

IT TAKES A VILLAGE:

An investigation into the decentralization of neurodiverse psychiatric care within a small Dutch locality.

see the bigger picture...

connect the dots...



connect the dots...

see the bigger picture...

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AR3AD110 | Designing for Care in an Inclusive Environment | MSc 3/4
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“people are meant to be burdens”

“.... as in, humans rely on and support one another and it's not a bother, it's our purpose; to love and be loved in return.”

- author unknown

(Image of a Tumblr comment, n.d.)

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Fig 1.
Community Hug. Image adapted from “Brothers and Sisters” by Illustrator Tommy Parker.

In 2021,

Unicef's *On My Mind European Brief* published statistics on the mental well-being of European child populations. The brief revealed that:

- "9 million adolescents aged 10-19 in Europe lived with a mental disorder...
- 357,457 of these adolescents (girls and boys) were of Dutch nationality...
- These figures are based on disorders including depression, anxiety, bipolar disorder, eating disorders, autism spectrum, schizophrenia, etc."(Unicef, 2021, pp.3-4)

Further to this, according to a recent Trimbos report published in 2023, in the Netherlands alone,

- "1 in 4 children (27.9%) under the age of 18 live with 1 or both parents suffering from mental illness of addiction issues...
- 44% of these children have a parent with 2 or more mental disorders (392,000)...
- 13% of them have a parent with an alcohol or drug disorder (117,000)...
- 7% have a parent with a dual diagnosis: these parents have a mood or anxiety disorder or ADHD as well as an alcohol or drug disorder (59,000)...
- 52% have a parent who has had contact with a care provider working in general health care, mental health care, or addiction services in the past year (466,000)." (para.5)

What does this mean? This is not just a passing trend. This is not a coincidence. This represents the *disabled-and-ageing*, this represents the *ageing-into-disability*, and this represents the hereditary and learned passing down of disability. These are statistics of *epidemic proportions*.

INTRODUCTION

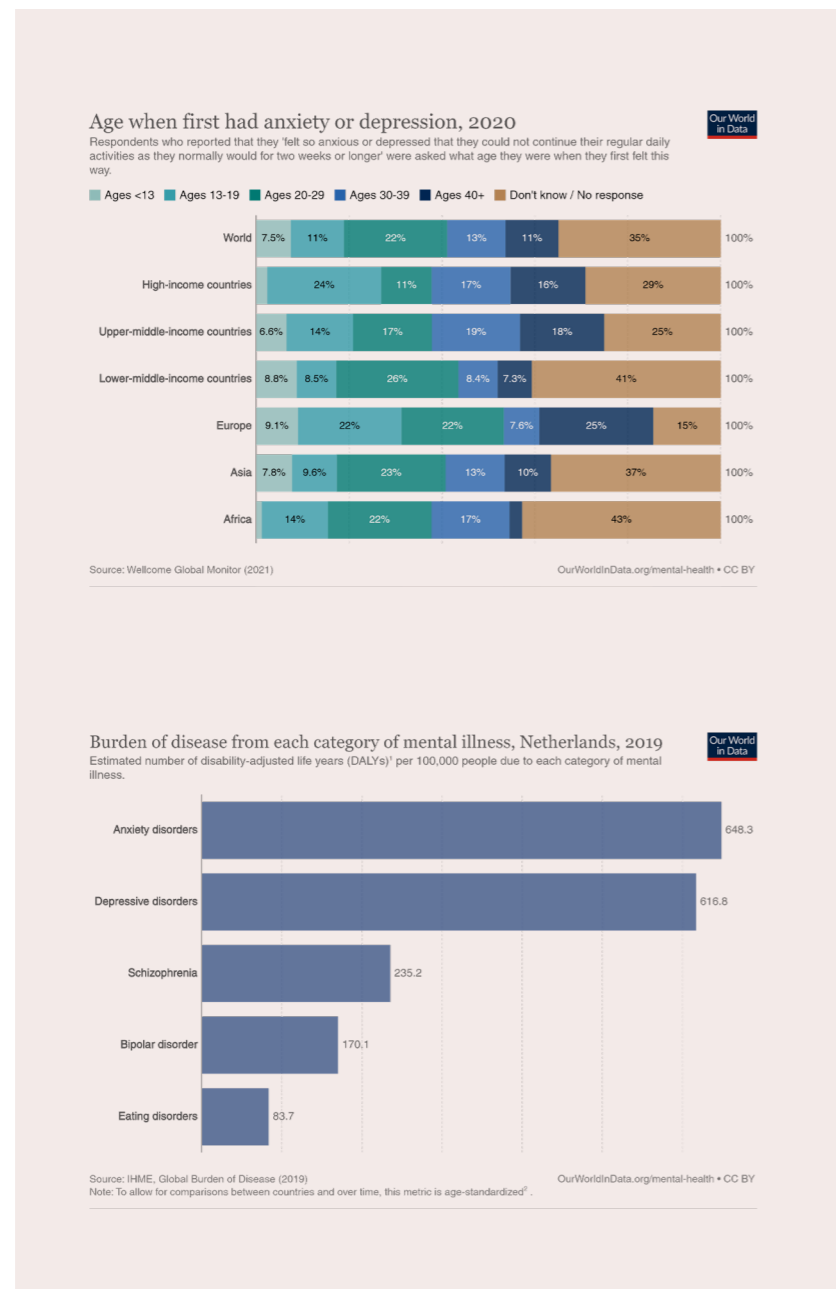
Background

Today's post-pandemic world has forcefully revealed, if anything, the very careful balance within which one's mental wellness exists in relation to the physical body and the environmental qualities extending beyond the skin's surface (Steemers, K., 2021). The presence or absolute lack thereof, of sensory stimulation, access to community, and opportunity to form valuable connection, play a detrimental role in whether one's delicate ecosystem of body-and-mind might flourish or falter (Card et al, 2023). That said, it is important to note here, that while this ecosystem relies on equal maintenance and care of both parts, there does exist an undeniable hierarchy - the mind retains functionality if injury meets the body, but the body falls victim to poor states of mind (Card et al, 2023).

