PERSPECTIVES ON THE PSYCHIATRIC HOSPITAL OF SHKODRA: PERCEPTION OF NEARBY RESIDENTS

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ABSTRACT

PERSPECTIVES ON THE PSYCHIATRIC HOSPITAL OF SHKODRA: PERCEPTION OF NEARBY RESIDENTS

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For the last decades, environmental education has shed a light into how psychiatric hospitals resonate into the neighborhood, not only in what they add to the particular aesthetic of a neighborhood, but also what they add to the collective psyche of the neighborhood. According to public perception and quite intuitive conventions, the presence of a psychiatric hospital resonates in its surroundings.

This study aims to analyze the perception of the Psychiatric Hospital of Shkodra by the residents of the neighborhood and understand better the community attitudes towards both the mental health and mental health facility. The focus of the study are the neighbors' perceptions (N = 100), which are gathered and analyzed employing a quantitative approach through random sampling door-to-door surveys.

By using questionnaires, it aims to determine the relation this built environment has with the people of the surrounding neighborhood. Presently, mental health is stigmatized, so the general perception of the environment is highly colored. However, this research aims to define the factors contributing to the attitudes, how they are tethered to the built environment and social components. Results of the analysis highlighted the relationship between facility characteristics and community attitudes towards mental health — to name a few, homeowners and residents who have lived longer in the neighborhood are more likely to perceive the facility as a factor decreasing property values; residents that had children at home tended to fully agree with the statement "There should be guards at the facility"; and respondents who found the facility ordinary preferred that the facility be situated in the outskirts of the city,

not in the neighborhood. Finally, the study provides a baseline for future research into community participation, and Not-In-My-Backyard (NIMBY) attitudes towards the inclusion and exclusion of mental health facilities.

Keywords: *citizen's attitude, mental illness, NIMBY, community participation, stigma, perception of community health facilties.*

ABSTRAKT

PERSPEKTIVA PËR SPITALIN PSIKIATRIK TË SHKODRËS: PERCEPTIMI I BANORËVE TË LAGJES

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Në dekadat e fundit, edukimi mjedisor ka theksuar mënyrën si ndikojnë spitalet psikiatrike në lagjen që i rrethon, jo vetëm në kuadër të aspektit estetik, por edhe në kuadër të kontributit që kanë në psikikën kolektive të lagjes.

Ky studim synon të analizojë perceptimin e banorëve të lagjes për Spitalin Psikiatrik të Shkodrës dhe të kuptojë më mirë sjelljet e perceptimet e komunitetit për shëndetin mendor dhe facilitetet e shëndetit mendor. Studimi ka në focus perceptimet e banorëve (N = 100), që janë mbledhur e analizuar duke përdorur një metodologji sasiore nëpërmjet marrjes në intervista të kampionit rastësor në anketa derë-më-derë.

Nëpërmjet pyetësorëve, ky studim synon të kuptojë dhe të përkufizojë marrëdhënien e banorëve të lagjes me mjedisin që i rrethon. Momentalisht, ka shumë stigma për shëndetin mendor. Hipoteza e studimit është që perceptimi mjedisor i facilitetit ndikohet nga stigmat dhe perceptimet e shëndetit mendor. Në vijim, kjo tezë synon të përkufizojë faktorët që ushqejnë sjelljet dhe perceptimet dhe si lidhen këta faktorë me mjedisin e ndërtuar dhe elementet shoqërore. Rezultatet e analizës hodhën dritë mbi lidhjen ndërmjet karakteristikave të spitalit dhe sjelljet e komunitetit rreth karakteristikave të ndërtesës dhe shëndetit mendor — më specifikisht, pronarët e shtëpive dhe banorët që kanë jetuar më gjatë në lagje, janë më të prirur ta perceptojnë ndërtesën si faktor kryesor që ul vlerat e pronave të tyre; banorët me fëmijë në shtëpi ishin shumë dakord që ndërtesa duhet të ketë roje; dhe të anketuarit që e karakterizuan ndërtesën "të zakonshme" preferonin që ndërtesa të gjendej jashtë qytetit, jo në lagje.

Ky studim shërben si themel për kërkime të mëtejshme në pjesëmarrjen e publikut në proceset e projektimit dhe planifikimit, dhe kuptimin e sjelljeve gjithë-përfshirëse dhe përjashtuese të faciliteteve të shëndetit mendor.

Fjalët kyçe: *perceptimi i ambienteve të shëndetit mendor, pjesëmarrja e publikut, qëndrimet e qytetarëve, sëmundje mendore, stigma*

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LIST OF ABBREVIATIONS

ART	Attention Restorative Theory describes the cognitive benefits of interacting with nature. The most notable study is Berman et al (2008).
CAMI	Community Attitudes towards Mental Illness (CAMI) is a framework introduced by Wolff et al (1996) to anticiate and study the attitudes of the community/ general public to mental illness.
NIMBY	Not In My Backyard discourse in urban planning refers to initiatives where there is local resistance to proposed developments in their local area (such as the construction of a psychiatric facility).

CHAPTER 1

INTRODUCTION

1.1 Problem Statement: The Restorative Power of Design

Design can affect to some extent the health of its users. Nowhere else does design carry more restorative power than in mental health facilities: the health of its users can be affected directly and indirectly by bad design. Illegible or poorly designed wayfinding for patients directly affects the health of its users, while creating a general stressful social environment is the indirect way design affects user's health (E. H. Zube, G. T. Moore; 1989).

There are many fields that specialize in the relationship between humans/users and their surroundings. This study leans on the pillars of environmental psychology to study the human-environment relation, through qualitative and quantitative approaches (L. Steg et al., 2013). Environmental psychology focuses on this relationship by creating coalitions with other disciplines to set apart the individuals that are trying to shape the environment (R. Gifford et al., 2011). There is a considerable intersection between the fields of architecture and environmental psychology and geography, in the pursuit of understanding the physical and spatial components that influence this relationship. Also, advancement in methodologies and theories of environmental psychology impelled and affected by social psychology and cognitive psychology (L. Steg et al., 2013).

A facility can affect its users by the way it is perceived by the community. Because positive and negative attitudes of the community can determine the integration of the facility in the community, they can affect the patient's road to recovery, and the mental health of the health provider as well (S. F. Isaac, 1979).

In Albania, psychiatric facilities opened for the first time, as part of district hospitals. These district hospitals followed the Soviet "shemanko" model of health-care: state-funded, centrally planned and operated universal healthcare focused on acute disease treatment through secondary care and inpatient treatment (Nuri, B.,

2002). The first psychiatric hospitals were built in Vlora (in 1920, later reconstructed during the 50's), Shkodra, Tirana, and Elbasan.

Media covered the prevalence and rise of mental health issues during, and following, the COVID pandemic. Many reports have highlighted that the pandemic affected mental health, quoting an unprecedented rise in depression, anxiety, and even suicide rates. There have been very few studies that have analyzed the pandemic's effect on mental health in Albania, but it has been well-documented world-wide. Moreover, there is a lack of literature in the intersection of mental health stigmas and psychiatric facility design.

1.2 Thesis Objective

This study aims to understand and analyze the neighborhood residents' perception of mental health and the mental health facility of the Psychiatric Hospital of Shkodra, building on the pillars of environmental science and restorative architecture. It employs a quantitative approach, by utilizing surveys with the residents of the neighborhood to understand their attitudes regarding mental health and their perception of the facility.

The study recognizes the power of community and user groups in steering design processes. According to Zube and Moore (1989) there are three groups that can steer the design process: design and regulatory agencies, fiscal and political organizations and community and user groups. Only the latter group has an effect also after the design process as to they are the ones that affect the facility and are affected by the facility. User groups include hospital admin, doctors, physicians, nurses, housekeeping, patients and visitors, while community groups can include the neighborhood, political groups, educational groups, religious groups and special interest groups.

The goal of this study is to comprehend and quantify community attitudes towards mental health and mental health facility, to provide solution for planning and design practices that promote community participation and engagement and patient integration in the neighborhood.

1.3 Scope of Works

This study employes a quantitative approach, using surveys to investigate the perception of the psychiatric hospital by neighborhood residents. The sample of the study is picked using random sampling methodology. The author conducted a door-to-door survey in the neighborhood of the hospital for a week, March 6 – 12 (March 6 - 9 from 8 AM to 1 PM, whereas from March 10 – 12 from 2 – 7 PM) interviewing people about their perception of the hospital. I introduced myself and the purpose of the study, informed them about the time it would take to fill out the survey, and asked for their consent.

The author makes use of primary and secondary data, where primary data was gathered through the survey and cognitive mapping exercise, and secondary data was gathered through archival research to the Municipality of Shkodra and the Regional Hospital of Shkodra, and literature review research.

1.3.1. Theoretical Basis

This study relies heavily on the pillar of environmental psychology. The following chapters provide a brief overview of the research on measuring environmental attitudes, the CAMI framework ("Community Attitudes towards Mental Illness).

1.3.2. Measuring Attitudes

There are various ways to measure environmental attitudes — this is why Milfont and Duckitt refer to it as "anarchy of measurement". They define environmental attitudes as the individual's tendencies to express and note what they like or dislike towards the environment (Milfont & Duckitt, 2010).

These attitudes cannot be observed instantaneously, because they are a dormant construct that has evolved over time. That is why Krosnick et al. (2005) argue that measuring attitudes ought to be centered around techniques with implicit

measurements and methods that have direct self-report. To that end, the most prevalent method to measure environmental attitude is the “direct self-report method”, including conducting interviews and questionnaires. Other ways to measure environmental attitudes include techniques of observing, and completion of measures of response (Milfont & Duckitt, 2010).

Following an increase in the level of awareness and interest in the attitudes of the community toward the patients of psychiatric hospital, there have been complex and sometimes downright contradictory findings, where some studies like Meyer (1964), Ring and Schein (1970) and others find results proving a positive attitude towards the patients and the facility, while others, like Steadman and Cocozza (1978), Cumming and Cumming (1957) and Darcy and Brockman (1976) find negative attitudes towards the patients and the facility. This drastic change in results has largely been attributed to different data collection methods and research methods. Repper and Brooker (1996) argue that other explanations for the drastic change in results are the interviewees’ lack of sincerity in the answers they have provided, and different interpretations of open-ended questions (as opposed to categories).

Generally, mental health facilities that garnered a high number of negative responses were those facilities that had substantial media coverage, while the facilities with little-to-no-media coverage integrated more smoothly into the community. Dear et al. (1990) attribute the lack of negative responses, to some extent, to a good percentage of individuals in the community that were unaware of the existence of such facilities in the neighborhood.

Wolff et al. (1996) developed a framework called "Community Attitudes towards Mental Illness" (CAMI) to predict the views of the community and the general public regarding mental illness. The findings from CAMI are categorized into four subscales: authoritarianism, benevolence, social restrictiveness, and community mental health ideology (CMHI). These categories are assessed using a set of 40 questions (or items) that are rated on a 5-point Likert scale, ranging from "strongly agree" to "strongly disagree." Higher scores in authoritarianism and lower scores in benevolence and social restrictiveness indicate a greater stigma. The CAMI remains a widely used tool for assessing stigma towards individuals with mental health conditions.

The research from literature review and previous research on measuring attitudes have helped shape the survey, by initially, promoting and including the self-report method (asking residents about their perception of the neighborhood), degree of familiarity with the neighborhood, and the degree of media coverage of the facility, that will be taken into account in the case study section.

1.4 Survey Design

The author conducted a door-to-door survey in the neighborhood of the hospital for a week, March 6 – 12 (March 6 - 9 from 8 AM to 1 PM, whereas from March 10 – 12 from 2 – 7 PM) interviewing people about their perception of the hospital. The people were asked questions about their gender, age, familiarity with the neighborhood, housing ownership/tenure, familiarity with the mental health care system, perception of the mental health hospital (across many dimensions, rated in a Likert scale of 1-5), real estate appreciation/depreciation due to the presence of the hospital, and the desire to live next to a psychiatric hospital. The survey closed with a cognitive mapping exercise, where the surveyees were invited to describe the road from the house to the psychiatric hospital. For the cognitive mapping, the author/surveyor helped the residents by mapping the walk, according to their description and integrating their feedback on the map.

The survey began with a short description, informing residents of the aim of the survey. “This survey aims to collect information on the residents’ attitudes and perceptions of psychiatric hospital. The following questions will help us understand your attitude. All the information is anonymous and shall be used for a Master of Architecture thesis.”

The survey first gathered data on the resident profile. This is the information gathered by the survey: gender, age (in brackets 18 – 39, 40 – 64, 65+), familiarity with the neighborhood (in brackets less than 5 years, 5 – 10 years, more than 10 years), rent or own, presence of children at home, education, and professional background.

The following questions are focused on attitudes related to mental health, and they include familiarity with mental health, where the resident would treat a family

member with health issues (home or hospital), where they would want the hospital to be (in or out of the city), and transparency towards neighbors and relatives over treatment.

The following category concern attitudes on the hospital, inspired by the CAMI framework and rated on a Likert scale from 1 to 5: situation on the psychiatric hospital, impression created by the presence of the facility, perception of mental health and facilities, impact of the facility on the traffic, noise and parking, fear, encounter with patients, and whether the facility affects real estate values.

1.5 Data Collection Method

The surveys were conducted on site, with printed surveys. The author conducted a door-to-door survey in the neighborhood of the hospital (as defined in *Figure 1*) for a week, March 6 – 12 (March 6 - 9 from 8 AM to 1 PM, whereas from March 10 – 12 from 2 – 7 PM) interviewing people about their perception of the hospital.

Figure 1. Map of the neighborhood, highlighting the defined area of study. Courtesy of the author.

1.6 Organization of the Thesis

This thesis consists of 6 chapters. The organization is done as follows:

Chapter 1 presents the problem statement, thesis objective, the scope of the study. Moreover, it introduces the theoretical basis of the study, and the methodology of the approach (namely, measuring community attitudes towards mental health, survey design, and data collection method).

Chapter 2 outlines the literature review, as it pertains to psychiatric architecture and perceptions of mental health facilities. It begins by introducing various mental health settings, the origins of the psychiatric hospital, and environmental psychology as a tool to understand residents' perception. It underscores the facility characteristics that affect the environmental perception of mental health facilities, and the image of the facility and its users created by the community. Finally, it looks into more abstract concepts of spatial conditions as borders — in a quest to define "outsiders" and "insiders", as they pertain to the facility, and even who the neighborhood residents — and a framework for understanding community attitudes towards mental illness.

Chapter 3 presents the case study of the psychiatric hospital of Shkodra, its general conditions and the analysis of the layout of the hospital, as it compares to the literature review case studies and practices. Chapter 4 presents data analysis methodology, ethical considerations and research limitations, and results pertaining to resident profile, community attitudes towards the facility, and statistically significant relationship tests. In chapter 5, findings and discussion are stated, interpreting the results from the previous chapter. Finally, chapter 6 includes conclusions and recommendations for further research.

CHAPTER 2

PSYCHIATRIC ARCHITECTURE, AND PERCEPTIONS OF MENTAL HEALTH FACILITIES

This chapter aims to introduce the pillars of the study, beginning with an introduction to the theoretical framework of psychiatric hospitals and mental health treatment, the origin and evolution of the psychiatric hospital typology, the pillars of environmental psychology and attitudes and behaviors.

This study concerns one out of four main mental health treatment settings: in-patient settings, and their relationship to the surroundings. Mental health treatment is set out in various settings, depending on factors such as the nature of the mental condition, the austerity of the mental condition and the physical health of the patients. According to North Texas Help there are 4 main types of settings of which patients can be admitted to: inpatient setting, outpatient setting, residential, tele-psychiatry, and tele-mental health services. (North Texas Help, accessed 2020). Blackberry rehab and mental health defines two types of settings, residential (inpatient) and outpatient setting (Blackberry Rehab, accessed 2020), where inpatient settings are facilities that provide treatment for an elongated period (up to 30 days) and outpatient settings, that only offer a variety of treatments within office hours. Based on the fact that there exists different classification of the types of mental health treatment settings in Table 1 is concocted a generalized classification of the mental health treatment settings. The focus of this thesis is the psychiatric residential center and the residential setting.

There are many factors that affect the progress of the treatment of mental health patients. Repper and Brooker (1996) define the following key conditions for progress:

1. Ample support and care offered by health providers,
2. Community acceptance and integration in the social constructs and the neighborhood's public facilities,
3. The patient users of the psychiatric hospital share the same rights as any other resident of the community.

Table 1. Classification of mental health treatment settings (Types of Mental Health Treatment Settings and Levels of Care | North Texas Help, n.d.).

MENTAL HEALTH TREATMENT SETTINGS			
Inpatient Setting		*Outpatient Setting*	*Telepsychiatry*
Inpatient Hospital Setting General Hospital	Residential Setting Psychiatric residential center	Partial Hospitalization Programs (PHPs) Intensive Outpatient Program (IOPs)	Telephone Email
Psychiatric Hospital	Rehabilitation center Nursing home	Outpatient Clinic Community Mental Center Practitioners Private Practice	Online Chat Videoconferencing

2.1 Introduction to the Mental Health Setting

Psychiatric hospitals are a subsection of the inpatient settings of mental health treatment facilities. People choose to go or are submitted to psychiatric hospitals when at-home care for their mental illness is no longer sufficient. There, the treatment can range from stabilization to medication and close monitoring, and administration of prescriptions. Some of the patients are usually transferred after a 30-day treatment in hospital setting.

Ulrich (1991) was one of the first researchers that emphasized the importance of the design of the clinic to the patient's ability to cope with stress. He outlines a framework of interior design that promotes patient's health: enabling sense of control, providing access to social support, allowing access to positive distractions and lack of exposure to negative distractions. His research suggested that single-occupancy rooms could reduce aggression in patients, there should be movable furniture in the communal areas, wards should not exceed low social densities, and gardens should be easily accessible.

Research has shown that facility design is not just important for the patients, but for staff as well. Jin et al. (2023) conducted a literature review to investigate the relationships between environmental design factors and staff mental health outcomes, including stress, fatigue, job satisfaction, burnout, and well-being. The search yielded 27 empirical articles that identified healthcare design aspects such as overall facility and perception (aesthetics and impressions, sense of belonging to the surroundings and safety), specific spaces and area separation (distinguishing between the patient area and staff workspace), ambiance levels (panoramic views, light and sound) and interior space design (including materials and furniture). The study proved that the design of the patient area was associated with all five mental health outcomes, and staff workspace, light, and sound were associated with stress, fatigue, level of job satisfaction and well-being. Therefore, a properly designed inpatient healthcare facility could promote the mental wellbeing of staff too.

Designing with nature is a prominent topic featured in psychiatric facility design, and more generally, in restorative architecture, because of the health benefits of interacting with nature. Many studies, but most notably the study by Berman et al (2008) have investigated the cognitive benefits of interacting with nature, using attention restorative theory (ART) to measure directed-attention abilities. The experiments conducted by the researchers found that a walk in nature or looking at pictures of nature can improve abilities related to directed attention.

2.2 Origin and Evolution of the Psychiatric Hospital

Literature on the psychiatric health facilities points the first special facilities in the 6th – 13th century in Bagdad, Aleppo, Kairo and Fez. These hospitals offered services that would soothe the patients' psyche — in 1365, a mental hospital in Granada would provide treatments like special diets, storytellers to aid sleep, baths, perfumes and drugs (Jones, 1983). Over the course of history, the aim of hospitalization followed course to the evolution of the hospital structure: Sendula-Jengić et al. (2011) pointedly note the progression of hospitals from "lunatic" asylums to psychiatric hospitals and wards.

The 17th century saw a surge in the term “madhouse” that sprung off the absence of these special facilities. The term itself refers to the level of ostracism and stigma surrounding mental health issues. Patient abuse in these facilities was considered mainstream, until 1744, when a regulating bill prohibited abuse in madhouses that had become synonymous with torture places, illustrated in *Figure 2* (Jones, 1983). Most patients were treated in the same quarters with criminals and beggars, and they were divided into “good” and “dangerous” patients (Sendula-Jengić et al., 2011).

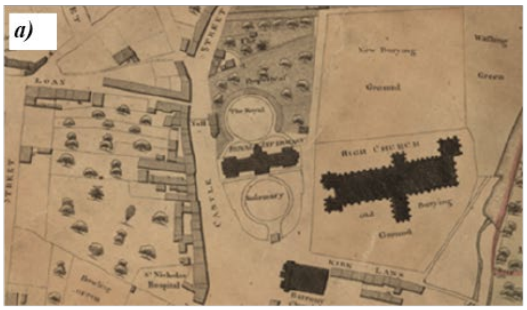
Figure 2. An interpretation of the 17th century Madhouse by W. Hogart (Art prints in demand.com, accessed 2020).

Bethel Hospital (otherwise known as Bedlam), the first psychiatric hospital in London opened in 1330 and is generally recognized as the first psychiatric hospital in Europe. Initially, the hospital was treating patients with physical ailments, and only in 1403 did the hospital admit mentally ill patients. The inhumane treatment of the hospital popularized the term “bedlam” to be synonymous with “madhouse” or “a rowdy, confusion-ridden situation”. For a long time, the mentally ill received the same care and accommodation as the beggars, traitors, and criminals (Sendula-Jengić et al., 2011). In 1728, Thomas Guy’s Hospital was established. While it had an unprecedented capacity (of 100 patients), it was characterized by open corridors and gardens, landscaping and features that were quite unusual for psychiatric hospitals at the time (Jones, 1983).

2.2.1. Hospital Architecture and Layout

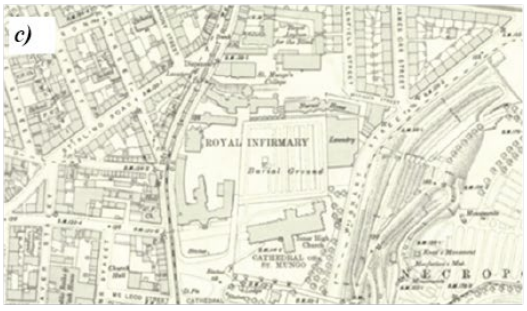
Generally, the architecture of psychiatric hospital was driven by the need to supervise and made use of Jeremy Betham's concept of "the panopticon" as a blueprint, extending to patients the same treatment as to prisoners. *Figures 3* and *4* illustrate examples of employing the panopticon concept in the Glasgow Royal Asylum or Infirmary (*Figure 3*) and Devon County Lunatic Asylum (*Figure 4*), characterized by a central tower and wings extending from the circular building.

a) Drawing of the Glasgow Royal Asylum



b) Glasgow Royal Asylum 1814

c) Glasgow Royal Asylum 1892



d) Glasgow Royal Asylum 1910

e) Glasgow Royal Asylum 1933

Figure 3. Glasgow Royal Asylum (Historic Hospitals, 2017).

For the most part, accommodations in asylums were composed of single occupancy rooms, a large central block from which two wings extended, and "airing courts" — courtyards surrounded by high walls, with a mound in the middle that allowed patients to peak a view over the wall without escaping it (Historic Hospitals, 2017). *Figure 4* illustrates a typical psychiatric hospital layout.

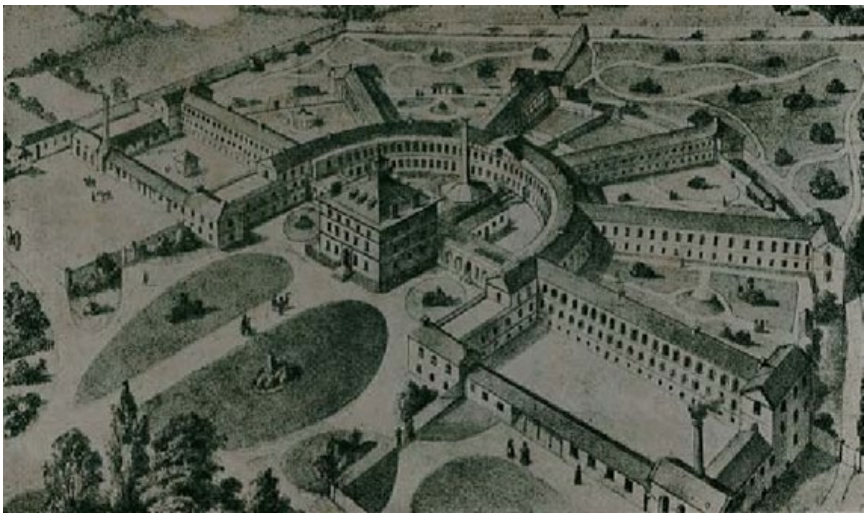


Figure 4. Devon County Lunatic Asylum 1845 (Historic Hospitals, 2017).

A breakthrough marked the 19th century psychiatric architecture: the implementation of the open-doors policy aimed to show to the outside world that asylums no longer needed to be secluded, and that there was nothing to fear. Many design decisions followed the open-door policy, mainly the removal of padded rooms (that served, until then, as a last resort to stop patients from self-hurt), illustrated in *Figure 6.*"By educating people on the necessity of these facilities, the funding helped with the structural and decorative improvement and raising of hospital standards in catering furnishing and recreation" (Jones, 1983).

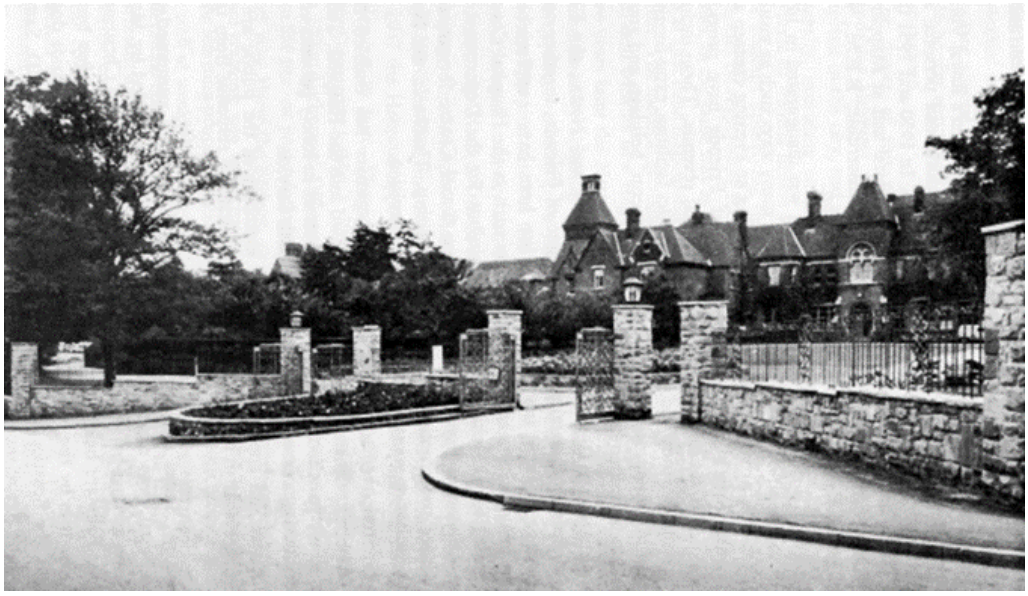


Figure 5. Stanley Royd Hospital (Historic Hospitals, 2017).

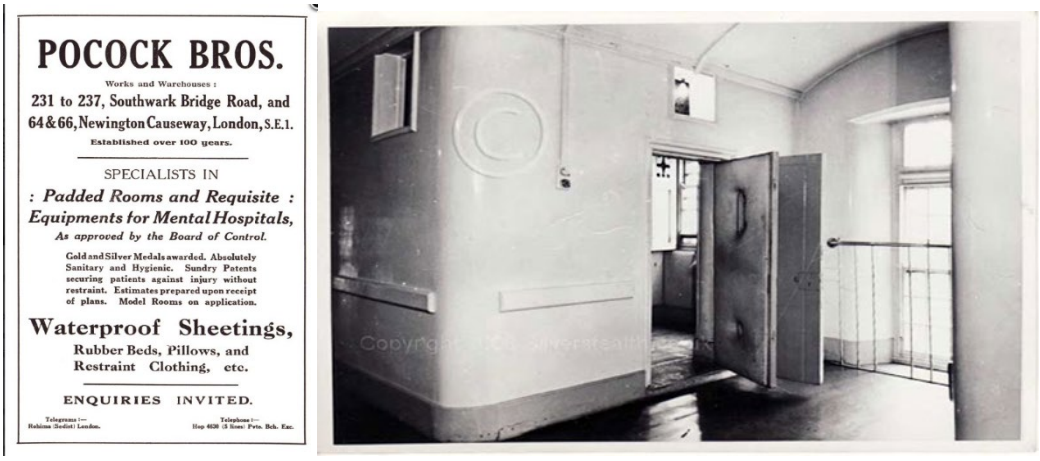


Figure 6. Padded room (Historic Hospitals, 2017).

