MENTAL HEALTH IN THE URBAN ENVIRONMENT

Positive and negative experiences of people with mental health issues and the impact on recovery

Jits van den Ende

23-12-2021

Master's thesis: Human Geography

Specialization: Urban and Cultural Geography

Author: Jits van den Ende

Student No.: s1029406

Supervisor Radboud University: dr. R.G. van Melik

Supervisor Trimbos-institute: dr. M.J.H van Bon-Martens

Abstract

Recently more attention is given to the mental health of the Dutch population in both policy and research. It appears that many individuals have to deal with mental health issues once during their lifetime. The environment in which people live does have an effect on mental health and mental health issues, be it through selection or causation. Places might, however, also work as enabling places, in which they could contribute to recovery. This thesis aims to explore the lived experience from people with mental health issues in the urban environment.

A photo elicitation method is applied to explore the experiences of people with mental health issues. Eight participants were asked to make photographs of places in the urban environment that they associate with their own mental health or recovery. These photographs were used as input for an in-depth interview. Together the eight participants made 71 photographs of the urban environment. Both the interviews and the photographs are analyzed to find commonalities between the experiences of the eight participants.

The analysis showed that various places in the urban environment, both urban and green/blue places, are associated with mental health and recovery. Confirming the consisting theoretical framework this thesis shows how specific positive experiences in the urban environment can enable personal recovery. This thesis, however, also contributes to the theoretical framework as it found that several negative experiences in the urban environment hinders recovery or poses constraints in the day-to-day lives of people with mental health issues.

It is concluded that the urban environment is a source of challenges for people with mental health issues. Under the right circumstances the urban environment can enable recovery. To create an inclusive environment it is needed to consider the experiences of people with mental health issues in (re)designing the urban environment by reducing challenges and seizing opportunities to create enabling environments.

Table of contents

List of figures

Figures

Tables

1. Introduction

A ''healthy city for and from everyone'' is the task the municipality of Utrecht set for itself. (Gemeente Utrecht Volksgezondheid, 2019). The municipality considers a heathy environment as an ''environment people experience as pleasant and where making healthy choices is easy'' (Gemeente Utrecht, n.d.). To realize a healthy environment, a team of municipal advisors from the public health department works together with the planning department. This team of healthy environment advisors is by default included within the process of planning. This enables them to include health related themes into plans at an early stage. The team advises on themes as air quality, stimulating physical activity, sports and playing, the supply of healthy food and promoting mental health. In the policy nota ''health for everyone'', which focuses on healthy environments, the seven main themes include the theme of mental health (Gemeente Utrecht Volksgezondheid, 2019). In this case, mental health is centered around mental health issues, including mental illnesses, and not in promoting the general mental health of the population (Shields-Zeeman et al., 2021). A healthy environment can promote mental health by preserving quiet places, places where people can feel at ease, and to design places that invite people to interact. The municipality, additionally, focuses on supporting neighborhood-based initiatives that help people get in touch with others in order to enable recovery in place.

This is part of a larger development in the Dutch mental health care system. Both policy and practice are shifting towards a new perspective of recovery in mental illness. The primary aim has for a long time been to 'cure' patients of their illnesses in order to function in society. This recovery is related to psychiatric care and mental health care focused on the inpatient hospital (Söderström, 2017). The new perspective aims to help people who experience mental health issues get control over their problems in their day-to-day lives. Eventually, individuals should be able to deal with their illness in such a way, that they can participate in society in a fulfilling manner (van Hoof et al., 2014). While psychiatric care might still be part of this process, symptomatic recovery is not the main goal anymore.

The role of the environment becomes more prominent when people recover in place. A healthy environment should enable recovery as well as general health. The connection between mental health issues and the environment, however, is mainly centered around the care environment and participation in the neighborhood. When looking at a policy document on public places, a part of the urban environment, it can be concluded that the municipality aims towards accessible public places for everyone (Gemeente Utrecht, 2016). This document, however, speaks only of the accessibility of places for physical disabilities and nothing is said about mental health issues. This master's thesis will study the role of the urban environment, and public places in particular, in the recovery of mental health issues.

1.1 Societal relevance: mental health issues in the city

Many people have to deal with mental health issues during at least one period in their lifetime. On a national scale multiple definitions of mental health and related terms are used to illustrate the current state, as well various measurements. Statistics Netherlands (CBS) used the MHI-5, a set of five questions about the state of one's mental health in the previous four weeks, in which people are qualified as either mentally healthy or unhealthy (CBS, 2021a). In September 2021 the CBS published the statistics of the first two quarters of 2021, which state that 15.5% of the Dutch population of 12 years and older were mentally unhealthy following this scale, the highest percentage since they started measuring in 2001 (CBS, 2021b). The Covid-19 pandemic played a role in this. Mostly young adults (23.8%) experienced problems with their mental health. The NEMESIS-2 study, a large-scale longitudinal study of the mental health of the Dutch population, measures mental health based on the

prevalence of mental disorders[1]. NEMESIS-2 states that over 4 out of 10 people has had a mental disorder at one moment in their life (de Graaf et al., 2010).

Within the municipality of Utrecht the mental health of its residents is measured twofold. First, the health monitor (HM) looks at self-reported mental health issues. The HM measures self-reported anxiety disorders, depression and mental issues (nervosity, burnouts or stress). It then appears that within the municipality of Utrecht in 2020 29% of adults (19-64 years old) experienced mental health issues (Volksgezondheidsmonitor Utrecht, 2020b). Additionally, they use the K10 to determine the risk for developing a depression or anxiety disorder[2]. From this they conclude that in 2020 7% of adults have a high risk for developing a depression or anxiety disorder (Volksgezondheidsmonitor Utrecht, 2020b).

1.1.1 Mental health differences in neighborhoods

There are various issues concerning recovery and self-management, such as the role of place. Mental health is influenced by multiple aspects, including the living environment (Shields-Zeeman et al., 2021). This can be seen in the prevalence of several mental disorder in urban areas. There are indications that schizophrenia incidence is higher in neighborhoods with a higher density (Krabbendam & Van Os, 2005), the prevalence and severity of depression and anxiety disorders are higher in neighborhoods with a low socioeconomic status (Generaal, Hoogendijk, et al., 2019) and that the prevalence of anxiety and mood disorders is higher in less green neighborhoods (de Vries et al., 2016). Within the municipality of Utrecht differences in mental health between the various neighborhoods can be found. In the neighborhoods Overvecht (33%) and City center (34%) a significantly larger amount of people have at least one self-reported mental health issue, while significantly less people in Vleuten-De Meern (17%) experience self-reported mental health issues compared to the city average of 28% in 2018 (Volksgezondheidsmonitor Utrecht, 2020a). The neighborhood Overvecht also has significantly more residents with a high risk for depression or an anxiety disorder (13%) compared to the city average of 7%. Vleuten-De Meern has significantly less residents with a high risk (4%), as well as the neighborhoods Oost and Noordoost (both 5%) (Volksgezondheidsmonitor Utrecht, 2020a).

These differences between neighborhoods can be explained by causation as well as by selection: social determinants influence mental health (causation) and mental health influences the social determinants (selection) (Shields-Zeeman et al., 2021). For example, people that reside in a neighborhood with a low socioeconomic status have a higher risk to develop depressive symptoms and people with a depression are more likely to move to a neighborhood with a low socioeconomic status (Richardson et al., 2015). The role of causation versus selection in this process is still a point of discussion (Jokela, 2014). There are, nevertheless, indications that the urban environment does influence the prevalence of mental disorders.

1.1.2 The medical and social model of mental health

Mental health care services deal with long queues for receiving health care. 6.2% of the whole Dutch population used formal mental health care services in a period of one year (2009) (de Graaf et al., 2010). This 6.2% is only a fragment of the total number of people experiencing mental health issues. By focusing on recovery as self-management, the pressure on formal mental health care services is

[1] The Netherlands Mental Health Survey and Incidence Study (NEMESIS)-2 measures mental health with the CIDI 3.0. The CIDI 3.0 is a structured interview with which several psychiatric disorders can be determined, including mood, anxiety, behavioral, substance and antisocial personality disorders (Nemesis, n.d.).

[2] The Kessler Psychological Distress Scale is a questionnaire of ten questions (K10) about psychological distress in the last four weeks. The score determines if an individual has a low, medium or high risk of developing a anxiety or depressive disorder.

lowered, while still promoting and facilitating recovery. The problems that arise from mental health issues are mostly seen as a medical problem, which should be solved medically. Many issues and problems, however, are the result of social problems and barriers in society (van der Hoek, 2021). In policy and practice recovery is already treated within a new perspective, in which symptomatic recovery is not a condition for recovery. The so-called social model of disability argues that individual disability from impairment, physical as well as mental, is the result of constraints society impose on individuals with an impairment (Shakespeare, 2013).

One of the constraints from society is stigmatization and discrimination (Sartorius, 2002; ten Have et al., 2015). People with a mental illness consider stigmatization as the main barrier to civic participation (Sartorius, 2002). While a large share of people (70%) does not object to having (ex-)psychiatric patients as a neighbor, colleague or friend, people still have a reserved attitude when it comes to including (ex-)psychiatric patients in their private lives. Only 30% of the people does not object to including (ex-)patients in their lives (ten Have et al., 2015). This resonates in the practices of discrimination people with a mental illness experience. Research on 900 Dutch individuals with a mental disability shows that almost 4 out of 5 have experienced discrimination based on their mental health (Place et al., 2015). Stigmatization and discrimination thereby halt the process of recovery, by providing barriers for social inclusion. Stigmatization of mental health and discrimination can be linked to certain places, such as the workplace, housing and the public arena (Doroud et al., 2018).

It is thus important to create a healthy environment in which people with mental health issues are able live their day-to-day lives without experiencing barriers and constraints. This could help individual recover from mental health issues and live a fulfilling life. It is therefore necessary to identify those places in the urban environment which constrain recovery and seek ways to change them in order to enable recovery instead. This thesis tries to contribute to this knowledge by exploring the lived experiences of people with mental health issues. Not only are places in the urban environment that individuals themselves associate with their mental health identified, individual experiences at these places are explored as well, in order to identify challenges and opportunities in the urban environment.

1.2 Scientific relevance: the lived experience of recovery in place

The large extend of mental health issues in urban areas has made for a topic of research for a long time. Studies to the geographies of mental health started with early sociologists, including Georg Simmel, and Henry Dunham and Robert Faris, who looked at the relationship between urban life and mental distress and mental disorders respectively. Simmel argued in his famous essay '*The metropolis and mental life'* that urban life is a source of stimuli to which the new urban population was not accustomed yet (Simmel, 2012). Therefore, urban individuals needed to adjust their attitude towards the environment. This results, for example, in a blasé attitude, where external stimuli are ignored in order to avoid overstimulation. This is best seen in the practices of social interaction. Where in small, rural communities social interactions are revolved around gaining and maintaining mutual trust, in the city social interactions are functional. Faris and Dunham (1939) studied the urban geographies of mental disorders in Chicago. They found that cases of schizophrenia were concentrated around the central areas in the city and a rather different, more scattered, distribution of manic-depressive cases. They concluded that the urban environment, and in particular poverty and related social and physical factors, plays an important role in the development of particular mental illnesses. These two seminal works led to two avenues of research on the urban environment and mental health: a psychiatric and a geographical avenue.

The psychiatric avenue focuses on how aspects of the environment influence the prevalence of mental disorders, following Faris and Dunham's study. These mainly epidemiological studies try to find links

between prevalence and urban environment. Firstly, density of the urban environment has been studied. The density of either population (persons per squared km) or the built environment (addresses per squared km) is found to be positively related to the prevalence of mental disorders, meaning that in more dense urban areas, there are more individuals with a mental disorder. A strong relationship is found for psychotic disorders (Krabbendam & Van Os, 2005). Weaker, and more ambiguous, relationships are found for depressive disorders (Generaal, Hoogendijk, et al., 2019; Mair et al., 2008) and anxiety disorders (Baxter et al., 2013). The influence of density in mental health is commonly explained through theories of psychological distress caused by the complexity of the urban environment (Evans, 2003). The factors causing psychological distress include exposure to noise (e.g. Evans, 2003; Gidlöf-Gunnarsson & Öhrström, 2007).