Despite its rise in popularity as a trending topic following several years of pandemic-related lockdown and the tumult of global events pursuant to it, the matter of mental health and the various ways in which it presents amongst people of different ages, ethnicities and incomes, is not a new one. It is believed that approximately 15-20% of the global population is neurodiverse (NCI, 2022, para. 1), inclusive of those born and maturing into their conditions, and those born to parents who themselves face these conditions, in one way or another. Atypical behavioural and mental conditions (BMH) come in various shapes and sizes, present at varying moments in one's life, and tend to differ in severity and duration (Card et al, 2023), proving decidedly difficult to tackle *in spite of* their prevalence, and *especially* if caught later on in life (Khan, L., 2016). That said, while the remaining 75-80% of the globe may have eluded a birth-related neurodivergent condition, this is not to say that they stand immune to the risk of ageing into disability - after all, depression, addiction, body dysmorphia, and anxiety disorders are considered the leading mental illnesses in the Netherlands, as of late (Roser & Ortiz-Ospina, 2021). The list goes on. The Centre for Mental Health identifies "adolescence and adult years as the peak age for first onset of adult mental illness. With three-quarters of adults having experienced first symptoms of poor mental health by the age of 24". According to their research "60% of disability experienced by those aged 15-34 years is caused by mental illness"(Centre for Mental Health, 2016, p.1) and there is, on average, a 10-year delay between young people experiencing their first symptoms and receiving help (Khan, L., 2016).

Leading research identifies early teenage and young adult years as the window of opportunity for successful intervention and long-term prevention efforts, stating that "intervening early in the course of many mental illnesses can significantly reduce life-course impairment"(Centre for Mental Health, 2016, p. 2). This may include "school failure, unstable employment, poor family and social functioning, and high divorce rates" (Centre for Mental Health, 2016, p. 1). Regrettably though, despite having identified this target group as integral to general preventive efforts, this 15-34 year-old age range happens to be one of the most under-served and under-protected with regards to mental health support, hence earning the title of a "missed opportunity".

"Services for teenagers and young adults also create gaps and involve imperfect handovers between child, adolescent and adult systems. This can result in young people losing support at a time when they face the greatest risks in terms of their wellbeing, mental health and risk taking and need the most help. Furthermore, gaps in support at this time mean that services back away from young people at the time that they are most likely proactively to seek help from services."
(Centre for Mental Health, 2016, p.2).



Figs 2-3. Global Mental Health Statistics (Roser & Ortiz-Ospina, 2021)

Problem Statement

The aftermath of a post-pandemic world has altered many facets of *life as we know it*, though none so immediately as the matters of mental wellness and the treatment of mental illness. Such matters are by no means new to the common individual, though what is notable is the zeal with which what was once kept fiercely private and protected from stigma-filled scrutiny, has now been thrust into public discourse, spurred on by a shared societal yearning to “talk about it”. Approximately 15-20% of the global population (parents and their children alike) are believed to be living with some form of diagnosed neurodivergence (National Cancer Institute, 2022), and these numbers continue to grow with the decline of public stigmatization. Consider the population of “overgrown children/still-too-young adults” faced with the daunting transition into adulthood, and the risks of early-onset mental health conditions that come with it (Centre for Mental Health, 2016). Consider also, the lack of outreach and accessible support for navigating and addressing these symptoms once you turn 18, and no longer belong to anyone. There exists today, a major discrepancy in care provision for youth suffering from or beginning to experience BMH issues at an age that is too young to properly self-advocate and too old for traditional social service infrastructure (Friedman & Nash-Luckenbach, 2023), but just right to intervene upon if properly recognized. These conditions are a fact of life for many, one which may make *living* in the normative sense rather difficult - made even more difficult when the support and care required for success is unaffordable, unavailable, or otherwise unattainable by a healthcare industry overwhelmed by demand and increasingly long wait periods.

This then raises the question: what if the responsibility for care could be better distributed within one’s community, to avoid the risk of affected persons slipping through the cracks? What if it could become integrated within a neighbourhood’s daily life, and what if neighbours become available to take on some of the medical practitioners’ burdens? What if human connection and the deliberate use of public space could provide additional built-in support for our neurodivergent peers - what would this look like for a small urban city’s architecture (i.e., Delft)?

Research Questions

How can architecture facilitate the integration of psychiatric care within neighbourhood infrastructure to:

- i) “Capture and reduce the period of illness” and “prevent their recurrence” in young neurodivergent people (16-30 yrs) entering adulthood (Centre for Mental Health, 2016), and
- ii) Decentralize and destigmatize mental care?

Sub-questions include:

- i) Which of the various mental health conditions would be best served through early intervention care? What degree of care do these conditions demand?
- ii) What does the defined target group require in terms of support, therapeutic activities, and facilities to accommodate these?
- iii) How can architecture and the built environment be used to shape a more inclusive and healing environment?



Fig 4. Brainstorming "Why Decentralize?" (Own Work)

THEORETICAL FRAMEWORK

Objective

The objective of this research is to review existing health and wellness-promoting design strategies and guidelines as a foundational basis, and in doing so, to identify and address the gaps or missing research related to the provision of mental health care outside of a medical or clinical setting. Research carried out here will seek to support the notion that the decentralization of psychiatric care from a closed system to a community-integrated intervention, will benefit not only an over-burdened healthcare industry, but patients themselves, their support networks, and their neighbours. With a clear focus on the social aspects of architecture and the built environment, this study will investigate the values and shortcomings of these theories at both the building scale, and that of the urban environment beyond it. *Healing Architecture* will serve as the main theoretical base, upon which several additional theories will be investigated to ensure full coverage of matters of mental healthcare within a built environment.

Healing Architecture

An evidence-based "design model that contends that particular features of the built environment (i.e. lighting and ambience, access to and/or views overlooking green spaces, accessibility and openness) have a positive impact towards promoting patient **experience, wellbeing, and recovery**" (Simonsen & Duff, 2019, p. 1).

Widely recognized as a "defining feature of innovative and contemporary hospital design" (Simonsen & Duff, 2019, p. 1), this design philosophy has been especially crucial in recent reformative efforts surrounding the public image of psychiatric care, and the design of spaces within which it occurs. Gone are the days of asylums and "architectures of madness"- massive edifices built to confine, and constantly altered according to the whims and changing seasons of psychiatric experimentation (Simonsen, 2017). Modern day health and care-related architecture, if designed successfully, is now done with patient and caregiver wellness at top of mind, though the innate sterility of the typical clinical setting is often counter-intuitive to these efforts. Greater awareness within the field of psychiatric and psychotherapeutic care has enormously shifted focus in favour of designing space by prioritizing **patient comfort** (Simonsen & Duff, 2019), though this degree of comfort continues to vary according to the setting within which it is applied. A hospital is unable to shed its *hospital-esque* air, especially when compared to the cushioned atmosphere and quiet affluence decorating the private therapist's office. It is here, amid the two extremes of the clinical - comfortable spectrum, that a gap is revealed pertaining to accessible mental health care and the built environment. After all, most would prefer to avoid the stigma and discomfort of hospital treatment (Centre for Mental Health, 2016), but not all are able to afford the luxuries of private practice. So, what solutions lie in-between? How can psychiatric care exist integrated within one's day-to-day (outside of the public and private medical office), and how can design, as a tool, make this space attractive and healing for users?