Location and design decisions underwent a similar breakthrough — France, for example, stressed the importance of serenity and peacefulness and located facilities in rural areas, to maximize daylight as well. Rooms were aligned single file, facing a walkway within a rectangular building that enclosed the courtyard. However, in Britan, the most prevalent style was “the Linear Plan”, conceived by Thomas Kirkbride, and characterized by buildings with wings perpendicular to its centrality. The epitome of the Linear Plan was Nottingham Borough Asylum at Mapperley (illustrated on *Figure 7*).

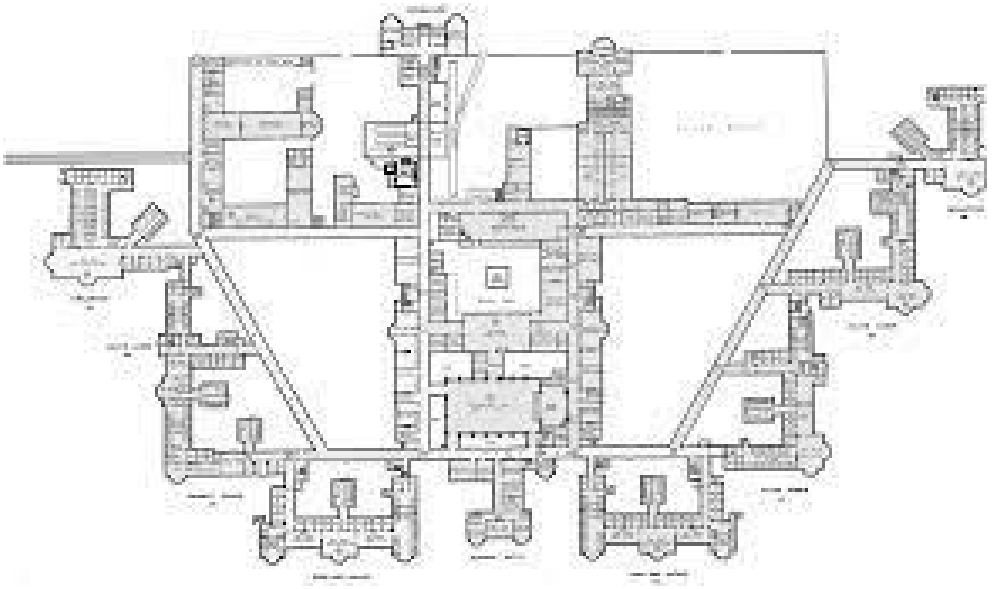
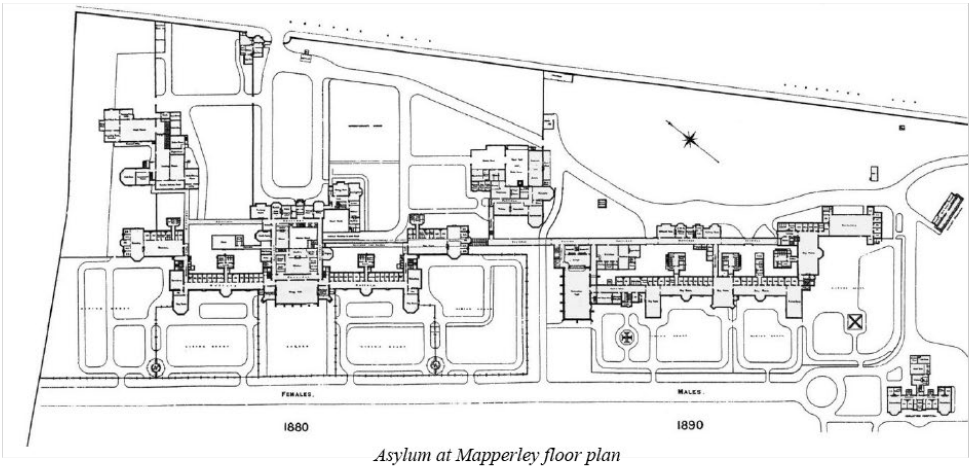
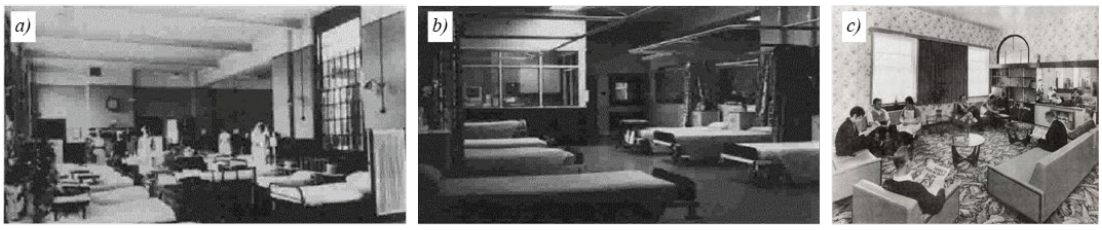


Figure 7. The layout of the asylum consisted of a symmetrical corridor in red brick, with stone banding, gothic ornamentation, and slate roofing.



Asylum at Mapperley floor plan



a) Ward view in 1930 *b) View of the same ward in 1980* *c) View of the same ward recently*

Figure 8. Mapperley asylum plan and views from the same ward throughout the years (County Asylums, accessed 2020).

Eventually, architectural historians and researchers came to the realization that patient experience is partially determined by design decisions. This realization, and

effectively this model of care, has been used to drive restorative design decisions since the establishment of the York Retreat in 1796 (Edginton, 1997), an asylum founded by William Tuke.

Figure 9. Perspective view of the Retreat of York (Kibria & Metcalfe, 2014).

Daily life in the retreat relied heavily on and was extensively supported by "moral architecture" — an orderly and sober environment that encouraged patients to be connected to their social and natural supports. Design and the asylum were used as "therapeutic instruments", assisting the patient's self-control and discipline, while removing them from exciting stimuli (e.g: door handles and doors were muffled to reduce noise, doors to patient rooms opened outwards to prevent barricading).

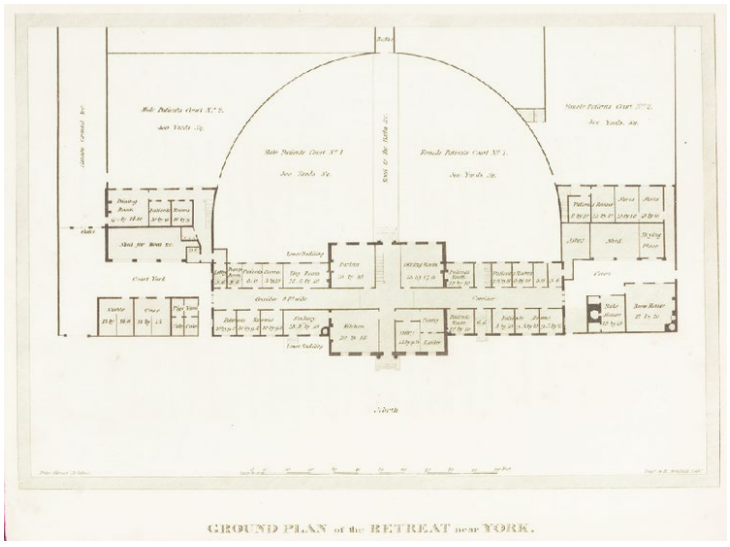


Figure 10. Ground plan of the Retreat of York (Kibria & Metcalfe, 2014).

In conclusion, the 19th century witnessed a pivotal point in the discourse of architecture as a therapeutic tool (Sendula-Jengić et al., 2011). That era was characterized by a rather naïve conviction that proper design and landscape can restore a person's sanity (Edginton, 1994). Later, in the 1960s and the 1970s, the therapeutic role of architecture was not merely a consideration among design circles but was prevalently accepted as a genuine tool that could improve the patient's mental health. Similarly, mental illnesses were embraced and destigmatized from the outside world, due to important breakthroughs in the corresponding field. Presently, the treatment period, like the stigmatization of mentally ill patients, has drastically decreased (Sendula-Jengić et al., 2011).

Mclaughlan et al (2021) have conducted a desktop survey of design practices across various psychiatric hospitals (31 forensic and 13 non-forensic), currently constructed, or scheduled to be completed between 2006 – 2022. In the span of three centuries, there were constructed 11 purpose-designed buildings accommodating the treatment of mental illness — a very small number, considering the discipline of evidence-based design has existed for over the last three decades (Mclaughlan et al., 2021).

Forensic psychiatric hospitals treat patients who have previous criminal offenses or are potentially at risk of committing a criminal offense. In general, patient accommodation is arranged as a degree of security (low, medium, or high). The study aims to understand how architects and designers can balance patient privacy, on the one hand, and dignity, on the other hand (Scull, 2014).

The researchers identify design decisions according to several categories: design approaches to site layout (where they define "the village" and the "campus" identified in *Figure 11*), and design approaches to inpatient accommodation (peninsula, race-track and courtyard illustrated in *Figure 12*). Finally, they identify several best practices, highlighting the design decisions that add value to the buildings (*Figure 13, 14,* and *15*).

Figure 11. Mclaughlan et al (2021) define two psychiatric hospital arrangements: "the village" and "the campus" arrangement.

On the left, the Broadmoor Hospital follows "the village" typology, with an internal treatment hub that serves as a focal point (Mclaughlan et al, 2021). On the right, the Worcester Recovery Center and Hospital prescribed a "campus" arrangement, where the treatment hub is on the edge. Additionally, Mclaughlan et al (2021) defined inpatient accommodation arrangements as well, pictured in *Figure 12*. Nr. 1 is the peninsula, where patient rooms extend on one side only. The racetrack configuration (nr. 2) and the courtyard arrangement (nr.3) are similar, with patient rooms on both sides of the building. The difference lies in the presence of landscaping in nr. 3.

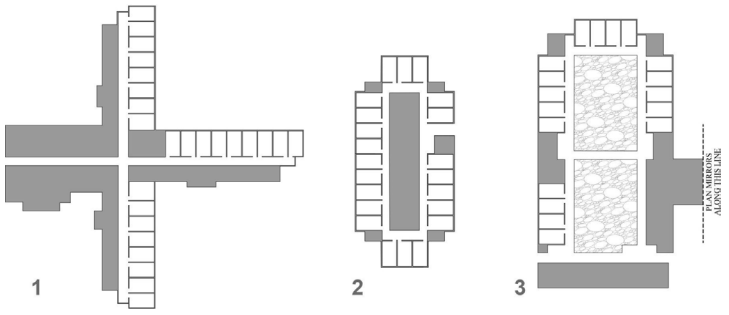


Figure 12. Mclaughlan et al (2021) define three accommodation arrangements.

Mclaughaln et al. (2021) also defined different conditions for landscape definition and occupation, differentiating between the exterior landscape fence, outer secure boundary line, and approximate extent of hospital side beyond the boundary (*Figure 13*).

Figure 13. Extent of landscape occupation and definition by patients, indicated by the position of inner and outer secure boundary lines.

Mclaughlan et al (2021) identify three best practices relating to the extent of landscape occupation and definition by patients: (1) Broadmoor Hospital (rural UK), (2) Irish National Mental Hospital (rural Ireland) and (3) Roseberry Hospital (suburban UK). The functional diagrams of case studies identified by Mclaughlan et al (2021) are illustrated on *Figure 14* and *15*, namely the Worcester Recovery Center and the Margaret and Charles Juravinski's Center for Integrated Healthcare.

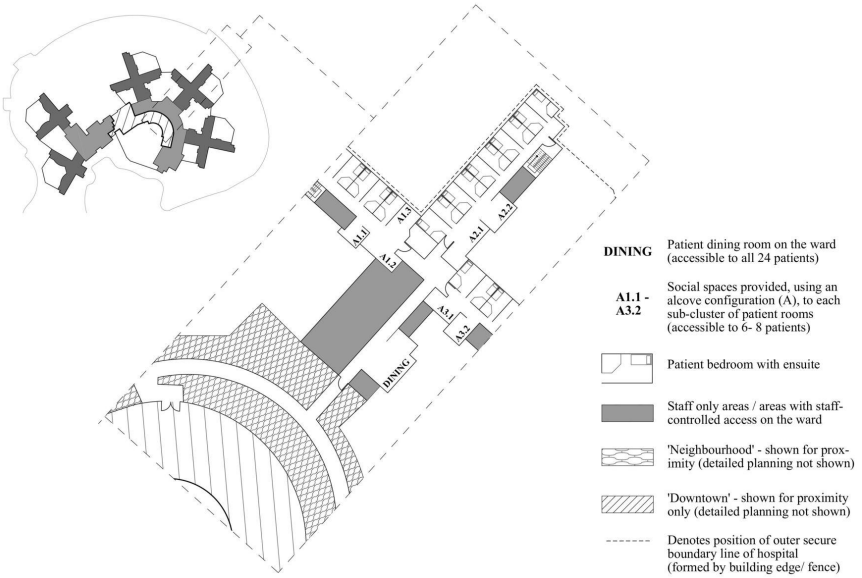


Figure 14. Functional diagram of the social spaces at the Worcester Recovery Center. Source: Mclaughlan et al (2021).

The functional diagrams highlight the typology of spaces identified and described above, specifically courtyard arrangement and accommodation layout. The diagram illustrated on *Figure 15*, showcasing the configuration for Margaret and Charles Juravinski's Center for Integrated Healthcare portrays a gradual, linear configuration, with a public-fronting zone in the bottom of the image, followed by the galleria, and finally, after crossing a clinical corridor, could the patients access inpatient accommodation.

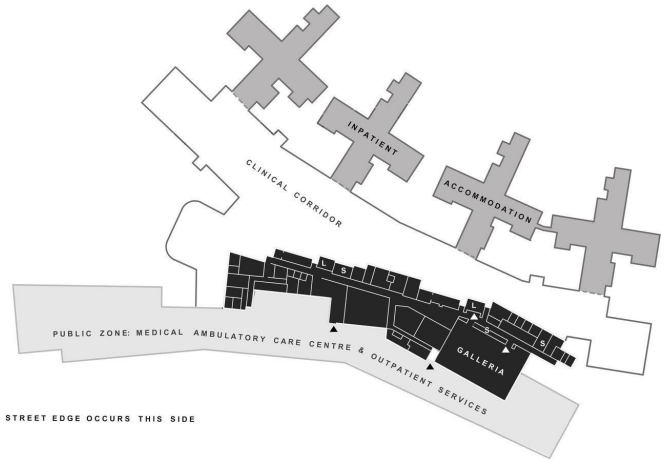


Figure 15. Functional configuration for Margaret and Charles Juravinski's Center for Integrated Healthcare. On the black is the galleria zone on the second floor (arrows indicate main access points).

Extensive literature has been devoted to the intersection of mental health care and architecture's contribution to the positive mental health outcomes. To that end, Connellan et al (2013) conducted a comprehensive literature review investigating themes that describe how the mental health facility architectural design affect users, with an intersectional approach of sources from health and architecture from 2010 – 2011. The emerging key themes, regarding mental health facility design, were light, security and privacy, nursing stations, therapeutic milieu, privacy, interior detail, gardens, and user engagement in the design process.

In conclusion, the case studies presented had specific layouts as follows:

Table 2. Summary of case study hospitals, design characteristics, and approaches.

Case study hospital	*Design characteristics*	*Design approaches according to Mclaughlan et al. 2021*
Glasgow Royal Asylum or Infirmary	Employed the panopticon concept Single occupancy rooms High walls enclosing courtyards with a mound in the middle that allowed the patients to peak over the wall.	Psychiatric hospital arrangement: The campus Inpatient accommodation arrangement: The racetrack configuration
Devon County Lunatic Asylum	Employed the panopticon concept Single occupancy rooms High walls enclosing courtyards with a mound in the middle that allowed the patients to peak over the wall.	Psychiatric hospital arrangement: The village Inpatient accommodation arrangement: The courtyard arrangement
Nottingham Borough Asylum at Mapperley	Employed "the linear plan" concept Wings perpendicular to the central node Multi occupancy rooms	Psychiatric hospital arrangement: The village Inpatient accommodation arrangement: The courtyard arrangement
York Retreat	"Moral architecture" Design and the asylum used as "therapeutic instruments" "The linear plan" concept	Psychiatric hospital arrangement: The village Inpatient accommodation arrangement: The racetrack

2.3 Environmental Psychology as a Research Tool for Understanding Residents' Perceptions

Environmental psychology is the interdisciplinary science that investigates the connection between humans and their environments and surrounding contexts. Its contribution to the field of psychology was instrumental in understanding the influence the physical environment exerted on its inhabitants (Bechtel, 2010).

In the case of this study, environmental psychology can be employed in understanding the neighborhood residents' perception of the mental health facility: namely, their experiences, their wellness, demeanors and vice-versa. The influence that individuals exert towards mental health facilities includes the manner in which environmental behavior is included and how pro-environmental behavior can be bolstered and encouraged (Environmental Psychology, 2013).

There are three key levels of environmental psychology analysis: fundamental psychological process, social space managing, and human-nature interaction (illustrated in Table 4) (Gifford et al., 2011).

This study aims to understand the resident's perception of the psychiatric hospital, employing environmental psychology as one of the pillars. The study aspires to understand environmental behavior and promote what "pro-environment" behavior — a term promoted by Kollmuss and Agyeman (2002) to describe individual behavior that attempts to undermine the negative impact of someone's actions towards the natural and built environment.

This is further labelled as goal-oriented, pro-environmental behavior (Gifford et al., 2011), adopted by people with the explicit goal of promoting and doing something beneficial for the environment. In table 1, the author synthesizes the literature review research regarding perceptions, behaviors, and definitions by different authors.

Table 3. Perceptions, behaviors, and their definitions, as identified during literature review research. Table is prepared by the author.

Perceptions and behaviors	Definition
Pro-environment behavior	Defined by Kollmuss and Agyeman (2002) to describe individual behavior that attempts to undermine the negative impact of someone's actions towards the natural and built environment.
Degree of noxiousness	Gifford et al. (2011) define "The degree of noxiousness" as a way for individuals and the community to understand the effect of the facility on property values, environment enhancement, community benefits, and neighborhood dynamics.
The image of the environment	According to Wright (1991), the image of the environment relies on group characteristics (gender, age, status).
NIMBY (Not-In-My-Backyard)	NIMBY is a term that originated in the 1950's and became popular in the 1980's and is used to describe locally organized resistance to unwanted land uses. Cowan (2003) investigates the attitudes of the public towards the relocation of a mental health facility in the neighborhood, and employes the term "NIMBY-ism" to describe the largely opposing behavior of residents. Her findings highlight that the existing public consultation guidelines fail to account the concerns and issues raised by the local people, and the study proposes a transparent public consultation and engagement process that involves the residents from the early stages.
Image of the facility — dormant	Heider (1939) argues that the environment enables a person to act, therefore attributing a user's behavior to themselves, and perceiving the facility as a dormant agent.
Image of the facility — outsider and insider perceptions	Wright (1991) argues for a differentiation between outsider and insider perceptions, where the outsider is less likely to perceive the positive aspects of the mental health facility.

2.4 Facility Characteristics of the Built Environment

Environmental attitudes describe one part of the phenomenon (i.e.: people's perception of the built environment), the other part being facility characteristics. In order to understand thoroughly environmental attitudes, they need to be contextualized. Facility characteristics include descriptors of type of facility, size, number, reputation, appearance, and operation. Repper and Brooker (1996) note a significant difference in perceiving residential and non-residential types of facilities — the latter is less accepted in the local community.

Another characteristic that evokes a negative reaction is the large scale of the facility, implying more activity, noise, and traffic. This leads to the conclusion that smaller facilities are preferred. The perception of community members can also be affected by the number of facilities in the area — with residents feeling overburdened by a higher number of facilities.

2.5 Environmental Perception of Mental Health Facilities

Environmental psychologists stress the importance of understanding the way people react to daily circumstances and sceneries. Gifford et al (2011) acknowledge that the level of awareness, adaptability, and necessary selectiveness in tending to environmental stimuli in complex sceneries are overpowering at times, and consequently make people filter out crucial elements, severely affecting health and safety. Culture plays an important role in environmental the perception of the environment and informs a person's perception behavior.

The study of perception behavior is crucial to this study, regarding the image of the mental health facility on an individual as well as a community level. Gifford et al. (2011) identify "the degree of noxiousness" as a measure of the community's perception. The degree of noxiousness allows individuals and the community to understand the effect of the facility on property values, environment enhancement, community benefits, and neighborhood dynamics (perceived at risk for fear of what individual the mental health facility attracts).

Understanding the impact that the psychiatric building exerts over the neighborhood is an important contribution to the public participation field, specifically with regards to NIMBY — Not In My Backyard — discourse in urban planning. Cowan (2003) investigates the attitudes of the public towards the relocation of a mental health facility in their neighborhood. Her findings highlight that the existing public consultation guidelines fail to account the concerns and issues raised by the local people, and the study proposes a transparent public consultation and engagement process that involves the residents from the early stages. Similarly, Warner (1983) notes that the neighborhood community can deny the placement of a mental health facility in the neighborhood, when faced with opposition, or can further intensify the opposition if a mental health facility is already established.

2.5.1. The Image of the Facility and its Users Created by the Community

The impact of the environment on people relies on group characteristics (gender, status, age and so on). The attributed labels describe the inhabitant, not the environment, therefore the reality is to some extent shaped by the interplay between the nature of the environment and that of individuals (Wright, 1991).

Heider (1939) states that the environment enables individuals to act — to that end, the mental health users are more prominent than the facility. Therefore, the facility is perceived to be "dormant" in relation to its users. This school of thought perceives the facility to be dormant, and play a not-so-active role, because they attribute a user's behavior to the user themselves. However, Wright (1991) argues that to properly understand a person's behavior, you ought to place the person in the context. Therefore, there is an outsider and insider differentiation and definition, where the outsider (in this case, the neighborhood community) is less likely to observe the positive features of the context than the insider (the mental health facility users). That is why the insider is more likely to give credit (for their behavior) to the environment, more than the outsider, who views the insiders' traits as a result of their behavior (Wright, 1991).

The final factor that affects the perception of the environment's role are traits accredited to "the just world" phenomenon. According to Lerner (1970), this belief stems from the need of people to attribute joy to reward, suffering to punishment, and so on. In the context of this study, an example that demonstrates this phenomenon is the fact that people with mental health are blamed for their fate, contributing to their stigmatization. The phenomenon stems from the need to bring balance to "what ought to be" and "reality".

In his thesis "The Concept of Fit and Public Response to Community Mental Health Facilities", Isaak (1979) presented a framework to understand the perception of the mental health facility that the community creates. The environment consists of social and physical characteristics of the community, and characteristics of the facility and its users. On an individual level, people tend to acknowledge these environment characteristics and create an internal vision of the neighborhood and the mental health facility — a version of the neighborhood which defines the perceived fit between the community and the facility and has attitudinal and behavioral responses that vary with individuals. Therefore, what defines the individual experience is their personal attributes (characteristics, social and economic status, beliefs, values, and so on). Finally, it is the outcome of the perception of fit process that determines the integration of the mental health facilities in the neighborhood. What encroaches on the integration of the mental health facility can be motivation conflict (rooted on the needs to protect the community) — a bad fit between the mental health facility and the community can have a negative effect on the community.

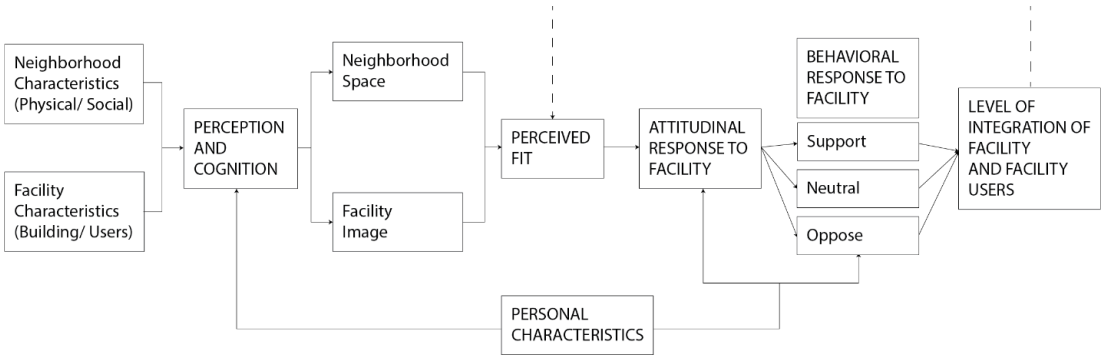


Figure 16. Isaak's (1979) perception of fit framework. Adapted by author.

2.5.2. Spatial Conditions and Borders

The individuals that are part of the community experience the mental health facility in an objective or subjective way, with regards to the spatial context. Currie (1976) defines the objective space for users and non-users alike as the set of lines, nodes, and surfaces that are generally identified in the neighborhood and city. Additionally, the objective space can be defined with other evaluative relations, like rent range, property values, densities and so on. The total of these objective values has significance in understanding the contexts harboring specific attitudes.

Malczewski (1990) further argues that the environment hosting the individual and their behavior can be altered by the process of perception and cognitive evaluation information. The residents' habits, with relation to the environment's quality of forms, can affect the broadcasted and acquired stimuli. It is difficult to correctly estimate the warping effect of the perception. Therefore, certain neighborhood residents become accustomed to certain conditions of the environment. Currie (1976) explains this phenomenon by pointing out that they have adjusted to the externalities in their neighborhood.

As previously mentioned, a facility perceived as noxious by residents of other neighborhoods can be quite positively perceived by the residents in the facility's neighborhood. Dear et al. (1980) provide evidence to support the hypothesis, claiming that the spatial boundaries of the mental health facilities appear to be confined to a six-block area around the facility, with a mixed response to the presence of the presence of the facility (positive, neutral, and negative). Currie (1976) theorizes that the perception of the users and non-users is subject of the individuals' systems of values and environmental preferences.

On that note, the definition of the neighborhood, in terms of perception and not spatial context, becomes an interesting question. Rapoport (1977) defines subjective borders as subjectively defined areas which hold particular importance for mental maps.

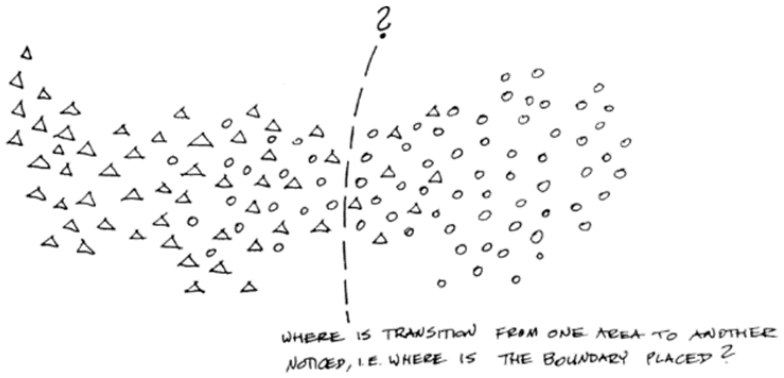


Figure 17. Diagram depicting subjective borders (Rapoport, 1977).

Furthermore, Rapoport (1977) defines "levels of complexity", consisting of layers that affect the subjective perception of an area — including, but not limited to, the resident's behavior, outfit, social status, and spatial components such as area scale, size, texture, noise, functions, and level of light (illustrated in *Figure 18*).

