017), Hagerman et al. (2005), Philbin and Gray (2002), Reid, (2001), Ulrich, (1984, 1991), Ulrich et al. (1991, 2004)	Therapeutic Environment Theory, Environmental Stress Theory	1. Single Occupancy Patient Room 2. Improving Acoustical Performance/ absorbing materials.	1. Due to budget restrictions might be implemented as few patients per room. 2. Important to have adequate building materials for acoustical performance.
Healing Garden	Research indicates that observing nature can alleviate stress and foster favorable emotional and psychological transformations. Research suggests that direct access to nature, such as through gardens, has positive impacts on physical and emotional well-being, leading to decreased pain, lower stress levels, improved social interactions, and a heightened sense of control in healthcare settings.	Hartig et al. (2003), Marcus (1999), Naderi and Shin (2008), Pearson et al. (2019), Sherman et al. (2005), Ulrich (1979, 1991, 1999), Ulrich et al. (2008), Van der Berg et al. (2003)	Therapeutic Environment Theory, Environmental Stress Theory	1. Outdoor Garden: abundant nature elements located close to patients and caregivers. 2. Indoor Garden: Designing an indoor garden as a respite space that has abundant natural elements, such as daylight, vegetations/fowers and water feature.	1. Neccessary and should not be excluded due to budget limitations. 2.Due to budget restrictions, plants in vases might be a more suitable solution than an indoor garden.
Art for Healing	Research findings indicated that positive artwork can have a restorative effect, evoking positive and pleasant responses to stimuli. Studies demonstrated that visual arts portraying restorative natural scenes could alleviate anxiety and agitation among mental health patients in healthcare settings.	Huisman et al. (2012), Upali, (2011), Upali et al. (2003, 2011), Ullman et al. (2021)	Therapeutic Environment Theory, Environmental Stress Theory	1. Artworks: Displaying artwork in the healthcare environment, especially the artwork contains nature theme as positive distractions.	1. Caregivers during the fieldwork supported this claim and was already implemented in one of the facilities. Designing simple visual intervention, like video art or still art can be used to improve patients' experience in the waiting room.
Control in Private Patient Room vs. Shared Patient Room	Research findings indicate that a private single-occupancy patient room can meet patients' needs for control and interpersonal and social support. Moreover, single-occupancy rooms are linked to reduced noise levels, improved sleep quality, higher patient satisfaction with care, and enhanced privacy compared to multiple-occupancy rooms.	Andrade and Devlin (2015, 2016), Bayo et al. (1995), Chaudhury et al. (2005), Devlin et al. (2014), Devlin and Arneill (2003), Hesselink et al. (2020), Langer (1983), Topf and Thompson (2001), Ulrich et al. (1991), Ulrich et al. (2008), Ulrich and Parsons (1992), Valente et al. (1992), Van de Gliud et al. (2007).	Control Theory	1. Private Patient Room: Designing single-bed patient rooms instead of multi-bed patient rooms to provide control and physical privacy. 2. Family Zone: Designing a family zone in the patient room includes storage space and a sofa-bed so family members can stay overnight. 3. Separate TVs: Installing two separate TVs in the patient room, one for the patient and one for the family members for having choices.	These suggestions are not ideal considering budged restrictions. (See suggested alternatives for Sense of Control)
Control Over Light, Temperature, and Lighting	Research indicates that offering patients control over environmental factors like bed position, air temperature, lighting, sound, and access to natural light can lower stress levels and enhance wellness. While opportunities for controlling the physical environment are viewed as crucial for patients' well-being, the effects may vary depending on individual preferences for control.	Andrade and Devlin (2015, 2016), Bingham et al. (2020), Huisman et al. (2012), McCum et al. (2021), Steptoe and Appels (1989), Ulrich (1991), Ulrich et al. (2003).	Control Theory	1. Private Patient Room: Designing the patient room that allows patients to control bed position, lighting, natural light and room temperature. 2. Nurse Station: Allowing nurses to control task-lighting and overhead lighting.	1. This should be limited in the case of harm to patients. Movable furniture might not be ideal. More restrictions over patient's control are crucial for areas designated for very agitated patients, as shown by fieldwork. 2. Feasible for the context, important for caregiver and staff productiivity.