→ Inclusive Design

The Commission for Architecture and the Built Environment defines Inclusive Design as a way to "design places through the aim of removing barriers that create undue effort and

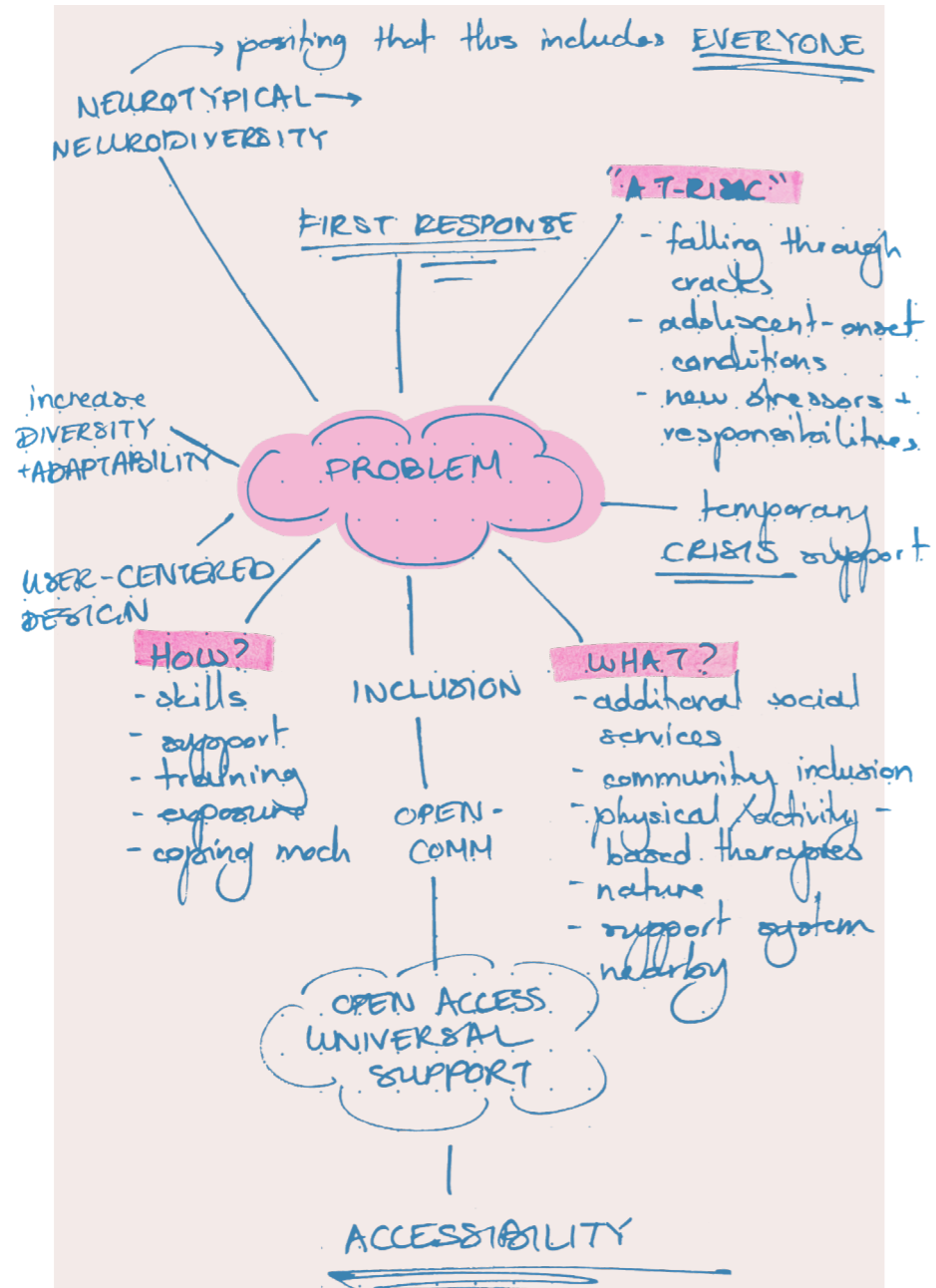


Fig 5. Brainstorming "The Problem" (Own Work)

"staying healthy in your HOME + COMMUNITY is the way to LIMIT increasing pressures on healthcare services, and thus designing the HOME, NEIGHBOURHOOD, and WORK ENVIRONMENT to improve health & well-being is a new opportunity."
- Steemers, R

separation, and to enable everyone to participate equally, confidently and independently in everyday activities" (Design Council, 2006, para. 3). Also interchangeably known as Universal Design, architecture and environments that are inclusive are those which acknowledge diversities within the general population, and accommodate it by "offering choice where a single design solution" is unsuitable for all (Design Council, 2006, para. 4).

A most crucial aspect that appears to be completely omitted in the conversation around Healing Architecture and the wellness-promoting design strategies it lists, is this matter of inclusivity - more specifically, the inclusion of physically and/or mentally disabled or lesser-abled persons. This oversight highlights the general overlooking of more than 80 million individuals in Europe alone (approx. 15% of the European population) (Schelings & Elsen, 2017), and indicates a blindspot "compounded by social and attitudinal barriers" (Imrie & Hall, 2001, p.xi) within the architectural industry.

• The 5 Ways to Well-Being

A theoretical concept still in its relative nascency, the 5 Ways to Wellbeing is the result of a 2008 think-tank study performed by the UK government-appointed New Economics Foundation (NEF) (Fletcher, 2020). Tasked with analyzing and synthesizing evidence-based data and cutting-edge psychiatric literature collected through the 2008 Mental Capital and Wellbeing Project, the aim of the NEF involved raising social awareness and "developing legitimate policy options to address key issues of mental wellness expected to impact UK society over the next 10-20 years" (Aked et al., n.d., p. 5). The outcome of these efforts has since been presented as a guideline of 5 key actions to be adopted into an individual's day-to-day life, to both improve and maintain personal well-being. Well-being itself has been defined as consisting of two main elements: feeling good and functioning well (Aked et al., n.d., p. 5).