A recent study of Generaal et al. (2019) suggest that it is not density that is associated with prevalence of depressive and anxiety disorders, but rather the quality of neighborhood characteristics. Low socioeconomic characteristics (SES) are found to impact mental health, besides individual level factors (Generaal et al., 2019). People living in low SES neighborhoods experience greater exposure to stressors, such as social disadvantage, instability and crime/disturbances, which affects mental health (Blair et al., 2014; Lorenc et al., 2012). The availability of green and blue spaces is also important. Multiple studies argue that the absence of green spaces lead to a higher prevalence of mental disorders (Boers et al., 2018; Gascon et al., 2015). One way to explain this relationship is the theory that green spaces offer 'noise-free' space to reduce long term noise annoyances, which benefits wellbeing (Gidlöf-Gunnarsson & Öhrström, 2007). They are places that restore a depleted capacity to direct attention, and with that facilitate recovery of mental fatigue (Berto, 2005). This concept of restorative environments is often associated with green space, but recently more attention has been given to blue spaces (Boers et al., 2018; de Vries et al., 2016; Vert et al., 2020). Boers et al. (2018) do not find a relationship between the availability of green and blue spaces and psychotic disorders. On the other hand, de Vries et al. (2016) find relationships between green, and especially, blue spaces and depressive and anxiety disorders.

These studies are, however, critiqued. While they highlight the role of place – and urban place in particular – in the geographies of mental health, they do not, however, say much about the mechanisms behind these relationships (Söderström et al., 2016). These studies assume that mental health outcomes are directly related to neighborhood characteristics and that they are passive receivers of the environment, which is not the case (Cummins et al., 2007). There is therefore a call that *''it is necessary to more closely attend to people's experiences of places for constructing meaningful lives, connections and participation with their communities''* (Doroud et al., 2018, p. 110).

The geographical avenue of mental health research focuses mainly on how the urban environment affects the mental health and psychological wellbeing of the general population. Cattell et al. (2008) and Valentine (2008) study, for example, how social interactions in the urban environment contribute to wellbeing. How the urban environment affects the day-to-day lives of individuals with a mental disorder has, however, not been studied as much. Doroud et al. (2018) provide an overview of twelve papers that explore the role of place in the lived experiences of individuals recovering from mental health issues. These studies focus primarily on the positive role of the urban environment on recovery. For example through the concept of therapeutic landscapes, and related concepts such as enabling places (Duff, 2011, 2012). Gesler (1996) explored why places and practices can be conceived as therapeutic. Therapeutic landscapes are places *''where the physical and built environments, social conditions and human perceptions combine to produce an atmosphere which is conducive to healing''* (Gesler, 1996, p. 96). This concept has been expanded to include mobilities (Gatrell, 2013) and

everyday places (Wakefield & McMullan, 2005). Duff explored how places within the urban environment can enable recovery by facilitating social, material and affective resources (Duff, 2012).

The urban environment is, however, not always experienced as positive. There are indications that certain elements of the urban environment have a negative effect on mental health, such as the absence of green places and the exposure to stressors, as seen from psychiatric research. Söderström et al. (2016) is one of the few studies that studies the negative experiences of people with mental health issues. They find that the urban environment is a source of stress in various ways in the day-to-day lives of people with a psychotic disorder. The urban environment poses these individuals with problems. Söderström et al. do not study the effect these experiences have on the day-to-day lives of their participants. This shows us that it is important to look how the urban environment is experienced negatively, in order to find the constraints that are experienced. Combining the constraining and enabling abilities of places in the urban environment makes it possible to look for challenges and opportunities in the urban environment to help individuals recover from mental health issues.

Opposite most research to the role of places in the process of recovery (enabling places, therapeutic places, etc.), this thesis tries to explore the lived experience of the urban environment without focusing on specifically the enabling role. It tries to explore the ways the urban environment can constrain people with mental health issues and the ways they can help them. This could also inform psychiatric studies in the mechanism behind the role of urban environments and mental disorders.

1.3 Research aims and research questions

This research aims to explore the experiences from people with a mental vulnerability in urban public places as a part of their living environment. It is not only important to search for the experiences at public places, but also the effect these experiences have on the lives of the individuals with a mental vulnerability. Are these experiences contributing to recovery of mental health issues, or do they hinder recovery? By studying these experiences we might get an insight in the role the urban environment can play within the process of recovery. This insight can contribute to an inclusive city for people with a mental vulnerability, by ensuring that the experiences of these individuals are considered within the design and redesign of public places. This leads to the following main research question that will be answered in this thesis:

How does the urban environment, and public places in particular, influence the recovery process of people with a mental vulnerability?

Firstly, those public places which individuals with a mental vulnerability associate with their own mental health are to be identified. By identifying the important places within the urban environment, it is possible to look for places that need additional attention because they offer challenges or opportunities for urban planning departments. It is also tried to identify elements at these places that influence the experiences at these places.

1. Which places in the urban environment do people with a mental vulnerability associate with their own mental health and recovery process?

Subsequently, the experiences at these places are to be considered, as well as an investigation to the connection between the experiences and recovery.

2. Which experiences are key to the importance of the mentioned places in the urban environment for the mental health?
3. Which role do these experiences have within the personal recovery?

A photo elicitation method has been applied to formulate an answer to these questions. A study has been conducted on eight individuals who reported mental health issues and self-identified as recovering from these mental health issues. An in-depth interview was conducted with each participant. Prior to the interview, participants were asked to make photographs of places in the urban environment that they positively or negatively associate with their mental health. The photographs were then discussed in the interviews. The use of this method makes it possible stay close to the experiences of the participants.

The study has been conducted as part of a research internship at the Trimbos institute in Utrecht. This non-profit organization tries to increase and share knowledge about mental health and the prevention of tobacco, alcohol, and drug (mis)use. The internship took place in collaboration with the municipality of Utrecht. Two members of the team healthy environment, in which the public health and spatial departments work together, advised and informed the research.

1.4 Reading guide

This thesis will continue with an overview of the existing literature related to the relationship between recovery and the urban environment (chapter 2). This chapter leads us through the conceptualization of different terms used in this thesis, such as recovery (2.1) and the physical environment (2.2), before continuing toward the relationship between these two concepts (2.3 and 2.4). This theoretical chapter concludes with a summary of the theory in a conceptual framework.

The methodological chapter 3 offers an rationale behind the chosen methods of data collection and analysis (3.1). It does also describe the actual process of data collection (3.2) and analysis (3.3).

Chapter 4 presents the results of the analysis of the collected data (4.1 through 4.4). These results are used to formulate answers to the set of four sub-questions in paragraph 4.5.

In a concluding chapter (5) the results of this thesis will be compared to the conceptual framework of chapter 2 (5.1). After discussing the strengths and limitations of this research (5.2), the results will be used to formulate recommendations for both future research as well as for practice (5.3).

2. Theoretical framework

This theoretical chapter is used to describe and explain the relevant concepts related to recovery of mental health issues and the urban environment. The chapter starts off with a conceptualization of recovery as a personal and unique process, which can be divided, based upon Leamy et al. (2011), in five parallel processes of recovery. After this the focus will be diverted towards the available literature on the relationship between urban environments and recovery.

2.1 Recovery as a personal process

The process of recovery is positioned at the center of this thesis. Recovery has been conceptualized in many different ways. Recovery of mental health issues has for a long time been medicalized. Within this biomedical model of recovery, recovery was based on the reduction of symptoms and the ultimate goal of curing (Deacon, 2013). Key behind this model is the assumption that *''mental disorders (…) are biologically-based brain diseases''* (Deacon, 2013, p. 847). As a result, recovery is based on the reduction of symptoms by regulating processes in the brain through medication or psychiatric therapy. This model has been widely criticized in mental health studies, but also in health studies in general (e.g. Deacon, 2013; Oliver, 1986). The clinical perspective is, most importantly, said to be focusing too much on the individual deficit, which disables individuals (Shakespeare, 2013). Price (2013) argues, for example, that using the term 'mental illness' – and its complement 'mental health' – creates a distinction between mentally healthy and mentally unhealthy people. This leads to a paradigm in which the latter group is expected to progress towards *''a sufficiently 'well' state''* comparable to the mentally healthy people (Price, 2013, p. 300). As a critique on the clinical (biomedical) model, a social model of disability has been constructed, built upon work from Mike Oliver and Vic Finkelstein (Shakespeare, 2013).

The social model of disability states that individual disability is not primarily the result of individual – biomedical – impairment, but that disability is resulting from the constraints society and the environments impose to the lives of those with an impairment (Shakespeare, 2013). These constraints can be physical – such as barriers to the accessibility of government facilities – but also social – such as discrimination in housing and employment (Oliver & Barnes, 2010). These constraints exclude people with an impairment from a full participation in society. This marginal economic and social position of disabled people is thus primarily caused by societal and environmental restrictions, more than individual impairment (Oliver & Barnes, 2010).

However, not unlike physical disabilities, mental health issues often have a chronic character. A large-scale study of the general population of the Netherlands concluded that with more than 40% of the people with mental health issues their problems have a chronic character (de Graaf et al., 2010). This illustrates the need for a different approach towards recovery which focuses on a life with mental health issues instead of on curing. The contemporary common approach within both research and practice is based on Anthony's (1993) concept of personal recovery. Anthony describes recovery as:

''a deeply personal, unique process of changing one's attitudes, values, feeling, goals, skills, and/or roles. It is a way of living a satisfying, hopeful, and contributing life even with limitations caused by illness. Recovery involves the development of new meaning and purpose in one's life as one grows beyond the catastrophic effects of mental illness'' (p. 527)

This personal approach towards recovery does not set curing, and even reducing symptoms, as a condition for recovery. Instead, recovery revolves around the personal development of goals, expectations, and values which enables an individual to live a fulfilling live, even with enduring

symptoms. Recovery is thus a personal and therefore unique process, as individuals experience different mental health issues and recovery means setting different goals and growth in different aspects of life. The concept of personal recovery finds a way in between the medical and social model, as it is important to acknowledge that while people are *''not merely passive receivers of [the] environment, this should not presuppose unrestrained individual agency''* (Tran Smith et al., 2015, p. 115).

2.1.1 The CHIME model

Despite the inherently personal and unique character of recovery, it is possible to identify various common processes in recovery. Multiple studies try to categorize these different processes. Whitley and Drake (2010), for example, propose a dimensional approach, in which recovery takes places within five dimensions. A clinical dimension – relating to mental health care; an existential dimension – relating to the search for meaning; a functional dimension – relating to the participation in society; a physical dimension – relating to the effect mental health issues can have on the general health and vice versa; and a social dimension – relating to the social network. While this is a useful way of thinking about recovery, it is the framework of Leamy, Bird, Le Boutillier, Williams and Slade (2011) that is the most established framework to summarize the recovery process. Based on a systematic review of 97 papers, they identified five intertwined categories of processes that are key to recovery: Connectedness, Hope and optimism about the future, Identity, Meaning in life, and Empowerment. These categories give the conceptual framework its name: the CHIME model. Important to note is that it is impossible to give a hierarchical categorization of the five processes. Due to the unique and personal character of recovery, different individuals might assess some processes more important than others.

Connectedness

Many people with a mental vulnerability experience a loss of social relationships (Macdonald et al., 2005). They lack or lose the ability to connect with others, which can result in feelings of exclusion from society and loneliness. Social interactions that do take place are, however, not inherently positive. Mental health issues are still stigmatized in mainstream society, and people might react negatively towards people who might act differently because of a mental vulnerability (Yanos et al., 2001). The process of connectedness is thus about (re)constructing those meaningful inter-personal relationships as well as about social inclusion (Tew et al., 2012). The development of positive relationships during the recovery process *''connects people with their social world''* (Tew et al., 2012, p. 455).

A specific form of relationship that can be beneficial for recovery are peer relationships. Connecting with peers or specialists with a background of mental health issues normalizes the problems that are experienced due to mental health issues (Gidugu et al., 2015). By sharing practical experiences, peer relationships can assist in day-to-day coping. They also include a therapeutic aspect. Sharing personal stories is a part of rewriting one's self-narrative and thereby the recovery process (Moran et al., 2012).

Hope and optimism about the future

Hope and optimism about the future could be seen as the fuel of the recovery process (van Hoof et al., 2014). Most people with a mental vulnerability experience a standstill of life in the sense of meaning, identity and social relationships (Andresen et al., 2006; Leamy et al., 2011). Small steps in the early stages of recovery lead to small growth in the right direction. This in turn leads to a perspective that recovery is possible and fuels hope for a fulfilling life. Perspective and hope thereby generate the motivation to actively control one's recovery (Wiles et al., 2008).