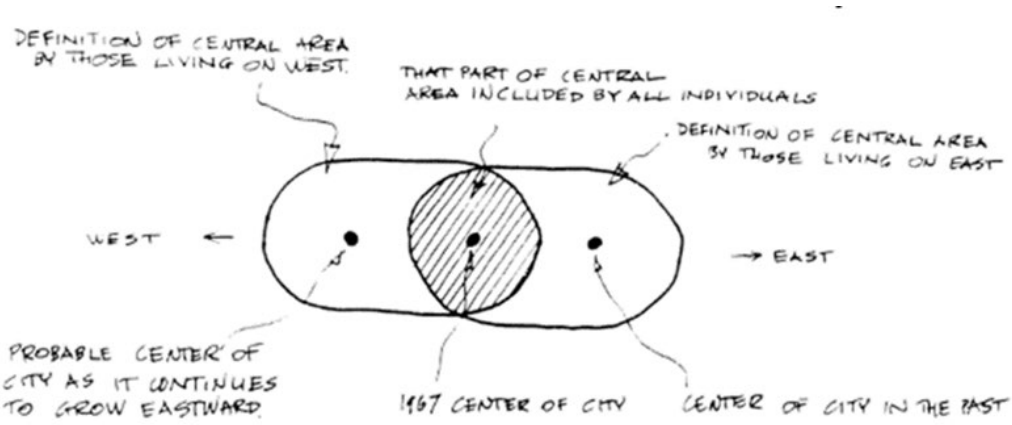


Figure 18. Levels of complexity that influence the subjective perception of boundaries (Rapoport, 1977).

How do you define the boundaries of a neighborhood? Rapoport (1977) states that residents define small areas within the immediate vicinity of their home, whose bounds depend on the residents' physical and social characteristics, extent of movement and frequency of contact. These neighborhoods can be mapped through cognitive mapping, to reflect age, sex, occupation, mobility, social networks, and the city's physical nature, all the while recognizing their dynamic and ever-changing nature.

2.6 Effects of Attitudes, Perceptions and Behaviors towards Mental Health Facilities

There are many factors that affect the progress of the treatment of mental health patients. Repper and Brooker (1996) define the following key conditions for progress: ample support and care offered by health staff and providers, community acceptance and integration in the neighborhood's social constructs, and the patient users of the psychiatric hospital share similar rights with other residents.

Consequently, patients that do not have the acceptance of the community have a poor life quality. Dear et al. (1980) go so far as to suggest that the continuous lack of acceptance makes patients more likely to relapse, a chain of reaction with leads to re-hospitalization, and decreases the chances of a full recovery.

Although there is a recent spike in public (neighborhood and community alike) acceptance towards health facilities, life in the neighborhood of the facility is now more belligerent and indignant — sometime, these stances go as far as to foster opposition towards new facility projects.

Abi Doumit et al (2019) define mental illness stigma as a set of negative attitudes and beliefs that make an individual fear, reject, avoid, and even discriminate against people with mental illnesses. Therefore, patients of the mental health facilities face institutional and public stigma as well, which limits their independence and autonomy. More extreme negative behaviors rooted in mental illness stigma are discrimination, prejudice and resorting to harmful, reductive stereotypes. Most literature points to the main focus of stigma is the lack of knowledge of mental health issues.

Attitudes can range from negativity, which stems from fear to open-mindedness and growth. The consequences of these attitudes can result in either acceptance, which can benefit individuals with mental health disorders by increasing their chances of being employed after treatment, or conversely, lead to social exclusion. Several studies have indicated that knowledge generally promotes acceptance, but there are also findings suggesting that knowledge about mental health patients and facilities can actually contribute to a negative attitude. Angermeyer et al. (2011) found that the majority of the public perceives mental health patients as individuals in need of assistance. Another global study concluded that developed countries exhibit less

stigma towards mental health patients and facilities compared to developing nations. The research demonstrated that developing countries tend to hold the belief that mental health patients are prone to violence (Abi Doumit et al., 2019).

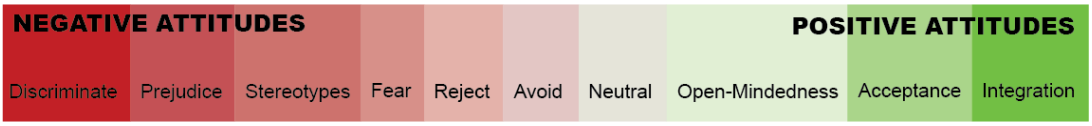


Figure 19. Range of attitudes described by Abi Doumit et al. (2019), adapted by the author.

2.7 Community Attitudes towards Mental Illness

Wolff et al. (1996) created a framework named "Community Attitudes towards Mental Illness: (CAMI) to anticipate the attitude of the community and the general public to mental illness. Results from CAMI are organized in four subscales, or categories:

1 Authoritarianism: the view that individuals with mental health issues are inferior and require supervision and coercion.

2 Benevolence: a humanistic and sympathetic view of individuals with mental health issues

3 Social restrictiveness: the view that individuals pose a threat to society and should be avoided.

4 Community mental health ideology (CMHI): the acceptance of services related to mental health and the integration of patients.

These are listed in 40 questions (or items) reported on a 5-point Likert scale which ranges from "strongly agree" to "strongly disagree". For example, scores higher in authoritarianism and lower in benevolence and social restrictiveness lead toward higher stigma. The CAMI is to this day the measure to determine stigma towards mental health patients.

2.8 Improving Attitudes towards Community Mental Health Facilities

In deciding the recommended approach to community engagement, Dear et al. (1990) have suggested that planners and designers must opt for a high-profile collaborative approach, encouraging communication and cooperation between host community and project planners), and a low profile (acting independently of the host community). Planners and designers should take into account local guidance, regulations, and legal requirements (fire, parking, land use typology), because if local residents opposing the project uncover a breach in regulations, this will be grounds for expression of concern regarding facility safety and operator reliability.

A high-profile approach consists of various means to raise the public's awareness of the planned project and its clients (consisting of educational leaflets, advertisements, and radio programs). Other studies have stressed the importance of including residents from the early stages of the project (Segal et al., 1982).

Similarly, people who find out about the projects themselves are more oppositional than those who have been informed. Repper and Brooker (1996) highlight that once a project has successfully been implemented, it is usually the case that the users or the residents are the best advocates. There is a dire need for a transparent and honest assessment of the effect of the facility on the neighborhood.

CHAPTER 3

CASE STUDY: THE PSYCHIATRIC HOSPITAL OF THE REGIONAL HOSPITAL IN SHKODRA

3.1 General Conditions of the Psychiatric Hospital of the Regional Hospital of Shkodra

The psychiatric hospital was designed in 2009 and implemented in 2010 – 2011 by Atelier 4, by commission of the Municipality of Shkodra. The hospital was designed on vacant land, next to the previous psychiatric hospital, which was designed in 1979. The psychiatric hospital is part of the Regional Hospital complex, to the North-East of the city. It is a 16-minute walk from the city center, or a 7-minute car drive (access is illustrated on *Figure 20*). The psychiatric hospital building has an area of 1,589 m^2 and has two floors.

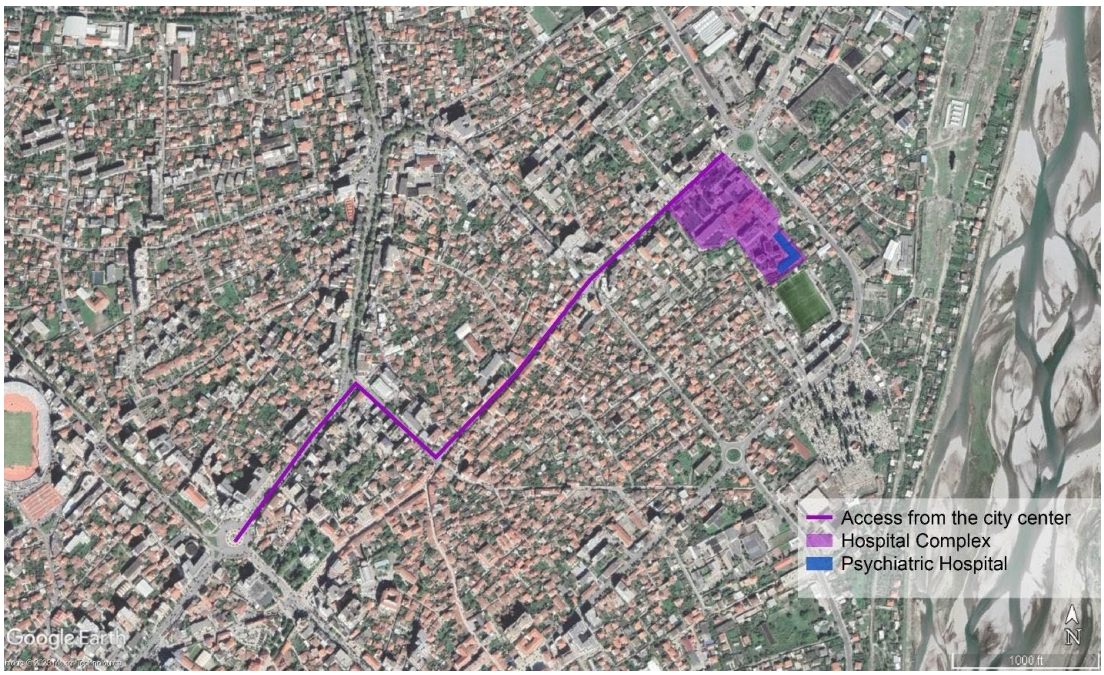


Figure 20. Picture depicting access to the psychiatric hospital from the city center.

The psychiatric hospital is bound to the West by the old psychiatric hospital, a five-storey building, to the East and the South by the hospital complex fencing, and to the North by the inner circulation streets allowing access to the hospital complex.

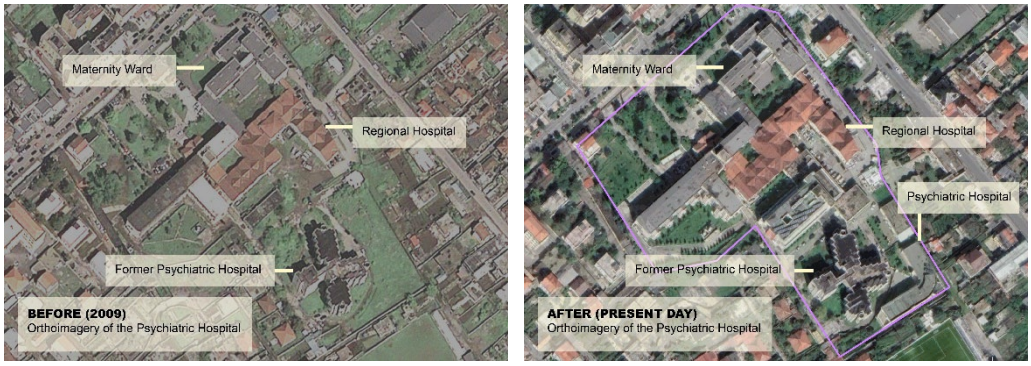


Figure 21. Orthophoto from Google Earth depicting the Regional Hospital complex in 2009, before the implementation of the new psychiatric hospital building (left). To the right, orthophoto depicting present day conditions.

The hospital was built to accommodate acute patients in a contemporary facility. The city found that the former psychiatric hospital building was rapidly depreciating (due to lack of maintenance, illustrated on Figure 22) and commissioned the developer (Atelier 4) to design and develop a new acute care psychiatric hospital facility.

Figure 22. Picture of the former psychiatric building, which was rapidly depreciating due to lack of maintenance.

The neighborhood is largely zoned for mixed-use urban development. The area consisting of the hospital complex is zoned for urban development. The first category of development is health, making up 28% of the land use area. This category is followed by residential, which makes up 10% of the area. The maximum height of development allowed is 7 storeys, and 23.6 m. Prohibited uses are industrial land uses and economy (Agjencia Kombetare e Planifikimit te Territorit, n.d.).

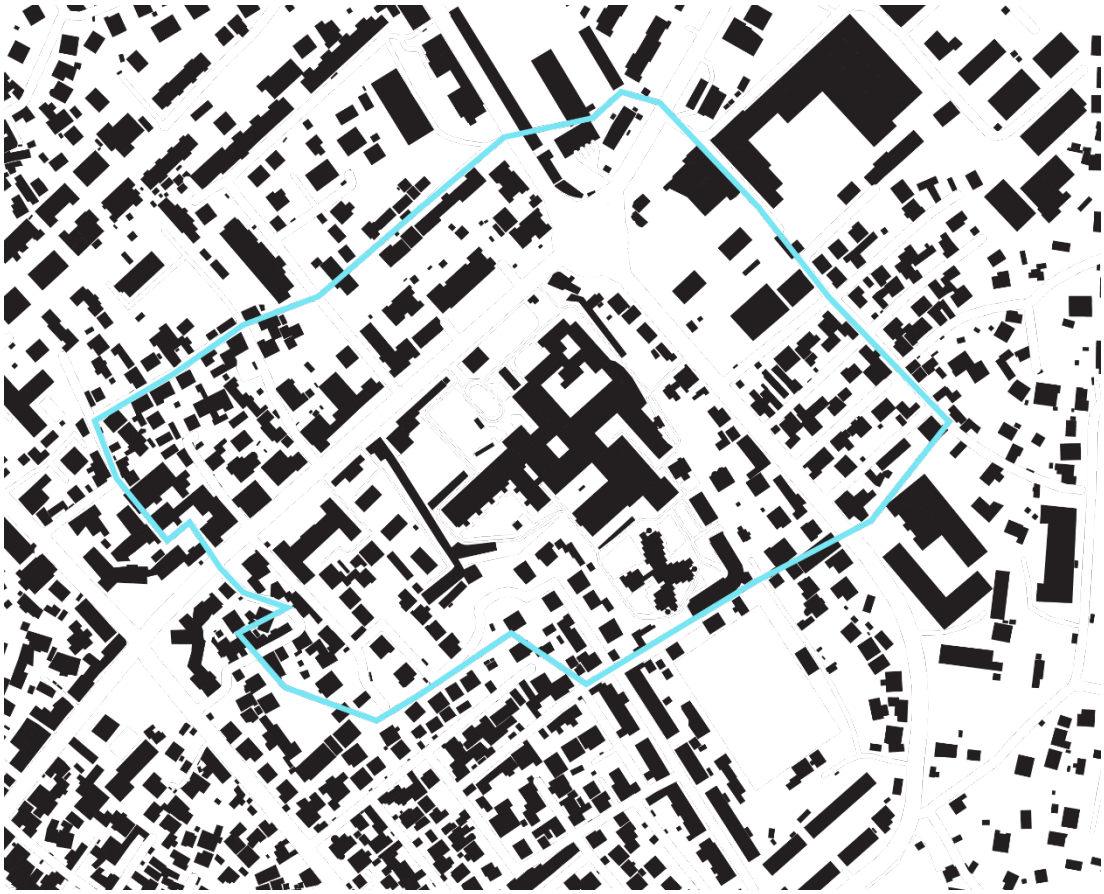


Figure 23. Nolli map of the neighborhood, where the area of study is defined. Courtesy of the author.

The area is bordered on the South by the stadium “Reshit Rusi”. The latter is zoned for social and recreational activities (40%), housing (16%), and services (5%). The industrial area begins slightly further up north, and the surrounding neighborhoods consist primarily of housing and mixed use development.

The design consists of two-storey volumes, abiding by the requirement of the Municipality that aimed to ensure ease of access for patients and high security and surveillance. The architectural shape responds to the former psychiatric hospital

building, and ensures easy access to pedestrians and cars alike, while prioritizing a human-scale, restorative design.

Figure 24. Pictures of the interior of the psychiatric hospital, depicting the multi-occupancy patient rooms (left), the offices (middle) and the circulation and social quarters (right).

The report of the developers clearly states the aim to design a façade that was welcoming to the patients and evocative, using a contemporary style, color palette and materials. The building was designed to serve as a complex divided into three nodes (what the developer refers to as “campuses”). The object is shaped like an “L” and has decreased density on the second floor (the area of the second floor is smaller).

Figure 25. Picture of the central node and main entrance. Image courtesy of the author.

The first node is the central node, as a binding element connecting the two wings, shaped like an arch. The other node is extended towards the North and serves as women's accommodation. The third node is the men's node, extending South-East.

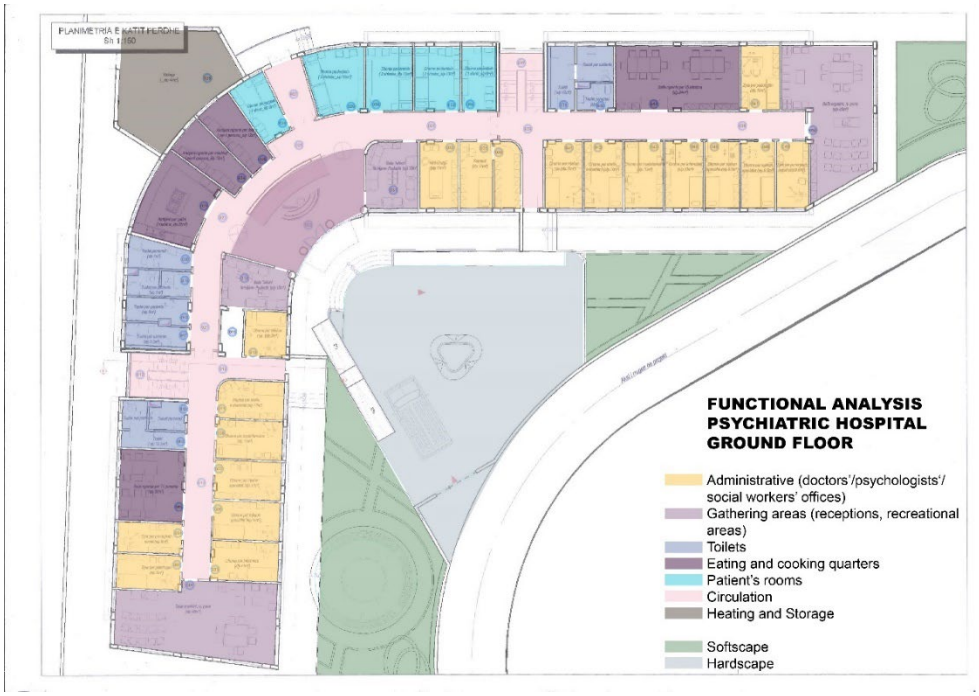


Figure 26. Functional analylysis of the psychiatric hospita's ground floor.

The developers included provisions for greenery and courtyard, emphasizing the restorative aspects of landscape design.[1] The main entrance is on the Western façade, facing the former psychiatric hospital, and overlooking a shared public space with the former psychiatric hospital building. The main pedestrian and vehicular road is transversing between the former and the new psychiatric hospital building and provides access to the psychiatric hospital. Both nodes (women's and men's quarters) have separate entrances, as well as a corridor connecting them internally, passing through the main (reception) node.

[1] The analysis was produced following archival research in the Regional Hospital. This is part of the report written by the developer and presented to the Municipality of Shkodra and the Regional Hospital. The particular reference to the landscape design is the following (in Albanian): "*Objekti do te vendoset ne mes te gjelberimit te ulet me lule, per te krijuar nje atmosphere te shendetshme, shlodhese e miqesore, si pjese e terapise qe u ofrohet pacienteve te saj*." This phrase sheds a light into the developer's appreciation for the restorative power of greenery and landscape design.

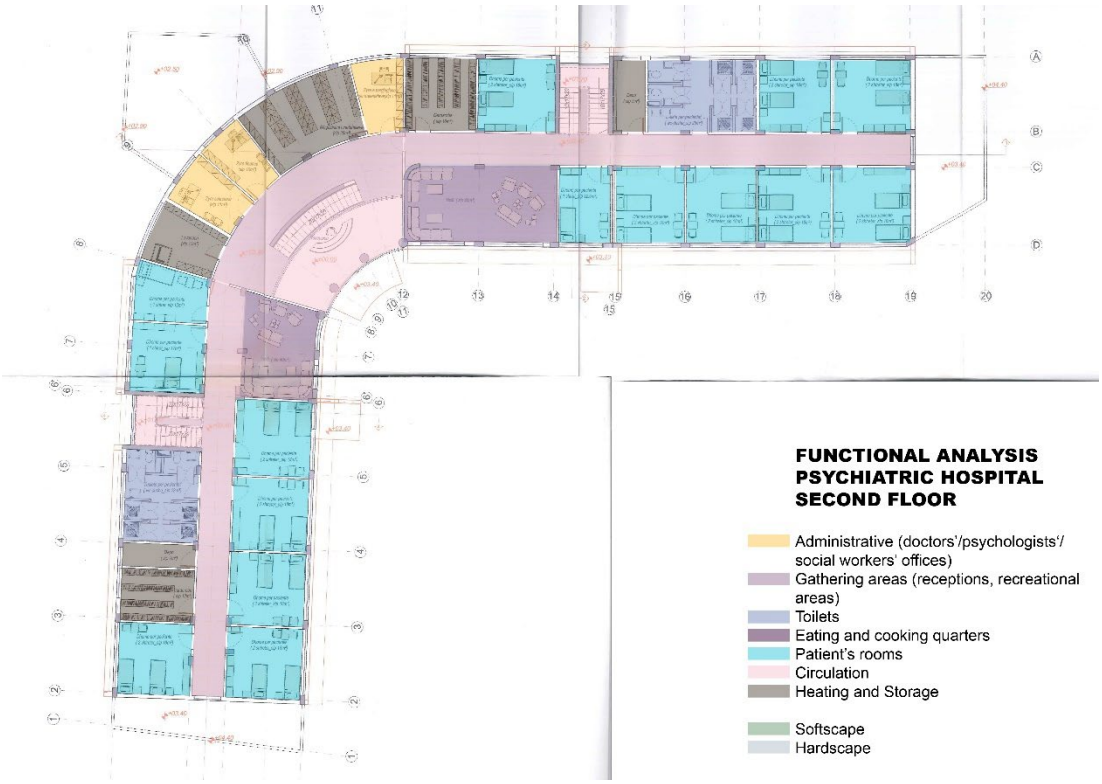


Figure 27. Functional analysis of the second floor of the psychiatric hospital.

In conclusion, the ground floors have more communal areas, like the cafeterias, recreational and administrative spaces, and sanitary nodes. The recreational activities room has a flexible design that allows it to be modelled according to furnishing. All the spaces abide by accessibility requirements.

3.2 Layout Analysis of the Shkodra Psychiatric Hospital

The Psychiatric Hospital of the Regional Hospital of Shkodra has a psychiatric hospital arrangement that abides to the campus model, as described by Mclaughaln et al (2021). Similar to the Glasgow Royal Asylum or Infirmary, the hospital has an internal, central administrative node that is well connected to its wings and different departments. The Psychiatric Hospital of Shkodra is similar to the Nottingham Borough Asylum at Mapperley, and York Retreat, in that it employs a variation of the linear plan concept, as conceived by Thomas Kirkbride. Unlike the Nottingham Borough Asylum and the York Retreat, which have wings perpendicular to the central node, the hospital of Shkodra employs a variation of the linear plan, because it

responds to the former psychiatric hospital building. The hospital has a combination of single and multi-occupancy rooms, to maximize the number of patients.

Table 4. Design characteristics and approaches according to Mclaughlan et al. (2021), for the literature review case studies and the Psychiatric Hospital of Shkodra. Courtesy of the author.

Case study hospital	*Design characteristics*	*Design approaches according to Mclaughlan et al. 2021*
Glasgow Royal Asylum or Infirmary	Employed the panopticon concept Single occupancy rooms High walls enclosing courtyards with a mound in the middle that allowed the patients to peak over the wall.	Psychiatric hospital arrangement: The campus Inpatient accommodation arrangement: The racetrack configuration
Devon County Lunatic Asylum	Employed the panopticon concept Single occupancy rooms High walls enclosing courtyards with a mound in the middle that allowed the patients to peak over the wall.	Psychiatric hospital arrangement: The village Inpatient accommodation arrangement: The courtyard arrangement
Nottingham Borough Asylum at Mapperley	Employed "the linear plan" concept Wings perpendicular to the central node Multi occupancy rooms	Psychiatric hospital arrangement: The village Inpatient accommodation arrangement: The courtyard arrangement
York Retreat	"Moral architecture" Design and the asylum used as "therapeutic instruments" "The linear plan" concept	Psychiatric hospital arrangement: The village Inpatient accommodation arrangement: The racetrack
The Psychiatric Hospital of the Regional Hospital of Shkodra	Human-scale, restorative design "The linear plan" concept Central node for circulation, administration and welcome center. Single and multi-occupancy rooms.	Psychiatric hospital arrangement: The campus Inpatient accommodation arrangement: The peninsula (patient rooms on one side, administrative rooms on the other)

CHAPTER 4

RESULTS AND ANALYSIS

This study aimed to understand the neighbors' and locals' perception of the psychiatric hospital by the residents of the neighborhood, employing a quantitative approach methodology (survey). The aim of the study was to understand the neighbors' perception of the psychiatric hospital and to investigate policy implications for a more inclusive neighborhood that would promote mental health awareness.

4.1 Data Analysis

The surveys were digitalized using Google Forms and exported to an Excel spreadsheet. Initial descriptive analysis was conducted in Excel. Furthermore, there were Chi-square tests conducted in RStudio to understand the relationship between categorical variables. Chi-square is a statistical test that tests the relationship between categorical variables, which examines the difference between categorical variables from a random sample in order to determine whether the expected and observed results are well-fitting. The formula is written below:

$$x^2 = \Sigma \frac{(O_i - E_i)^2}{E_i}$$

In the formula, x^2 is Chi-squared, O_i is the observed value (gathered from the sample) and E_i is the expected value. The expected value is calculated for each observation by multiplying, for each value, the row total and the column total and dividing it to the total number of observations. In any case, the models in RStudio calculate the expected value, and the difference between the observed and expected value, therefore generating the chi-squared value. The bigger the value is (i.e.: the difference between the observed and expected value), the more statistically significant the relationship is.

Based on the literature review conducted the categorical values that will be analyzed to understand if there is any statistically significant relationship are as shown in Table 5:

Table 5. Table showcasing the many combinations of variables that would make up the chi-squared models.

Model number	*Categorical data 1*	*Categorical data 2*
1 *2* *3* *4* *5* *6* *7*	Gender Age Familiarity with the neighborhood Rent/Own Presence of kids at home Treatment at home/ hospital In/out of the city	.1 Current situation, .2 Impression, .3 CAMI Attitudes .4 Influence on traffic and noise .5 Influence on parking .6 Impact on real estate values
8	Current situation	8.1 Impression 8.2 CAMI Attitudes 8.3 Influence on traffic and noise 8.4 Influence on parking 8.5 Impact on real estate values
9	Impression	9.1 CAMI Attitudes 9.2 Influence on traffic and noise 9.3 Influence on parking 9.4 Impact on real estate values
10	CAMI Attitudes	10.1 Influence on traffic and noise 10.2 Influence on parking 10.3 Impact on real estate values

4.2 Results

The author conducted a door-to-door survey in the neighborhood of the hospital for a week, March 6 – 12 (March 6 - 9 from 8 AM to 1 PM, whereas from March 10 – 12 from 2 – 7 PM) interviewing people about their perception of the hospital. There were 100 participants.

4.4.1. Participant Characteristics

For the purposes of this study, 100 participants were interviewed. Out of them, 51% of the participants were male, and 49% of the participants were female. Participants were asked to share their age corresponding to three age brackets (18 – 39, 40 – 64, 65+). Most of the interviewed participants belonged to the 40 – 64 age group (41%, or 2 in 5 participants), whereas 32% of the participants belonged to the 18 – 39 age group, and 27% of the respondents were over 65 years old.

Table 6. Contingency table of gender and age.

Gender/ Age	18-39	40-64	65+
Female	15	18	16
Male	17	23	11

Regarding education, most respondents (41%) stated that they have completed secondary education, 39% stated they have higher education, and 20% of the respondents stated that they have primary education.

Table 7. Contingency table of gender and education.

Gender/ Education	Higher Education	Secondary Education	Primary Education
Female	17	20	12
Male	22	21	8

When asked about how long they lived in the neighborhood, 61% of the respondents replied that they had lived there over 10 years, 31% of them had lived there 5 – 10 years, and 8% had lived in the neighborhood for less than 5 years. Most of the respondents are homeowners (78%) as opposed to renters. 65% of the participants lived with children in their households, as opposed to 35% of them that had no children in their households.