While this theorem presents as a rather holistic and socially-minded guideline for how to live one's life happily, it remains highly relevant within architectural perspectives as well, and has in fact become a guiding principle in several architectural practices globally (Fletcher, 2020). The successful design of the built environment is founded upon the architect's desire to provide spaces that positively benefit the human experience within, and as such, it is crucial now, at a time when numbers of mental ill health and personal dissatisfaction are on the rise, to adapt our practices to better serve both mental and physical wellness, in response.

• The Neighbourhood Unit

A title coined in the early 1900's by American urban planner and sociologist, Clarence Perry, the Neighbourhood Unit concept describes an "early diagrammatic planning model for residential development in metropolitan areas" (Wikimedia, 2023, para. 1). In this model, Perry prescribes a 5-step framework for the ordering and arrangement of public and private buildings composing a suburban block, with the ultimate goal of realizing an urban context in which local facilities are separated by distances no greater than a 5-minute walk ("The 5-minute Walk", 2019).

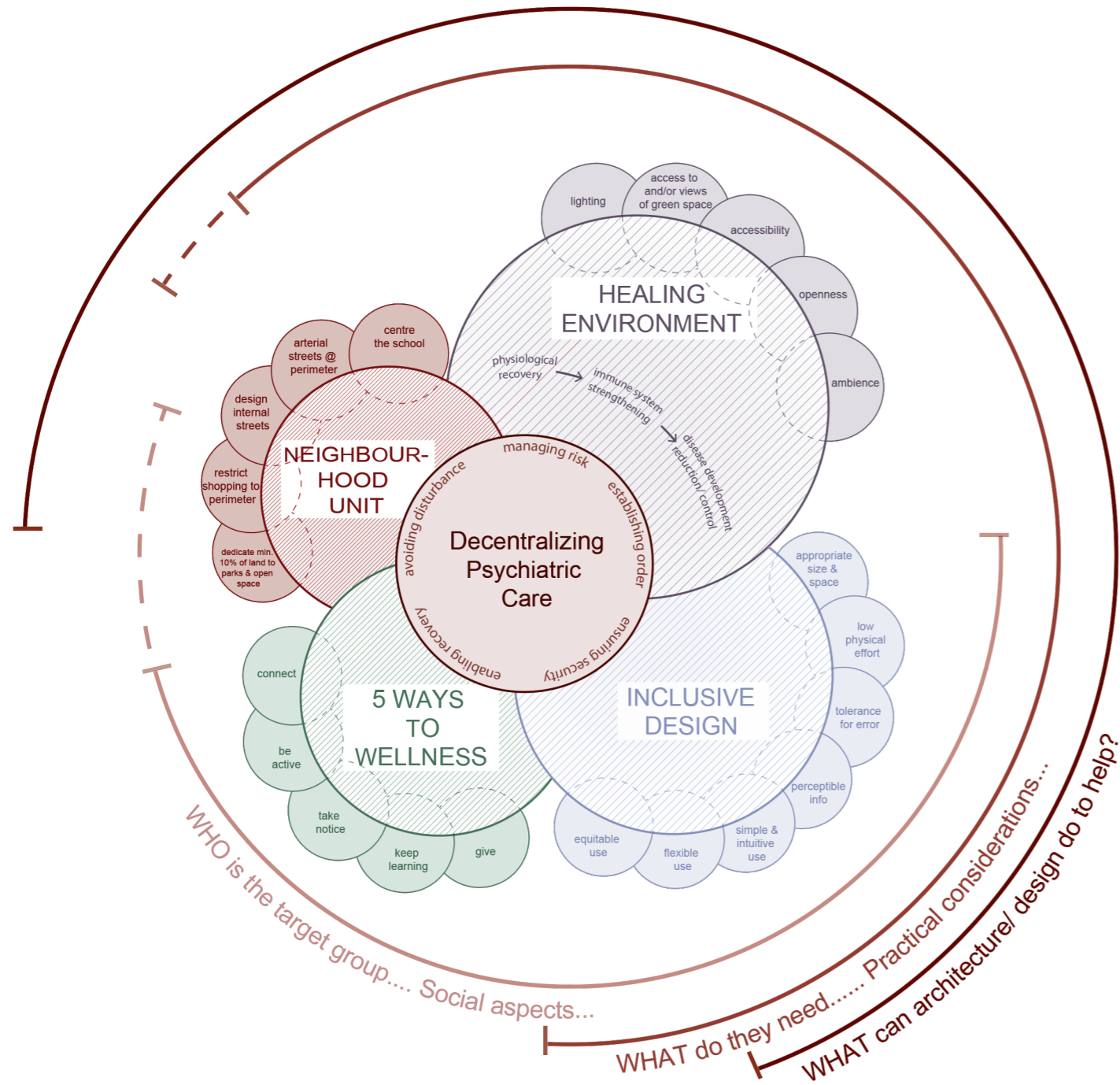


Fig 6. Theoretical Framework Diagram (Own Work)

Inspired by a time when social codes surrounding vehicular traffic were not yet established and resulting mortality rates ran high, this planning theorem came to be as a solution oriented around the safe pedestrian travel of children within their neighbourhoods. "Perry's intentions were calibrated to the human foot..." (EVStudio, 2020, para.3), and as such, his resulting research saw planning practices adapted, for the first time, to enforce the clear separation of vehicular and pedestrian traffic by shifting major arterial streets towards the neighbourhood's outer boundaries, designing internal streets hierarchically and aesthetically, and placing central to it all, the elementary school (Wikimedia Foundation, 2023). It's continued use remains visible today, in the planning of major urban cities and their adjacent suburbia, though its relative success remains the subject of controversial debate ("The 5-minute Walk", 2019). Nevertheless, in the case of this research, the *Neighbourhood Unit* provides a guiding framework by which a particular context might be analyzed to inform the selection of a project site that would best serve the needs and access of its surrounding community.

Research Scope

Due to the nature of the psychiatric field - the diversity of mental conditions, the variable degrees of severity with which they present (unique to every individual), and the vast number of treatment options available in each case - the matter of the scope of research conducted for this Thesis will have to be crucially calibrated. As the intention for this study involves investigating the validity of decentralizing psychiatric care within a community setting, it is important to first recognize that certain conditions requiring high-intensity or full-time care, and furthermore, conditions exhibiting dangerous or threatening behaviour, will likely not benefit from such an initiative. It should also be noted here, that this research in no way intends to replace the valuable efforts by the current system of in-patient/out-patient care provided by hospitals, clinics, and other dedicated private practices, but instead aims to investigate possible solutions within an urban environment that may assist in lessening the demand on these facilities and healthcare providers. As a result, this brings to the forefront, an important three-pronged approach to increasing access to care - raising social awareness, early intervention, and preventative measures.