Supervision and Control Over Patients – Decentralized Nurse Station	Research suggests that caregivers often face stress and burnout due to the nature of their work, which involves high responsibility and low control. The concept of decentralized nurse stations has shown significant improvements over centralized ones in addressing these issues. Studies indicate that combining	Cai and Zimring (2012), Chandhury et al. (2009), Copeland and Chambers (2017), Durham and Kenyon (2019), Fay et al. (2017), Fay et al. (2019), Kramer and Schmalenber (2003), McCullough	Control Theory	1. Decentralized Nurse Station: Designing decentralized nurse stations in the nursing unit. Each nurse station supervises 8-12 patients.	1. Feasible fo context scnerio. 2. Limited due to staff and budged restrictions

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Topic of discussion	Summary of EB research	Sources	Theoretical Groundwork	Book Design Guidelines	Context Application and Relevance
	decentralized nurse stations with distributed nurse alcoves positioned outside patient rooms can enhance patient supervision and improve medical care delivery.	(2009), Pati et al. (2015), Shumanker and Pequegn et al. (1989), Thomson and Goldin (1975), Ulrich (1991), Williams et al. (2008), Zborowsky et al. (2010).		2. Distributed Nurse Alcoves: Allocating a nurse alcove outside the patient rooms. Each nurse alcove control two patients' rooms with see-through windows.	
Control Patient Falls, Patient Safety, Walking Distance, Communication	Research indicates that caregivers often experience stress and burnout due to the high responsibility and low control in their work. Decentralized nurse stations have shown significant improvement over centralized ones in addressing these issues. Combining decentralized nurse stations with distributed nurse alcoves outside patient rooms can enhance patient supervision and medical care delivery. Moreover, studies suggest that this setup helps prevent patient falls and improves safety, although findings on walking distance vary. Lack of communication emerged as an issue, leading to recommendations for hybrid decentralized nurse stations with enhanced communication elements to reduce walking distance.	Cai and Zimring (2012), Chandhury et al. (2009), Copeland and Chambers (2017), Durham and Kenyon (2019), Fay et al. (2017), Fay et al. (2019), Pati et al. (2015), Shumanker and Pequegn (1989), Ulrich (1991), Williams et al. (2008), Zborowsky et al. (2010).	Control Theory	1. Decentralized and Distributed Supply Spaces for each nurse station can reduce nurses' walking distance. 2. Respite Spaces for Caregivers: to communicate and socialize with co-workers, helping to communication situation in decentralized nurse stations.	Both are feasible fo context of psychiatric hospitals to avoid caregiver burnout.
Preference of Natural Scenes – Restoration	Overral information concluded from the chapter.	Hartig et al. (2003), Marcus (1999), Naderi and Shin (2008), Pearson et al. (2019), Sherman et al. (2005), Ulrich (1979, 1991, 1999), Ulrich et al. (2008), Van der Berg et al. (2003)	Environmental Preference Theory, Research Evidence of Nature Restorative Effect	1. Indoor and Outdoor Gardens 2. Nature Views: Designing windows in the healthcare environment for all users to see natural scenes, including patients and caregivers.	Important for creating a healing encironment in a psychiatric hospital. Indoor gardens might be restricted due to budgeting. Albania is mostly a sunny location and periods where outdoor gardens cannot be accessed due to bad weather are rare and short. Thus, indoor gardens are not critical as it would be in a nothern or colder country.