Table 8. Contingency table of tenure and time living in the neighborhood.

Tenure/ Time living in the neighborhood	5-10 years	Less than 5	More than 10

Homeowner	19	2	57
Renter	12	6	4

When asked about familiarity with the mental health system, 60% of the respondents replied that they were familiar with the mental health system, as opposed to 40% who were not. 63% of the respondents attested that they would want their family member or acquaintance to be treated in a mental health facility, whereas 37% of the respondents replied that they prefer attending to them at home. The respondents were split, when asked if they would want the hospital to be inside the city (49%), or outside (51%), as illustrated in *Figure 28*.

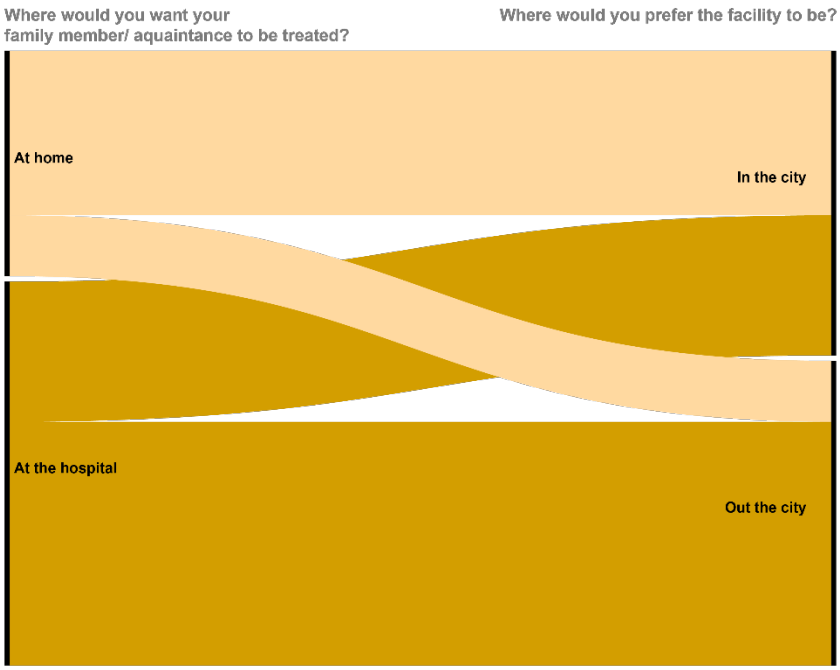


Figure 28. Alluvial diagram of the preference of treatment (in home/ at the hospital) and preference of facility placement (in/ out of the city).

Regarding stigma surrounding mental health, when asked if they would share hospitalization information with their relatives or neighbors, only 38% of them replied that they would let their relatives and neighbors know (pictured on *Figure 29*). The overwhelming majority, 62% of the respondents, would either not share this information (33%) or they were not sure (29%).

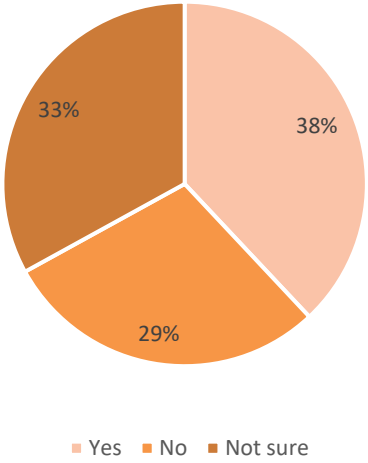


Figure 29. Percentage of the transparency regarding family member' hospitalization.

When asked about their profession, most respondents replied they were retirees, unemployed, and later on vendors, students, and accountants, as illustrated in the word cloud depicted in Figure 30. The word cloud was prepared by the author in Microsoft Word, after data cleaning and categorization.

Figure 30. Word cloud depicting the residents professions.

4.4.2. Community Attitudes towards the Facility

Respondents were invited to rate the current situation of the facility on a Likert scale, as it pertaints to the following aspects: distinct, accessible, gloomy, transparent, introverted, ordinary, wide/prominent, small, well-maintained, comfortable, and quiet.

To analyze the Likert scale results, I created a point-system to multiply the responses (namely: 1 very negative was multiplied by -3 points, 2 negative was multiplied by -2, 3 neutral by 1, 4 positive was multiplied by 2 points, and 5 very positive by 3 points). The aspect that was rated the most positive was ordinariness, followed by accessibility, gloominess, distinctiveness, quietness, and facility's smallness (diminutiveness), and introverted-ness. The aspects that were rated negatively were the facility's prominence, comfort, transparency and maintenance.

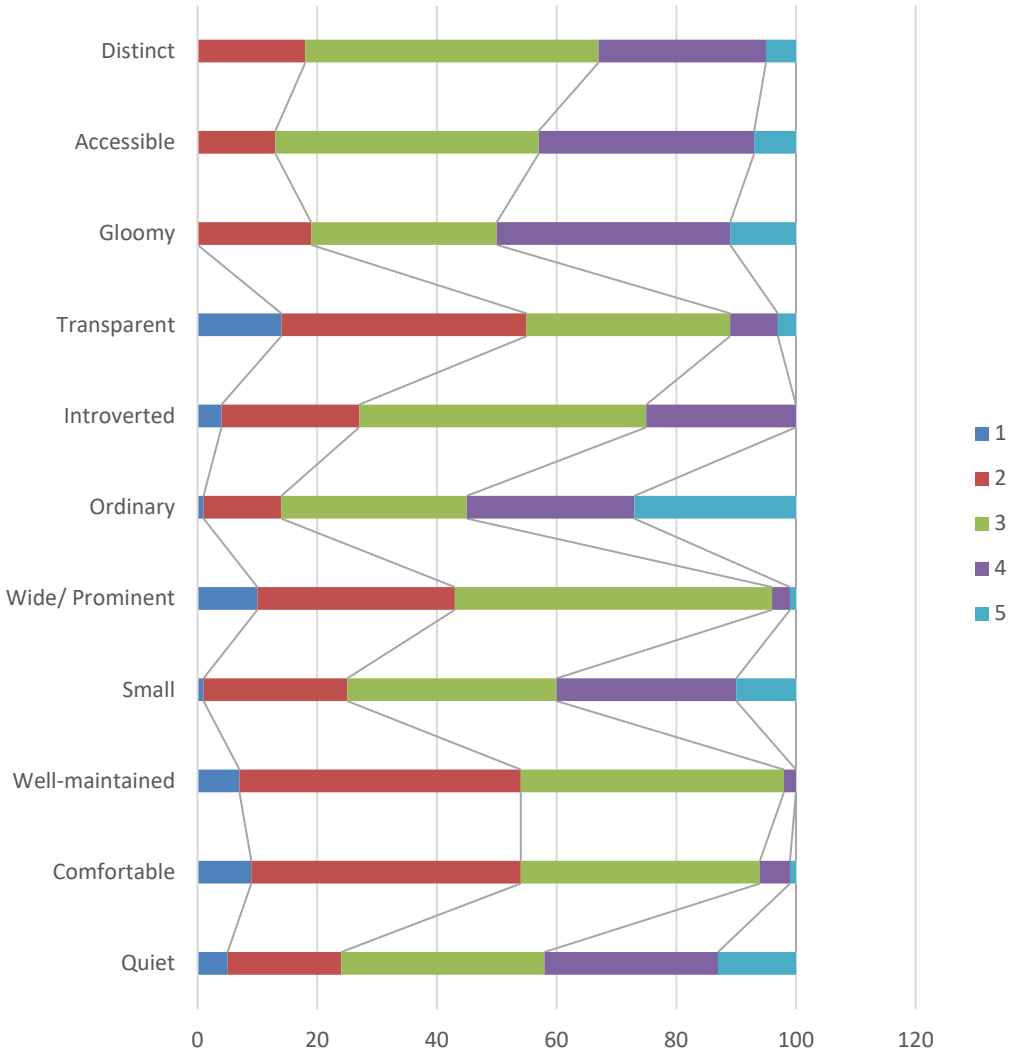


Figure 31. Rating the different aspects of the hospital, based on a point-system.

Table 9. Chart showing the ratings (on a scale from 1 to 5) for the different aspects of the facilities.

Rating	Quiet	Comfortable	Well-maintained	Small	Wide/ Prominent	Ordinary	Introverted	Transparent	Gloomy	Accessible	Distinct
1 (-3 pts)	-15	-27	-21	-3	-30	-3	-12	-42	0	0	0
2 (-2 pts)	-38	-90	-94	-48	-66	-26	-46	-82	-38	-26	-36
3 (1 pts)	34	40	44	35	53	31	48	34	31	44	49
4 (2 pts)	58	10	4	60	6	56	50	16	78	72	56
5 (3 pts)	39	3	0	30	3	81	0	9	33	21	15
Total	78	-64	-67	74	-34	139	40	-65	104	111	84

Respondents were asked to report the feelings that the facility evoked in the following categories: safety, calm, annoyance, threat, fear, and no feeling. Almost half the respondents (47%) stated that the facility evoked no feelings, and 38% of the respondents noted that the facility made them feel bothered or annoyed (graphed on *Figure 33*).

Figure 32. Pie chart illustrating the feelings evoked by the presence of the facility.

Respondents were invited to respond to the following statements by rating them on a scale (1 completely agree to 5 completely disagree). To analyze and compare the results, I created a point-based system similar to the one used in the previous question on the aspects of the facility, (namely: 1 completely agree was multiplied by 3 points,

2 agree was multiplied by 2, 3 neutral by 1, 4 disagree was multiplied by -2 points, and 5 completely disagree by -3 points).

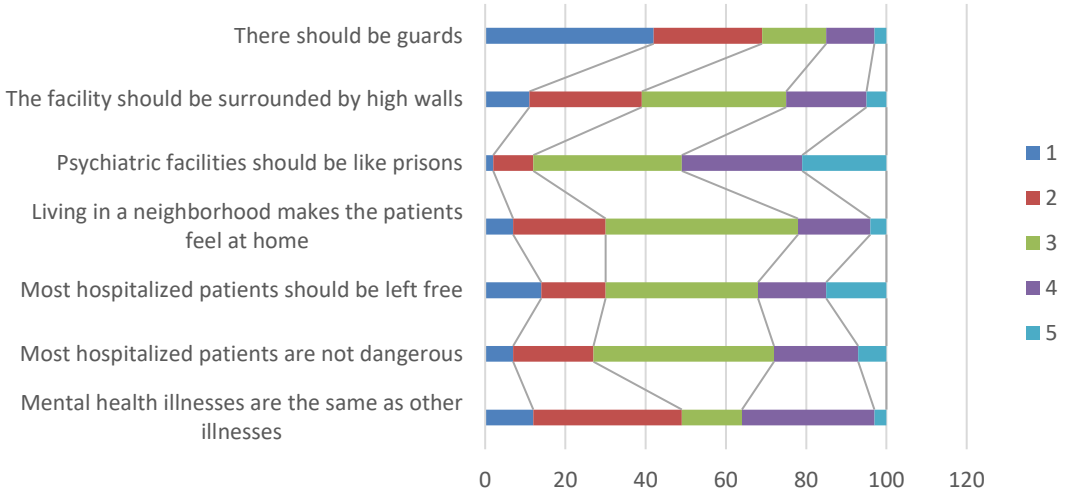


Figure 33. Rating the attitudes towards the statements based on a point-system.

The statement which the respondents agreed the most with was "There should be guards at the facility", followed by "The facility should be surrounded by high walls", "Living in a neighborhood makes the patients feel at home", "Mental health illnesses are the same as other illnesses".

Table 10. Chart showing the ratings for each statement.

Rating	Mental health illnesses are the same as other illnesses	Most hospitalized patients are not dangerous	Most hospitalized patients should be left free	Living in a neighborhood makes the patients feel at	Psychiatric facilities should be like prisons	The facility should be surrounded by high walls	There should be guards
1 (3 pts)	36	21	42	21	6	33	126
2 (2 pts)	74	40	32	46	20	56	54
3 (1 pts)	15	45	38	48	37	36	16
4 (-2 pts)	-66	-42	-34	-36	-60	-40	-24
5 (-3 pts)	-9	-21	-45	-12	-63	-15	-9
Total	50	43	33	67	-60	70	163

The statements which the respondents agreed less with were “Most hospitalized patients are not dangerous” and “Most hospitalized patients should be left free”. The only statement the respondents disagreed with was “Psychiatric hospitals should be like prisons”.

Finally, the respondents were invited to report whether they felt afraid because of the presence of the facility in the neighborhood, and if so, why they felt afraid (illustrated in the alluvial diagram on *Figure 36*). The majority of the respondents (66%) did not feel afraid in the neighborhood due to the presence of the facility. The 34% of the respondents who felt afraid, cited concerns about the kids (15%) — either if they were alone at home (6%) or playing by the facility (5%), or other general concerns (4%) —, concerns of patients escaping (10%), or not being able to defend themselves (5%).

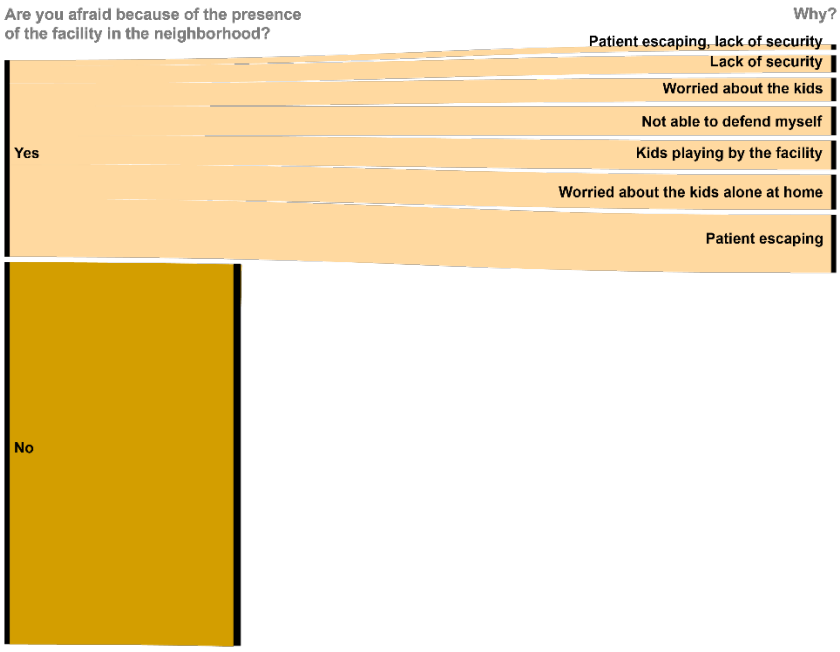


Figure 34. Alluvial diagram visualizing distribution of reasons why residents were afraid of the presence of the facility in the neighborhood, courtesy of the author.

4.4.3. Statistically Significant Relationships

There were **265 chi-square tests** run to understand whether there was a statistically significant relationship between the categorical variables outlined in the table on Appendix B. The analyses were conducted in RStudio, following the variable combinations outlines in the methodology.

The following table outlines the model numbers (as a reference system), the variable combination, and the p-value for each chi-square test. **The observed models have a p-value of less than 5%, meaning that there were observed statistically significant relationships between the two categorical variables.** Every statistically significant relationship is associated with a table outlining the most significant combinations.

Table 11. Table prepared by the author showcasing the variable combinations.

Model nr.	*Variable 1*	*Variable 2*	*p value*
8.1.2	Current situation (quiet)	CAMI Attitudes (not dangerous)	0.000112
8.11.1	Current situation (i dallueshem)	CAMI Attitudes (same as other diseases)	0.000188
8.1.3	Current situation (quiet)	CAMI Attitudes (set free)	0.000439
8.9.6	Current situation (gloomy)	CAMI Attitudes (high walls)	0.000743
8.3.1	Current situation (well-maintained)	CAMI Attitudes (same as other diseases)	0.001622
4.6	Rent/Own	Impact on real estate values	0.004965
4.4	Rent/Own	Influence on traffic and noise	0.006615
8.1.1	Current situation (quiet)	CAMI Attitudes (same as other diseases)	0.006999
3.6	Familiarity with the neighborhood	Impact on real estate values	0.009171
9.2.10	Current situation (accessible)	Influence on traffic and noise	0.01281
1.2	Gender	Impression	0.01473
9.2.1	Current situation (quiet)	Influence on traffic and noise	0.01525
8.11.4	Current situation (i dallueshem)	CAMI Attitudes (feel home)	0.01586
2.1.4	Age	Current situation (small)	0.01963
8.8.6	Current situation (transparent)	CAMI Attitudes (high walls)	0.02034
8.9.3	Current situation (gloomy)	CAMI Attitudes (set free)	0.02325
8.10.4	Current situation (accessible)	CAMI Attitudes (feel home)	0.02439
8.10.2	Current situation (accessible)	CAMI Attitudes (not dangerous)	0.03229
8.11.2	Current situation (i dallueshem)	CAMI Attitudes (not dangerous)	0.03311
5.3.7	Presence of kids at home	CAMI Attitudes (guards)	0.03525
9.3.10	Current situation (accessible)	Impact on real estate values	0.03882
9.2.3	Current situation (maintained)	Influence on traffic and noise	0.04071
7.1.6	In/out of the city	Current situation (ordinary/normal)	0.04306
8.10.1	Current situation (accessible)	CAMI Attitudes (same as other diseases)	0.04889

Model 4.6 compared homeownership to the perception that the presence of the facility decreased the value of the property. The p-value for model 4.6 was 0.004965, meaning that there is a statistically significant relationship between homeownership and the perception that the presence of the facility decreased the value of the property. Homeowners were more likely to think that the presence of the facility decreases the value of the property, more so compared to renters.

Table 12. Contingency table for model 4.6, showcasing tenure and perception of the facility decreasing property values.

Do you think the presence of the facility decreases the value of your property?	No	Yes
Homeowner	7	70
Renter	8	14

Model 3.6 compared how long residents have lived in the neighborhood to the presence of the facility decreasing the value of the property. With a p-value of 0.009171, the model showed that residents of more than 10 years were more inclined to think that the facility decreased the value of their property than residents who had lived for less than 10 years in the neighborhood.

Table 13. Contingency table for model 3.6, showcasing time living in the neighborhood and perception of facility decreasing property values.

Do you think the presence of the facility decreases the value of your property?	No	Yes
Less than 5 years	4	4
5 – 10 years	2	29
More than 10 years	9	51

Model 4.4 explored the relationship between renters and the facility's influence on traffic and noise pollution. Most homeowners were more likely to state that the facility affected noise pollution.

Table 14. Contingency table for model 4.4, showcasing tenure and the facility's influence on traffic and noise pollution (contingency table).

Does the facility affect traffic and noise pollution?	No	Yes
Homeowner	12	66
Renter	10	12

Model 1.2 analyzed the relationship of gender to the feelings evoked by the presence of the facility (annoyance, fear, threatened, safe, or no feelings) and found that the relationship was statistical significance, with a p-value of 0.01473. Men were more likely to respond that the presence of the hospital made them feel neutral/ evoked no sentiment, whereas women were more likely to answer that the presence of the hospital made them feel afraid and annoyed (bothered).

Table 15. Contingency table for model 1.2, showing the relationship between gender and the feelings evoked by the presence of the facility.

Feelings evoked by the facility	No feelings	Annoyance	Fear	Threatened	Safe
Female	7	6	22	13	1
Male	28	19	3	1	

Model 8.1.2 compared the perception of the hospital as quiet to the attitudes towards the statement “Most hospitalized patients are not dangerous”. The analysis showed that there was a strong likelihood that people that perceived the quietness of the facility as positive also agreed with the statement “Most hospitalized patients are not dangerous”. The chi-square test calculates the difference between the observed and expected values, where the observed values are the observations, and the expected values are calculated by multiplying, for each value, the row total (total number of observations in a given value’s row) to the column total (total number of observations in a given value’s column) and divide the number by the total number of observations. RStudio automatically calculates the expected values, as well as the difference between the observed and expected values, when constructing the model. For each

model where there is a statistical significance, the highest difference between the observed and expected value will be considered, pictured in orange. In this case, the value of the highest difference is 4, corresponding to the variables mentioned above.

The highest difference between the observed and expected value (measured through the chi-square test), pictured in orange, means there is a statistically significant relationship between the two values of each category. On the contrary, the negative difference between observed and expected values (violet) means there is no statistical significance.

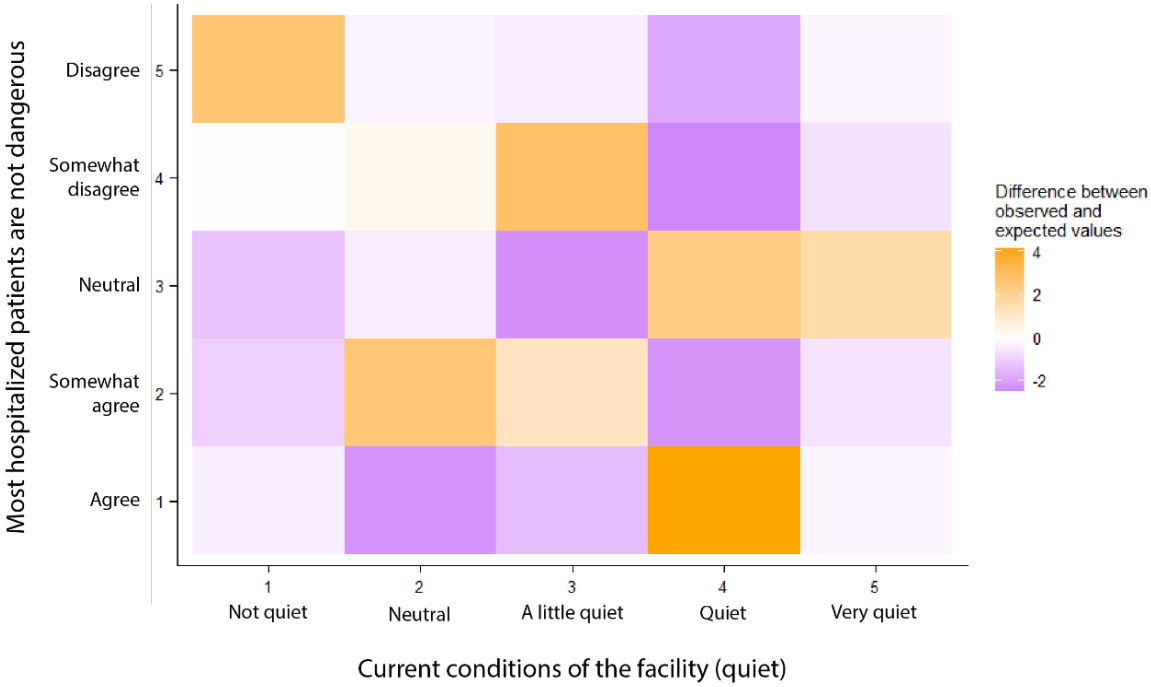


Figure 35. Model 8.1.2. compares the perception of the hospital as quiet to the attitudes towards the statement "Most hospitalized patients are not dangerous".

Model 8.1.3 explored the relationship between the current situation (quiet, rows) and respondent attitudes to the statements “Patients should be set free” (columns). Respondents were likely to be positive to the statement “Patients should be set free”, and they were more likely to rate the facility as somewhat quiet. The highest difference between the observed and expected value (measured through the chi-square test, 6), pictured in orange, means there is a statistically significant relationship between the two values of each category.

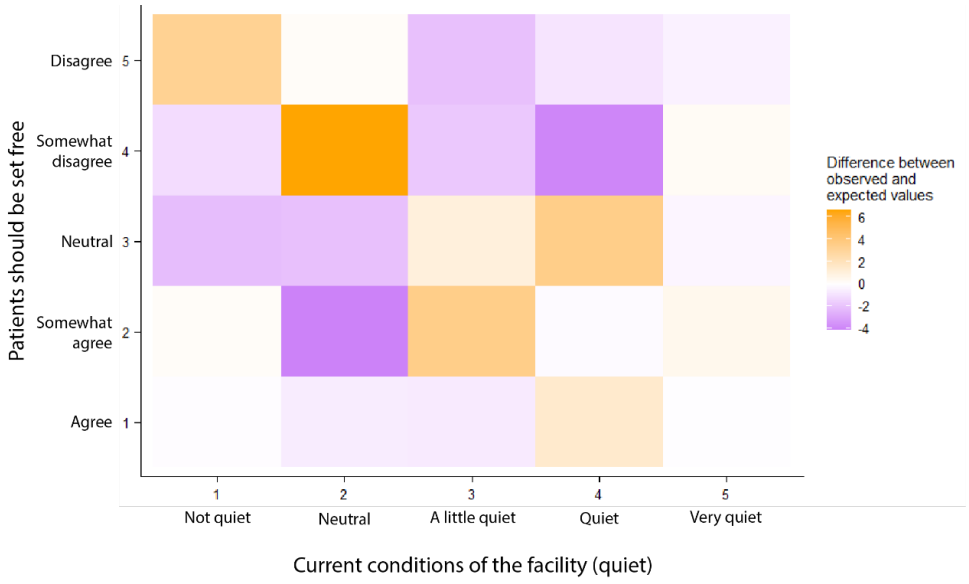


Figure 36. Model 8.1.3 analyzed the relationship between the current situation (quiet, rows) and respondent attitudes to the statements "Patients should be set free".

Model 8.9.6 analyzed the relationship between the perception of the facility as gloomy and the attitudes to the statement "Mental facilities should be surrounded by high walls". Most respondents rated the facility as very gloomy, and they were likely to agree with the statement. The highest difference between the observed and expected value (measured through the chi-square test, value 4), pictured in orange, means there is a statistically significant relationship between the two values of each category.

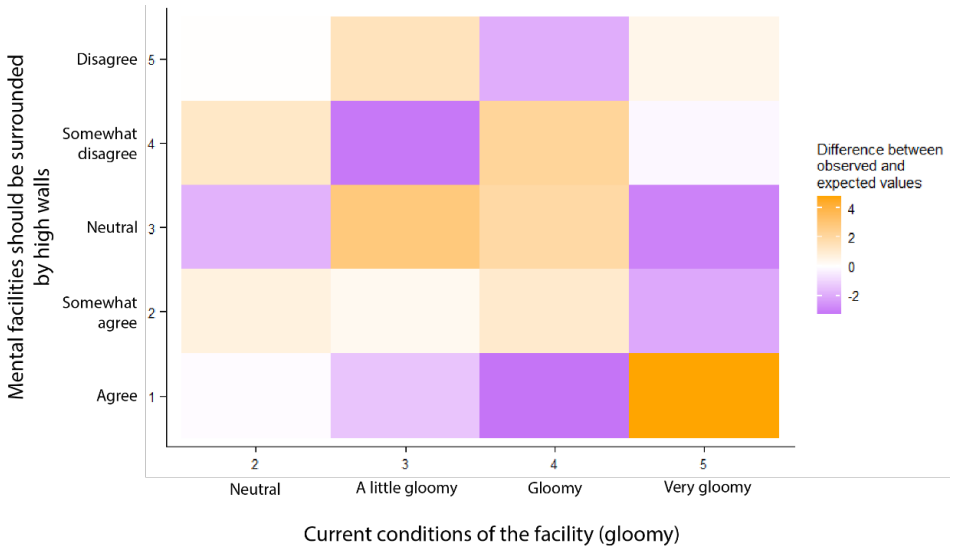


Figure 37. Model 8.9.6 analyzed the relationship between the perception of the hospital as gloomy and the attitudes to the statement.

Model 8.8.6 analyzed the perception of the facility as transparent (rows), as it relates to the attitudes regarding the statement “Mental facilities should be surrounded by high walls”. Respondents tended to either view the facility as slightly less transparent and agree with the statement (that there should be high walls) or view the transparency as moderate and somewhat agreed that there should be walls. The highest difference between the observed and expected value (measured through the chi-square test, 2), pictured in orange, means there is a statistically significant relationship between the two values of each category.