Identity

For many individuals with a mental vulnerability, the mental illness or psychiatric history has become a defining aspect of their identity as a psychiatric patient (van Hoof et al., 2014). Acknowledging that a psychiatric history does not define who you are, and appreciation of your own strengths supports recovery (Onken et al., 2002). Part of recovery is therefore *''a progression from the identity of 'patient' to 'person' ''* (Yanos et al., 2010, p. 78). For some people this might involve a transformation of identity, while for others this might mean to reclaim a prior identity and social self (Bird et al., 2014).

Besides this, people with a mental vulnerability must overcome stigmatization and discrimination in everyday life. Many people with a psychiatric background experience stigmatization and discrimination and consider this hindering for their recovery (Sartorius, 2002; ten Have et al., 2015). Stigmatization does not only affect the position within society of people with a mental vulnerability, but also hope and self-esteem, as people tend to internalize stigma (Tew et al., 2012). Overcoming stigma is a difficult process, but the acknowledgment that one is more than the psychiatric history contributes to the giving of meaning to the issues. This helps with starting a conversation about mental health issues, which hopefully contributes to combatting stigmas.

Meaning in life

Central within the recovery process is the attempt to give meaning to different aspects of life. In many cases, mental health issues and the negative experiences that derive from them are placed outside of one's narrative. Instead of accepting the mental vulnerability, it is ignored. The same applies to the events in life that are related to mental health issues. Normalizing difficult experiences makes them less pathological (van Hoof et al., 2014). This contributes to the realization that the experiences are not that different from the struggles others experience (van Hoof et al., 2014). Some people look for specific ways to give meaning to their lives, for example in spirituality. Relying on faith can be a healthy way to cope with stress (Cabassa et al., 2013). With a renewed meaning to the mental vulnerability within ones' narrative it is possible to stop life being controlled by the mental health issues.

Empowerment

Lastly, empowerment focuses on the increasing ability to take responsibility and gaining control of life (Leamy et al., 2011). For some empowerment means being involved in decision-making about treatment and care (Bird et al., 2014), while for others it is more important to be able to live a 'normal' life (Borg & Davidson, 2008). According to Borg & Davidson (2008) being able to *''just doing it''* is essential to grow and move ahead from a standstill situation caused by mental health issues (p. 134-5).

The five categories of recovery processes are aimed towards the individual development of persons recovering from mental health issues. The concept of personal recovery as developed by Anthony (1993) and Leamy et al. (2011) is still focused on the individual character of mental health issues and recovery. While this definition and conceptualization of recovery progresses from the biomedical model, it has to be acknowledged that recovery is related to the context in which recovery has to take place (Borg & Davidson, 2008). Price-Robertson et al. (2017) argue, for example, that the social environment, family, friends and other social relationships, contribute to all of the above processes, and not only to connectedness. This thesis, however, focuses on the physical environment as context for recovery.

2.2 The different uses of 'physical environment': a subjective approach

The role of the environment on mental health has been broadly studied. Many epidemiological studies focus on the effect of environments on the prevalence of various mental illnesses. The relationship between environments and recovery has less often been studied. Remarkable are the many different definitions and conceptualizations of the environment that are used. It is therefore important to firstly conceptualize the environment in recovery studies.

This thesis studies the influence of the urban environment on the recovery process of people with a mental vulnerability. Before discussing the existing knowledge on this relationship, it is important to demarcate the urban environment. When talking about the influence of the environment on mental health, the environment can be divided in several aspects (Shields-Zeeman et al., 2021): school environments, work environments, living environments, home environments and care environments. This research primarily views the environment as the living environment. The living environment is the direct environment in which someone lives. Within epidemiological the environment is seen as the direct living environment, measured as objectively logically demarcated areas (e.g. neighborhoods) and measurable characteristics. For example, de Vries et al. (2016) look at percentages of green places within 1 kilometer from one's home and Generaal et al. (2019) look at various neighborhood characteristics using postal codes. Weden et al. (2008) argue, however, that subjective assessments are more strongly associated with health than objective assessments. This implies that it is important to study perceived neighborhood conditions. Besides this, areas are not as clearly bounded as objective demarcations imply. It can be argued that borders do not exist (Thrift, 2006, p.140). Demarcated areas, such as postal codes and neighborhoods, do not necessarily correspond with the perceived living environment.

This thesis therefore implements a subjective approach to places. It is, for example, more useful to describe neighborhood characteristics with relational terms instead of with objective terms (Cummins et al., 2007). It is important to address how people perceive their neighborhood. Rather than describe the neighborhood as 'deprived' and 'affluent', it is better to describe them with dynamic characteristics such as 'declining' and 'advancing' (Cummins et al., 2007). Places are interpreted by the individual and are formed through the meanings and values the individuals gives them. Places can thus also have different meaning for different individuals (Malpas, 2012). Another important aspect of this subjective approach is the relational aspect of individual experiences of places (Cummins et al., 2007).

2.3 Recovery and the physical environment

There are thus multiple indications that the physical environment affects mental health. It is however also acknowledged that the physical environment affects recovery (Doroud et al., 2018). The study of the effect of places on recovery has been initialized by Gesler's concept of therapeutic landscapes (Bell et al., 2018). Therapeutic landscapes are places *''where the physical and built environment, social conditions and human perceptions combine to produce an atmosphere which is conducive to healing''* (Bell et al., 2018, p.123). Studies on therapeutic landscapes initially focused on extraordinary places of healing. Later the concept was extended to those place characteristics that promote healing and the therapeutic value of everyday spaces (Bell et al., 2018; Wakefield & McMullan, 2005). Conradson (2005) highlights the need to understand the underlying dynamics of the healing effects of therapeutic environments. Doroud et al. (2018) could identify twelve papers that focus on the role of the environment on recovery. They found four interrelated mechanisms through which the physical environment can impact recovery. The environment impacts recovery as is offers places 1) for being; 2) for doing; 3) for becoming; and 4) for belonging. These mechanisms are interrelated and places can

impact recovery through multiple mechanisms. The role of specific place characteristics is unclear in most instances. Where possible some specific characteristics that affect these mechanisms are named.

Place for being

Firstly, the environment offers places for being. Places provide a pleasant atmosphere, where a sense of security, safety and peacefulness is key (Doroud et al., 2018). Individuals create emotional bonds with these places, as there are places where they feel in place and are happy to be. It are those places that people identify as their favorite places (Duff, 2012). Therapeutic landscapes are a perfect example of places for being. In its initial conceptualization as extraordinary places, often with elements of spirituality and nature, therapeutic landscapes are places to rest and to get away from everyday life (Williams, 1998). However, the idea of therapeutic landscapes has been applied to everyday places (Wakefield & McMullan, 2005). Green urban places are, for example, important for the ability to recover from mental fatigue (Berto, 2005; Kaplan, 1995). The home and favorite places as shops and cafés are regularly mentioned, besides public places (Doroud et al., 2018). These kinds of places can be seen as so-called third places. Third places are places outside the home and work environment that are of importance for individual (Oldenburg & Brissett, 1982). The importance of these places is personal, and can therefore not be generalized to specific places.

Place for doing

Physical activity has many positive effects on mental health and there are some indications that physical activity contributes to the effectiveness of treatments for depression (Biddle & Mutrie, 2008; Stathopoulou et al., 2006). The environment is important in facilitating a pleasant place for physical activity. An attractive, accessible and open public space, for example, encourages walking (Giles-Corti et al., 2005). The design of public places also contributes to the promotion of physical activity (Handy et al., 2002). Besides this, the environment can offer places where individuals can work on recovery-related activities (Doroud et al., 2018; Duff, 2012). Duff (2012) offers the example of a woman who associates performing handstands with recovery, as to perform a handstand some anxieties and fears need to be contested. A place that is ideal to perform a handstand is thus important for this woman. On the other hand, places can hinder recovery when they have the opposite effect than promoting physical activity, for example when a feeling of unsafety is experienced (Doroud et al., 2018; Lorenc et al., 2012).

Place for becoming

The environment does offer places where people can work on their recovery. Places can act as *''springboards for becoming hopeful, finding inspiration, and exploring new possibilities and directions that support personal growth or greater wellness''* (Doroud et al., 2018, p.116). Firstly, because places can foster hope and exploration. Most notably, stable housing is named as fostering hope for a better future. Besides that, places can help overcome challenges and help setting goals. Past challenges resulting from mental health issues are to be overcome at places related to their challenges. Overcoming these challenge results in new possibilities and a hope for a better future. Places are thus also associated with growth and development. Duff (2012) also notes that places can elevate mood on 'down days'. Unsafe and uncomfortable places can however evoke negative associations, where optimism can turn to pessimism (Doroud et al., 2018). In those cases places can hinder recovery.

Place for belonging

The last mechanism through which the environment impacts recovery is through social interactions with family, friends and neighbors. When social interactions are positive, they can contribute to a feeling of connectedness and belonging (Cattell et al., 2008). Social aspects of places, involving

relations with housemates or neighbors and feeling connected with the neighborhood and/or environment, are key to a sense of belonging. The environment can also have a negative effects on social interactions and a sense of belonging, for example when the environment feels unsafe (Lorenc et al., 2012).

2.3.1 Green and blue places

The most common theme perhaps when studying the relationship between the urban environment and mental health is green and blue space. Green spaces are all places in the city that are characterized by the presence of natural, 'green' features. Green spaces are often identified as urban parks, gardens or green corridors. Blue spaces are those places that prominently feature elements of water, such as a lake, river or canal (Vert et al., 2020). Blue spaces are often included within research on green spaces, few studies focus solely on blue spaces (e.g. Foley & Kistemann, 2015; Vert et al., 2020). Green and blue spaces are linked to mental health benefits. De Vries et al. (2016) found that the availability of green and blue space is positively associated with self-reported mental health. A study in Wisconsin, US, showed that higher levels of neighborhood greenness were associated with lower levels of depression-, anxiety-, and stress-related symptoms (Beyer et al., 2014). In the same sense, Boers et al. (2018) found that individuals with a psychotic disorder lived in neighborhoods with significantly lower amounts of green space, compared to the general population. A systematic review, however, shows that the evidence between green space and mental health benefits is limited (Gascon et al., 2015). This results from the heterogeneity of the definitions and assessments used (Gascon et al., 2015). Another issue is the mechanisms behind the relationship between green and blue space and mental health benefits. Multiple theories are used to explain the role of greenness.

First of all green and blue spaces have stress-relieving abilities. After a stressful situation, gazing upon a natural landscape reduces stress faster than urban landscapes (Ulrich, 1984; Ulrich et al., 1991). Ulrich (1984) found that a green or blue view outside a hospital room contributes to a faster recovery of patients, compared to urban views. Interestingly, passive experiences of green spaces – the view from a window – is enough to enable the green space's abilities to reduce stress.. On the other hand, green spaces also restore direct attention capacities (Berto, 2005; Kaplan, 1995). Mental fatigue, resulting from long periods of mental effort, can lead to problems in human effectiveness, including increasing anxieties (Kaplan, 1995). Kaplan's (1995) attention restoration theory states that a green experience, in so-called restorative environments, facilitate recovery from mental fatigue by restoring the direct attention capacities. This is also shown in a study of Gidlöf-Gunnarsson and Öhrström (2007), who found that the perceived availability of nearby green space reduces long-term noise annoyances and thereby stress symptoms. The restorative capacities of natural environments might be depending on the length of the restorative experience (Berto, 2005).

Secondly, green and blue spaces are places of green exercise, physical activities while being exposed to nature (Pretty et al., 2005). Green and blue spaces in particular are, however, linked to the effect of physical exercise. Firstly, urban green spaces facilitate and promote physical activities, through their accessibility and their design, which provides opportunities to a wide range of users (McCormack et al., 2010). Additionally, some studies show that running, walking and other physical activities in natural environments have more effect on mental wellbeing than performing the same activities indoors or in synthetic environments (Bowler et al., 2010; Thompson Coon et al., 2011). Recent inquiries are also conducted to the specific role of blue spaces. One study found that walking in a blue space improved mood and psychological wellbeing significantly more than walking in an urban space (Vert et al., 2020). Barton and Pretty (2010) found that blue exercise may be of greater benefit for mood than green exercise, while green exercise also improves mood and self-esteem. Most studies, however, look at the psychological benefits of physical exercise in green spaces, without comparing it

to physical exercise in other environments. In those cases, physical exercise could be the mediator in the relationship between green space and mental health benefits (Markevych et al., 2017). This limits the evidence for the additional benefits for wellbeing of green or blue space in physical exercise.