To best facilitate the provision of care through early intervention, the scope of this study will zero in on adolescent and young adult populations (aged 16-30), a category which happens to be both the most under-served, and most at risk for the onset of debilitating mental illness (Centre for Mental Health, 2016). This will include both: persons who are born with a disability, and persons who age into disability, but will be limited to those of the neurodivergent population who have the possibility to be independent and self-sufficient, and do not require full-time care in a medical facility. Furthermore, behaviour and mental conditions that fall within the Serious Mental Illness (SMI) category (i.e., schizophrenia, major depressive disorders, and psychotic disorders) will be further excluded from this research ("What is Serious Mental Illness?", 2023).

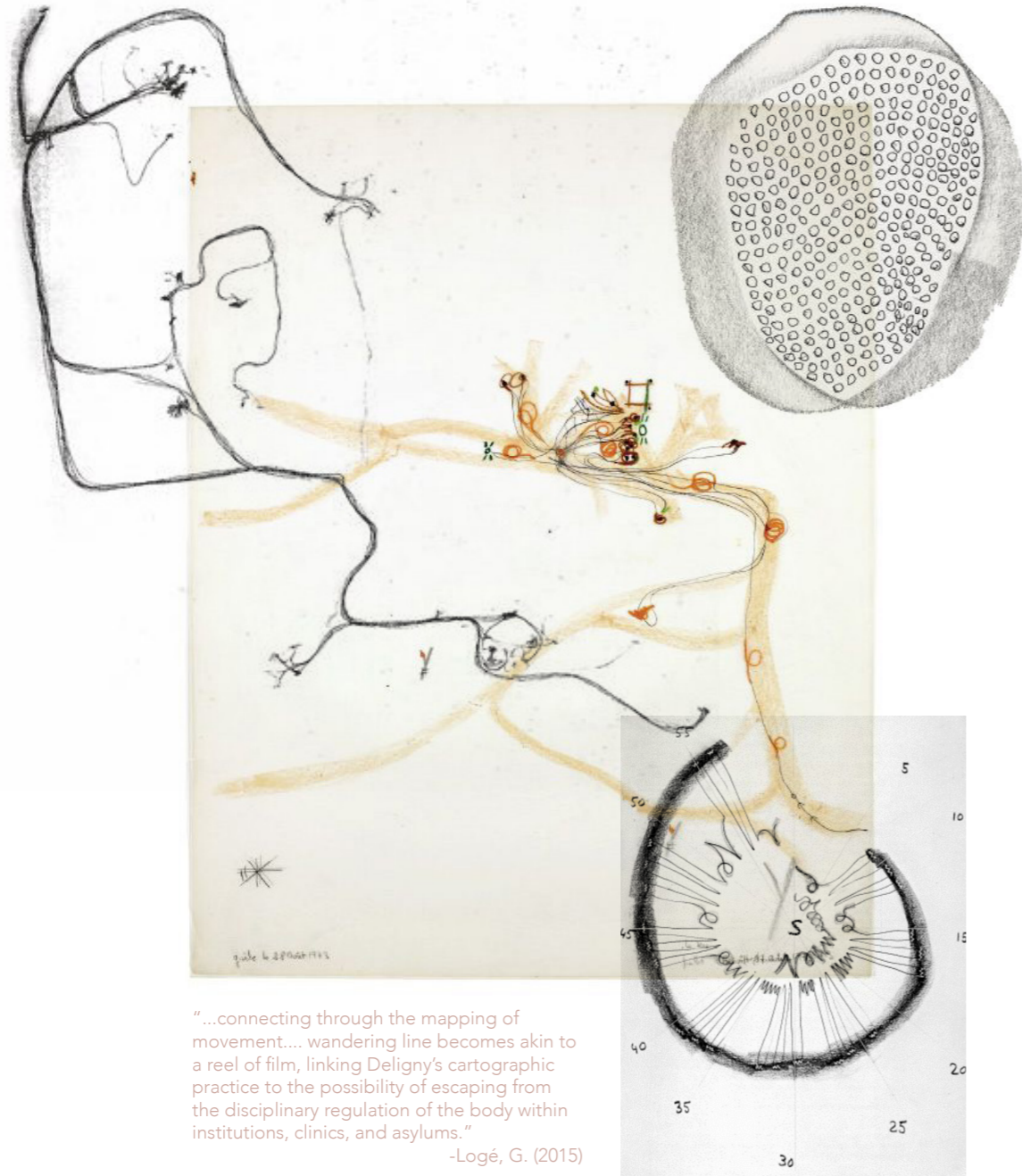


Fig 7.
Image compilation of observational sketches by Fernand Deligny. Collected and adapted.

METHODOLOGY

Research will be conducted through a variety of immersive methods. This will ensure that collected data is comprehensive, current, and inclusive of both observed and lived experience.

Literary Sources

To establish a proper structure and foundation for this research, and make visible any research gaps that may require further inquiry through alternative means (i.e., ethnographic investigation), academic literature will stand as the predominant source of information. There exists already a wealth of information pertaining to subjects of neurodivergences and mental conditions, psychological practice, and architecture & healthy living environments, so the challenge will be in narrowing down the focus to align with the specific research question. A literature review of academic articles, journals, research essays, and books will be performed into the subjects of decentralizing mental health care and community architecture. To further narrow the search, research will be performed according to the following sub-categories:

- i) Psychiatry & The Provision of Care
- ii) Mental Health Statistics (Global/ Local)
- iii) Mental Health & Design

Statistics & Data Collection

Statistics and demographic-related data are crucial to this study, both in identifying the globally under-served target groups for which preventive and open access care would be most beneficial, and in revealing neighbourhoods within a given locality (i.e., Delft) in need of additional welfare services. Additionally, the medical field has an abundance of psychology-related research, and the use of statistical data will elucidate methods for organizing and addressing today’s socially predominant ailments, their relative severities, and the realistic possibility of success for care provided outside of a traditional clinical setting.

Collected information will serve to further specify a feasible target group from the broader population, and define the precise requirements they need addressed in a future design.