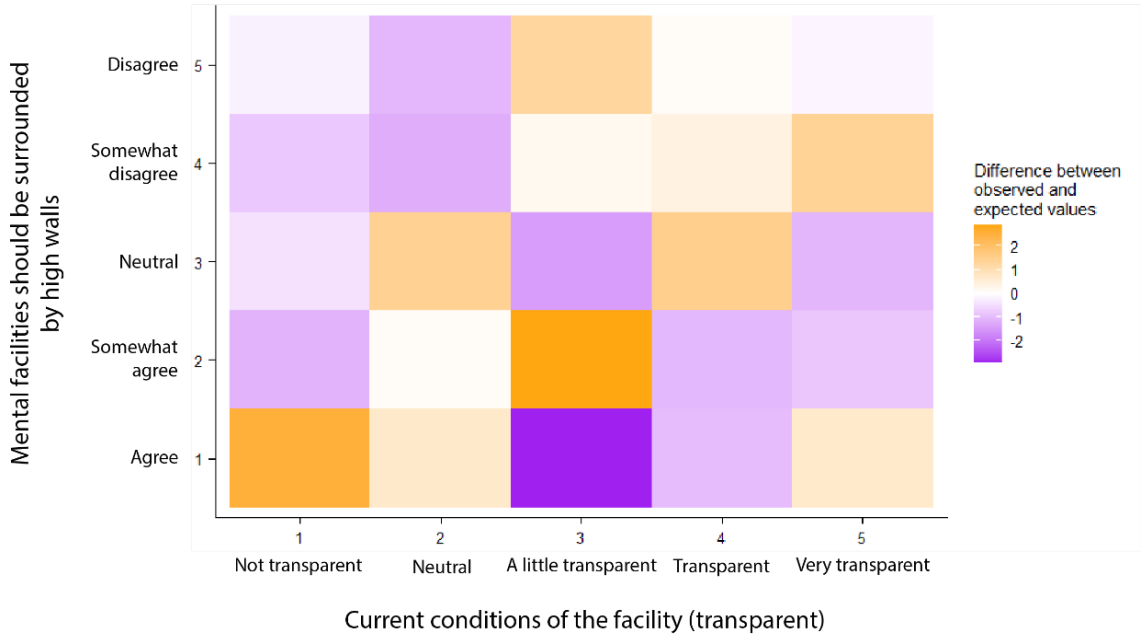


Figure 38. Model 8.8.6 analyzed the perception of the facility as transparent (rows), as it relates to the attitudes regarding the statement “Mental facilities should be surrounded by high walls”.

Model 8.3.1 explored the relationship between the perception of the maintenance of the facility, and the attitudes of the respondents to the statement “Mental illnesses are the same as other illnesses”. While most respondents tended to slightly agree with the statement, they also tended to feel neutral about the maintenance of the facility. The highest difference between the observed and expected value (measured through the chi-square test, 2), pictured in orange, means there is a statistically significant relationship between the two values of each category.

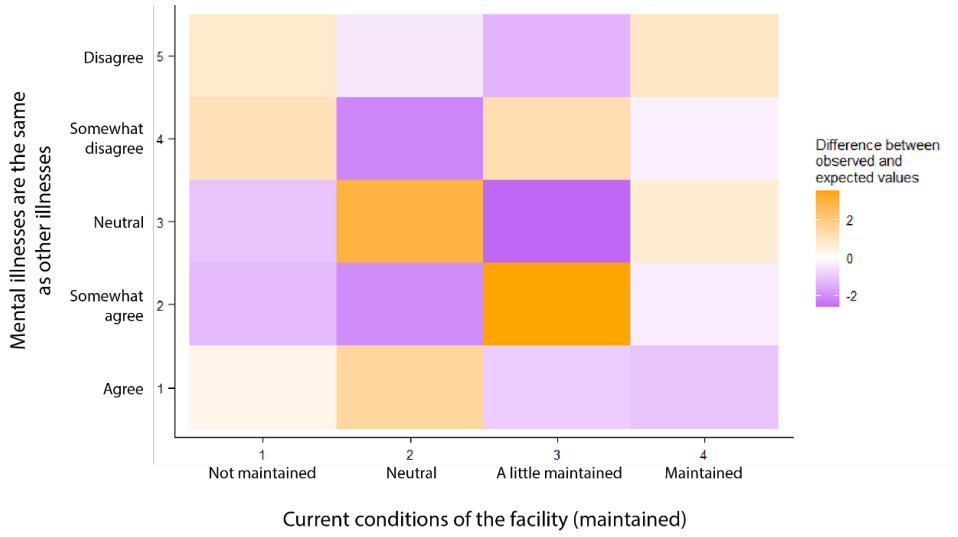


Figure 39. Model 8.3.1 explored the relationship between the perception of the maintenance of the facility and the attitudes of the respondents to the statement.

Model 8.1.1 analyzed the perception of the facility as quiet and the attitudes towards the statement "Mental illnesses are the same as other illnesses". Most respondents found the facility very quiet, and largely agreed with the statement. The highest difference between the observed and expected value, in this case 5, pictured in orange, means there is a statistically significant relationship between the two values of each category.

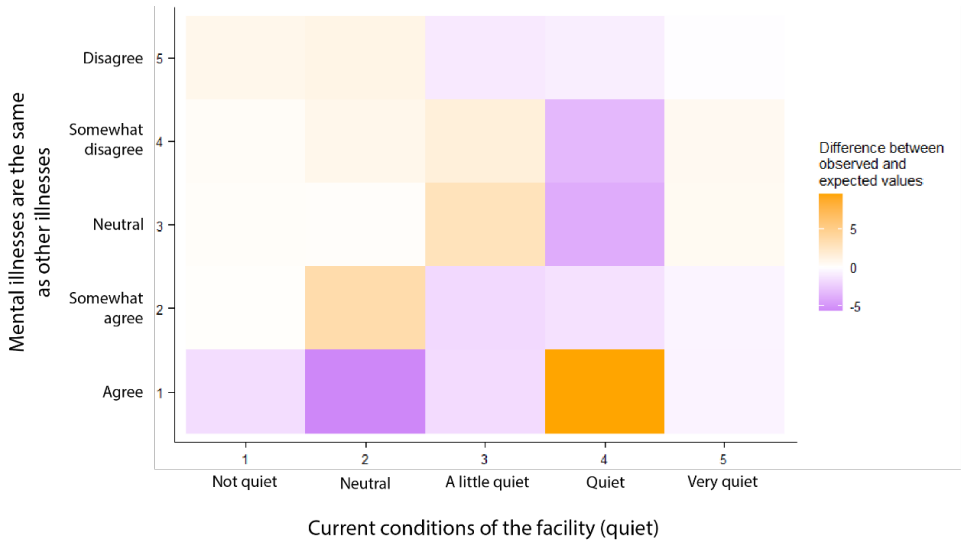


Figure 40. Model 8.1.1 analyzed the perception of the facility as quiet and the attitudes to the statement "Mental illnesses are the same as other illnesses".

Model 8.11.1 explored the relationship between the perception of the facility being prominent to their attitudes towards the statement “Mental illnesses are the same as other illnesses”. Most people tended to slightly agree with the statement “Mental illnesses are the same as other illnesses” and were likely to view the facility as very prominent. The highest difference between the observed and expected value (in this case, the value is equal to 5), pictured in orange, means there is a statistically significant relationship between the two values of each category.

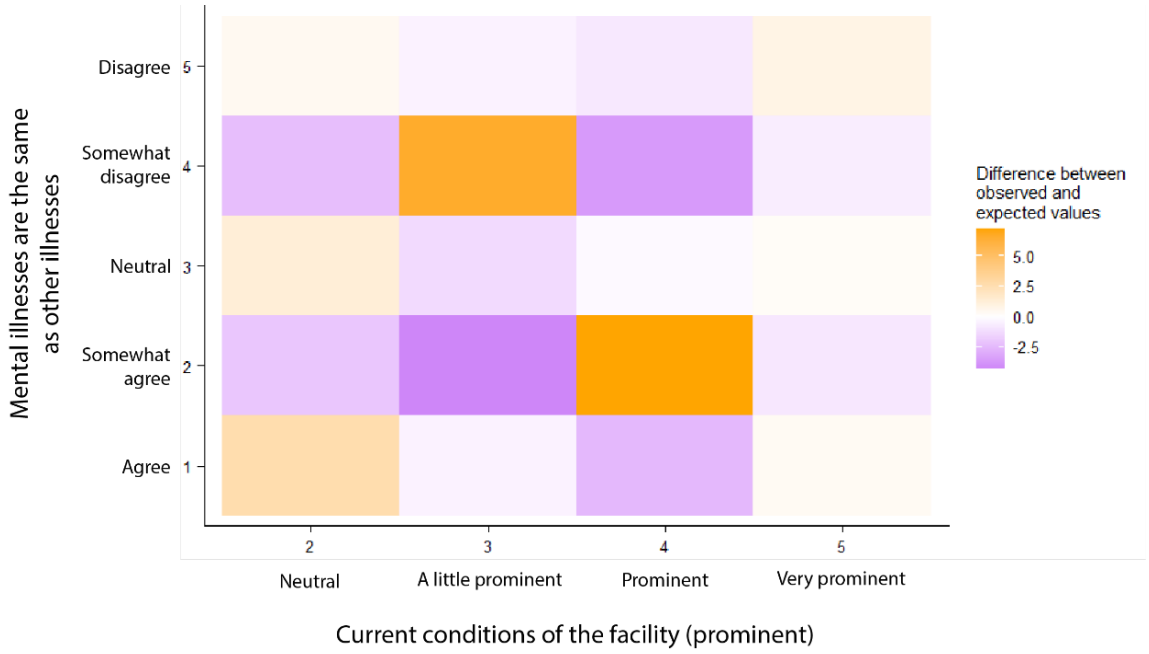


Figure 41. Model 8.11.1 explored the relationship between the perception of the facility being prominent to their attitudes towards the statement “Mental illnesses are the same as other illnesses”.

Model 9.2.10 analyzed the relationship between the perception of the facility as accessible and the influence of the facility on traffic and noise pollution. Most respondents believed that the facility does not affect traffic and noise pollution, and they were likely to perceive the facility as very accessible. The highest difference between the observed and expected value (in this case, 2), pictured in orange, means there is a statistically significant relationship between the two values of each category.

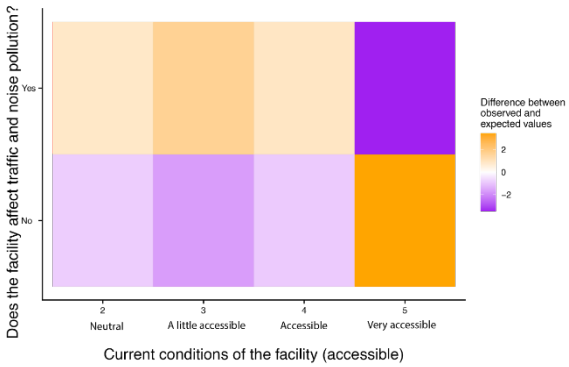


Figure 42. Model 9.2.10 analyzed the relationship between the perception of the facility as accessible and the influence of the facility on traffic and noise pollution.

Model 9.2.1 explored the relationship between the perception of the facility as quiet and the influence of the facility on traffic and noise pollution. The overwhelming majority of the respondents agreed that the facility affect noise pollution, and it was more likely for the same respondents to state the facility was not that quiet. The highest difference between the observed and expected value (in this case 2), pictured in orange, means there is a statistically significant relationship between the two values of each category.

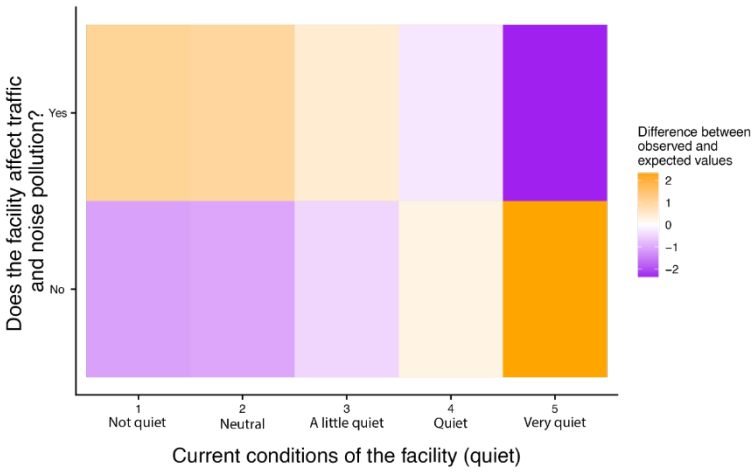


Figure 43. Model 9.2.1 explored the relationship between the perception of the facility as quiet and its influence on traffic and noise pollution.

Model 8.11.4 analyzed the relationship between the perception of the facility as prominent and the respondents' attitudes to the statement "The facility being in a residential neighborhood makes them feel at home". While most respondents were

neutral towards the prominence of the facility, most of the respondents were neutral to slightly disagreeing with the statement "The facility being in a residential neighborhood makes them feel at home". The highest difference between the observed and expected value (in this case, 2), pictured in orange, means there is a statistically significant relationship between the two values of each category.

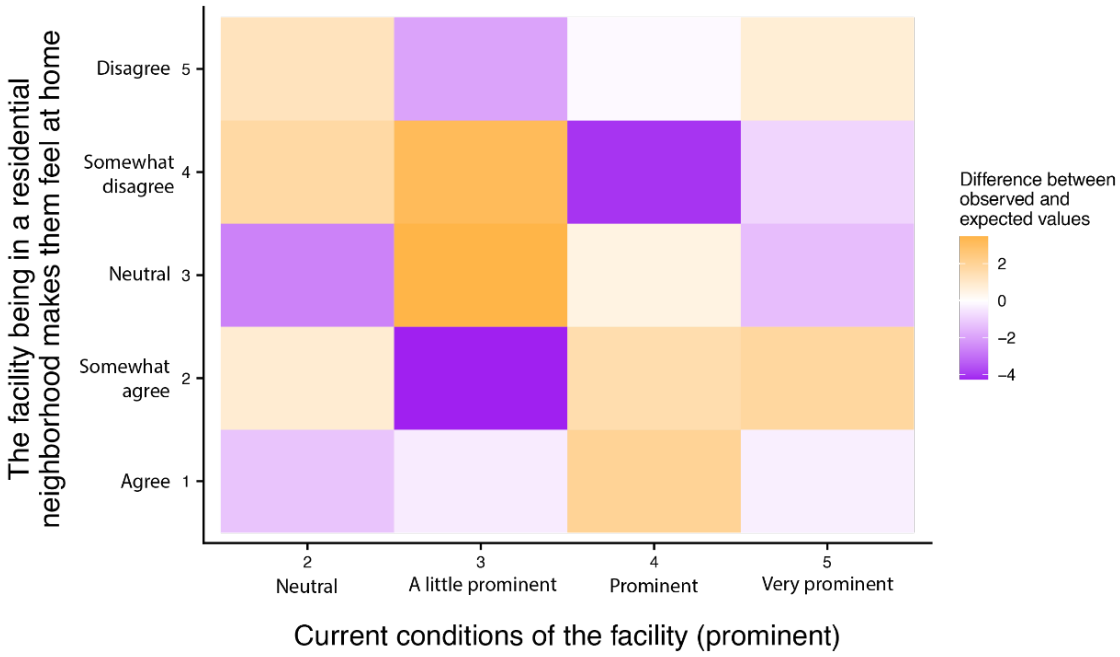


Figure 44. Model 8.11.4 analyzed the relationship between the perception of the facility as prominent and the respondents' attitudes to the statement "The facility being in a residential neighborhood makes them feel at home".

Model 2.1.4 explored the relationship between the people's age and their perception of the facility as small. Most respondents that were 40 – 64 years old felt the facility was somewhat small, whereas respondents over 65 years old felt very positive about the facility's smallness.

The highest difference between the observed and expected value (in this case, 4, for two combinations of variable values), pictured in orange, means there is a statistically significant relationship between the two values of each category.

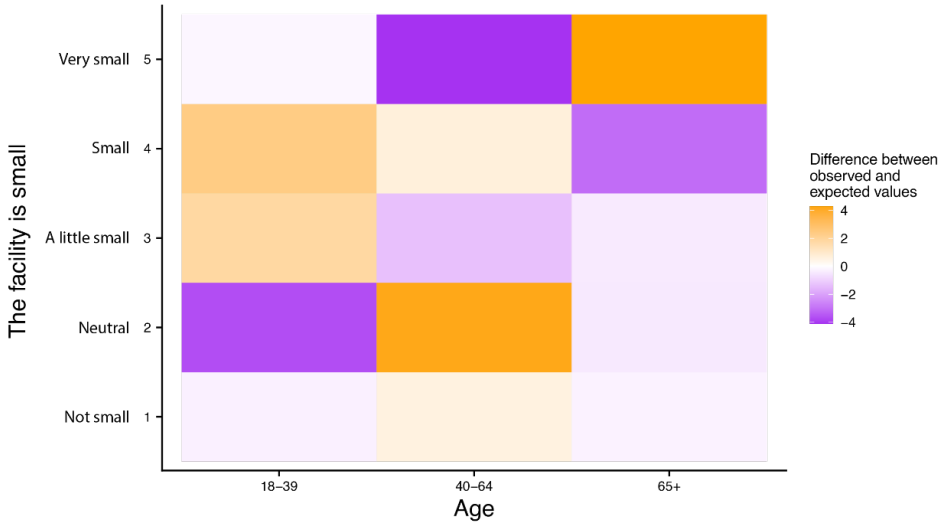


Figure 45. Model 2.1.4 explored the relationship between the people's age and their perception of the facility as small.

Model 8.9.3 explored the relationship between the perception of the gloominess of the facility and the respondents' attitudes towards the statement "Patients should be set free". According to the model, respondents that were neutral to the perception of the facility is gloomy were likewise neutral to the statement "Patients should be set free". The highest difference between the observed and expected value (in this case, 5), pictured in orange, means there is a statistically significant relationship between the two values of each category.

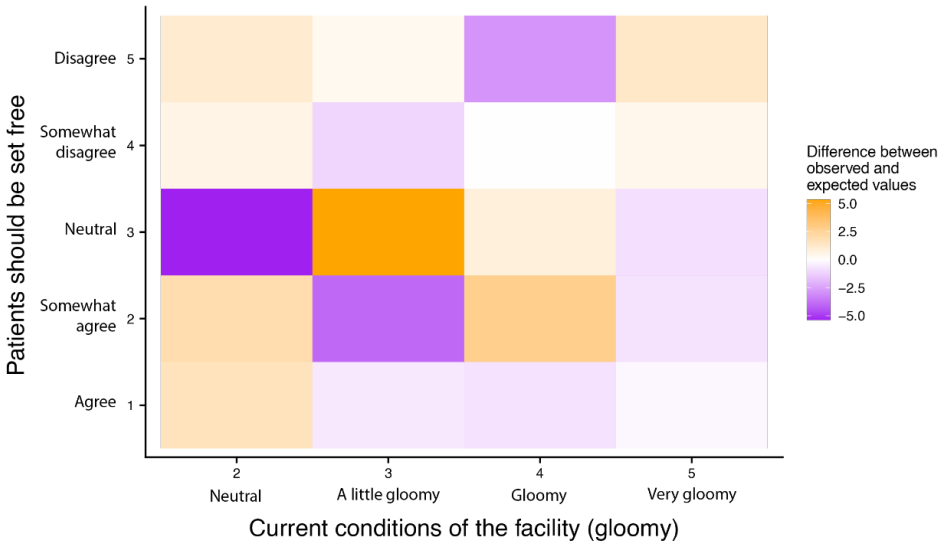


Figure 46. Model 8.9.3 explored the relationship between the perception of the gloominess of the facility and the respondents' attitudes towards the statement.

Model 8.10.4 evaluated the relationship between the perception of the facility as accessible and the attitudes towards the statement “The facility being in a residential neighborhood makes them feel at home”. Respondents tended to feel very positive about the accessibility of the facility and tended to agree with the statement “The facility being in a residential neighborhood makes them feel at home”.

The highest difference between the observed and expected value (3), pictured in orange, means there is a statistically significant relationship between the two values of each category.

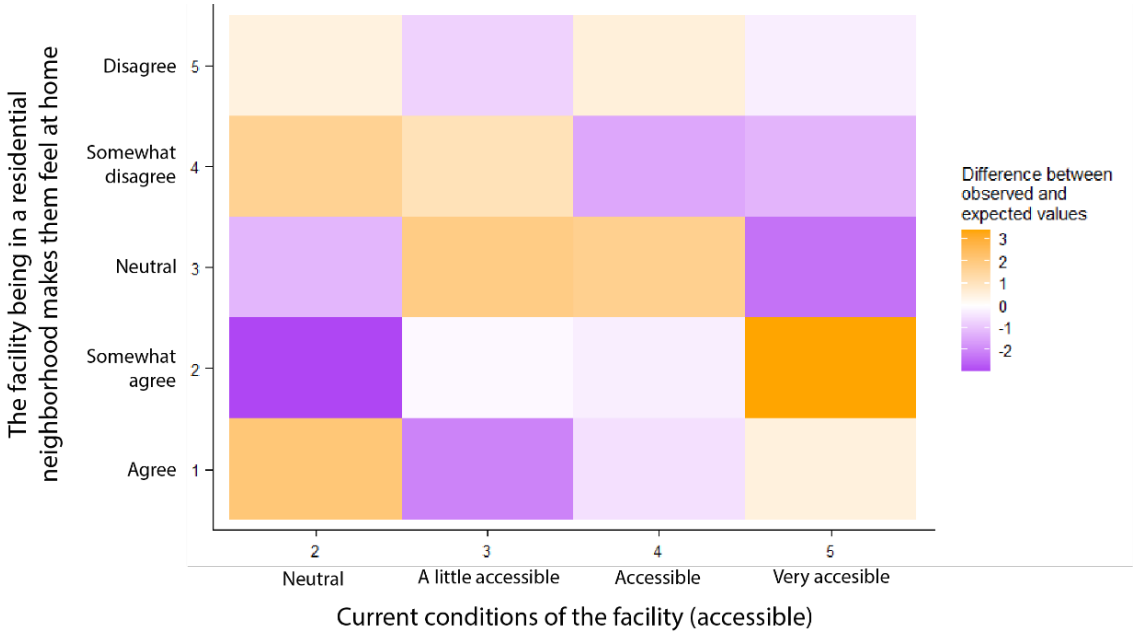


Figure 47. Model 8.10.4 evaluated the relationship between the perception of the facility as accessible and the attitudes towards the statement “The facility being in a residential neighborhood makes them feel at home”.

Model 8.10.2 explored the relationship between the perception of the facility as accessible and the respondents’ attitudes to the statement “Most hospitalized patients are not dangerous”. The model found that people tended to find the hospital very accessible and tended to slightly agree with the statement.

The highest difference between the observed and expected value, pictured in orange (5), means there is a statistically significant relationship between the two values of each category.

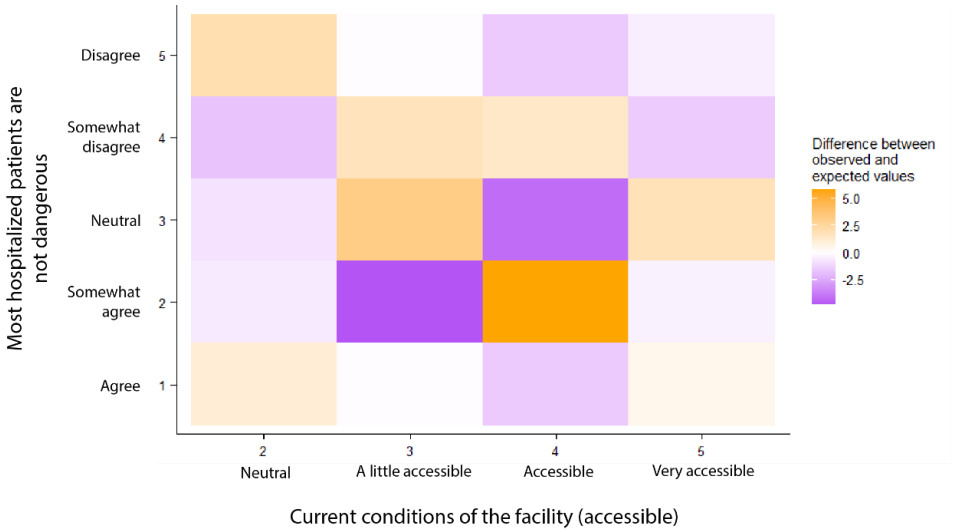


Figure 48. Model 8.10. 2 explored the relationship between the perception of the facility as accessible and the respondents' attitudes to the statement.

Model 8.11.2 analyzed the relationship between the perception of the facility as prominent and the respondent's attitudes towards the statement "Most hospitalized patients are not dangerous". The model found that there was a statistical significance between feeling neutral about the facility's prominence and slightly disagreeing with the statement. The highest difference between the observed and expected value (4), pictured in orange, means there is a statistically significant relationship between the two values of each category.

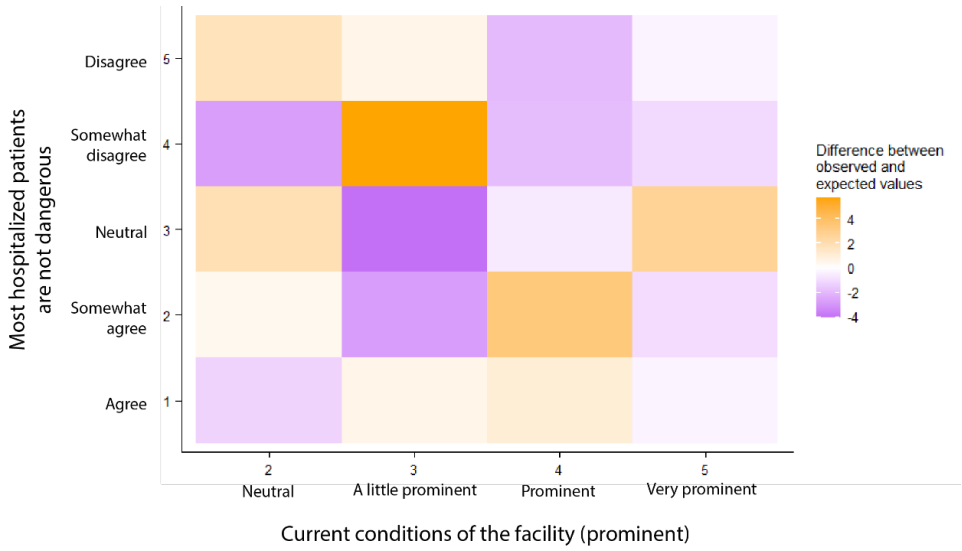


Figure 49. Model 8.11.2 analyzed the relationship between the perception of the facility as prominent and the respondent's attitudes towards the statement.

Model 5.3.7 investigated the relationship between the presence of children at home and the attitudes to the statement “There should be guards at the facility”. The model found that the presence of children at home was strongly associated with fully agreeing with the statement. The highest difference between the observed and expected value (4), pictured in orange, means there is a statistically significant relationship between the two values of each category.