Third, green space is linked to promote social interaction and thereby facilitating social cohesion. Green spaces provide settings for contacts with community members, which increases social cohesion (Kuo et al., 1998). Kuo et al. (1998) found that a higher level of greenness of a public place, increases the use of the place and thereby the opportunities for informal social interaction between neighbors. On the other hand, according to a large scale Dutch study, less green space in one's neighborhood is associated with a perceived shortage of social support and with feelings of loneliness (Maas et al., 2009).

The benefits of green and blue spaces on mental wellbeing might be dependent on the quality of the environment. Accessibility, proximity, biodiversity and safety are, among others, factors that play a role in health outcomes (Keniger et al., 2013; McCormack et al., 2010). Likewise, the design of green space matters. Urban parks with open spaces, such as fields, playgrounds, shelters and seats positively affects the level of social interaction among neighborhood residents (Rasidi et al., 2012). One study, for example, found that the benefits of physical exercise in natural environments depend on the quality of the green space (de Vries et al., 2003). Another study argues that the level of biodiversity influences the level of benefits for psychological wellbeing of the users of urban green spaces (Fuller et al., 2007). Therefore, it can be argued that the subjective experiences of green spaces are more important than objective measurements (Lee & Maheswaran, 2011).

2.4 The physical environment and stagnation

Recovery from mental health issues is not all about growth and development. Everyone experiences periods of stagnation, in which the mental health issues get the upper hand and growth stops (van Hoof et al., 2014). For an important part recovery entails breaking through these periods of impasse and to initiate growth. Onken et al. (2002) provide an overview of factors that can hinder recovery. Stigmatization and discrimination can for example hinder recovery. Many individuals still experience barriers in employment and education. They experience that in many cases employers and institutions do not take their mental health issues into account. Meanwhile, many individuals also experience stigmatization through negative social interactions (van Hoof et al., 2014). This affects hope and perspective, the opportunity of choice, the individual independence, and therefore the general attitude (Onken et al., 2002). A pessimistic attitude and a feeling of hopelessness also hinder recovery. Among other things can stigma's result in a negative attitude that affects the self-image, hope and independence. Earlier it was concluded that a positive attitude and hope are a part of recovery. Factors that detract hope are therefore hindering for the recovery process. People with mental health issues also often experience social isolation. This results in a structural low income compared to the general population, which in turn leads to financial barriers for societal participation (van Hoof et al., 2014).

Research on the role of the physical environment on recovery focuses mostly on the enabling role of the environment. The physical environment can however also be a source of challenges for people with mental health issues. Söderström et al. (2016) studied the urban experiences of individuals who recently experienced their first psychotic episode. They found that the urban environment is a source of stress. Firstly, they found that the density of the urban environment can be problematic. While many epidemiological studies have focused on the density of the built environment, Söderström et al. (2016) argue that it is rather mostly an issue of human density. Stress is related to being in a crowd, from which it is not possible to escape. Density however also depends on the time of the day. Places that are crowded by day, can be deserted by night. Place experience can therefore differ greatly between

different moments. Interestingly, human density can also be experienced as protective (Söderström et al., 2016).

Second, stress is a result from an overload of stimuli in the urban environment. Mostly noise and physical contact are sources of stimuli that are experienced as overwhelming. Visual stimuli and smell are also named. Problems arise when a combination of different stimuli is experienced. Places where a combination of stimuli are experienced for a longer period of time, are therefore often avoided.

Third, obstacles in pedestrian mobility are sources of stress. Routines are often used as coping strategies. Keeping a certain rhythm is a way to cope with the many stimuli that are experienced. Obstacles, like traffic lights or being slowed down by a crowd, can break this rhythm, and result in difficult situations of be 'nailed down'.

The last source of stress in the urban environment relates to role management. The urban environment are also sites of social interactions with known and unknown others (Söderström et al., 2016). Social interactions can induce anxieties, and sites where interactions can be expected are regularly avoided.

2.5 Summary

This thesis is centered around the question how the physical environment affects recovery of people with a mental vulnerability. The concept of recovery that is used in this thesis is based upon Anthony's (1993) definition of recovery as a unique and personal process in which the reduction of symptoms and curing is not a condition for recovery. Within recovery five intertwined processes can be distinguished, based upon Leamy et al.'s (2011) CHIME-model, that can lead to a fulfilling life, with or without a reduction of symptoms. Figure 2.1 provides a visualization of the relation between the physical environment and recovery, as it can be explained by the existing literature.

On one side the physical environment has a recovery enabling function. Doroud et al. (2018) explain this through four mechanisms in which the environment act as places for being, doing, becoming and belonging. Doroud et al. (2018), however, use a rather broad definition of the environment and their results also include home environments, work environments and so-called 'third places'. The role of the physical environment, as living environment, has not been separately studied.

It is unclear if the physical environment can hinder recovery. Particular factors, such as discrimination, stigmatization, negative social interactions and experience barriers can work stagnant (Onken et al., 2002). The role of the physical environment in this is thus unclear. It is clear that the physical environment is a source of stress for people with a psychotic disorder (Söderström et al., 2016). How this relates to recovery has not been studies however.

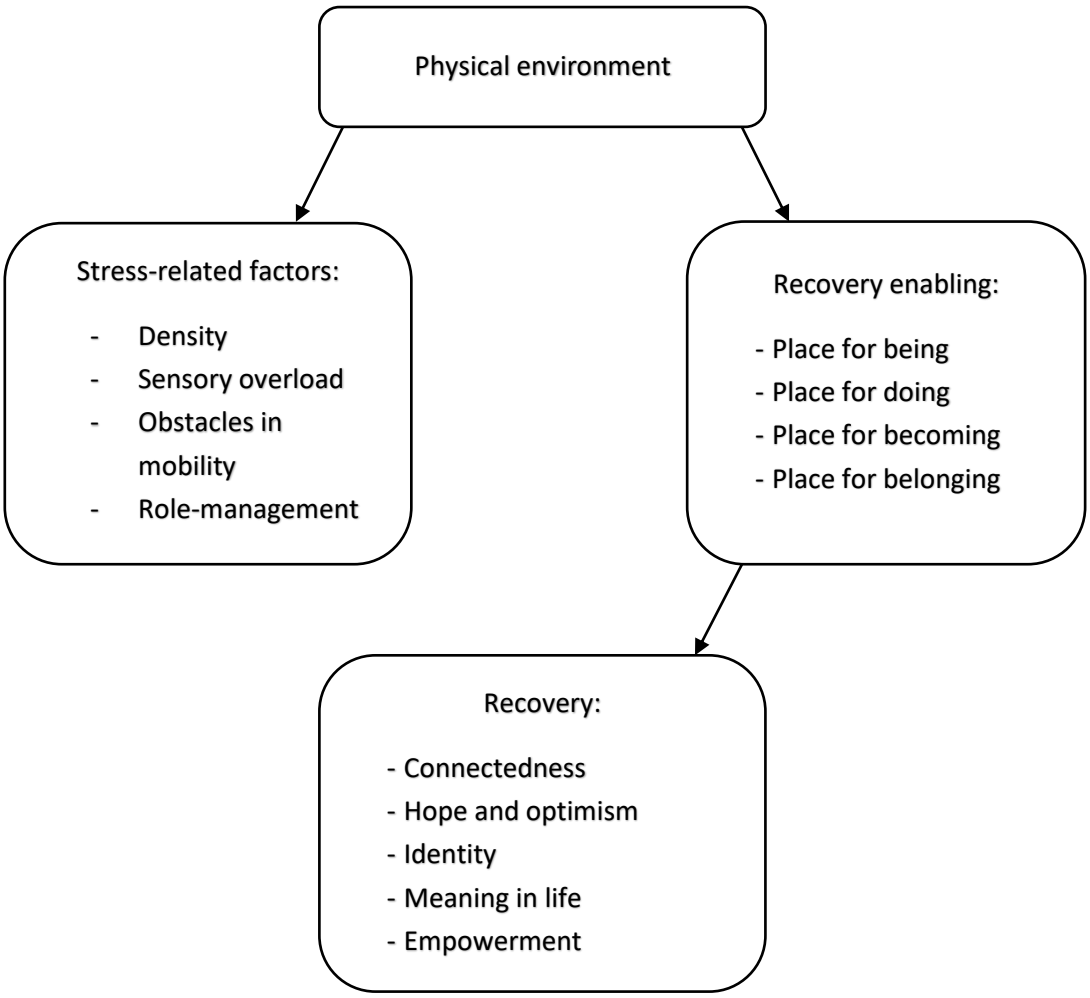


Figure 2.1: Conceptual framework based upon the existing theory (source: own design)

3. Methodology

In order to explore the lived experience of the urban environment and the effect on recovery these experiences have, an empirical research has been conducted. A photo elicitation method was used to gather data, in which eight participants were asked to bring photographs to a semi-structured interview. This methodological chapter describes in detail the underpinning logics for the chosen methods as well as the practices of data collection and analysis. The methods were judged and approved by the ethical commission of the internship organization, the Trimbos institute.

This thesis is focused on the lived experience of the urban environments of people with mental health issues. To examine these lived experiences a qualitative method has been used. Semi-structured interviews have been conducted with eight individuals with mental health issues. Photo elicitation was used as a method to gain more insights in the experiences. The chosen method is based upon a phenomenological philosophy. Phenomenology means as much as examining the lived experience of a phenomenon of several individuals in detail (Creswell, 2013). Instead of producing an objective statement of an object or event (the phenomenon), a phenomenological study attempts to explore individual personal perceptions of an object or event (Smith, 2011). A phenomenological study typically studies the phenomenon with interviews in order to produce an in-depth descriptive of the experiences of the phenomenon. The phenomenon of inquiry in this thesis is the lived experience of the urban environment with mental health issues.

3.1 Research population and recruitment

To study a phenomenon the participants are required to have experienced the phenomenon (Creswell, 2013). This led to several criteria for potential participants to be selected for this study. Firstly, they have to experience mental health issues. Initially this study focused upon adults (18-65 years old) with a serious psychiatric disorder who self-identify as recovery. In contact through email with one potential participant it became clear that this description of the research population could be experienced as stigmatizing. As people are diagnosed with a mental disorder they become patients. Price (2013) provides an elaborate overview of the issues that arise when trying to define mental health and mental health issues. Stigmatization is experienced as a major issue for many people with mental health issues (Sartorius, 2002; ten Have et al., 2015; Yanos et al., 2010). As this thesis aims to help individual with mental health issues, using possibly stigmatizing terms is undesirable. During the recruitment period the description of the research population was therefore changed to adults who experience mental health issues. In the following of this thesis, the research population is addressed as ‘people with a mental vulnerability’.

Participants are not selected on the basis of the disorder which causes their mental health issues. This is an explorative research and the aim is not to connect particular symptoms of a certain disorders to the experiences as for example Söderström et al. (2016) do. This research rather takes Duff’s (2012) approach and focuses on their lived experiences and does not relate this to disorders or symptoms. Comorbidity – in more than half of the cases people suffer from more than one disorder – makes it problematic to link results to specific disorders (de Graaf et al., 2010). The most common disorders in the Netherlands are mood disorders, anxiety disorders and substance abuse disorders (de Graaf et al., 2010). The selection of participants is therefore based upon the self-identification as having mental health issues and, importantly, as being in recovery from these mental health issues.

Another initial criteria for potential participants was living within the municipality of Utrecht. This criteria originated from the collaboration with the municipality of Utrecht during the internship.

However, because this thesis does not focus on particular places within the city of Utrecht, but on the experiences in urban environments in general, it was agreed to let this criteria go.

Participants were recruited through multiple channels. Firstly, various organizations that work with people from the research population were approached. Approached organizations included Meetellen in Utrecht, de Tussenvoorziening en Enik Recovery College. A flyer for professionals with information about the research and the research population was distributed among the contact persons from the organizations with the request for cooperation with the recruitment of participants (Appendix 1). When an organization agreed to help with recruitment, they received a flyer with information for potential participant (Appendix 2) with the request to distribute this among potential participants. Those interested in participation could contact the researcher directly themselves or could authorize others, such as a professional, to share contact detail, after which the researcher contacted them. The flyers were also distributed on social media, via LinkedIn for professionals and via Facebook groups for potential participants. Lastly, snowball sampling was used to recruit potential participants through participants. This method of recruitment appeared to be appropriate, as it enabled us to approach a population that is hard to reach, while people within the population often come into contact with others who experience the same issues.

After the first contacts, the potential participants received an information letter with extensive information about the study and data processing. Hereafter a meeting was planned. This meeting was used to further inform the potential participants about the study and what would be expected of them, and to answer possible questions. It is expected that the threshold for asking question was lower for potential participants than only contact via email. Besides this, the meeting was used to jointly determine whether the potential participant fell within the research population. The focus here was on the self-identification as in recovery, for which in some cases a different terminology was used.