Architectural Precedents & Case Studies

The research focus will rely on existing architectural precedents of Care and Mental Wellness facilities (i.e., Maggie’s Centres, etc.) to help identify design techniques, aesthetics, and spatial and programmatic requirements to best realize the meaning of a “*Community Care Centre*”. Special attention will be paid to precedents designed with consideration of interior-exterior relationships, and with the building’s surrounding context and access to natural elements in mind. From a practical perspective, this investigation will also include cases of Community Centres and Charitable Organizations serving local

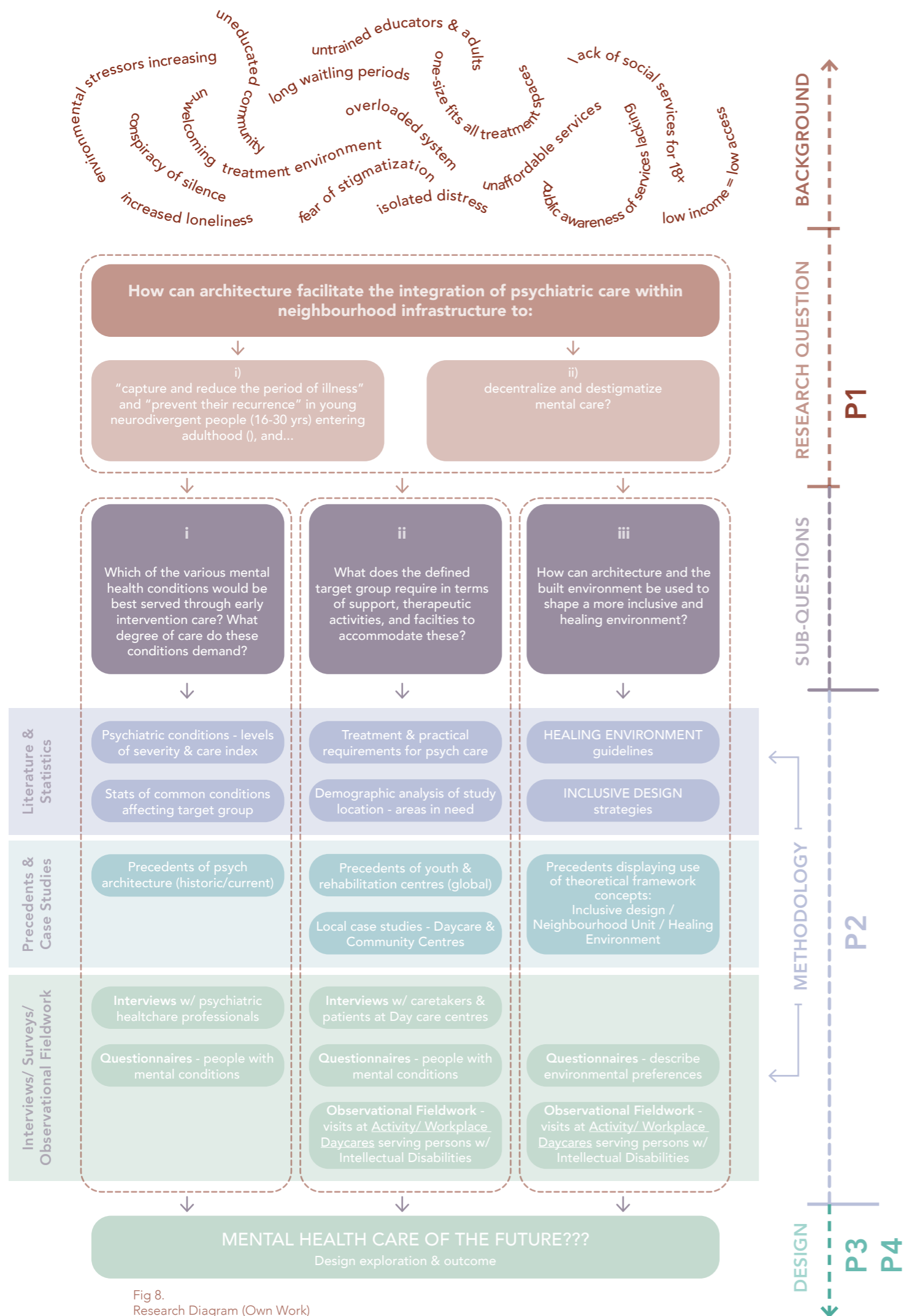


Fig 8. Research Diagram (Own Work)

Dutch communities today. This will inform as to the already existing facilities, the scale of buildings in relation to context, the ease of access for target group users, etc. It will also provide realistic standards to guide the design of a new building such that it fits and belongs in an existing neighbourhood context.

Interviews

Human-centered research is paramount to this study, and considering the mountain of literary resources that already exists, appealing to an individual expert with personal experience and insight into the chosen research topic will assist in verifying the validity of collected information, pinpointing key elements, and revealing nuances that are lost in scientific research. Roughly 10 industry professionals (i.e., doctors, caregivers, trainees, etc.) further supported by as many willing neurodiverse persons and their support networks will be sought out for insight into matters of daily routines, tics and triggers, coping mechanisms, and the therapeutic potentials of space.

Considering the nature of the study is inclusive of persons with mental and intellectual disabilities, it should be noted that interviews will not be possible in all situations, and as a result, certain target group voices may not be explicitly heard throughout this phase. With this in mind, and in an effort to keep the research process as inclusive as possible, compensatory measures will be taken through alternative ethnographic methods (see Fieldwork).

Fieldwork

Fieldwork will cover an exhaustive portion of the research efforts, as exposure to actual behaviours, routines, aids and obstacles experienced by the chosen target group versus the able-bodied members of their community, is crucial to the validity of this research. For the purpose of accessing a relevant research pool, Delft will serve as the focus for fieldwork efforts and will act as a testing ground to which research results may be applied.

Fieldwork will be carried out in agreement with four local Daycare and Youth Activity Centres - a combination of independent initiatives and programs supported by the Ipse de Bruggen or Firma van Buiten foundations. With an investigative focus geared towards social and community edifices serving the Special Needs' community, fieldwork will aim to identify how access to skill-building, stimulating activity, and guided workplace exposure can aid in community building and rehabilitation. Studies will be performed through a variety of techniques, including:

- i) Photo journaling & collage of space and its uses
- ii) Cartographic mapping of movements & interactions
- iii) Rubbings of existing vertical and horizontal textures
- iv) Experiential exercises (i.e., wheelchair-bound travel, or with impaired vision)
- v) Etc.

GLOSSARY OF DEFINITIONS

Decentralization the trend to relocate patients with chronic mental illness from long-term institutionalization, usually at government hospitals, to outpatient care in community-based residential facilities. (APA, n.d.)