Preference of Visual Arts – Positive Distractions	Research has demonstrated the influence of positive distractions, like visual art, on patients' clinical and behavioral results within healthcare settings. Findings suggest that preferred natural scenes, encompassing water features, landscape elements, preferred colors, familiarity, and pleasant memories, have restorative potential. Additionally, research indicates that visual arts preferences vary across different age groups.	Diette et al. (2003), Hathorn and Nanda (2008), Miller et al. (1992), Nanda et al. (2008), Nanda et al. (2009), Nanda et al. (2011), Pearson et al. (2019), Schneider et al. (2003), Thake et al. (2017), Thake et al. (2020), Ulrich and Charmel (2003), Ulrich (1991), Ulrich et al. (2003), Vessey et al. (1994)	Environmental Preference Theory, Research Evidence of Positive Distractions	1. Visual Arts: Positive art, art depicting nature. 2. Virtual Reality and Simulations: Designing positive distractions, including virtual reality and simulations in the healthcare environment, reduce pain and stress.	1. Ideal for a psychiatric hospital. 2. Virtual Reality technology might not be feasible due to budget restrictions, however other methods of simulation can be implemented: ex wallpapers of vegetation, or thorugh artwork.
Preference of Physical Attributes in the Healthcare Environment – Patients Well-being	Studies indicate that elements such as privacy, comfort, seating layout, visually pleasing furniture, and positive distractions within waiting areas can enhance users' perception of care quality. Moreover, research has identified patient preferences and expectations within patient rooms from a patient-centered standpoint. These preferences encompass comfort (e.g., privacy, security), control (e.g., noise, lighting), access, and connection (e.g., family, outside world).	Arneill and Devlin (2002), Becker and Douglass (2008), Carpman et al. (1993), Devlin and Arneill (2003), Jafarifroozabadi et al. (2021), Kotzer et al. (2011), Malkin (1992), Panda et al. (2015), Patterson et al. (2017)	Environmental Preference Theory, Research Evidence of Users' Preference	1. Privacy and Control (Private Patient Room) 2. Family Zone in the Patient Room 3. TV and Internet	Previously discussed, budget restrictions.
Preference of Daylight and Window Views – Best Possible Outcomes and Staff Satisfaction	Research indicates that the physical environment can enhance medical staff's perception of their work-life quality. Of all the design elements, incorporating natural light and providing window views within healthcare settings received the most favorable response from medical staff. Studies suggest that nurses who have access to outdoor nature views and daylight experience lower stress levels.	Alimoglu and Donmez (2005), Altimizer (2004), Aries et al. (2010), Chandhury et al. (2006), Kamali and Abbas (2012), Leather et al. (1998), Mahmood et al. (2011), Munch et al. (2012), Mroczek et al. (2005), Pati et al. (2008), Rubin et al. (1997), Sherman et al. (2005), Sternberg (2009), Ulrich (1984), Zadeh et al. (2014)	Environmental Preference Theory, Research Evidence of Restorative Effect	1. Daylight in the Healthcare Environment: windows, atrium, and skylights in the healthcare environments for maximum daylight. 2. Window View for Patients and Caregivers: in patient rooms and caregiver workspaces	1. Ideal for a psychiatric hospita, considering the importance of daylight on human psychology and physiology.

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Environmental Affordances for Patient-Centered Care	Evidence-based studies have highlighted the significance of incorporating a designated family zone within private patient rooms to enhance family involvement and patient support, a crucial aspect of patient-centered care. Various physical features within patient rooms are also important for fostering patient-centered care and promoting patient well-being.	Andrade and Devlin (2015), Bardenhagen and Rodiek (2016), Choi and Bosch (2013), Gibson (1977), Gibson (1979), Pati et al. (2009), Patterson et al. (2017)	Environmental Affordance Theory, Research Evidence	1. Family Zone 2. Single patient room	See Previous explanation.
Color, Environment and Human response	Research indicates that observing nature can alleviate stress and foster favorable emotional and psychological transformations. Research suggests that direct access to nature, such as through gardens, has positive impacts on physical and emotional well-being, leading to decreased pain, lower stress levels, improved social interactions, and a heightened sense of control in healthcare settings.	Mahnke (1996)	Color Theory	1. Natural materials are prefered by people over colorful walls. 2. An alternative to natural materials are earthtones. 2. Green is not always a healing color. Avoid bright green colors. 4. Red can create excitement and more activity, but also agression if too bright. 5. yellow can make people more efficient.	1. Use local materials to reduce price of exposed materials. 2. Earthtone colors are preferred and more calming. During filedowk it was shown that staff and patients did not like the brightmint colors of the interior spaces or of the facades.

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