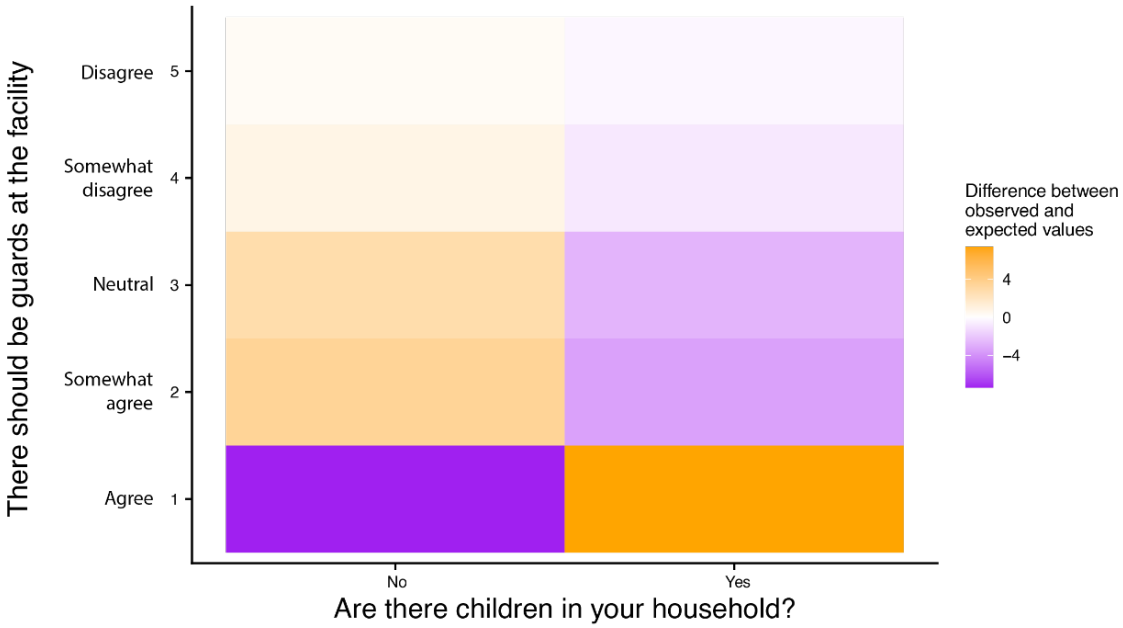


Figure 50. Model 5.3.7 investigated the relationship between the presence of children at home and the attitudes to the statement.

Model 9.3.10 investigated the relationship between the perception of the accessibility of the facility, and the perceived impact of the facility on property values. Residents who found the facility not that accessible felt that the presence of the facility decreased the property values. The highest difference between the observed and expected value (in this case, 2), pictured in orange, means there is a statistically significant relationship between the two values of each category.

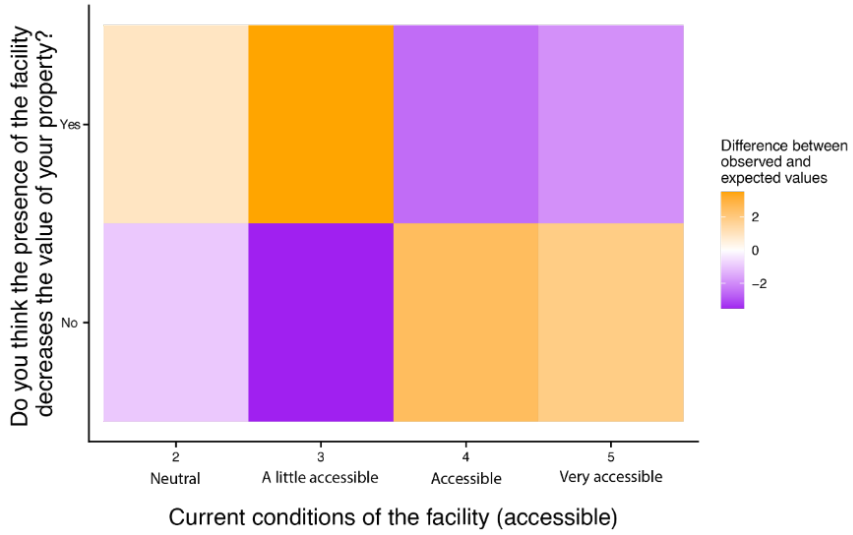


Figure 51. Model 9.3.10 investigated the relationship between the perception of the accessibility and the perceived impact of the facility on property values.

Model 9.2.3 explores the relationship between the reactions to the maintenance of the facility and the perceived influence on traffic and noise. Most respondents were neutral towards the maintenance of the facility and tended to perceive the facility as impacting traffic and noise levels in the neighborhood. The highest difference between the observed and expected value (2), pictured in orange, means there is a statistically significant relationship between the two values of each category.

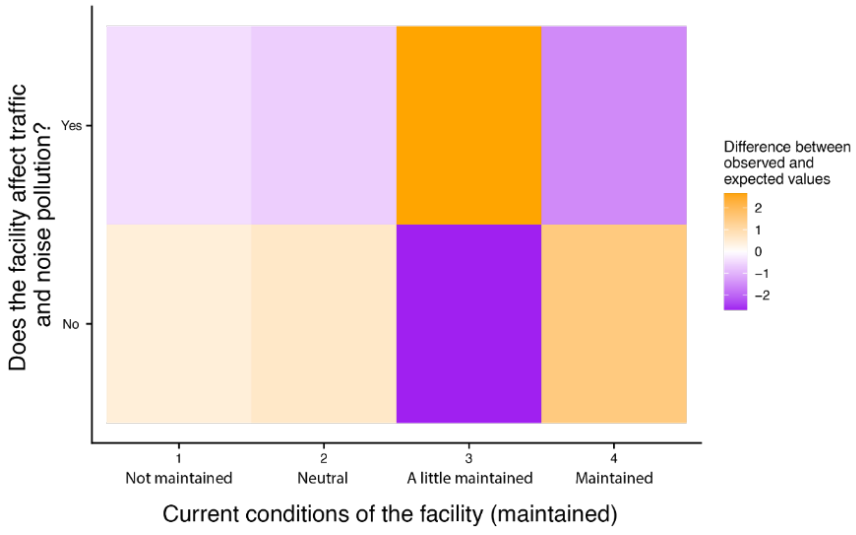


Figure 52. Model 9.2.3 explores the relationship between the reactions to the maintenance of the facility and the perceived influence on traffic and noise.

Model 7.1.6 compared the reactions towards the facility being ordinary, and the respondent's preference on where they would prefer the facility to be situated (in or out of the city). The model found that there was a statistical significance between respondents that preferred the facility to be in the city, and the perception of the ordinariness of the facility as neutral, whereas respondents that preferred the facility out of the city found the facility to be very ordinary. The highest difference between the observed and expected value (5), pictured in orange, means there is a statistically significant relationship between the two values of each category.

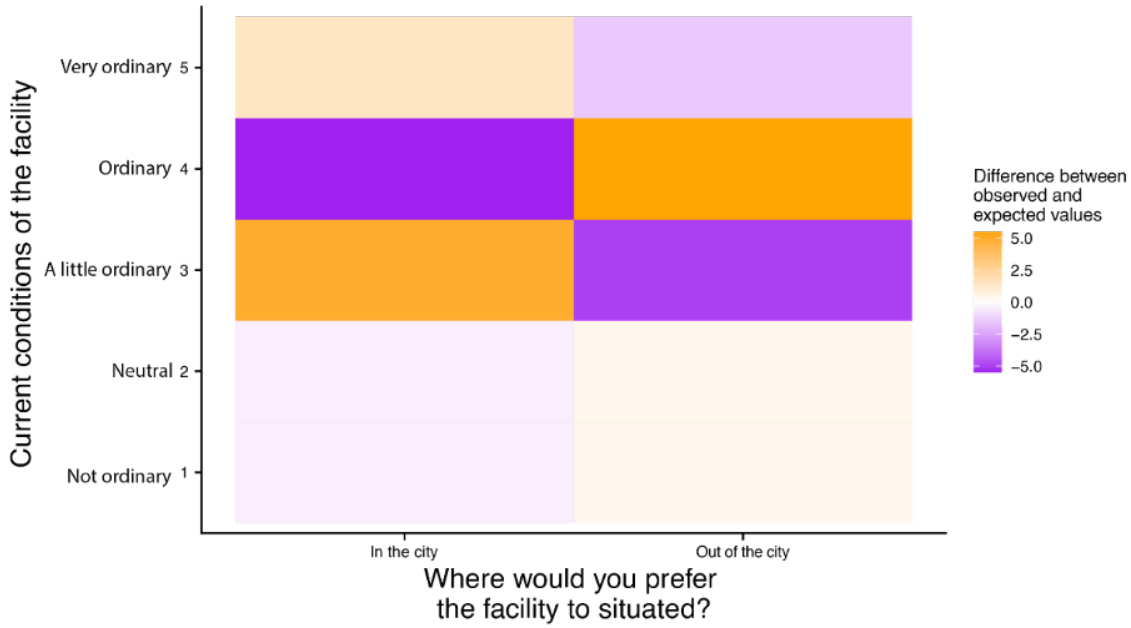


Figure 53. Model 7.1.6 compared the reactions towards the facility being ordinary, and the preference of facility placement.

Model 8.10.1 explored the relationship between the facility's accessibility and the attitudes toward the statement "Mental illnesses are the same as other illnesses". The model found that respondents that perceived the facility as somewhat accessible tended to slightly agree with the statement. The highest difference between the observed and expected value (5), pictured in orange, means there is a statistically significant relationship between the two values of each category.

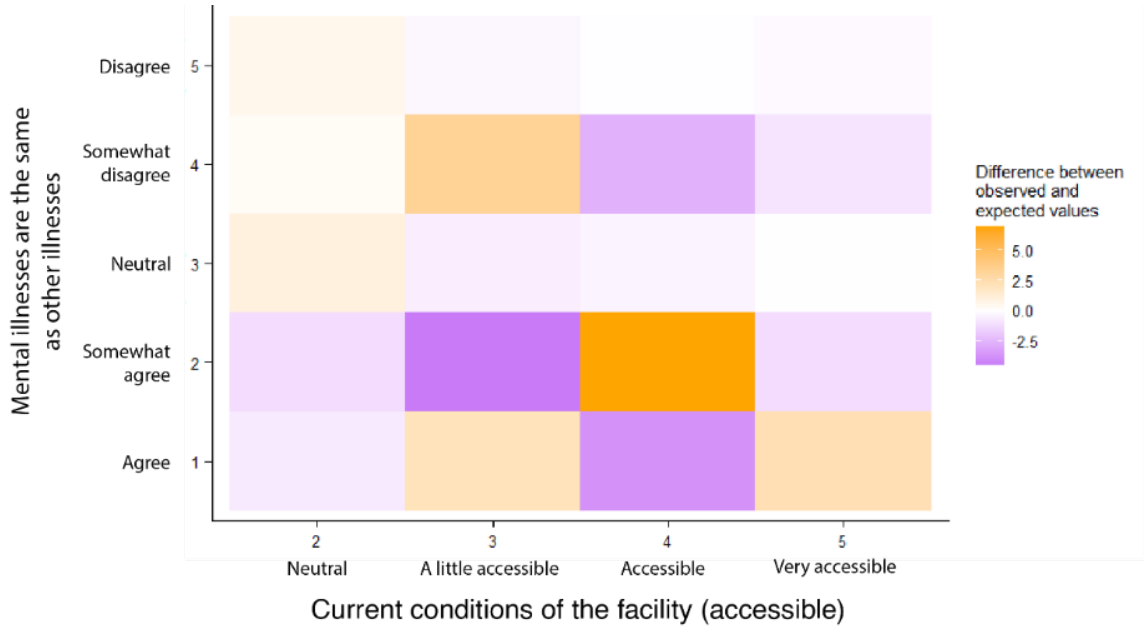


Figure 54. Model 8.10.1 explored the relationship between the facility's accessibility and the attitudes toward the statement.

CHAPTER 5

FINDINGS AND DISCUSSION

This study aims to understand the neighborhood residents' perception of the Psychiatric Hospital of Shkodra. The study employs quantitative method, through door-to-door surveys in the neighborhood of the hospital for a week, March 6 – 12, 2023 (March 6 - 9 from 8 AM to 1 PM, whereas from March 10 – 12 from 2 – 7 PM) interviewing 100 survey participants people about their perception of the hospital. The findings of the study outline the resident profile (age, education, tenure, and time living in the neighborhood), responses of the attitudes towards mental health, and community attitudes towards the facility, and key statistically relevant relationships.

5.1 Resident Profile

51% of the participants were male, and 49% were female. Most participants belonged were between 40 – 60 years old (41% of participants), followed by 32% that were 18 – 39 years old, and 27% of them over 65 years old. Most respondents had completed secondary education (41%, as compared to 39% having completed higher education and 20% with primary education).

Most respondents were quite familiar with the neighborhood, as they had lived there over 10 years (31% of them had lived there 5 – 10 years, and 8% had lived there for less than 5 years). Likewise, most respondents are homeowners (78%), and had children in their households (65%). Most respondents had either retired or were unemployed.

5.2 Community Attitudes towards Mental Health

When asked about familiarity with the mental health system, 60% of the respondents replied that they were familiar with the mental health system, as opposed to 40% who were not. 63% of the respondents attested that they would want their

family member or acquaintance to be treated in a mental health facility, whereas 37% of the respondents replied that they prefer attending to them at home. The respondents were split, when asked if they would want the hospital to be inside the city (49%), or outside (51%).

Regarding stigma surrounding mental health, when asked if they would share hospitalization information with their relatives or neighbors, only 38% of them replied that they would let their relatives and neighbors know. The overwhelming majority, 62% of the respondents, would either not share this information (33%) or they were not sure (29%).

5.3 Community Attitudes towards the Facility

Respondents were invited to rate the current situation of the facility on a Likert scale, as it pertaints to the following aspects: distinct, accessible, gloomy, transparent, introverted, ordinary, wide/prominent, small, well-maintained, comfortable, and quiet. The aspect that was rated the most positive was ordinariness, followed by accessibility. On the contrary, the aspects that were rated negatively were the facility's transparency and maintenance.

Respondents were asked to report the feelings that the facility evoked. Almost half the respondents (47%) stated that the facility evoked no feelings, and 38% of the respondents noted that the facility made them feel bothered or annoyed.

Respondents were invited to respond to the following statements by rating them on a scale (1 completely agree to 5 completely disagree). To analyze and compare the results, I created a point-based system similar to the one used in the previous question on the aspects of the facility, (namely: 1 completely agree was multiplied by 3 points, 2 agree was multiplied by 2, 3 neutral by 1, 4 disagree was multiplied by -2 points, and 5 completely disagree by -3 points).

The statement which the respondents agreed the most with was "There should be guards at the facility", followed by "The facility should be surrounded by high walls". The only statement the respondents disagreed with was "Psychiatric hospitals should be like prisons".

Finally, the respondents were invited to report whether they felt afraid because of the presence of the facility in the neighborhood, and if so, why they felt afraid. The majority of the respondents (66%) did not feel afraid in the neighborhood due to the presence of the facility. The 34% of the respondents who felt afraid, mostly cited concerns about the kids (15%).

Table 16. Perceptions and behaviors for the Psychiatric Hospital of Shkodra. Table is courtesy of the author.

	Definition of Perceptions and Behaviors	**Psychiatric Hospital of Shkodra**
Pro-environment	Kollmuss and Agyeman (2002): individual behavior that undermines the negative impact of someone's actions towards the environment.	Most respondents believed that the facility does not affect traffic and noise pollution, and they were likely to perceive the accessibility of the facility as very positive. Similarly, it was likely for respondents to state that they felt slightly negative to neutral about the quietness and the state of maintenance of the facility. Most homeowners were more likely to state that the facility affected noise pollution.
Degree of noxiousness	Gifford et al. (2011): a way for individuals and the community to understand the effect of the facility on property values, enhancement, community benefits and dynamics.	Residents who felt slightly negative about the accessibility of the facility felt that the presence of the facility decreased property values. Homeowners were more likely to think that the presence of the facility decreases the value of the property, more so compared to renters. Residents of more than 10 years were more inclined to think that the facility decreased the value of their property than residents who had lived for less than 10 years in the neighborhood. Respondents that had children at home fully agreed to the statement "There should be guards at the facility".
The image of the environment	According to Wright (1991), the image of the environment relies on group characteristics (gender, age, status).	Most respondents that were 40 – 64 years old felt the facility was relatively small, whereas respondents over 65 years old felt the facility was slightly bigger. Men were more likely to respond that the presence of the hospital made them feel neutral/ evoked no sentiment, whereas women were more likely to answer that the presence of the hospital made them feel afraid and annoyed (bothered).

NIMBY	Cowan (2003) investigates the attitudes of the public towards the relocation of a mental health facility in the neighborhood, and employes the term "NIMBY-ism" to describe the largely opposing behavior of residents.	There was a statistical significance between respondents that preferred the facility to be in the city, and the perception of the ordinariness of the facility as neutral — whereas respondents that preferred the facility out of the city found the ordinary aspect of the facility to be slightly positive. Further study should be conducted, employing qualitative methods, as the residents might feel pressured to say "the right thing" when it's quantitative, categorical questions.
Image of the facility — dormant	Heider (1939) argues that the environment enables a person to act, therefore attributing a user's behavior to themselves, and perceiving the facility as a dormant agent.	Facility perceived as prominent, coded as neutral alongside slightly disagreeing with "Most hospitalized patients are not dangerous", neutral agreement to "The facility being in a residential neighborhood makes them feel at home" and slightly agreeing to "Mental facilities should be surrounded by high walls". Facility perceived as well-maintained, coded as neutral alongside slightly agreeing to "Mental illnesses are the same as other illnesses". Most respondents believed that the facility does not affect traffic and noise pollution, and they were likely to perceive the accessibility of the facility as very positive. Similarly, it was likely for respondents to state that they felt slightly negative to neutral about the quietness and the state of maintenance of the facility. Most homeowners were more likely to state that the facility affected noise pollution.
Image of the facility — outsider and insider	Wright (1991) argues for a differentiation between outsider and insider perceptions, where the outsider is less likely to perceive the positive aspects of the mental health facility.	There is a very negative association to the facility as transparent, and complete agreement to the statement "Mental facilities should be surrounded by high walls". Further studies and research should take into account insider perception, using the methodology and literature review of this thesis as a foundation to guide future research further.

After conducting various chi-square tests, the combinations of attitudes towards mental health and facility aspects were mapped in *Figure 57,* to understand the combinations better.

Generally, facility aspects and community attitudes that were both coded positively were:

- Facility perceived as accessible was coded positively alongside agreeing to the statements “The facility being in a residential neighborhood makes them feel at home”, “Most hospitalized patients are not dangerous”, and “Mental illnesses are the same as other illnesses”.
- Facility perceived as quiet was coded positively alongside agreeing to the statements “Patients should be set free”, “Most hospitalized patients are not dangerous”, and “Mental illnesses are the same as other illnesses”.
- Facility perceived as gloomy was coded alongside strongly agreeing to the statements “Mental facilities should be surrounded by high walls”.
- Facility perceived as prominent was coded alongside agreeing with the statement “Mental illnesses are the same as other illnesses”.

Generally, facility aspects and attitudes towards mental health that were both coded as neutral were:

- Facility perceived as prominent, coded as neutral alongside slightly disagreeing with “Most hospitalized patients are not dangerous”, neutral agreement to “The facility being in a residential neighborhood makes them feel at home” and slightly agreeing to “Mental facilities should be surrounded by high walls”.
- Facility perceived as well-maintained, coded as neutral alongside slightly agreeing to “Mental illnesses are the same as other illnesses”.
- Facility perceived as gloomy coded neutral alongside the neutral agreement to “Patients should be set free”.

Finally, there was an outlier/contrasting statistically significant relationship, where there is a very negative association to the facility as transparent, and complete agreement to the statement “Mental facilities should be surrounded by high walls”.

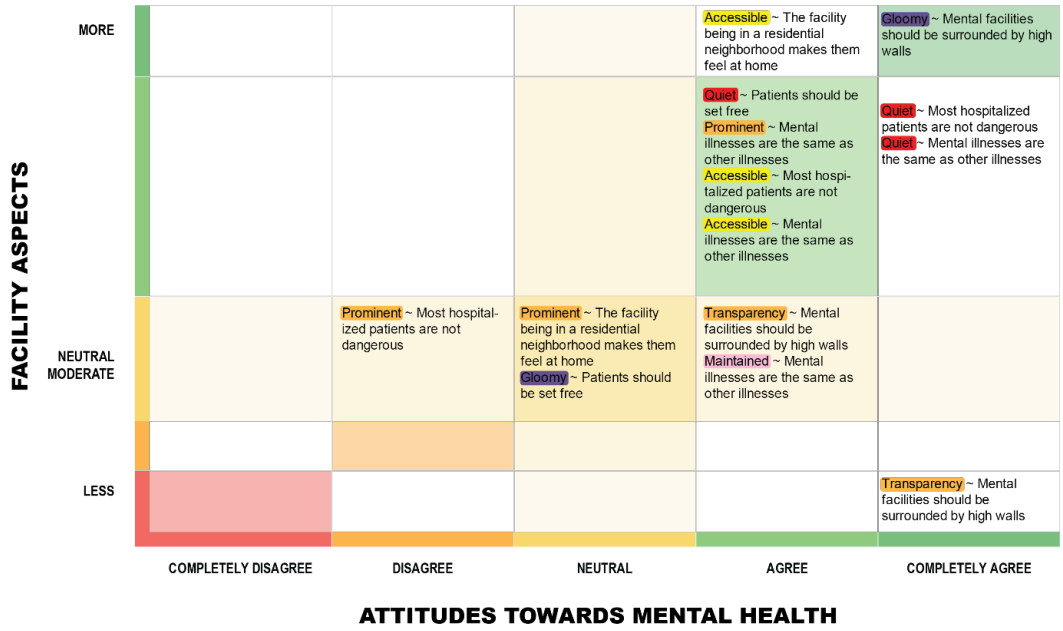


Figure 55. Diagram of facility aspects, attitudes towards mental health and their respective ratings.

CHAPTER 6

CONCLUSION AND FUTURE RESEARCH RECOMMENDATION

This thesis aimed to identify and analyze the residents' perception of the Psychiatric Hospital of Shkodra. The author employed quantitative methodology, and surveyed residents in a defined neighborhood area around the psychiatric facility. The focus of the study were the residents, therefore suggestions for future research would include insider's perspective, to understand the dynamics between outsiders (residents), and insiders, as it pertains to the perception of the facility.

6.1 Ethical Considerations

The participants agreed to be part of this study on their own free will. As an author and surveyor at the same time, I approached the residents' houses, described the survey and its duration and asked for their consent.

The participants of the study are all adults, since there are significant ethical considerations to including minors in a study of perception of a psychiatric building (considering the sensitivity of topics related to mental health).

6.2 Research Limitations

The author surveyed respondents employing a door-to-door approach in the identified neighborhood area (illustrated on the map above). The quantitative analysis was chosen as a first step to understand a cross-sectional view of the residents, but it could not provide the same level of qualitative, interpersonal detail that accompanies qualitative studies. This study should serve as a basis for further in-depth analysis (case studies and qualitative interviews). The study focuses on the experience of non-users of the mental health facility, an experience whose scope focuses on perceptions and attitudes. Future researchers are invited to explore the experiences of other

stakeholders and interest groups, and use the methodology employed by this study as a foundation.

Finally, the participants were invited to draw and describe the way from their house to the hospital. However, most of the participants were timid and reluctant to draw, therefore the author drew the path for them. In the final version of the results, the drawings of the way home have not been considered. However, cognitive mapping as a methodology could be useful for focus-groups, or more qualitative interviews that would last longer as well.

6.3 Attitudes towards Mental Illness

The study found that men were more likely to respond that the presence of the hospital made them feel neutral/ evoked no sentiment, whereas women were more likely to answer that the presence of the hospital made them feel afraid and annoyed (bothered). It is suggested to conduct future research of a qualitative nature, as men might feel more pressured to appear calm and neutral towards the facility, and not share their feelings at depth.

Furthermore, questions pertaining the impact of the facility on real estate values found that residents who found the facility slightly less accessible felt that the presence of the facility decreased the property values. Homeowners tended to perceive the presence of the facility as a factor that decreased the value of the property, more so compared to renters. Residents who had lived there longer (more than 10 years) were more likely to think that the facility decreased the value of their property. Recommendations for future research would include focusing on participatory approaches around planning and design solutions that would integrate the facility more, while at the same time, promote and encourage patient integration, as the facility would be perceived as an added value to the community.

When asked about traffic, most respondents believe that the facility does not affect traffic and noise pollution and found the facility very accessible. Similarly, it was likely for respondents to state that they found the facility not that quiet, and not that well-maintained. On the other hand, most homeowners tended to perceive the facility as responsible for traffic and noise pollution.

Residents that had children at home tended to fully agree with the statement "There should be guards at the facility".

Finally, respondents that perceived the facility as ordinary tended to prefer that the facility be placed inside the city.

6.4 Attitudes towards the Facility

The study aims to comprehend and quantify community attitudes towards mental health and mental health facility (quiet, ordinary, transparent), and to provide suggestions for planning and design practices.

The facility is ordinary and evokes no feelings

Most respondents were more likely to report that the facility evoked no feelings (especially men), or that it was very ordinary. This aspect of ordinariness was mentioned frequently, in a positive note. Recommendations for further research would include focus groups with insiders (users of the facility), and qualitative analyses, to understand opportunities for integration.

The facility depreciates real estate

Residents who found the facility slightly less accessible felt that the presence of the facility decreased the property values. Homeowners tended to perceive the presence of the facility as a factor that decreased the value of the property, more so compared to renters. Residents who had lived there longer (more than 10 years) were more likely to think that the facility decreased the value of their property.

The facility should be maintained

It was likely for respondents to state that they found the facility not that quiet, and not that well-maintained. Most homeowners tended to perceive the facility as responsible for traffic and noise pollution. The facility should plan more frequent maintenance, and a greening buffer bordering the facility.

The facility should be surrounded by a buffer

All respondents tended to agree that there should be guards — especially residents with children in their households. Most respondents that perceived the facility as very ordinary tended to prefer that the facility be placed inside the city. This

is an opportunity to implement a green buffer around the facility, to provide privacy for insiders and the outsiders, and maintain the perception of ordinariness.

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APPENDIX A

SURVEY RESULTS

The survey format is followed by the survey results.

Ky pyetësor behet me qëllimin qe te mbledhim informacion mbi qëndrimin e njerëzve ndaj prezencës se spitalit psikiatrik te Shkodrës ne lagjen e tyre. Pyetjet qe do te vijojnë do te na ndihmojnë te arrijmë te kuptojmë pozicionin tuaj ndaj spitalit.

Te gjitha te dhënat janë anonime dhe do te përdoren për një studim masteri ne Arkitekture.

1. GJINIA ☐ F ☐ M
2. GRUPMOSHA ☐ 18-39 ☐ 40-64 ☐ 65+
3. Sa Kohe Keni Qe Banoni Ne Këtë Lagje?
4. ☐ ME PAK SE 5 ☐ 5-10 ☐ ME SHUME 10 VITE
5. JETONI ME QERA ? ☐ PO ☐ JO
6. KENI FEMIJE NE SHTEPI ? ☐ PO ☐ JO
7. EDUKIMI

ARSIM I ULET ☐

ARSIM I MESEM ☐

ARSIM I LARTE ☐

8. PROFESIONI……
9. A keni familjaritet me sistemin e shëndetit mendor ?

☐ Po

☐ Jo

10. Nëse do te kishit një te afërm me probleme do donit te kurohej :

ne Shtëpi ☐

ne Spital ☐

11. Ne qoftese do te donit te kurohej ne një spital do donit qe spitali te ishte

Brenda qytetit ☐

jashtë qytetit ☐

12. Do u tregonit komshinjve/ te afërmeve për shtrimin e tij ne spital

Po ☐ Jo ☐ s'jam i sigurt ☐

13. A jeni ne dijeni për prezencën e spitalit psikiatrik pranë shtëpisë tuaj ? Po ☐ Jo ☐

14. Sipas jush si është situata aktuale e spitalit psikiatrik ?

Negative 1 2 3 4 5 Pozitive

	1	2	3	4	5
I qete					
I rehatshëm					
I mbajtur mire					
I vogël					
I gjere					
I zakonshëm					
introvert					
transparent					
I zymte					
aksesueshem					
I dallueshëm					

15. Prezenca e spitalit ju krijon ndjesi(mund te shënoni me shume se 1 alternative)

Sigurie ☐

Qetësie ☐

Bezdie ☐

Kërcënimi ☐

Frike ☐

Asnjë ndjesi ☐

Te tjera ….....

16. Kthejini përgjigje pyetjeve te mëposhtme sipas skales

Plotësisht dakord 1 2 3 4 5 Nuk jam aspak dakord

1-Semundjet mendore jane njesoj si semundjet e tjera	1	2	3	4	5
2- Shumica e te shtruarve ne spitalin psikiatrik nuk jane te rrezikshem					
3- Shumica e te shtruarve ne spitalin psikiatrik duhet te lihen te lire					
4- Te qenurit ne nje lagje te banuar mendoj qe i ben te ndihen si ne shtepi					
5- Spitalet psikiatrike duhet te jene si burgjet					
6- Duhet te rrethohen me mure te larta					
7- Duhet te kete roje					

17. A ndikon ne trafikun dhe zhurmën e lagjes prezenca e spitalit psikiatrik? Po ☐ Jo ☐

18. A krijohen probleme parkimi për shkak te fluksit qe sjell spitali psikiatrik? Po ☐ Jo ☐

19. A keni frike ne lagje për shkak te prezencës e spitalit psikiatrik ? Po ☐ Jo ☐

Nëse PO , nga çfarë?