Neurotypical describes someone who thinks and processes information in ways that are typical to within their culture. They tend to learn skills and reach developmental milestones around the same time as their peers. (MediLexicon International, n.d., para. 1)

Neurodivergent describes the wide range of neurological functioning that exists among humans and the many ways human brains differ from each other. Classical definitions of neurodivergence include diagnoses of autism, ADHD and dyslexia (etc.). (Princing, 2022, para1)

BMH Behavioural and Mental Conditions. (Card et al., 2023)

Mental Disorder characterized by a clinically significant disturbance in an individual's cognition, emotional regulation, or behaviour. It is usually associated with distress or impairment in important areas of functioning. Mental disorders may also be referred to as mental health conditions. (WHO, 2022, para. 1)

Mental Illness refers to a wide range of mental health conditions - disorders that affect your mood, thinking and behaviour. Examples include depression, anxiety disorders, schizophrenia, eating disorders and addictive behaviours. (Mayo Foundation, 2022, para. 1)

Intellectual Disability involves problems with general mental abilities that affect functioning in 2 areas; intellectual functioning (such as learning, problem solving, judgement), and adaptive functioning (activities of daily life, communication and independent living). (American Psychiatric Association, n.d., para. 1)

Lexicon autonomy, control, inclusive environment, diversity, de-institutionalize, free movement, clarity,

Disability a temporary or permanent condition likely to show up at any time of everyone's life. (Schelings & Elsen, 2017, p. 1)

Healing Architecture evidence-based design concept based on assumptions that space and spatial qualities of the built environment have positive impacts on users occupying that space and the practices unfolding within (Simonsen, 2017p. 5). Designing to promote patient healing and well-being through the following guidelines; home-like environment, access to views and nature, light, noise control, barrier-free environments, and room layout. (GEZE, n.d., para. 8)

Recovery-oriented Practices a means of promoting, through design, user recovery during hospitalization. Recovery is the "achievement of an optimal state of personal, social, and emotional wellbeing, as defined by each individual, whilst living with or recovering from a mental health issue." (NSW Health, 2022, para. 1)

Inclusive Design methodology that aims to remove the barriers that create undue effort and separation. It enables everyone to participate equally, confidently, and independently in everyday activities. (CABE, 2023, p.3)

intervention, recovery, prevention, community, active coping, stimulation, loneliness, destigmatization

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APPENDIX A.

Interviewee: Director of Brownies & downieS

BACKGROUND

To start off, can you tell me a bit about who you are, and what you do with Brownies & DownieS?

How long have you been with the company?

What can you tell me about Brownies & Downies?

I'd love to hear anything you'd like to share, to start off!

w

What's the greatest lesson you've learned since your time there?

ABOUT THE EMPLOYEES

As part of my design, I'm investigating the possibilities and also the limits (if there are any) with designing for fully inclusive functions. It seems that your organization has had quite a lot of experience with this, so I'm hoping you can answer a few of my curiosities..

Can you tell me a bit about your employees, and the types of conditions they experience? Is it limited to persons with Intellectual Disabilities?

Is there a selection process when it comes to bringing in new employees? Are there certain restrictions you must follow, or are you able to accept everyone?

Have you found that people with different conditions are able to work together? Or do you find that people with different conditions are not compatible with one another?

I'm curious about how the re-integration program works, is this something that your organization offers from the very beginning? Or do you work with other training and education companies?

I read in an interview with Out-of-Home that you mention the importance of customization. This is also something that was mentioned to me by several Daycare Supervisors – the need to assess someone's moods and adapt to their varying abilities day-to-day. How do you do this?

Has there ever been any desire to hire a combination of neurodiverse employees and neurotypical volunteers?

DESIGN

As an architecture student, I'm very curious about the design of your restaurants. I would love to hear about the design process involved here.

How does the design of each restaurant work? Are the spaces customized to the needs of your employees?

Are there specific "inclusivity" guidelines that you follow?

Do you work with specialized architects or designers to do this?

Does the design differ between different locations? Or are they all following a specific formula?

I've spoken to a few caretakers and supervisors at [other] locations and they've mentioned to me that "sensory experiences" are very important to people with Intellectual Disabilities and other Special Needs. Is this something that you use to help with designing the Brownies & Downies cafes?

For example, do you look at specific requirements of...

- o Temperature?
- o Smells?
- o Colours, light, patterned walls?
- o Movement restrictions?
- o Age restrictions?

Is there a specific process when choosing locations for various Brownies & Downies restaurants? Are there any practical things to consider when opening a new restaurant in a different city?

For example...

- o Over-stimulation
- o Over-crowding

How are locations chosen? Is it on a franchising basis, or according to demand, based on the number of persons wanting to work in a given area?

How do your employees arrive to work? Is it organized transportation, or are they all able to arrive alone? Do they all live nearby or do they travel from various locations?

FINAL THOUGHTS

In terms of the Brownies & DownieS vision, are there any long-term goals that you'd like to see happens?

What advice would you give regarding the design of an inclusive community center?

Reflection questions for a Person with Special Needs (Engels)

QUESTION 1: In general, how would you rate your mood?

- Happy all the time
- Happy some of the time
- Not happy

QUESTION 2: Do you like spaces that are light or dark?

- Light
 - Dark
 - Why do you like this?
-

QUESTION 3: Do you like loud noises?

- Yes, I like loud noises.
- No, I don't like loud noises. They bother me.
- What kind of noises bother you most?

QUESTION 4: Do you like when places have smells (ex: food, perfumes, etc.)?

- Yes, I like when there are good smells.
- I don't mind if there are smells. I don't notice.
- No, I don't like to smell anything.

QUESTION 5: What kind of temperature do you like in spaces?

- Warm
- Cold
- I don't mind.

QUESTION 6: Do you like to move a lot when you're at work?

- Yes, I am always moving. I like to be in new places.
- Sometimes I move, sometimes I like to sit.
- No, I don't move a lot. I like to stay in one spot.

QUESTION 7: Do you like climbing up or down stairs?

- Yes, I like it, I like being active.
- No, I don't like it, it makes me tired.
- I don't mind.

QUESTION 8: Do you like being in spaces with a lot of windows?

- Yes, I like looking outside. I like to see things happening.
- Sometimes I like to look outside, but not always. Sometimes I like to be in quiet dark spaces.
- No, I don't like to look outside. Seeing too much activity makes me tired.

If you answered **Yes**, what do you like to see outside of windows?

- The city
- Nature
- People
- Animals
- Other...

QUESTION 9: Do you like working with other people?

- Yes, I like to have company.
- No, I like to be alone.

QUESTION 10: Do you like meeting new people?

- Yes, I like to make new friends.
- Sometimes, I like to meet new people.
- No, I like to spend time only with people I already know.

QUESTION 11: Do you like having activities to keep you busy?

- I like to be busy.
- I sometimes like to be busy.
- I don't like to be busy. I like to have lots of free time.