After this meeting the potential participant got some time to consider participation. When one decided to participate some additional information necessary for the data collection was provided. Every participant signed an informed consent form prior to participation. As appreciation for their participation, participants were given a voucher of the value of 10 euros, provided by the municipality of Utrecht.

3.2 Data collection

A total of eight participants were found. With each of these eight participants an in-depth interview has been conducted. Instead of using traditional semi-structured interviews, a method of photo elicitation has been applied.

3.2.1 Photo elicitation

Photo elicitation means as much as ‘’the simple idea of inserting a photograph into a research interview’’ (Harper, 2002, p. 13). The participants are asked to produce multiple photographs prior to the interview as input. During the semi-structured interview the phenomenon – the lived experience of the urban environment – is discussed by asking question about the photographs the participant brought to the interview. There are several strengths of using photographs in interviews.

- Because visual representations evoke deeper elements of the human consciousness, they can produce more and different insights than textual representations (Harper, 2002).
- The use of photo elicitation encourages interviews which are more emotional and affective (Rose, 2016).

- Photographs can catch elements of the everyday that seem trivial, but might provide useful insights (Dennis et al., 2009).
- Letting research participants take their own photographs as input to the interview, empowers them (Pain, 2012). The photo elicitation interview is centered around the expertise of the participant, thereby putting power in the hands of the participant. Note that photo elicitation is different from a photovoice method. With photovoice the goal of the method is to empower the participant with the aim to impact society. With photo elicitation empowerment is related to the relationship between participant and researcher (Rose, 2016).
- Asking people to take photographs is an easy and fun way of enrolling participants into a research project. (Rose, 2016).

The use of photo elicitation in mental health research is underutilized (Glaw et al., 2017). The use of photographs can, however, be useful as it can visualize the views of life among people who are (possibly) cognitive unable to express those views in traditional interviews (Erdner et al., 2009). For the same reason, this method is used in research on other groups with a possible cognitive inability to express themselves, such as people with dementia (Bartlett, 2012) or children (Dennis et al., 2009). The method of photo elicitation in research specifically on the role of the environment in recovery has been scarcely applied. The few studies that do use this method, can provide meaningful insights in the role of urban place in recovery (e.g. Duff, 2012; Söderström et al., 2016). Therefore, photo elicitation was seen as a valuable method to collect data for this master's thesis.

There are, however, some limitations to the use of the photo elicitation method. First, this method is demanding on a participant's time compared to more commonly used methods such as interviews (Latham, 2010). This means that recruitment becomes more difficult, as an on-going commitment from the respondent is expected. This makes recruitment more difficult due to the fact that participation would be time-consuming. Potential participants might therefore turn down participation as it will consume too much of their time.

This appeared to be a small issue during the recruitment process. There has been contact with four potential participants that eventually chose to not participate. For all of these individuals participation seemed too time-consuming. There might, however, also have been other reasons that have played a role in the decision.

3.2.2 Photographs and interviews

The participants were asked to provide ten photographs prior to the interview. They were asked to make photographs of places in the urban environment that they associate with their own mental health. They received a form with instructions for the making of these photographs after the first meeting, in which was explained what I was looking for (Appendix 3). They had one week to make and send these photographs. In some cases the deadline differed with permission of the researcher. Besides this, in some cases the amount of ten photographs was let go. Multiple participants noticed that more photographs would repeat the story of other photographs, which why it was deemed unnecessary to hold on to the criteria of ten photographs. The combined total of 71 photographs the participants submitted served as input to the interviews. During this semi structured interview the participants were asked multiple questions regarding the photographs they submitted. A topiclist was formed prior to the interviews (Appendix 4). For each photograph the participant was asked what the reasoning was behind the choice for the particular place. Follow-up questions were asked to reveal underlying experiences, memories and attitudes related to these places. As the narrative of the participants were leading for the interview, in some cases attention was given to subjects that were not included in the topic list. After the discussion of the photographs and the photographed places,

each participant was asked whether they, for which reason whatsoever, excluded places or photographs where they are of importance to discuss. The interviews lasted between 45 and 75 minutes with two outliers of 35 minutes and 90 minutes. One participant indicated that an interview was impossible at that moment because of her mental health issues. For this participant a solution was designed in which she was permitted to add her own description by the photographs instead of an oral interview. In this description she was asked to answer questions that were formulated by the researcher based upon the topic list.

3.2.3 Covid-19

The collection of data was conducted between April and July 2021, a period characterized by the coronavirus Covid-19. The Covid-19 pandemic did have an effect on the mental state of people with a mental vulnerability (De Lange et al., 2020). From a panel of over 400 individuals with a mental vulnerability 38% indicates that the mental health issues has worsened during the pandemic. However, some people note that they have less mental health issues as they experience less obligations and stimuli from society.

Experiences in the urban environment might be affected as multiple measures were drawn up to prevent the spread of the virus (Devine-Wright et al., 2020). This meant that face masks were mandatory in indoor public places and the basic rule of 1.5 meter social distancing was in effect. This study focuses on the experiences in outdoor public places, where relatively few measures apply. While Covid-19 and the measures might affect the experiences in the urban environment, there was no cause to update the research design. The participants were all possible to go outside and to make photographs. However, as a result of the virus it did appear that it was not always possible or preferable to conduct a safe face-to-face interview in person. In most cases the interviews were therefore conducted through a video meeting, with MS Teams. With screen share, it was possible to go through the photographs with the participant whilst discussing them.

3.3 Data analysis

The interviews were recorded with permission from the participants. The interviews were then transcribed (after transcription the recordings were deleted) and together with the photographs coded and analyzed in MAXQDA 2020 (see Appendix 5). In order to stay close to the narrative of the participants and to not let presupposed theories determine the outcomes of the analysis, a combination of inductive and deductive methods of coding had been applied. The concepts and relationships from the theoretical framework informed the topic list and the interviews. After transcribing the interviews a first round of open coding took place. The code system did thus not originate from the theoretical framework, but from the participants' narratives. With the theoretical framework in mind, the open coded were grouped together to main themes. The codebook can be found in Appendix 6.

The first sub-question focused on identifying the places in the urban environment that the participants associate with their mental health issues. To identify these places both the photographs and the transcripts were coded and analyzed. The photographs were coded as objectively as possible in order to pinpoint similar characteristics. This process of coding took place after the interviews. It was thus required to forget the stories that were told when discussing the photographs. In most cases the discussed topic per photograph was obvious, but in some cases the topic that was discussed was not that obvious. For example a picture of a railing of a bridge over a channel. Instead of the channel being the main topic, it was the railing and a lock on this railing that was most important for this specific participant. This photographs would in this part of the coding process still be coded as a blue place. In the interviews the participants discussed some places that were not in any of their photographs (for

multiple reasons). To not exclude these places the transcripts were also coded. Every place that was discussed got is own code. Eventually the codes in the photographs and the transcripts were grouped based on similarities. This resulted in several sub-themes divided between two main themes – 'green and blue places' and 'urban places'.

The second and third sub-questions focused on the experiences the participants have at these places. In a first round of open coding all experiences of the first transcripts were giving a code. These were then divided between positive and negative experiences. A process of axial coding took place in which the coded where divided in categories in order to create main themes. During this process of axial coding the theoretical framework was used to form and name the categories. This resulted in six themes for the positive experiences and four themes for the negative experiences. Some categories were formed to group the individual consequences of the experiences. During the analysis it was concluded that these categories differed too much from the existing theoretical framework. While the content is included in the descriptive and discussion of the results, they were not used as separate themes per se.

3.3.1 Writing down the results

The results chapter (chapter 4) gives an overview of the themes that surfaced from this analysis. The themes are firstly discussed as they are. When answering the sub-questions and discussing the results, the themes are connected to the theoretical framework of chapter 2, to find out where they overlap and where they differ.

The overview is complemented with some of the photographs and quotes from the interviews that illustrate the themes. The participants were asked for permission to use the photographs and quotes. All participants gave permission to use the photographs, and seven out of eight participants gave permission to use quotes. All interviews were held in Dutch. The quotes were therefore translated to English the be used in the results chapter. The translation was done carefully, but meanings can always get lost in translation. The original quotes in Dutch are therefore added in the Appendices. In Appendix 7 the Dutch quotes per paragraph can be found.

Additionally, to secure the privacy of the participants their real names are not used. The names used in paragraph 3.4 and chapter 4 are fictious.

3.4 Response

The recruitment procedure eventually produced eight participants. Four times there had been contact with potential participants who choose to not participate. The common reason that was given had been the time-consuming character of participation. The eight participants together made 71 photographs. A brief overview of the participants can be found in table 3.1. Of the eight participants seven live in the municipality of Utrecht. The remaining participant, Jara, lives in Ede, a city within the province of Utrecht. A majority of the participants is female (six out of eight) and between 20 and 30 years old (six out of eight). The participants were not selected based upon the nature of their mental health issues, so no information about this is available. All participants, however, did self-identify as recovering. A reflection on the response and recruitment procedure can be found in the concluding chapter in paragraph 5.3.

The participants were asked to send in ten photographs prior to the interviews. As said before, some participants did not send in ten photographs. Three participants send in less photographs, while two participants had difficulties choosing and send in eleven.

Table 3.1: Overview of participants

Participants[3]	Sex	Age	Number of photographs
Leonie	F	27	10
Anouk	F	28	7
Merel	F	22	11
Nadine	F	24	6
Christien	F	25	10
Tjerk	M	57	10
Jara[4]	F	-	11
Matthijs	M	25	6

[3] Names of participants are fictitious.
[4] The only participant not living in the municipality of Utrecht.

4. Results

This chapter will discuss the findings from the analysis of the interview transcripts and the participants' photographs. This will be done based upon the three sub-questions (see 1.2). Paragraph 4.1 is mostly based on the analysis of the photographs and provides an overview of the places in the urban environment that the participants associate with their own mental health. Hereafter the findings of the transcript analysis will explain how various experiences in the urban environment can impact the mental health of the participants. This is divided between the positive experiences and impact (paragraph 4.2) and the negative experiences and impact (paragraph 4.3). Paragraph 4.4, lastly, is used to formulate answers on the three sub-questions.

4.1 Places in the urban environment

To identify the places that are associated with mental health by the participants, the photographs have been analyzed apart from the transcript. The eight participants together send in 71 photographs. The photographs show the places that the participants associate with their own mental health. The coding process resulted in two types of places that can be distinguished in the urban environment: green (and blue) places and urban places.

Of the 71 photographs, 34 photographs picture places that can be characterized as so-called green places. These green places include parks, forests and green paths for walking. Specific places that were photographed by the participants were the Maximapark, Park Oosterspoorbaan and estates Rhijnauwen and Amilsweerd. One participant photographed a cemetery. Because of the clear presence of green features and a walking path, this cemetery could be considered a green place. Five times a place is photographed in which water is the central feature, including the Amsterdam-Rijn channel. Green and blue elements go well together; in thirteen cases the photographs shows both green and blue elements. The walking path around the Singel, the path by the Kromme Rijn river through the estates of Rhijnauwen and Amelisweerd, and Park Transwijk are examples of places where green and blue come together.

36 photographs, on the other hand, display places that are characterized by urban elements. These places are, for example, roads and intersections (10), supermarkets and shopping centers (4) and plazas (2). Eight photographs focus on specific buildings, such as the Dom tower, a pharmacy, a school building and a hospital. Although the focus of these photographs is on the urban elements, in most places green or blue elements can be found. The opposite is however also true. In some photographs of green and blue spaces, elements of the urban environment can be found.

The last photograph cannot be divided in one of the two groups, as it is not a picture of a particular place. This photograph is of a service dog of one of the participants.

Most participants send in a combination of photographs of both green or blue places and urban places. One participant, Nadine, only send in photographs of urban places.

In the interviews the participants discussed several places that were not seen in the photographs. The places discussed in the interviews (thus including those on the photographs) can also be divided in two groups: green and blue places, and urban places. Most places can be seen as public places. However, this is not true for all places. Some places are not actual public places, but can be seen as public as they more or less have a public character: they are mostly accessible for everyone. These places include supermarkets, shopping centers and the waiting room of the pharmacy. They can be seen as a part of the urban environment as conceptualized in this thesis. One participant, Tjerk, also discusses private

places, such as his own home and workplace. In some cases places are discussed that are not part of the own place of residence. Jara in particular photographed places outside of her place of residence. For her these places were typical for a certain situation she encounters in het day-to-day life. It is then more about the situation than about the place. In the same way places are described in general, without specifying the location (e.g. ''the city'' as a place).