.....

.....

.....

20. Keni rastisur ndonjëherë ne lagje me ndonjë te sëmure? Po ☐ Jo ☐

Nëse PO , si ka qene sjellja e tij ose saj ?

i/e qete ☐

Agresiv/e ☐

i/e hutuar ☐

i/e afrueshëm ☐

Te tjera

….....

21. A mendoni qe prezenca e spitalit i ul vlerën pronës tuaj?
Po ☐ Jo ☐
22. Çfarë problematikash tjera ju sjell prezenca e spitalit ne lagjen tuaj ?

……

….....

.....

23. A dëshironi te keni shtëpinë larg spitalit psikiatrik ?
Po ☐ Jo ☐
24. Vizatoni rrugën nga shtëpia juaj tek spitali psikiatrik

1	2	3	4	5	6	7	8	9 1 ne spital 2 ne shtepi	10 1 brenda 2 jashte	11	12	13. [I qete]	13. [I rehatsh em]	13. [miremb]	13. [I vogel]	13. [I gjere]	13. [I zakonshe m]	13. [Introve rt]	13. [Transpare nt]	13. [I zymte]	13. [I akses ueshe m]	13. [I dallueshe m]	14	15_1	15_2	15_3	15_4	15_5	15_6	15_7	16	17	18	19	20	21	21.2	21.3	21.4	22	23	24
F	40-64	3	Jo	Po	Ulet	Tailor	Jo		1	1	S'e di	Po	4	2	2	4	1	5	3	1	5	4	2	Bezdie	1	2	4	4	3	1	1	Po	Po	Po	Mund te arratiset nje i semure, shtepia eshte shume afer mund te hyje.	Po	Agresiv/e	I/e hutuar			Po	bashke me rajonalin, zhurme, trafik dhe mungese vendesh parkimi	Po
M	40-64	3	Jo	Po	Mesem	Mechanic	Jo		2	1	Jo	Po	2	1	3	4	3	2	3	3	5	5	2	Bezdie	1	3	5	2	4	4	5	Po	Po	Jo		Jo					Po	zhurma, trafik, parkim	Po
F	18-39	3	Jo	Jo	Larte	Lawyer	Jo		1	1	Po	Po	3	2	3	5	2	5	4	2	5	4	2	Bezdie	1	4	3	5	2	4	5	Po	Po	Jo		Jo					Po	Zhurma	Po
F	65+	3	Jo	Po	Ulet	Retiree	Jo		1	2	Jo	Po	1	2	3	5	3	4	4	1	5	3	2	Frike	1	5	5	5	1	1	1	Po	Po	Po	Jam e moshuar, mund te iki nga spitali nje i semure, nuk mund te mbroj veten kam dhe nipat ?	Po	I/e qete				Po	zhurme dheFrike	Jo
M	65+	3	Jo	Po	Ulet	Retiree	Jo		1	2	Jo	Po	3	2	3	5	1	2	1	2	5	3	2	Asnje ndjesi	1	3	3	3	3	3	3	Po	Po	Jo		Po	I/e hutuar				Po	Frike te familjaret dhe zhurme nga rajonali	Po
F	18-39	2	Jo	Po	Mesem	Unemployed	Jo		2	1	S'e di	Po	4	2	3	4	2	3	1	3	5	3	4	Bezdie	1	3	4	3	3	5	5	Po	Po	Po	Per femijet	Po	Agresiv/e	I/e hutuar			Po		Po
M	40-64	3	Jo	Po	Mesem	Biznes privat	Jo		1	2	Po	Po	4	2	3	4	2	4	3	2	5	3	3	Asnje ndjesi	1	4	3	3	3	1	1	Po	Po	Jo		Jo					Po	Trafik, ndotje akustike, vende te pakta parkimi	Po
F	65+	3	Jo	Jo	Ulet	Retiree	Po		1	1	Po	Po	4	2	3	5	2	4	3	3	4	3	2	Frike	1	3	3	4	2	4	5	Po	Po	Jo		Po	I/e qete	I/e hutuar			Po	Rajonali eshte me shume problem	Jo
M	65+	3	Jo	Jo	Mesem	Retiree	Po		1	2	Po	Po	4	2	2	4	2	3	2	3	4	3	2	Bezdie	1	3	3	3	3	3	4	Po	Po	Jo		Jo					Po	mungese parkimi, trafik, zhurme	Jo
M	18-39	3	Jo	Jo	Larte	Teacher	Jo		1	2	Po	Po	3	3	3	4	2	2	3	2	4	4	4	Asnje ndjesi	1	3	3	2	3	3	5	Po	Po	Jo		Jo					Po	Trafik, parkim, zhurme	Jo
F	18-39	2	Jo	Jo	Larte	Teacher	Po		2	1	Po	Po	4	3	3	4	2	3	2	2	4	3	3	Asnje ndjesi	1	3	2	3	2	3	5	Po	Po	Po	Ne rast se arratiset nje i semure, shtepine e kam afer, sjam mesuar.	Po	I/e qete	I/e afrueshem			Po	Trafik, vende parkimi	Po
F	65+	3	Jo	Po	Ulet	Retiree	Jo		1	1	S'e di	Po	4	2	3	4	2	3	2	3	4	3	2	Kercenimi	1	3	2	2	2	3	5	Po	Po	Po	Mbesat qe i le 2 vetem.	Jo					Po	Mungese sigurie, zhurme nga trafiku	Jo
F	18-39	2	Jo	Po	Mesem	Unemployed	Jo		2	1	S'e di	Po	3	3	3	3	2	3	3	3	4	3	3	Kercenimi	1	4	2	3	3	4	5	Po	Po	Po	Te le vajzat vetem 2	Jo					Po	Trafik dhe zhurme	Po
M	40-64	3	Jo	Po	Mesem	Waiter	Jo		1	2		Po	4	2	2	4	2	3	4	3	3	3	3	Asnje ndjesi	1	3	3	3	3	5	5	Po	Po	Jo		Jo					Po	Zhurme dhe trafik	Po
F	65+	3	Jo	Jo	Ulet	Retiree	Po		1	1	Po	Po	4	4	3	4	3	4	3	3	3	4	4	Kercenimi	1	3	3	3	3	3	3	Po	Jo	Jo		Po	I/e qete	I/e hutuar			Jo	Zhurme	Jo
M	65+	3	Jo	Jo	Ulet	Retiree	Jo		1	1	S'e di	Po	4	3	3	5	4	4	2	4	4	4	4	Asnje ndjesi	1	3	3	3	3	3	3	Po	Jo	Jo		Jo					Jo	Zhurma	Jo
M	65+	3	Jo	Jo	Mesem	Retiree	Jo		1	2	Po	Po	3	3	2	2	2	3	3	3	2	2	2	Asnje ndjesi	1	3	2	3	3	5	5	Po	Jo	Jo		Jo					Po	Zhurme dhe trafik	Jo
F	65+	3	Jo	Jo	Ulet	Retiree	Jo		1	2	Jo	Po	2	2	2	5	3	3	3	3	4	4	4	Frike	1	2	4	3	3	2	2	Po	Po	Jo		Po	I/e hutuar	I/e afrueshem			Po	Zhurme, trafik	Po
M	18-39	3	Jo	Jo	Mesem	Unemployed	Jo		1	2	S'e di	Po	4	3	2	4	2	3	3	3	3	3	3	Asnje ndjesi	1	3	3	3	1	1	1	Po	Po	Jo		Jo					Po	Zhurme, tarfik, parkim	Po
F	40-64	2	Jo	Po	Mesem	Tailor	Jo		1	1	S'e di	Po	2	2	2	4	2	3	3	3	3	3	3	Frike	1	3	3	3	4	5	5	Po	Po	Po	Djalin, ta le vetem	Po					Po	Trafik, mungese sigurie, zhurme, parkim i paket.	Po

1	2	3	4	5	6	7	8	9 1 ne spital 2 ne shtepi	10 1 brenda 2 jashte	11	12	13. [i qete]	13. [i renatshem]	13. [mirembajtur]	13. [i vogel]	13. [i gjere]	13. [i zakonshem]	13. [Introvert]	13. [Transparent]	13. [i zymte]	13. [i aksesueshem]	13. [i dallueshem]	14	15_1	15_2	15_3	15_4	15_5	15_6	15_7	16	17	18		19	20	21	21.2	21.3	21.4	22		23	24
M	40-64	3	Jo	Po	Mesem	Electrician	Jo	1	2	Po	Po	3	4	2	3	1	2	2	2	4	3	3	Asnjendjesi	1	3	3	3	3	4	4	Po	Po	Jo		Po	I/e qete	I/e afrueshem				Po	Zhurme, trafik, mungese parkimi		Po
M	40-64	3	Jo	Po	Larte	Accountant	Po	1	1	Po	Po	4	2	2	4	3	3	2	3	4	4	2	Asnjendjesi	1	2	3	2	4	3	1	Po	Po	Jo		Po	I/e qete	I/e afrueshem				Po			Po
F	40-64	3	Jo	Po	Larte	Accountant	Jo	1	2	Jo	Po	4	2	2	4	3	2	3	4	4	3	3	Kercenimi	1	3	3	2	4	2	1	Po	Po	Jo		Po	I/e qete	I/e hutuar	I/e afrueshem			Po			Po
M	18-39	3	Jo	Jo	Mesem	Guard	Jo	1	1	S'di	Po	4	2	2	5	3	2	2	2	3	3	3	Asnjendjesi	1	3	3	3	4	3	3	Po	Po	Jo		Po						Po			Po
F	40-64	3	Jo	Po	Ulet	Unemployed	Jo	1	2	Jo	Po	2	1	2	4	2	1	2	3	3	3	3	Kercenimi	1	3	3	3	2	3	2	Po	Po	Po	Arratisje e pacienteve, mungese sigurie	Jo						Po			Po
M	40-64	3	Jo	Po	Ulet	Shoemaker	Jo	1	2	Jo	Po	2	1	3	2	2	4	3	2	4	2	2	Asnjendjesi	1	3	4	4	3	1	1	Po	Po	Jo		Jo						Po			Po
M	18-39	3	Jo	Jo	Larte	Student	Jo	1	2	S'di	Po	4	2	2	3	2	3	3	3	4	3	3	Asnjendjesi	1	3	3	3	3	3	1	Jo	Jo	Jo		Jo						Po			Po
M	65+	3	Jo	Po	Mesem	Retiree	Jo	2	2	S'di	Po	3	1	1	5	1	3	2	2	5	4	3	Asnjendjesi	1	2	2	3	3	2	1	Jo	Jo	Jo		Jo						Po			Jo
F	18-39	2	Po	Po	Larte	Accountant	Jo	1	2	Po	Po	5	3	3	4	2	5	4	3	4	4	3	Asnjendjesi	4	3	4	3	3	3	1	Jo	Po	Jo		Jo						Jo			Jo
M	18-39	1	Po	Po	Mesem	Line worker	Jo	1	2	S'di	Po	2	4	4	5	3	3	2	3	4	3	3	Asnjendjesi	5	4	3	2	2	4	5	Jo	Jo	Jo		Po	I/e qete	Agresiv/e	I/e hutuar	I/e afrueshem		Jo			Jo
F	40-64	2	Jo	Jo	Mesem	Vendor	Po	1	1	Po	Po	4	3	1	2	3	3	2	3	2	3	3	Frike	1	1	1	2	3	4	1	Jo	Jo	Jo		Po	I/e qete	I/e hutuar	I/e afrueshem			Po			Jo
M	40-64	2	Jo	Po	Mesem	Cook	Jo	2	1	S'di	Po	4	2	2	4	5	2	2	5	5	5	5	Bezdie	1	3	3	3	2	1	1	Po	Po	Po	Mungese e sigurise	Jo						Po			Po
F	18-39	2	Jo	Po	Ulet	Unemployed	Jo	2	1	Jo	Po	2	1	1	3	2	2	1	1	3	4	4	Bezdie	1	2	3	3	3	1	1	Po	Po	Po	Mungese sigurie	Jo						Po			Po
M	40-64	2	Jo	Po	Larte	Professor	Po	1	1	Po	Po	4	2	2	3	2	3	2	2	2	2	3	Frike	1	1	1	1	5	4	1	Po	Po	Jo		Jo						Po			Jo
F	65+	2	Jo	Po	Larte	Retiree	Po	1	2	Po	Po	4	2	2	3	1	4	2	3	4	3	3	Kercenimi	1	1	2	2	5	4	1	Po	Po	Jo		Po	I/e qete	I/e afrueshem				Po			Jo
M	65+	2	Jo	Po	Larte	Retiree	Po	1	1	Po	Po	5	5	2	5	2	5	3	1	4	5	5	Asnjendjesi	1	3	2	2	3	3	1	Jo	Jo	Jo		Po	I/e qete	I/e hutuar				Po			Jo
F	18-39	2	Jo	Po	Larte	Engineer	Jo	1	1	Po	Po	3	1	1	4	2	4	4	3	4	4	3	Asnjendjesi	1	1	2	2	4	4	1	Po	Po	Jo		Po	I/e hutuar	I/e afrueshem				Po			Jo
F	40-64	2	Jo	Po	Mesem	Unemployed	Po	1	2	Po	Po	2	1	1	2	2	3	3	4	5	4	5	Frike	5	3	4	5	5	1	1	Po	Jo	Po	Nga mungesa e sigurise	Po	Agresiv/e					Po	Mungese qetesie,line per femijet		Po
F	40-64	3	Po	Po	Ulet	Cleaner	Jo	2	1	Jo	Po	4	3	2	2	2	3	3	3	2	2	4	Frike	1	1	3	1	5	4	1	Jo	Jo	Jo		Po	I/e afrueshem					Jo			Jo
M	40-64	2	Jo	Jo	Mesem	Exchange employee	Po	1	2	Po	Po	5	3	3	4	2	5	1	4	4	5	5	Bezdie	3	3	3	2	3	3	2	Jo	Jo	Po	Mungese e sigurise	Jo						Po			Po
M	40-64	3	Po	Po	Ulet	Unemployed	Jo	2	1	Jo	Po	3	2	3	2	3	3	2	2	2	3	3	Asnjendjesi	1	3	2	4	3	3	1	Jo	Jo	Jo		Po	I/e hutuar					Po	Etiketimi ofendues i zones prej spitalit		Po

1	2	3	4	5	6	7	8	9 1 ne spital 2 ne shtepi	10 1 brenda 2 jashte	11	12	13.[i qete]	13.[i renatshem]	13.[mirembajtur]	13.[i vogel]	13.[i gjere]	13.[i zakonshem]	13.[Introvert]	13.[Transparent]	13.[i zymte]	13.[i akses ueshem]	13.[i dallueshem]	14	15_1	15_2	15_3	15_4	15_5	15_6	15_7	16	17	18	19	20	21	21.2	21.3	21.4	22	23	24
M	18-39	3	Jo	Jo	Larte	Accountant	Jo	2	2	S'edi	Po	3	2	2	3	3	2	3	2	2	2	3	Bezdi e	3	2	2	3	3	2	2	Jo	Jo	Jo		Jo					Po		Po
M	18-30	2	Po	Po	Larte	Physiotherapist	Po	1	2	S'edi	Po	4	2	2	4	2	4	3	3	4	4	3	Bezdi e	1	4	5	4	3	2	1	Jo	Jo	Jo		Jo					Jo		Jo
F	40-64	1	Jo	Po	Larte	Accountant	Po	1	1	S'edi	Po	3	3	2	2	2	3	3	3	2	3	3	Frike	4	5	5	4	2	2	1	Po	Po	Po	Nuk jam ne gjendje te veterrorohem	Jo					Po	Spitali ndodhet shume prane, mungese qetesie	Po
M	40-64	1	Po	Jo	Mesem	Small business owner	Jo	2	1	S'edi	Po	2	2	3	3	2	3	4	3	4	3	4	Asnje ndjesi	2	2	3	3	3	2	2	Jo	Po	Jo		Jo					Jo		Jo
M	18-30	3	Jo	Po	Larte	Unemployed	Jo	1	1	S'edi	Po	2	2	3	2	2	3	4	3	2	3	3	Bezdi e	3	3	4	3	3	3	2	Po	Po	Jo		Jo					Po	Zhurma dhe trafik	Po
F	40-64	1	Jo	Po	Mesem	Tailor	Jo	2	1	Jo	Po	3	3	2	3	2	3	3	2	2	3	2	Frike	3	2	3	2	4	3	2	Po	Po	Po	Per te luajtur me femijet ne lagje	Po	I/e afrueshem				Po	Nuk ke siguri, dikush mund te arratiset, dhe zhurme	Po
M	18-39	3	Jo	Po	Larte	Accountant	Po	1	2	Po	Po	2	2	3	2	2	3	4	4	3	4	4	Asnje ndjesi	2	3	3	2	3	2	1	Po	Po	Jo		Jo					Po	Probleme me parkimin	Jo
F	65+	3	Jo	Po	Ulet	Retiree	Jo	1	2	Jo	Po	3	3	3	2	2	3	3	3	2	4	3	Frike	4	4	4	4	3	2	1	Po	Jo	Po	Arratisja e nje te semuri	Po	I/e qete	I/e hutuar			Po	Zhurme nuk ka qetesi	Po
M	40-64	3	Jo	Po	Larte	Engineer	Po	1	2	Po	Po	2	2	2	3	1	3	3	4	4	3	2	Asnje ndjesi	1	2	4	3	4	4	3	Jo	Jo	Jo		Jo							Jo
F	40-64	3	Jo	Po	Mesem	Vendor	Po	2	2	Jo	Po	2	2	3	2	2	3	3	2	3	2	4	Frike	1	3	4	5	4	3	1	Po	Po	Po	Luhatjet emocionale te pacienteve te arratisur	Jo					Po	Shqetesim	Po
F	65+	3	Jo	Po	Mesem	Retiree	Jo	2	1	S'edi	Po	3	3	3	2	2	3	2	3	2	3	3	Frike	3	2	2	3	3	1	1	Po	Jo	Po	Femijet luajne kudo ne lagje	Jo					Po	Shume zhurme, nuk ka qetesi	Po
M	18-30	3	Jo	Jo	Mesem	Student	Po	2	1	S'edi	Po	3	3	3	3	3	5	4	3	3	3	3	Asnje ndjesi	1	4	3	4	4	2	2	Po	Po	Jo		Po	Qante shpesh				Po		Po
F	18-39	2	Po	Jo	Larte	Student	Jo	1	2	Jo	Po	2	3	2	3	2	2	4	4	3	4	3	Bezdi e	3	2	3	3	2	2	1	Po	Po	Jo		Po	I/e qete	I/e hutuar			Po	Probleme me parkimin	Jo
F	40-64	3	Jo	Po	Mesem	Hairdresser	Po	2	2	Po	Po	2	2	3	4	4	4	3	3	4	3	4	Frike	2	3	3	2	5	4	2	Po	Po	Jo		Po	I/e hutuar	Emocionale			Po		Jo
M	40-64	2	Jo	Jo	Larte	Lawyer	Po	1	2	Po	Po	3	3	3	3	2	3	3	3	3	3	3	Asnje ndjesi	1	3	3	3	4	3	3	Po	Po	Jo		Po	I/e qete	I/e hutuar			Po	Fluksi i familjareve qe zene parkimin	Jo
F	65+	3	Jo	Po	Larte	Retiree	Po	1	2	Po	Po	2	2	2	2	2	3	3	3	3	4	3	Kercenimi	2	3	3	4	4	3	2	Po	Po	Jo		Jo					Jo		Jo
F	40-64	2	Po	Jo	Mesem	Vendor	Po	1	1	S'edi	Po	4	3	2	2	2	3	3	2	3	4	4	Bezdi e	2	3	3	3	3	3	3	Po	Po	Jo		Po	I/e hutuar				Po		Po
M	40-64	3	Jo	Po	Mesem	Taxi driver	Jo	2	1	Jo	Po	3	3	3	2	2	3	3	3	2	3	3	Bezdi e	4	5	5	4	3	2	2	Po	Po	Po	Arratisja e nje pacienti	Po	Agresiv/e	I/e hutuar			Po	Probleme me parkimin	Po
F	65+	3	Jo	Po	Mesem	Retiree	Po	2	1	S'edi	Po	3	3	3	2	2	3	3	3	2	3	3	Frike	4	4	4	4	2	2	1	Po	Po	Po	Kur dalin femijet prane portave	Jo					Po	Nuk ka siguri	Po
M	18-30	1	Po	Jo	Larte	Student	Po	2	2	Po		3	2	2	2	2	3	3	3	3	4	4	Frike	1	3	3	3	3	2	2	Po	Po	Jo		Jo					Po		Jo

1	2	3	4	5	6	7	8 1=ne spital 2=ne shtepi	10 1 brende 2 jashte	11	12	13. [I qete]	13. [I renatsh em]	13. [I rremb]	13. [I vogel]	13. [I gjarpi]	13. [I zakonshm]	13. [I ntrovert]	13. [Transparenz]	13. [I zymtar]	13. [I aksesuarshm]	13. [I dalueshm]	14	15_1	15_2	15_3	15_4	15_5	15_6	15_7	16	17	18	19	20	21	21.2	21.3	21.4	22	23	24
F	18-39	1 Po	Jo	Larte	Student	Po	1	2 Po	Po		2	2	3	2	3	2	3	3	2	3	3 Frike	1	4	4	3	4	3	3 Jo	Po	Je	Po	Vegete	Ve sfrueshem			Jo	Jo	
M	65+	3 Jo	Jo	Ulet	Retiree	Jo	2	1 Jo	Po		2	2	3	3	3	2	2	3	3	3	3 Asnjehdjesi	4	4	4	4	3	3	2 Po	Po	Jo		Jo				Po	Zhurmadhe	Jo	
M	65+	3 Jo	Po	Mesem	Retiree	Jo	1	2 S'kedi	Po		3	3	3	2	3	3	4	4	3	4	4 Bezdie	3	3	3	3	4	3	2 Po	Po	Po	Kam merak perfemijet Ne rastete vecanta	Po	Vehutuar	Ve sfrueshem			Po	paksigurt	Po	
F	40-64	2 Jo	Po	Larte	Accountant	Po	1	2 Po	Po		3	3	2	3	3	4	4	4	2	4	3 Frike	2	4	5	2	3	4	2 Po	Jo	Po	arratisje	Po	Vegete				Po		Po	
M	18-39	3 Jo	Po	Larte	IT worker	Po	1	1 Po	Po		2	2	2	3	2	3	3	3	4	4	3 Asnjehdjesi	1	2	4	3	3	3	2 Jo	Po	Jo		Jo				Jo	Problem me	Jo	
M	40-64	2 Po	Jo	Mesem	Electrician	Jo	2	1 Jo	Po		2	3	2	3	3	3	2	3	3	2	2 Bezdie	3	3	4	3	3	2	2 Po	Po	Jo		Po	Vegete	Vehutuar			Po	parkimin	Jo	
M	65+	3 Jo	Jo	Ulet	Retiree	Jo	1	1 Jo	Po		3	3	2	3	1	3	3	3	2	3	3 Bezdie	4	3	3	3	3	3	3 Po	Po	Jo		Jo				Po		Jo	
F	18-39	2 Jo	Po	Mesem	Unemployed	Po	1	1 S'kedi	Po		3	3	3	4	4	3	3	3	4	4	4 Kercenimi	2	4	3	3	3	3	2 Po	Po	Po	Per veten dhe femijet Ne arratisjen	Po	Agresive	Vehutuar	Ndonjehere agresiv		Po	Mungese sigurtie dhe zhurme Zhurme nuk	Po	
F	40-64	3 Jo	Po	Ulet	Vendor	Jo	2	2 Jo	Po		2	2	3	2	2	3	3	4	3	3	3 Frike	4	4	4	3	3	3	3 Po	Po	Po	apartenave	Po	Vehutuar				Po	kaqenes	Po	
M	40-64	2 Po	Jo	Larte	Notary	Jo	1	2 S'kedi	Po		3	3	2	3	2	4	4	3	4	3	3 Frike	3	3	3	2	4	3	2 Po	Po	Jo		Po	Vegete				Po		Jo	
F	65+	3 Jo	Po	Ulet	Retiree	Jo	2	1 Jo	Po		2	2	3	3	2	3	3	2	3	2	2 Frike	2	5	5	3	2	2	1 Po	Jo	Po	Perfemijet	Jo				Po	Zhurme dheFrike per arratisje	Po	
M	40-64	3 Jo	Po	Larte	IT worker	Po	2	2 Po	Po		2	3	2	3	2	4	4	3	3	4	3 Asnjehdjesi	1	3	4	3	3	3	3 Jo	Po	Jo		Jo				Po		Jo	
F	18-39	3 Jo	Jo	Larte	Student	Po	1	2 Po	Po		3	3	3	4	2	3	4	4	3	4	3 Asnjehdjesi	1	2	3	1	4	4	3 Po	Jo	Jo		Po	Vegete	Vehutuar			Jo		Jo	
F	40-64	1 Po	Po	Mesem	Vendor	Jo	2	1 Jo	Po		2	2	2	3	2	3	4	4	4	4	4 Kercenimi	2	2	3	2	4	3	1 Po	Po	Po	Tembroj veten dhe femijet	Po	Agresive	Vehutuar			Po	Zhurme dhe trafik, problem rajonali	Po	
M	40-64	3 Jo	Po	Ulet	Driver	Po	1	2 Po			2	2	1	1	1	3	3	3	2	3	3 Bezdie	4	3	5	3	2	1	1 Po	Po	Jo		Jo				Po	Vendete pakte parkimi	Jo	
M	40-64	2 Po	Po	Larte	Dentist	Jo	1	1 S'kedi	Po		4	3	3	3	2	3	4	4	3	4	4 Asnjehdjesi	2	2	3	3	4	3	3 Po	Jo	Jo		Po	Ve sfrueshem	Vehutuar			Po		Jo	
F	65+	3 Jo	Po	Mesem	Retiree	Jo	2	1 Jo	Po		3	3	4	3	3	3	3	4	3	4	4 Frike	3	4	4	3	3	2	1 Jo	Jo	Po	Femijet te luajne prane Frike per	Jo				Po		Po	
F	40-64	3 Jo	Po	Mesem	Unemployed	Po	1	1 Po	Po		1	2	3	2	2	3	3	2	3	4	3 Frike	2	5	5	3	3	2	2 Po	Po	Po	femijet	Po	Vehutuar				Po	Ndotje akustike	Po	
M	18-39	2 Po	Jo	Larte	Student	Po	2	2 S'kedi	Po		2	3	2	4	2	3	3	3	4	3	4 Asnjehdjesi	2	3	3	2	4	4	3 Po	Po	Jo		Jo				Po		Jo	
F	18-39	3 Po	Jo	Larte	Secretary	Jo	1	2 Po	Po		3	2	2	4	3	4	3	3	4	3	5 Asnjehdjesi	1	3	3	2	2	2	1 Jo	Po	Jo		Jo				Jo		Jo	