QUESTION 12: Do you like working with a routine everyday?

- I like the same routine everyday.
- I like to change my routine sometimes.
- I like to do new things everyday.

QUESTION 13: At work, do you like your space to be arranged specifically?

- Yes, I like when everything is in a specific order, defined by me.
- I don't care.
- No, I don't like things to be arranged specifically.

QUESTION 14: Do you like to learn new things?

- Never
 - Sometimes
 - All the time
 - What is your favourite thing to learn about?
-

QUESTION 15: Do you ever get tired or stressed when working?

- Never
- Sometimes
- All the time
- What do you do or where do you go when this happens?

QUESTION 16: What is the best part of your day when you come to work? What makes you the most happy?

QUESTION 17: What is the worst part of the day when you come to work? Is there anything that upsets you?

QUESTION 18: What is your favourite thing to do when you're not at work?

QUESTION 19: Do you have a favourite colour?

QUESTION 20: If you could paint 1 wall in this restaurant, what would you paint on it?

QUESTION 21: What is your favourite space in the restaurant?

QUESTION 22: Is there a space in the restaurant that makes you feel uncomfortable? Why?

QUESTION 23: Do you ever feel confused when you're walking around the restaurant? Or do you always know where you're going?

QUESTION 24: Do you like being outside? Do you ever feel stressed when you're walking around in the city?

Reflection questions for a Person with Special Needs (Nederlands)

VRAAG 1: Hoe voel jij je in het algemeen?

- Altijd vrolijk
- Meestal vrolijk
- Niet vrolijk

VRAAG 2: Hou je van plekken die donker zijn of juist veel licht hebben?

- Licht
 - Donker
 - Waarom vind je dit prettiger?
-

VRAAG 3: Hou je van harde geluiden?

- Ja, ik hou van harde geluiden
- Nee, ik hou niet van harde geluiden. Ik vind ze vervelend.
- Wat voor soort geluiden heb je het meeste last van?

VRAAG 4A: Merk je het wanneer je omgeving een duidelijke geur heeft?

- Ja, ik merk het (Yes, I notice)
- Alleen wanneer het een heel erg sterke geur is
- Nee, ik merk het niet (No, I do not notice it)

VRAAG 4: Zo ja, vind jij dit prettig?

- Ja, ik vind het prettig wanneer ik het lekker ruikt.
- Het interesseert me niet wanneer ik iets ruik
- Nee, ik vind het niet prettig om iets te ruiken

VRAAG 5: Wat voor temperatuur vind je prettig?

- Warm
- Koud
- Het maakt me niks uit

VRAAG 6: Vind je het fijn veel te bewegen wanneer je aan het werk bent?

- Ja, ik ben altijd in beweging. Ik vind het fijn in veel ruimtes te komen.
- Soms vind ik het fijn om te bewegen, soms vind ik het fijn om te zitten.
- Nee, ik beweeg niet veel. Ik vind

VRAAG 7: Vind je het fijn om op en af van de trap te lopen?

- Ja, ik vind fijn, ik hou ervan om actief te blijven?
- Nee, ik vind het niet fijn. Ik word er moe van?
- Het maakt me niks uit

VRAAG 8: Vind je het fijn om op een plek te zijn met heel veel ramen?

- Ja, ik vind het leuk om naar buiten te kijken en te zien wat er buiten gebeurt.

- o Soms vind ik het leuk om naar buiten te kijken, maar niet altijd. Soms vind ik het ook fijn om in het donker te zitten.
- o Nee, ik vind het niet leuk om naar buiten te kijken. Ik wordt moe van kijken naar alles wat buiten gebeurt.

Zo **ja**, wat zou je graag naar willen kijken wanneer je uit het raam kijkt?

- o De stad
 - o Natuur
 - o Mensen
 - o Dieren
 - o Iets anders, namelijk...
-

VRAAG 9: Vind je het leuk om met andere mensen te werken?

- o Ja, ik vind het leuk om gezelschap te hebben.
- o Nee, ik ben liever alleen.

VRAAG 10: Vind je het leuk om nieuwe mensen te ontmoeten?

- o Ja, ik maak graag nieuwe vrienden.
- o Soms vind ik het leuk om nieuwe mensen te ontmoeten.
- o Nee, ik ben het liefste met de mensen die ik al ken.

VRAAG 11: Vind je het leuk om activiteiten te doen die je bezig houden?

- o Ja, ik vind het fijn om bezig te blijven.
- o Soms, vind ik het fijn om bezig te blijven.
- o Ik vind het niet fijn om bezig te zijn. Het liefste heb ik veel vrije tijd.

VRAAG 12: Vind je het fijn om met een routine te werken iedere dag?

- o Ja, ik vind het fijn om iedere dag dezelfde routine te hebben.
- o Ik vind het fijn om af en toe mijn routine te veranderen.
- o Ik doe het liefste iedere dag iets nieuws.

VRAAG 13: Op het werk, vind je het fijn als alles zijn eigen plekje heeft?

- o Ja, ik vind het fijn wanneer ik zelf alles een eigen plek mag geven.
- o Het maakt me niets uit.
- o Nee, ik vind het niet fijn wanneer alle seen eigen plek heeft.

VRAAG 14: Vind je het leuk om nieuwe dingen te leren?

- o Nooit
 - o Soms
 - o Altijd
 - o Wat vind je het leukste om iets over te leren?
-

VRAAG 15: Word jij wel eens moe of gestressed terwijl je aan het werk bent?

- o Nooit
 - o Soms
 - o Heel vaak
 - o Wat doe jij wanneer dit gebeurt?
-

VRAAG 16: Wat is het leukste moment van de dag wanneer je naar het werk komt? Waar word je het meest gelukkig van?

VRAAG 17: Wat vind je het minst leuke onderdeel van de dag wanneer je naar het werk komt? Is er iets wat jou overstuur maakt?

VRAAG 18: Wat vind je het leukste om te doen wanneer je niet op werk bent?

VRAAG 19: Wat is je favoriete kleur?

VRAAG 20: Als je een muur in dit restaurant mag schilderen, wat zou je erop schilderen?

VRAAG 21: Wat is jouw favoriete plek in dit restaurant?

VRAAG 22: Is er een plek in het restaurant waar je je niet prettig voelt? Waarom?

VRAAG 23: Voel je je soms verward wanneer je door het restaurant loopt? Of weet je altijd waar je naartoe loopt?

VRAAG 24: Vind je het fijn om buiten te zijn? Voel je je gestrest wanneer je door de stad loopt?