The initial analysis of the places leads us to conclude that a variety of places in the urban environment are associated with mental health and recovery. An almost equal number of green/blue places and urban places are named. From this it is possible to conclude that the urban environment in a broad sense (both green and urban places) is involved in the mental health of people with mental health issues. From the subsequent analysis of experiences it appears that green places are mostly experienced as positive. It should, however, no be presupposed that all green places are always experienced as positive. Some contextual elements play a role in the experiences. Urban places are more often than green places experienced negatively. But here as well this should not be presupposed, as urban places are also experienced as positive if the context is right. Lastly, this analysis shows us that public places and the urban environment are interpreted differently by the participants. This confirms the choice for a subjective approach towards the urban environment (Cummins et al., 2007).

4.2 Positive experiences and recovery

The places named above, are photographed and/or discussed by the participants because they are associated with their mental health. Paragraphs 4.2 and 4.3 discuss the experiences at these places and the impact these experiences can have on mental health and the recovery process. From the transcripts a wide range of experiences surfaced, both positive and negative. There is no significant difference between the number of positive and negative experiences. In addition, the distinction between a positive and negative experience can be vague. Experiences often are interrelated. The order of this chapter should not be perceived as a hierarchical division of themes.

Firstly, the positive experiences are discussed. The inductive coding process produced emergent six themes in which the positive experiences can be divided.

4.2.1 A pleasant atmosphere

Seven participants describe a situation in which a pleasant atmosphere is experienced at a particular place. An atmosphere is not a tangible characteristic of a place. An atmosphere – mostly referred to as affective atmospheres (Anderson, 2009) – is not observed, but is felt or sensed by humans (Lupton, 2017). This means that atmospheres are emergent, they change as humans responds to changes in the presence of both humans and nonhumans (Lupton, 2017). Atmospheres are also multiple. As they exist only because of the interpretation of individuals, a place can be assigned multiple atmosphere by several individuals (Anderson & Ash, 2015). The interviews show that a pleasant atmosphere is experienced in various ways. For Anouk a pleasant atmosphere can derive from the appearance of a place. She photographed a plaza in front of a shopping center. She regularly visits this place to buy groceries and sometimes lingers there with a friend or with her dog. This is possible as a result of the pleasant atmosphere she experiences at this plaza. For her, small elements in space can affect the atmosphere of a place.

''Well, each bench has a quote: 'Be the reason someone smiles today'. They all have a quote like this. I like this kind of aesthetics (…) I think it is something small that these benches look good like this. For me this really matters for the atmosphere.'' (Anouk)[5]

Because she experiences a pleasant atmosphere at this place, it becomes a place she likes to be. It becomes a place she can be with a friend and a place where she can train her dog. Most participants assign aesthetic value to natural features in public places. Tjerk is charmed by nature and especially when nature is blooming.

''I included a photo of Park Transwijk in the winter. (…) Some time ago already, I went on a holiday to Indonesia, that was during the rainy season, so all of nature was in bloom and I can really enjoy that. I'm always happy when spring comes around, I'm happy when the snowdrops and the fruit trees start to bloom'' (Tjerk)

This is not only the case in green places such as Park Transwijk. In some cases roadside green or seeing a garden is sufficient to affect the atmosphere in a positive sense.

''That's right (…) it's just someone's garden, but they just made it so … yeah, cozy or something. I think that it's partly a kitchen garden and I just get so happy because of it, because of how overgrown it looks. I really like that''. (Merel) (Figure 4.1)

Figure 4.1: Pleasant atmosphere: gardenview with green (source: Merel)

Tjerk and Merel, but also other participants, notice that a pleasant atmosphere affects them positively. Not only is a pleasant atmosphere experienced, it makes them happy and cheerful. These places thus have a positive impact on their mood. A positive mood is important for the will to recover and offers hope and perspective (van Hoof et al., 2014). That atmospheres are important to hope and perspective (Duff, 2016), become evident from the story of Leonie. She describes a walking path she looks for when she is not doing so well (figure 4.2). There she can enjoy the trees, plants and animals she encounters during her walk. This walk can make her happy at times she is not doing so well.

Figure 4.2: Pleasant atmosphere: green walking path (source: Leonie)

Sometimes the elements that participants focus on, and lead to a pleasant atmosphere are less tangible. Various places are discussed because of the open feeling that is experienced. Spacious places are experienced as pleasant, they give a feeling of freedom as Leonie experiences on this path (figure 4.3). On the other hand, a small path through nature can give a pleasant feeling, as Christien describes.

[5] All interviews were conducted in Dutch. The quotes were translated to English. The original quotes in Dutch can be found in Appendix 5.

''This walking path is very narrow, which somehow is very pleasant because it gives such an idyllic image. You almost become part of nature.'' (Christien) (figure 4.4)

This shows how atmospheres can be multiple (Anderson & Ash, 2015). Atmosphere can emerge from various elements, as individuals experience elements different. The multiple can also be seen in the urban or rural atmosphere that are experienced in different urban places. Anouk discusses the urban atmosphere, the lively ambiance and the monumental character of the city center, but at the same time she appreciates the rural feeling she gets in the neighborhood park, where she regularly gets together with neighbors. Another participant enjoys walking through a neighborhood with a large student housing complex (IBB – Ina Boudier Bakkerlaan). The student housing creates a student-like atmosphere which is linked to a particular sociability and crowdedness in which she herself cannot live in, but is appreciated by her. It contributes to a feeling of being part of the student community, without having to experience the problems of the crowdedness.

''I photographed the IBB because I… it's not about the IBB per se, but such a student area is so great, I really enjoy of being a part of that, because of the chill atmosphere there. I wouldn't want to live at the IBB, that would be too noisy for me, but I live close by and really enjoy walking through this area'' (Merel)

Figure 4.3: Pleasant atmosphere: spacious neighborhood walking path (source: Leonie)

Figure 3.4: Pleasant atmosphere: small walking path by the Kromme Rijn (source: Christien)

4.2.2. Positive thinking

Places are also positively experienced because they evoke positive thoughts and memories, through which they are associated with positivity. All participants describe at least one situation that evokes positive thoughts. Positive thinking is a part of recovery, as it (re)awakens hope after despair (Bird et al., 2014; Leamy et al., 2011). For Tjerk, Utrecht's Dom Tower evokes the positive thought of the feeling of being home, and home is where he feels most in place.

''Well, when you see it [the Dom Tower] *standing then… it's indeed a feeling that you're home again in your own city. It just is a landmark of the city. When you drive towards the city on the highway, you can see it from afar and you know ''I'm almost home''. ''* (Tjerk)

Leonie describes the positive feeling of hope she gets when she sees the locks of love on a bridge over the Amsterdam-Rijn channel (figure 4.5). By dwelling on these locks she daydreams about valuable relationships, in which she feels the need to grow more. This place, and the locks in particular, symbolizes her goals for future growth. A quote at another place evokes memories about the swimming lessons she took prior to the corona pandemic to (re)gain trust in herself and in others. She uses these thoughts to give her own mental health issues a place in her own narrative (figure 4.6). It is important in a process of recovery to give meaning to mental health issues and to foster hope and perspective (Leamy et al., 2011). A water playground is not only a fun place to play, but it also can be a symbol for her own life (figure 4.7). From all the chaos in the deep, to finding a way up. All these experiences contribute to hope, perspective and the meaning of mental health in one's narrative.

Figure 4.5: Positive thinking: love locks on a bridge over the Amsterdam-Rijnchannel (source: Leonie)

Figure 4.6: Positive thinking: quote remembering her of swimming lessons (source: Leonie)

Figure 4.7: Positive thinking: water playground as a symbol for recovery (source: Leonie)

4.2.3 Quiet and peaceful

For six of the eight participants quiet and peaceful places are important as they offer possibilities to relax. Therapeutic landscapes are often characterized by quiet and peaceful environments (Bell et al., 2018). Green (urban) places are said to be important for the ability to recover from mental fatigue (Berto, 2005; Kaplan, 1995). Natural soundscapes, for example, are often found to have restorative capacities (Zhang et al., 2017). Multiple participants describe how sounds, as well as other natural

stimuli, are experienced as calming. Leonie, for example, experiences the relaxing sounds of water when she stands on the bridge over the Amsterdam-Rijnchannel (figure 4.5) as very pleasant and calming. Also, Christien appreciates the calming sounds of nature, for example when she walks by the Kromme Rijn river.

''The sound of nature, the smells, the colors, the view, the water, the crisping gravel under your feet, great! I come to rest in my mind here. Enjoying the here and now. No expectations, no obligations. Just 'being' for a moment.'' (Christien)

For Matthijs it is the absence of sounds, and other stimuli, that enables him to relax. As he can experience a multitude of stimuli as negative, places which are quiet are important to him (Gidlöf-Gunnarsson & Öhrström, 2007). He describes a place which he looks for during his walk as it offers a moment to process the stimuli that are experienced elsewhere.

''I'm standing here on a little bridge, which is on my standard route that I walk in this park … it is here that I just take a moment … a moment to rest. When I do take a moment to drink or something, I can just as well do it at a place I almost don't experience stimuli. Where I only see a dragonfly sometimes''. (Matthijs) (figure 4.8)

Quiet and peaceful places – therapeutic landscapes – and positive soundscapes are often associated with natural environments (Jeon et al., 2021; Williams, 1998). However, it appears that quiet and peaceful places are can also be found within the urban environment. One type of place that is discussed by several participants are green walking paths that go through the urban environment. These paths, especially the green features, serve as a shield for the stimuli from the city.

''This is the walking path by the Singel. In the fall I walked here every day, and it was a very pleasant place. Under the beautiful tress, a piece of nature within the old city. Here I found peace in the busy city life'' (Christien)

Figure 4.8: Quiet and peaceful: Maximapark (source: Matthijs)

Figure 4.9: Quiet and peaceful: park bench with its back to the path (source: Matthijs)

Matthijs describes one specific bench in a park he regularly visits that helps him to be shielded from stimuli and to enjoy nature. Instead of facing the path, as most park benches, this bench stand with its back to the path (figure 4.9). As a result, Matthijs does not see what happens on the path, which makes it easier to relax. These relaxing places enables the participants to process stress and to relax. Recovering energy levels is not as self-evident when many stimuli are experienced (see paragraph 4.3.2).

Figure 4.10: Quiet and peaceful: green path through the neighborhood (source: Christien)

Relaxing and calm places are for several participants important because it enables them to process stress. In some cases these places enable the participants to move through the city without be flooded by stimuli. A green path through the neighborhood makes it more pleasant to walk through the neighborhood (figure 4.10). Or the bridge over the Amsterdam-Rijnchannel that is used as a point to rest from the busy city center before furthering the trip. Or the detour to the supermarket or the train station that is chosen in order to better deal with the situation there:

''I notice that when I'm not doing so well and I can choose a green route, that I can handle the moments after that are somewhat busier, social, are stressful, that I can handle those better'' (Jara)

4.2.4 Being active

The previous three experiences are based upon passive experiences of the urban environment of the participants themselves. All participants, however, describe positive experiences that result from being active in the urban environment. Physical activity is generally found to have positive effects on mental health (Biddle & Mutrie, 2008). Being physical active on a regular basis can improve mood and psychological well-being and reduce symptoms of depression and anxiety (Dinas et al., 2010; Galper et al., 2006; Harvey et al., 2010; Ströhle et al., 2007). This is shown in the participant's experiences. Various participants discuss being active as positive because it is a way to deal with stressful situation. Being active can then enable the participants to be somewhere, with experiencing less problems.

''I think that I feel more comfortable … I'm very inpatient … or very restless myself, I don't know, but that means that I feel less stressed when I'm doing something, so I feel better when I'm walking than when I'm sitting somewhere'' (Jara)

However, physical activity is also important for growth and working on one's recovery (Doroud et al., 2018). Multiple participants describe physical activity as an important part of processing negative thoughts and feelings. The way in which places can contribute to recovery is different for different participants. Tjerk has to work in his backyard, which is property of the housing corporation, but his task to maintain. He claims he does not particularly enjoy gardening, but it can nonetheless be a pleasant distraction when he feels very stressed or angry. Nadine, to the contrary, notes that walking is a way to get into her own thoughts and feelings, and to find out what happened that made her feel this way.