1	2	3	4	5	6	7	8	9 1 ne spital 2 ne shtepi	10 1 brenda 2 jashte	11	12	13. [I qete]	13. [I rehatsh em]	13. [miremb]	13. [I vogel]	13. [I gjere]	13. [I zakonshe m]	13. [Introve rt]	13. [Transpare nt]	13. [I zymte]	13. [I akses ueshe m]	13. [I dallueshe m]	14	15_1	15_2	15_3	15_4	15_5	15_6	15_7	16	17	18	19	20	21	21.2	21.3	21.4	22	23	24
M	18-39	3	Jo	Jo	Mesem	Unemployed	Jo		1	2	S'e di	Po	3	3	2	3	3	4	4	3	4	3	2	Bezdie	3	3	4	2	2	2	1	Po	Po	Jo		Jo				Po	Probleme me parkimin	Po
M	18-39	2	Jo	Po	Mesem	Plumber	Jo		2	1	Jo	Po	3	2	2	3	1	3	2	2	4	2	3	Bezdie	4	4	4	3	3	3	1	Po	Po	Po	Femijet nuk luajne lirisht jashte	Po	Agresiv/e			Po	Pasiguri dhe zhurme	Po
F	65+	3	Jo	Po	Larte	Retiree	Po		1	1	Po	Po	2	2	3	3	2	4	4	3	4	4	4	Kercenimi	2	2	4	2	4	4	3	Po	Jo	Jo		Jo				Po		Jo
M	65+	3	Jo	Po	Larte	Retiree	Jo		2	1	Jo	Po	1	2	2	3	3	3	2	3	4	2	2	Kercenimi	5	5	5	4	4	2	1	Po	Jo	Po	Frike per femijet	Jo				Po	Mungese qetesie/siguri e Shume zhurme dhe probleme	Po
M	40-64	2	Jo	Jo	Larte	Architect	Jo		2	1	Jo	Po	2	3	3	2	2	3	2	3	2	4	3	Bezdie	2	4	4	3	2	2	1	Po	Po	Jo		Jo				Po	parkimi	Po
F	18-39	2	Po	Jo	Larte	Therapist	Po		1	2	Po	Po	4	3	2	4	2	4	3	4	3	3	4	Asnje ndjesi	1	1	5	1	5	5	2	Jo	Jo	Jo		Po	I/e afrueshem	I shoqerueshem		Po		Jo
F	40-64	3	Jo	Po	Mesem	Tailor	Jo		1	2	Po	Po	3	3	2	3	1	3	4	4	3	4	4	Asnje ndjesi	2	2	3	1	5	4	1	Jo	Jo	Jo		Jo				Jo		Jo
F	18-39	2	Po	Jo	Mesem	Vendor	Po		2	1	Jo	Po	1	2	2	3	2	3	2	3	3	3	3	Kercenimi	4	4	5	4	4	3	2	Po	Po	Po	Nuk e mbroj dot veten Nuk i moroj dot femijet dhe veten ne rast se arratiset	Po	Agresiv/e	I/e hutuar		Po	Trafik i shtuar	Po
F	65+	3	Jo	Po	Mesem	Retiree	Po		2	2	S'e di	Po	2	3	2	3	2	4	3	4	4	3	3	Frike	3	4	5	4	3	3	1	Po	Jo	Po	dikush	Jo				Po	Zhurme	Po
M	18-39	3	Jo	Jo	Mesem	Call center employee	Jo		2	1	S'e di		4	4	3	3	2	5	4	3	3	4	4	Asnje ndjesi	2	4	5	4	3	2	2	Po	Po	Jo		Po	I/e hutuar	Zhurmuese		Po	Parkimi i banoreve zihet nga vizitoret	Po
F	18-39	1	Po	Jo	Larte	Student	Po		1	2	Po	Po	3	3	3	3	2	4	4	5	3	5	4	Sigurie	1	2	3	2	5	4	1	Jo	Jo	Jo		Jo				Jo		Jo
M	40-64	2	Po	Po	Ulet	Shoemaker	Jo		2	2	S'e di	Po	1	2	2	4	3	4	4	3	4	2	2	Bezdie	3	3	2	4	3	2	3	Po	Po	Jo		Jo				Po		Po
M	65+	2	Jo	Jo	Mesem	Retiree	Jo		2	1	Jo	Po	2	2	3	4	2	3	3	2	5	2	3	Asnje ndjesi	4	5	5	4	2	1	1	Po	Po	Jo		Po	I/e hutuar			Po	Familnare te pacienteve shkaktojne trafik, zhurme	Jo
F	65+	3	Jo	Jo	Larte	Retiree	Po		1	2	Po	Po	4	3	3	3	3	4	4	5	2	5	4	Kercenimi	1	1	2	1	4	4	4	Jo	Po	Jo		Jo				Jo		Jo
M	40-64	3	Jo	Jo	Larte	Lawyer	Jo		1	2	Jo	Po	3	3	2	2	2	3	3	4	3	2	3	Bezdie	1	2	2	1	3	3	2	Po	Po	Jo						Po	Trafik i shtuar, zene parkimin e lagjes	Po
F	40-64	3	Po	Jo	Mesem	Small business owner	Po		2	1	Jo	Po	2	1	2	4	2	3	4	2	4	4	4	Kercenimi	3	2	2	3	4	2	2	Po	Jo	Po	Arratisja e te semureve, familjare te shqetesuar	Po	I/e hutuar	I/e afrueshem		Po	Shume zhurme dhe trafik	Jo
M	18-39	2	Po	Po	Larte	Engineer	Jo		1	1	S'e di	Po	2	1	1	3	2	3	2	3	4	3	3	Bezdie	4	4	3	3	2	2	1	Po	Po	Po	T'i le femijet te luaje lirisht Arratisja e nje	Po	Agresiv/e	Ofendues		Po	Mungese qetesie/siguri e Shume zhurme dhe trafik	Po
F	65+	3	Jo	Po	Mesem	Retiree	Po		1	2	Po	Po	3	4	3	4	2	3	3	2	4	4	4	Frike	2	3	2	2	3	2	2	Po	Jo	Po	pacienti, konflikte 1	Jo				Po	Mungese qetesie Mungese vendesh parkimi	Po
M	40-64	3	Jo	Po	Larte	Small business owner	Jo		2	1	S'e di	Po	3	3	2	2	3	2	3	3	4	4	4	Bezdie	3	4	4	3	2	2	2	Po	Po	Jo		Jo				Po		Jo

APPENDIX B

COMBINATIONS OF VARIABLES FOR CHI-SQUARED TESTS

The following table shows the combinations of the variables for the chi-squared tests, and the p-value (demonstrating statistical significance) for each.

Model nr.	*Variable 1*	*Variable 2*	*p value*
1.2	Gender	Impression	0.01473
1.4	Gender	Influence on traffic and noise	0.8924
1.5	Gender	Influence on parking	0.432
1.6	Gender	Impact on real estate values	0.2445
2.2	Age	Impression	0.08204
2.4	Age	Influence on traffic and noise	0.2786
2.5	Age	Influence on parking	0.05353
2.6	Age	Impact on real estate values	0.1201
3.2	Familiarity with the neighborhood	Impression	0.0316
3.4	Familiarity with the neighborhood	Influence on traffic and noise	0.1371
3.5	Familiarity with the neighborhood	Influence on parking	0.7481
3.6	Familiarity with the neighborhood	Impact on real estate values	0.009171
4.2	Rent/Own	Impression	0.3822
4.4	Rent/Own	Influence on traffic and noise	0.006615
4.5	Rent/Own	Influence on parking	0.6354
4.6	Rent/Own	Impact on real estate values	0.004965
5.2	Presence of kids at home	Impression	0.07623
5.4	Presence of kids at home	Influence on traffic and noise	0.6489
5.5	Presence of kids at home	Influence on parking	0.9287
5.6	Presence of kids at home	Impact on real estate values	0.3614
6.2	Treatment at home/ hospital	Impression	0.2137
6.4	Treatment at home/ hospital	Influence on traffic and noise	0.749
6.5	Treatment at home/ hospital	Influence on parking	0.7862
6.6	Treatment at home/ hospital	Impact on real estate values	0.07192
7.2	In/out of the city	Impression	0.05226
7.4	In/out of the city	Influence on traffic and noise	0.09106
7.5	In/out of the city	Influence on parking	0.5127
7.6	In/out of the city	Impact on real estate values	0.2445
1.1.1	Gender	Current situation (quiet)	0.9618
1.1.10	Gender	Current situation (accessible)	0.1248
1.1.11	Gender	Current situation (i dallueshem)	0.2785
1.1.2	Gender	Current situation (cozy)	0.8139

1.1.3	Gender	Current situation (well-maintained)	0.68
1.1.4	Gender	Current situation (small)	0.5961
1.1.5	Gender	Current situation (wide/prominent)	0.3871
1.1.6	Gender	Current situation (ordinary/normal)	0.3685
1.1.7	Gender	Current situation (introvert)	0.2334
1.1.8	Gender	Current situation (transparent)	0.5123
1.1.9	Gender	Current situation (gloomy)	0.7927
1.3.1	Gender	CAMI Attitudes (same as other diseases)	0.6413
1.3.2	Gender	CAMI Attitudes (not dangerous)	0.08182
1.3.3	Gender	CAMI Attitudes (set free)	0.8881
1.3.4	Gender	CAMI Attitudes (feel home)	0.09359
1.3.5	Gender	CAMI Attitudes (prisons)	0.2224
1.3.6	Gender	CAMI Attitudes (high walls)	0.2848
1.3.7	Gender	CAMI Attitudes (guards)	0.6732
11.1.1	CAMI Attitudes (same as other diseases)	Influence on traffic and noise	
11.1.10	CAMI Attitudes (set free)	Influence on parking	
11.1.11	CAMI Attitudes (feel home)	Influence on parking	
11.1.12	CAMI Attitudes (prisons)	Influence on parking	
11.1.13	CAMI Attitudes (high walls)	Influence on parking	
11.1.14	CAMI Attitudes (guards)	Influence on parking	
11.1.15	CAMI Attitudes (same as other diseases)	Impact on real estate values	
11.1.16	CAMI Attitudes (not dangerous)	Impact on real estate values	
11.1.17	CAMI Attitudes (set free)	Impact on real estate values	
11.1.18	CAMI Attitudes (feel home)	Impact on real estate values	
11.1.19	CAMI Attitudes (prisons)	Impact on real estate values	
11.1.2	CAMI Attitudes (not dangerous)	Influence on traffic and noise	
11.1.20	CAMI Attitudes (high walls)	Impact on real estate values	
11.1.21	CAMI Attitudes (guards)	Impact on real estate values	
11.1.3	CAMI Attitudes (set free)	Influence on traffic and noise	
11.1.4	CAMI Attitudes (feel home)	Influence on traffic and noise	
11.1.5	CAMI Attitudes (prisons)	Influence on traffic and noise	
11.1.6	CAMI Attitudes (high walls)	Influence on traffic and noise	
11.1.7	CAMI Attitudes (guards)	Influence on traffic and noise	
11.1.8	CAMI Attitudes (same as other diseases)	Influence on parking	
11.1.9	CAMI Attitudes (not dangerous)	Influence on parking	
2.1.1	Age	Current situation (quiet)	0.9433
2.1.2	Age	Current situation (well-maintained)	0.3458
2.1.3	Age	Current situation (wide/prominent)	0.7238
2.1.4	Age	Current situation (introvert)	0.6451
2.1.5	Age	Current situation (gloomy)	0.4689
2.1.6	Age	Current situation (i dallueshem)	0.3099
2.2.2	Age	Current situation (cozy)	0.7434
2.2.3	Age	Current situation (small)	0.01963
2.2.4	Age	Current situation (ordinary/normal)	0.5483
2.2.5	Age	Current situation (transparent)	0.8507
2.2.6	Age	Current situation (accessible)	0.8917

2.3.1	Age	CAMI Attitudes (same as other diseases)	0.9432
2.3.2	Age	CAMI Attitudes (not dangerous)	0.2644
2.3.3	Age	CAMI Attitudes (set free)	0.2942
2.3.4	Age	CAMI Attitudes (feel home)	0.8138
2.3.5	Age	CAMI Attitudes (prisons)	0.6405
2.3.6	Age	CAMI Attitudes (high walls)	0.966
2.3.7	Age	CAMI Attitudes (guards)	0.6202
3.1.1	Familiarity with the neighborhood	Current situation (quiet)	0.1225
3.1.10	Familiarity with the neighborhood	Current situation (accessible)	0.7498
3.1.11	Familiarity with the neighborhood	Current situation (i dallueshem)	0.05941
3.1.2	Familiarity with the neighborhood	Current situation (cozy)	0.3086
3.1.3	Familiarity with the neighborhood	Current situation (well-maintained)	0.05221
3.1.4	Familiarity with the neighborhood	Current situation (small)	0.2185
3.1.5	Familiarity with the neighborhood	Current situation (wide/prominent)	0.4133
3.1.6	Familiarity with the neighborhood	Current situation (ordinary/normal)	0.9512
3.1.7	Familiarity with the neighborhood	Current situation (introvert)	0.2715
3.1.8	Familiarity with the neighborhood	Current situation (transparent)	0.7621
3.1.9	Familiarity with the neighborhood	Current situation (gloomy)	0.7183
3.3.1	Familiarity with the neighborhood	CAMI Attitudes (same as other diseases)	0.7871
3.3.2	Familiarity with the neighborhood	CAMI Attitudes (not dangerous)	0.06663
3.3.3	Familiarity with the neighborhood	CAMI Attitudes (set free)	0.357
3.3.4	Familiarity with the neighborhood	CAMI Attitudes (feel home)	0.6793
3.3.5	Familiarity with the neighborhood	CAMI Attitudes (prisons)	0.8242
3.3.6	Familiarity with the neighborhood	CAMI Attitudes (high walls)	0.7847
3.3.7	Familiarity with the neighborhood	CAMI Attitudes (guards)	0.9323
4.1.1	Rent/Own	Current situation (quiet)	0.5514
4.1.10	Rent/Own	Current situation (accessible)	0.9696
4.1.11	Rent/Own	Current situation (i dallueshem)	0.195
4.1.2	Rent/Own	Current situation (cozy)	0.9621
4.1.3	Rent/Own	Current situation (well-maintained)	0.2026
4.1.4	Rent/Own	Current situation (small)	0.835
4.1.5	Rent/Own	Current situation (wide/prominent)	0.3311
4.1.6	Rent/Own	Current situation (ordinary/normal)	0.8458
4.1.7	Rent/Own	Current situation (introvert)	0.1886
4.1.8	Rent/Own	Current situation (transparent)	0.6328
4.1.9	Rent/Own	Current situation (gloomy)	0.1979

4.3.1	Rent/Own	CAMI Attitudes (same as other diseases)	0.5207
4.3.2	Rent/Own	CAMI Attitudes (not dangerous)	0.5509
4.3.3	Rent/Own	CAMI Attitudes (set free)	0.5197
4.3.4	Rent/Own	CAMI Attitudes (feel home)	0.8147
4.3.5	Rent/Own	CAMI Attitudes (prisons)	0.2571
4.3.6	Rent/Own	CAMI Attitudes (high walls)	0.3041
4.3.7	Rent/Own	CAMI Attitudes (guards)	0.5248
5.1.1	Presence of kids at home	Current situation (quiet)	0.5583
5.1.10	Presence of kids at home	Current situation (accessible)	0.6769
5.1.11	Presence of kids at home	Current situation (i dallueshem)	0.8012
5.1.2	Presence of kids at home	Current situation (cozy)	0.05948
5.1.3	Presence of kids at home	Current situation (well-maintained)	0.3349
5.1.4	Presence of kids at home	Current situation (small)	0.6708
5.1.5	Presence of kids at home	Current situation (wide/prominent)	0.2414
5.1.6	Presence of kids at home	Current situation (ordinary/normal)	0.6417
5.1.7	Presence of kids at home	Current situation (introvert)	0.8877
5.1.8	Presence of kids at home	Current situation (transparent)	0.3972
5.1.9	Presence of kids at home	Current situation (gloomy)	0.2336
5.3.1	Presence of kids at home	CAMI Attitudes (same as other diseases)	0.4178
5.3.2	Presence of kids at home	CAMI Attitudes (not dangerous)	0.6103
5.3.3	Presence of kids at home	CAMI Attitudes (set free)	0.295
5.3.4	Presence of kids at home	CAMI Attitudes (feel home)	0.7621
5.3.5	Presence of kids at home	CAMI Attitudes (prisons)	0.8315
5.3.6	Presence of kids at home	CAMI Attitudes (high walls)	0.598
5.3.7	Presence of kids at home	CAMI Attitudes (guards)	0.03525
6.1.1	Treatment at home/ hospital	Current situation (quiet)	0.06737
6.1.10	Treatment at home/ hospital	Current situation (accessible)	0.06215
6.1.11	Treatment at home/ hospital	Current situation (i dallueshem)	0.5927
6.1.2	Treatment at home/ hospital	Current situation (cozy)	0.8377
6.1.3	Treatment at home/ hospital	Current situation (well-maintained)	0.8439
6.1.4	Treatment at home/ hospital	Current situation (small)	0.1598
6.1.5	Treatment at home/ hospital	Current situation (wide/prominent)	0.5275
6.1.6	Treatment at home/ hospital	Current situation (ordinary/normal)	0.2774
6.1.7	Treatment at home/ hospital	Current situation (introvert)	0.4998
6.1.8	Treatment at home/ hospital	Current situation (transparent)	0.5496
6.1.9	Treatment at home/ hospital	Current situation (gloomy)	0.7439
6.3.1	Treatment at home/ hospital	CAMI Attitudes (same as other diseases)	0.07977
6.3.2	Treatment at home/ hospital	CAMI Attitudes (not dangerous)	0.07304
6.3.3	Treatment at home/ hospital	CAMI Attitudes (set free)	0.05979
6.3.4	Treatment at home/ hospital	CAMI Attitudes (feel home)	0.06846
6.3.5	Treatment at home/ hospital	CAMI Attitudes (prisons)	0.863
6.3.6	Treatment at home/ hospital	CAMI Attitudes (high walls)	0.1175
6.3.7	Treatment at home/ hospital	CAMI Attitudes (guards)	0.3693
7.1.1	In/out of the city	Current situation (quiet)	0.6422
7.1.10	In/out of the city	Current situation (accessible)	0.9357
7.1.11	In/out of the city	Current situation (i dallueshem)	0.8617

7.1.2	In/out of the city	Current situation (cozy)	0.8384
7.1.3	In/out of the city	Current situation (well-maintained)	0.5717
7.1.4	In/out of the city	Current situation (small)	0.6903
7.1.5	In/out of the city	Current situation (wide/prominent)	0.5582
7.1.6	In/out of the city	Current situation (ordinary/normal)	0.04306
7.1.7	In/out of the city	Current situation (introvert)	0.07155
7.1.8	In/out of the city	Current situation (transparent)	0.09216
7.1.9	In/out of the city	Current situation (gloomy)	0.5875
7.3.1	In/out of the city	CAMI Attitudes (same as other diseases)	0.4711
7.3.2	In/out of the city	CAMI Attitudes (not dangerous)	0.06469
7.3.3	In/out of the city	CAMI Attitudes (set free)	0.4837
7.3.4	In/out of the city	CAMI Attitudes (feel home)	0.2222
7.3.5	In/out of the city	CAMI Attitudes (prisons)	0.2525
7.3.6	In/out of the city	CAMI Attitudes (high walls)	0.9457
7.3.7	In/out of the city	CAMI Attitudes (guards)	0.3285
8.1.1	Current situation (quiet)	CAMI Attitudes (same as other diseases)	0.006999
8.1.2	Current situation (quiet)	CAMI Attitudes (not dangerous)	0.000112
8.1.3	Current situation (quiet)	CAMI Attitudes (set free)	0.000439
8.1.4	Current situation (quiet)	CAMI Attitudes (feel home)	0.1565
8.1.5	Current situation (quiet)	CAMI Attitudes (prisons)	0.2394
8.1.6	Current situation (quiet)	CAMI Attitudes (high walls)	0.2536
8.1.7	Current situation (quiet)	CAMI Attitudes (guards)	0.7215
8.10.1	Current situation (accessible)	CAMI Attitudes (same as other diseases)	0.04889
8.10.2	Current situation (accessible)	CAMI Attitudes (not dangerous)	0.03229
8.10.3	Current situation (accessible)	CAMI Attitudes (set free)	0.2417
8.10.4	Current situation (accessible)	CAMI Attitudes (feel home)	0.02439
8.10.5	Current situation (accessible)	CAMI Attitudes (prisons)	0.7386
8.10.6	Current situation (accessible)	CAMI Attitudes (high walls)	0.4833
8.10.7	Current situation (accessible)	CAMI Attitudes (guards)	0.3645
8.11.1	Current situation (i dallueshem)	CAMI Attitudes (same as other diseases)	0.000188
8.11.2	Current situation (i dallueshem)	CAMI Attitudes (not dangerous)	0.03311
8.11.3	Current situation (i dallueshem)	CAMI Attitudes (set free)	0.6984
8.11.4	Current situation (i dallueshem)	CAMI Attitudes (feel home)	0.01586
8.11.5	Current situation (i dallueshem)	CAMI Attitudes (prisons)	0.2596
8.11.6	Current situation (i dallueshem)	CAMI Attitudes (high walls)	0.7066
8.11.7	Current situation (i dallueshem)	CAMI Attitudes (guards)	0.3176
8.2.1	Current situation (cozy)	CAMI Attitudes (same as other diseases)	0.1376
8.2.2	Current situation (cozy)	CAMI Attitudes (not dangerous)	0.9082
8.2.3	Current situation (cozy)	CAMI Attitudes (set free)	0.8283
8.2.4	Current situation (cozy)	CAMI Attitudes (feel home)	0.5189
8.2.5	Current situation (cozy)	CAMI Attitudes (prisons)	0.9934
8.2.6	Current situation (cozy)	CAMI Attitudes (high walls)	0.6739
8.2.7	Current situation (cozy)	CAMI Attitudes (guards)	0.6543
8.3.1	Current situation (well-maintained)	CAMI Attitudes (same as other diseases)	0.001622

8.3.2	Current situation (well-maintained)	CAMI Attitudes (not dangerous)	0.05231
8.3.3	Current situation (well-maintained)	CAMI Attitudes (set free)	0.6292
8.3.4	Current situation (well-maintained)	CAMI Attitudes (feel home)	0.6317
8.3.5	Current situation (well-maintained)	CAMI Attitudes (prisons)	0.9833
8.3.6	Current situation (well-maintained)	CAMI Attitudes (high walls)	0.2217
8.3.7	Current situation (well-maintained)	CAMI Attitudes (guards)	0.1133
8.4.1	Current situation (small)	CAMI Attitudes (same as other diseases)	0.05157
8.4.2	Current situation (small)	CAMI Attitudes (not dangerous)	0.2349
8.4.3	Current situation (small)	CAMI Attitudes (set free)	0.2795
8.4.4	Current situation (small)	CAMI Attitudes (feel home)	0.2451
8.4.5	Current situation (small)	CAMI Attitudes (prisons)	0.5102
8.4.6	Current situation (small)	CAMI Attitudes (high walls)	0.1101
8.4.7	Current situation (small)	CAMI Attitudes (guards)	0.3749
8.5.1	Current situation (wide/prominent)	CAMI Attitudes (same as other diseases)	0.1627
8.5.2	Current situation (wide/prominent)	CAMI Attitudes (not dangerous)	0.9462
8.5.3	Current situation (wide/prominent)	CAMI Attitudes (set free)	0.9581
8.5.4	Current situation (wide/prominent)	CAMI Attitudes (feel home)	0.965
8.5.5	Current situation (wide/prominent)	CAMI Attitudes (prisons)	0.531
8.5.6	Current situation (wide/prominent)	CAMI Attitudes (high walls)	0.1404
8.5.7	Current situation (wide/prominent)	CAMI Attitudes (guards)	0.4924
8.6.1	Current situation (ordinary/normal)	CAMI Attitudes (same as other diseases)	0.5218
8.6.2	Current situation (ordinary/normal)	CAMI Attitudes (not dangerous)	0.6165
8.6.3	Current situation (ordinary/normal)	CAMI Attitudes (set free)	0.9818
8.6.4	Current situation (ordinary/normal)	CAMI Attitudes (feel home)	0.1528
8.6.5	Current situation (ordinary/normal)	CAMI Attitudes (prisons)	0.7333
8.6.6	Current situation (ordinary/normal)	CAMI Attitudes (high walls)	0.8592
8.6.7	Current situation (ordinary/normal)	CAMI Attitudes (guards)	0.8707
8.7.1	Current situation (introvert)	CAMI Attitudes (same as other diseases)	0.08954
8.7.2	Current situation (introvert)	CAMI Attitudes (not dangerous)	0.5231
8.7.3	Current situation (introvert)	CAMI Attitudes (set free)	0.3036
8.7.4	Current situation (introvert)	CAMI Attitudes (feel home)	0.7547
8.7.5	Current situation (introvert)	CAMI Attitudes (prisons)	0.3719
8.7.6	Current situation (introvert)	CAMI Attitudes (high walls)	0.3135
8.7.7	Current situation (introvert)	CAMI Attitudes (guards)	0.7486

8.8.1	Current situation (transparent)	CAMI Attitudes (same as other diseases)	0.5464
8.8.2	Current situation (transparent)	CAMI Attitudes (not dangerous)	0.2273
8.8.3	Current situation (transparent)	CAMI Attitudes (set free)	0.8773
8.8.4	Current situation (transparent)	CAMI Attitudes (feel home)	0.05971
8.8.5	Current situation (transparent)	CAMI Attitudes (prisons)	0.1128
8.8.6	Current situation (transparent)	CAMI Attitudes (high walls)	0.02034
8.8.7	Current situation (transparent)	CAMI Attitudes (guards)	0.09412
8.9.1	Current situation (gloomy)	CAMI Attitudes (same as other diseases)	0.09704
8.9.2	Current situation (gloomy)	CAMI Attitudes (not dangerous)	0.3763
8.9.3	Current situation (gloomy)	CAMI Attitudes (set free)	0.02325
8.9.4	Current situation (gloomy)	CAMI Attitudes (feel home)	9.53E-05
8.9.5	Current situation (gloomy)	CAMI Attitudes (prisons)	0.5914
8.9.6	Current situation (gloomy)	CAMI Attitudes (high walls)	0.000743
8.9.7	Current situation (gloomy)	CAMI Attitudes (guards)	0.1672
9.1.1	Current situation (quiet)	Impression	0.2575
9.1.10	Current situation (accessible)	Impression	0.3202
9.1.11	Current situation (i dallueshem)	Impression	0.9083
9.1.2	Current situation (cozy)	Impression	0.877
9.1.3	Current situation (well-maintained)	Impression	0.04079
9.1.4	Current situation (small)	Impression	0.8292
9.1.5	Current situation (wide/prominent)	Impression	0.9066
9.1.6	Current situation (ordinary/normal)	Impression	0.5053
9.1.7	Current situation (introvert)	Impression	0.1994
9.1.8	Current situation (transparent)	Impression	0.002097
9.1.9	Current situation (gloomy)	Impression	0.2387
9.2.1	Current situation (quiet)	Influence on traffic and noise	0.01525
9.2.10	Current situation (accessible)	Influence on traffic and noise	0.01281
9.2.11	Current situation (i dallueshem)	Influence on traffic and noise	0.06589
9.2.2	Current situation (cozy)	Influence on traffic and noise	0.3433
9.2.3	Current situation (well-maintained)	Influence on traffic and noise	0.04071
9.2.4	Current situation (small)	Influence on traffic and noise	0.6571
9.2.5	Current situation (wide/prominent)	Influence on traffic and noise	0.4124
9.2.6	Current situation (ordinary/normal)	Influence on traffic and noise	0.5204
9.2.7	Current situation (introvert)	Influence on traffic and noise	0.9428
9.2.8	Current situation (transparent)	Influence on traffic and noise	0.3228
9.2.9	Current situation (gloomy)	Influence on traffic and noise	0.3904
9.4.1	Current situation (quiet)	Impact on real estate values	0.6758
9.4.10	Current situation (accessible)	Impact on real estate values	0.03882
9.4.11	Current situation (i dallueshem)	Impact on real estate values	0.1532
9.4.2	Current situation (cozy)	Impact on real estate values	0.35
9.4.3	Current situation (well-maintained)	Impact on real estate values	0.3065
9.4.4	Current situation (small)	Impact on real estate values	0.9683

9.4.5	Current situation (wide/prominent)	Impact on real estate values	0.7522
9.4.6	Current situation (ordinary/normal)	Impact on real estate values	0.3989
9.4.7	Current situation (introvert)	Impact on real estate values	0.394
9.4.8	Current situation (transparent)	Impact on real estate values	0.02424
9.4.9	Current situation (gloomy)	Impact on real estate values	0.5107