''Especially when I feel depressed or sad and I go for a walk, it is to empty my head, and I'm daydreaming much … it's that I'm processing why I feel so depressed.'' (Nadine)

Being active can thus positively affect mental health through various mechanisms, as a distraction from feelings or as a way to processes them. The urban environment is important in that it provides a place for these activities. Tjerk could have a hard time to find distractions from his feelings with the housing corporation's garden, and Nadine needs a pleasant environment to walk in for her to be able to daydream without distractions. It is, additionally, important that these places are pleasant and provide an enabling environment for activities, as Anouk discusses:

''I really enjoy swimming, only I don't like inside pools. But now with the Kromme Rijn (public pool) *the roof is open in the summer, so it's more of a combination of inside/outside pool. And it is of course, it's extra special now after such a long lockdown that we're allowed to do sports again. For me physical activity is important, as well as that there is a nice place to do so.''* (Anouk)

4.2.5 Positive social interactions

The urban environment also provides places for positive encounters with others. The life with mental health issues often includes negative experiences in social interactions with known and unknown others (Macdonald et al., 2005; Yanos et al., 2001). It is therefore important that positive interactions are experienced. Four participants discuss positive social interactions or experiences that create a sense of community. Like Leonie, who indicates that she regularly experiences problems with keeping distance with others, especially in times of Covid-19 restrictions (see 4.3.3). She notes that in some cases she is able to focus on those experiences with people who respectfully deal with the situation, rather than on the negative interactions. By focusing on the positive experiences she becomes more confident during her walks. Positive interaction can in this way help her recovery as enables her to think more positive about herself. Anouk describes positive social interactions in a neighborhood park with a playground, where she meets with neighbors on nice days. This park enables her to feel part of a community within a city.

Tjerk, who also has a history of negative experiences with social interactions, describes a work-situation where he can experience positive interactions. He works at a pavilion in a park in Utrecht where he experiences low-threshold interactions. This illustrates that connecting with people, albeit on a superficial level, is important and can create a positive energy for someone who can feel depressed at times.

''A lot of playing children come to the park with their parents and grandparents. So, it's a really positive environment, where people also … by showing their interest for the children, you can start an easy conversation with the parents or grandparents. Something that is appreciated a lot. That just gives positive energy.'' (Tjerk)

For the eight participants the urban environment in not necessarily a place to (re)construct meaningful inter-personal relationships (Tew et al., 2012). It are those participants that have negative experiences with social interactions in the urban environment for whom positive experiences are particularly valuable. They can begin to trust others to act respectfully and themselves to be able to deal with difficult social situations. The interaction itself, however, can also be a mechanism to cope with difficult situations:

''I enjoy it TOGETHER. It works really well for me to swim together and chat. Otherwise the time just… I can't handle waiting very well. I always need some stimuli. So when I go alone, I struggle to complete the 45 minutes, I think at some moment: 'It's really boring'. I like when I'm with someone'' (…) ''I feel less frightened when I'm somewhere with someone.'' (Anouk)

4.2.6 Ability to cope

The participants all discuss negative experiences and difficult situations they encounter in the city (see paragraph 4.3). Six participant describe moments where they experience the ability to cope with these difficult situations. This provides them with a sense of self-confidence and control over life when moving through the city. Some participants find calm and clear situations important to move relaxed through the city. Nadine experiences two different intersections on her daily bike route very differently. While both intersections are busy, she experiences one intersection as clear and the other as unclear. A straightforward intersection makes it possible to cross the intersection a normal speed,

without panicking. When she starts to get more familiar with the situation at a certain intersection, for example because avoiding is not a possibility, she notices that she approaches the intersection with more confidence. Matthijs also experiences this on his regular biking route.

''It is indeed that I'm starting to learn to cope with these things because I … I know then ''I'm at this traffic light'' or ''I'm at this roundabout, or at this intersection'', that kind of things… that I now know better what is expected of me there.'' (Matthijs)

That these participants describe the growing confidence when they get to know certain routes is not surprising. Wayfinding generally gets better when familiarity of the route grows (Prestopnik & Roskos, 2000). However, individuals with anxiety or other mental health issues often experience additional problems in wayfinding (Mackett, 2021). Mental health issues can, for example, affect the process of decision making. This is also found during the interviews with the participants (see 4.3.2). Familiarity of places encounter in regular routes enables the participants to focus on the other stimuli and impressions at busy places. This is one step further into being able to deal with situations. Matthijs notes that he now does experience some situations better than years ago.

''I can handle myself at those kind of situations and I can think ''you know what, I would like to see it different, but it is better than it was''. I think that it is that I can know process it easier and that the limit has been pushed further away.'' (Matthijs)

Although he indicates that he still wants to grow, he now knows what works for him to cope with difficult situations. Other participants apply various mechanisms to cope with difficult situations. For Anouk it works to move through the city with someone, be it a friend or her service dog. The presence of someone gives her something to focus on, which reducing the stress and alertness she often experiences. Closing off the sounds from the environment with noise-cancelling headphones can also be a way to cope with the chaos of the city, as Christien describes. For Nadine it works to walk instead of bike. By walking she provides herself with extra time to create a clear overview of the situation, so that she knows what can be expected of others and what is expected of her. Taking a calm route is also a way to better cope with situations, as discussed in 4.2.5.

All these experiences where participants notice that they are able that to handle difficult situations, contribute to a growing confidence in one's self and in the ability to have control over one's own day-to-day life, as they are not (as much) constrained by difficult situations that are faced in the urban environment. Moving thought the urban environment with confidence can then have an even more positive effect. Leonie notices that she can move through space with more confidence, causing others to react more positively to her presence. This makes her more confident which enables her to stand up for herself when she feels the need to.

4.3 Negative experiences and stagnation

Besides the positive experiences in urban environments that might enable recovery, some places are experienced negatively by the participants. All participants have negative experiences in public places. Again, it is not possible to produce a hierarchical division of the importance or effect of the different experiences. The coding process led to four themes of negative experiences.

4.3.1 An unpleasant atmosphere

In paragraph 4.2.1 the pleasant atmosphere that some participants experience was discussed. Some places are, however, experienced negatively because of an unpleasant atmosphere. It is not always clear what the cause for the unpleasant atmosphere is, but it can lead to negative feelings, as six of the eight participants describe. Some situations are discussed where places awake feelings of fear and anxiety. For example at a park that is surrounded by buildings and where Jara feels locked up (figure 4.11). This makes it a park she rather not be in. This cramped feeling is also apparent in a shopping center or a supermarket, especially at moment when she is already not feeling well.

Figure 4.11: Unpleasant atmosphere: park surrounded by buildings feels locked in (source: Jara)

''I notice that I mostly struggle with that when I'm not feeling very well. It's not so bad that I have to avoid these places, but I notice that is not helpful for how I feel at those moments. So if it's not necessary, I will not do it at these moments.'' (Jara)

It appears that the cramped feeling affects her mood. When she is already is a bad mood, this experience might worsen her mood. When she is not doing well, she therefore choses to avoid places where she experiences these feelings.

Feelings of anxiety can also originate from the presence of others. The presence of unknown others leads to a feeling of danger. Two participants notice that they get into a state of alertness as a reaction to this feeling. This state of alertness is, however, draining energy and can thus lead to fatigue.

''Because I experience sensory overload at the supermarket very fast. I can't handle … I'm don't fear the supermarket, but I'll get triggered when people approach me from behind, with corona now there's more distance, but people walking behind you and touching you hastily. That really drains energy. And I'm very alert, so I see everything. I always scan for danger.'' (Anouk)

A trip to the supermarket for Anouk becomes an exhausting experience in this way. Nadine notices that she reaches a state of alertness when she approaches a busy intersection. Although she tries to stay calm, she indicates that she has an occupied mind at a moment like that. She experiences anxiety at those moments. Other situations can feel threatening. Leonie experiences threats in public spaces when people do not respect her personal space. People get too close to her and as a result of previous negative experiences she feels unsafe. Anouk describes a waiting room at the doctor where she feels anxious:

''Well, sometimes you have these waiting rooms where there was a distance. That there was a small room to wait in, and I can … I'm doing really well at the moment, so I can handle these things much better now, but I was very anxious for men that got too close to me when no one was there and so I like waiting rooms where the assistant can watch the room.'' (Anouk)

These feelings of fear and anxiety can negatively affect mood. These participants note that they start to feel worse because of these experiences. Other places can also negatively affect mood because in a more general sense an unpleasant or uncomfortable atmosphere is experienced. Christien describes

multiple overpasses she encounters during her walk. One of these overpasses provides her with the possibility to shorten her walk, but the graffiti makes her feel uncomfortable (figure 4.12). Instead of as art, she sees the graffiti as vandalism. Another overpass symbolizes the transition from the quiet and peaceful nature to the chaos of the city.

''This is an unpleasant place for me. This overpass is the moment in my daily walk where I go from nature, where I feel good and call, back into the city. And there's it way too busy for me unfortunately.'' (Christien)

Figure 4.12: Unpleasant atmosphere: graffiti gives a feeling of vandalism (source: Christien)

Figure 4.13: Unpleasant place: uncomfortable feeling because of the appearance of the homeless shelter (source: Jara)

Jara describes a place she feels uncomfortable at. During her walk she passes a place with on one side a block of good-looking and well maintained houses and on the other side a shelter for homeless people. This shelter exists of multiple containers and looks shabby (according to Jara). The appearance of the homeless shelter gives her an uncomfortable feeling and can worsen her mood (figure 4.13).

''I think that I… It depends on how I feel that day, because when I'm already a bit stressed or sad, I can get more stressed or sad from this. But I realize that's because of how I perceive it.'' (Jara)

4.3.2 Sensory overload

Five participants experience sensory overload in the city because of the many stimuli and impressions that they have to take in. Matthijs compares sensory overload with a very busy roundabout in a foreign land where you cannot understand anyone and cannot read a sign, and where you then as a traffic officer have to control traffic. When too many cars want to drive on, the roundabout is full, as well as Matthijs' head when too many stimuli are experienced. To clear the roundabout, it is necessary that for a moment no new cars drive on it. This same happens in his head. When new input keeps appearing, it is impossible for him to relax.

In this way, busy streets and intersection are problematic for some participants. On the one side because of the multitude of stimuli that are experienced at busy situations. Mostly sounds pose problems for the participants, although lights and smell are named too, but less frequently. Having to stop at a red light might therefore cause troubles.

''Two minutes of waiting at a red light, while all kinds of traffic rushes past me from different directions, different sounds: cars, trucks, motor scooters, bicyclist, honking, talking, the ticking of the traffic lights, the lights of the traffic lights etc. For a normal person maybe just boring because of the waiting, but a

complete hell for me! On quiet intersections I often run a red light to save spare myself the input, but only when it's safe!'' (Christien)

Figure 4.14: Sensory overload: an unclear situation at an intersection (source: Nadine)

On the other hand, busy intersections pose a problem when attention has to be directed to many different road users. When the situation is also unclear, for example because the traffic lights are not working, unpleasant situations arise (figure 4.14).

''Yeah, and that makes the situation so chaotic that you don't even know who gets to go first. You see ''shark's teeth'' everywhere and some cyclists are SO careful that they suddenly stop in the middle of the road and I think ''there are cars coming from every direction''. It's super busy, especially on Saturday when everybody is out. Then I choose to take a different route.'' (Nadine)

The participants that encounter these problems at busy and unclear situations, tend to take another route to avoid such a situation. Avoiding is a common strategy to prevent having to deal with busy situations. As said before, quiet and peaceful places offer the space to take a pleasant route and to avoid busy routes. In some cases it appears to be impossible to find an alternative route, for example because the detour takes too much time. This can lead to problems, such as Jara describes in relation to her education.

''It did happen, but that's some time ago, when I still lived in Arnhem. That if I didn't have the time to take a detour, and I had to go to an intensive seminar which I knew would be interactive. That if I had to going through the city, that I chose, after too much input, ''let's leave this seminar with what it is. I'm going to catch up with it later''.'' (Jara)

In this case her education suffers the consequences from the sensory overload she experiences in the urban environment. The sensory input from stimuli and impressions in the public space causes her to not be able to process input from following moments. To use the words of Matthijs: the roundabout is full and new cars cannot be processed. Matthijs notices that he has trouble with handling situations when he experiences sensory overload.

''Yeah, I always get a bit overflooded with input there and then I notice that it, especially when I have to be there for a longer period, that it affects me in how I respond to things, but also how well I respond. So like … I get less … I'm not able to respond as quickly.'' (Matthijs)

After a hectic period, it is important for him to relax to process the input. Is he unable to do so, then his day will be less easy for him to get through. The impact of sensory overload is not only experienced during those moment of sensory overload, the affect the participants during the whole day. Furthermore, sensory overload happens at the expense of relaxation. Earlier it was discussed how important the urban environment can be for relaxation. But situations of sensory overload can undo all relaxing experiences. Christien goes on a daily walk to relax, but when she encounters a busy environment this walk can have the opposite effect on her.

''Walking for me is a way to relax and to recharge, as long as the environment isn't too busy. Otherwise I still get overflooded with new impressions which I have to process when I'm back home. My head can then explode and that really costs me a lot of energy.'' (Christien)

Anouk also uses physical activity to relax, but notices that the relaxing effect of swimming is influenced by stimuli. The situation during the covid-19 restriction resulted in several shifts at the pool, in order to secure that the maximum number of people in the pool was not exceeded.

''So it can stay like this if it's up to me, that you swim in shifts of 45 minutes. I hear people complain about it, but when you're talking about stimuli and my mental health, I can't handle so many people, it doesn't work relaxing anymore.'' (Anouk)

4.3.3 Negative social interactions

Other situations are not problematic because of the number of people or stimuli present, but because of the interactions with others. Leonie extensively describes multiple situations in which she experiences that people intrude her personal space and react negatively when she tries to stand up for herself. This gives her a feeling of guilt, in which she feels responsible for this situation. Furthermore, she describes a situation in which she experienced negative reaction from people at a public place about her clothing in the summer. She indicates that these reactions have the possibility to cause new traumas.

Anouk is happy with er service dog, who helps her deal with difficult situations, for example when she enters a supermarket. Instead of focusing on het anxiety, which result in a state of alertness, she can focus on the dog and thus be more relaxed. She, however, still notices a lot of ignorance when it comes to a service dog for mental health issues.

''I get talked to often: ''oh, can you enter with it?'' (…) I feel that there's a lot of ignorance about service dogs for mental health issues. That's why he isn't understood sometimes. (…) I don't really have negative experiences. BUT I feel a lot of ignorance. Every time I have to explain it, which takes a certain energy from me. ''Yeah, he is allowed to come with me, because it's a service dog''.'' (Anouk)

Although her service dog is never denied access – excluding one situation at an accommodation facility – she often has to explain the situation, where Anouk's opinion is that it should not happen. Another situation that is problematic for her, is her weekly visit to the pharmacy. The interactions with the personnel confirm her identity as a patient that has to be told what to do when it comes to her medication. She feels that she can handle the medication on her own. She experiences the directions from the pharmacy personnel as belittling.

The impact negative social interaction can have, is illustrated by Tjerk. He describes a situation he encountered at work.

''I notice that I … I mean, I'm there for three days, the other days are filled by others, so there is a kind of transfer from one day to the next. I'm really sensitive, I react sensitive to that transfer. If others… if colleagues comment on me, I feel personally attacked, as in ''I did something wrong'' and I'm really sensitive to that and with one comment like that a whole day of positivity can be wiped out.'' (Tjerk)

4.3.4 Negative thinking

Lastly, some places lead to negative thought and memories, like this schoolyard with playing children that call up melancholic thought about an uncomplicated time.

''Because I can think ''oh these children…'', because when I was still in primary school I didn't have these issues. And sometimes it's this freedom of childhood that can make me happy, but sometimes I can think ''I hope…'', I can get a bit sad about it because I start to think ''yeah, I was like that then, but not anymore''.'' (Merel)

For some participants negative thoughts about themselves arise at public places. The presence of others can be exhausting for that reason. Jara fills in for others what they might think of her.

''I do that a lot anyway, but that's more because of how many people there are, when there are a lot of people I tend to fill in for those people what they think of me, while most people of course aren't thinking about that at all when they walk there, they're busy enough with themselves. But because I'm always a bit wary because of my issues, and because I start filling in for others, it can be exhausting to be at places with a lot of people.'' (Jara)

Anouk describes a period in which she experienced severe depressive complaints and she often avoided going outside.

''Well, places in general actually. I would think that everyone could read me, and totally untrue, but… and I would think negatively about myself and would think ''Oh, what would they think about me'' and very insecure and I would look at everything with a negative gaze. Everything could be a trigger, ''it would be better if I wasn't here'' or even further thoughts. So I avoided everything for a period.'' (Anouk)

4.4 Formulating answers on sub-questions

On the basis of the results that are discussed in this chapter it is possible the formulate answers on the four sub-questions that were set up for this thesis. The first sub-question is at follows: *which places in the urban environment do people with a mental vulnerability associate with their own mental health and recovery process?* It appears that a variety of different places are associated with mental health. An analysis of both the photographs and the interviews shows that near halve of the associated places are related to nature, while the other half is related to urban environments. When looking at the experiences at these places, it appears that places in nature are generally experienced as positive. These are places were often a pleasant atmosphere is experienced and which are quiet and peaceful. Additionally, or maybe as a result, these places are used to be active. However, it must be established that green and blue places are not exclusively experienced as positive. Sometimes this is because of place-bound elements, but in most cases negative experiences at green and blue places are the result of changes in the environment. Mostly when these places become crowded the positive experiences can turn into negative experiences. Instead of a pleasant atmosphere and a quiet environment, an unpleasant and sensory overload is experienced. The chance of negative interactions is also higher when places become more crowded.

Urban places are not clearly positively or negatively experienced. Sensory overload at intersections is a major issue for some of the participants. However, when they start to get more familiar with certain situations they begin to deal with these situations. They notice that they start to become more confident in the fact that they are able to handle a situation like that. A negative experience can thus also turn into a positive experience. Urban areas are often judged by the experienced atmosphere. Neighborhoods as the IBB and the city center are appreciated because of their cozy and sociable atmosphere, while places as overpasses and places with a shabby appearance are experienced as negative.

Places that are associated with the participants mental health are mostly places they encounter regularly. It are places they must visit (a supermarket), they must pass (the route to work) or that are chosen on a (daily) walk. It are everyday places one encounters regularly. It also appears that not all places are located within the direct living environment, thus confirming the living environment should not be limited to the neighborhood of residence. The extent of the living environment differs between different participants.

An additional part of the first sub-question is that it is tried to identify elements that influence the experiences. It is difficult to answer this question with the current research design. The experiences are very personal, and even personally some place-bound elements are experienced differently through various moments. The influence of the experience thereby lays outside of the environment. For these unique experiences it is possible to identify which place-bound elements in the environment has an effect. A pleasant atmosphere can result from different elements that are given aesthetic value. An inspiring quote or artwork can provide a place with a pleasant atmosphere. Inspiring quotes and artworks can also affect positive experiences because they symbolize aspects of one's own narrative. Other element of urban places, however, are named because the result in an unpleasant atmosphere. Enclosed places are particularly unpleasant, where a spacious place is experienced as very pleasant. Expressions of neglect, including graffiti, also result in an unpleasant atmosphere.

Natural elements within urban areas also appear to be important. Green paths through the city offer a quiet place to walk and move. The natural elements then serve as a shield of sorts to the stimuli from the city. This might be a row of trees, but roadside green can be sufficient to provide a division between the road and the path. Roadside green can then be seen as a point to focus on.

There is a clear distinction in the places where the participants can relax and where they experience sensory overload. Relaxing is possible in quiet, green places with few people, so that the input of stimuli is low. Sensory overload, however, is experienced at busy situations of traffic where the input of stimuli and impressions is high. Unclear traffic situations can amplify sensory overload. Traffic lights that are not working, for example, cause an unclear situation besides the stimuli of sounds and lights from traffic that have to be processed. These situations also cause feeling of fear and anxiety to surface.

One of the most named elements at places is the absence or presence of other people. Places whit few other people are generally experiences as positive, where crowdedness is experienced negatively. One participant however explains that she enjoys the presence of others. This highlights the personal character of experiences.

De second sub-question is as follows: *which experiences are key to the importance of the mentioned places in the urban environment for the mental health?* It had become clear that the places are experienced in multiple ways. The experiences can be divided between positive and negative experiences. All participants experience places positively. These positive experiences can be divided into six themes.

- Experiencing a pleasant atmosphere.
- Experiencing positive thinking.
- Experiencing a quiet and peaceful environment.
- Good experiencing by being active.
- Experiencing positive social interactions.
- Experiencing the ability to cope with difficult situations.

The negative experiences in the urban environment can be summarized in the following four themes:

- Experiencing an unpleasant atmosphere.
- Experiencing sensory overload.
- Experiencing negative social interactions.
- Experiencing negative thinking.

The third sub-question is connected to the second sub-question and is as follows: *which role do these experiences have within the personal recovery?*

The experiences have positive and negative consequences for four aspects of mental health: mood, levels of stress and energy, one's own capacities and on perspective. The influence on mood results mostly from the feeling experienced at places, which is why atmospheres and thoughts and memories are mostly associated with mood, whether it is a positive or a negative effect.. Negative social interactions also affect mood, only in a negative way. The experiences also clearly have an effect on the levels of stress and energy. On one side do various positive experiences positively impacts stress and energy. Places where a pleasant atmosphere and/or peacefulness is experiences are places where the participants can relax and recharge. For a part this can be explained because these places are ideal for physical activity, for doing sports or a daily walk. Many experiences are, however, exhausting and are draining energy-levels. In particular sensory overload in the urban environment poses problems for a number of participants. But also negative thoughts and social interactions can be exhausting. Some experiences affect the capacities of the participants. These experiences can enable the participant to move through the city without problems. This results in a growing freedom of mobility. Confidence in oneself grows through positive experiences. On the other hand can sensory overload at places, and the lack of quiet alternatives, restrict the participants. In some cases sensory overload does also have an effect on daily life, for example at work or in one's education. Finally, some experiences affect perspective. Interactions and thoughts and memories have either a positive or negative impact on the idea that growth in recovery is taking place.

5 Discussion and conclusions

This thesis aims to explore the relationship between the urban environment, and public places in particular, and the recovery of mental health issues. Existing studies focus primarily on the positive effects of the urban environment. This research aims to gain insight in the negative effect, as well as the positive effect of the urban environment. A photo elicitation method has been used to centralize the experiences of the participants. In-depth interviews have been conducted with eight participants who experience mental health issues and self-identify as recovering. Together the eight participants send in 71 photographs of places they associate with their mental health.

This concluding chapter starts with a summary of the results. These results will then be put into the context of the existing theoretical framework. The strengths and limitations of the research design are then discussed. In both of these paragraphs questions for future research are formulated when there appears to be knowledge missing. Eventually this leads to recommendations for practice.

5.1 Summarizing the results

The main question to be answered in this thesis is the following: *How does the urban environment, and public places in particular, influence the recovery process of people with a mental vulnerability?* The three sub-question were answered in chapter 4 (see paragraph 4.4). The results can be summarized in a model (figure 5.1). It can be concluded that the urban environment is a source of both positive and negative experiences. The positive experiences are divided in six themes: experiencing a pleasant atmosphere, quiet and peacefulness, positive thoughts and memories, positive social interactions, the ability to cope with difficult situations, and positive experiences by being active. The negative experiences are divided in four themes: experiencing an unpleasant atmosphere, sensory overload, negative social interaction and negative thoughts and memories. These experiences have a positive and negative impact on mood, levels of stress and energy, one's own capacities, and on self-image and perspective.

On basis of these results it can be concluded that places in the urban environment contribute to the recovery process. Green and blue places in or near the city are experienced positively because of their pleasant atmosphere, quietness and peacefulness. As a result they have a positive impact on mood and levels of stress and energy. Specific place-bound elements can amplify this impact, for example a park bench not facing the path. Urban places can also have a positive impact. Elements of green, such as trees and roadside green, and elements of aesthetic value are important for experiencing a pleasant atmosphere and positive thoughts and memories. An inspiring quote or artwork is associated with process of recovery and can thereby contribute in designing a pleasant place. It does become clear that the positive experiences are depended on the level of crowdedness at a certain place. Sensory overload is an issue for most of the participants, and originates when there is too much input of stimuli (e.g. sounds and lights) and impressions. When places are crowded, situations may arise that are experienced negatively. The negative experiences can affect the rest of the participants' day. One participants notes that a day of work become difficult when he experiences sensory overload on his way to work. Another participant indicates that she has skipped lectures because of the sensory overload she experiences on the way to the train station and the alternative route was time-consuming. This shows is that the impact of negative experiences on daily life can be significant.

The next paragraph compares the model in figure 5.1 with the conceptual framework of figure 2.1 (see page 20.

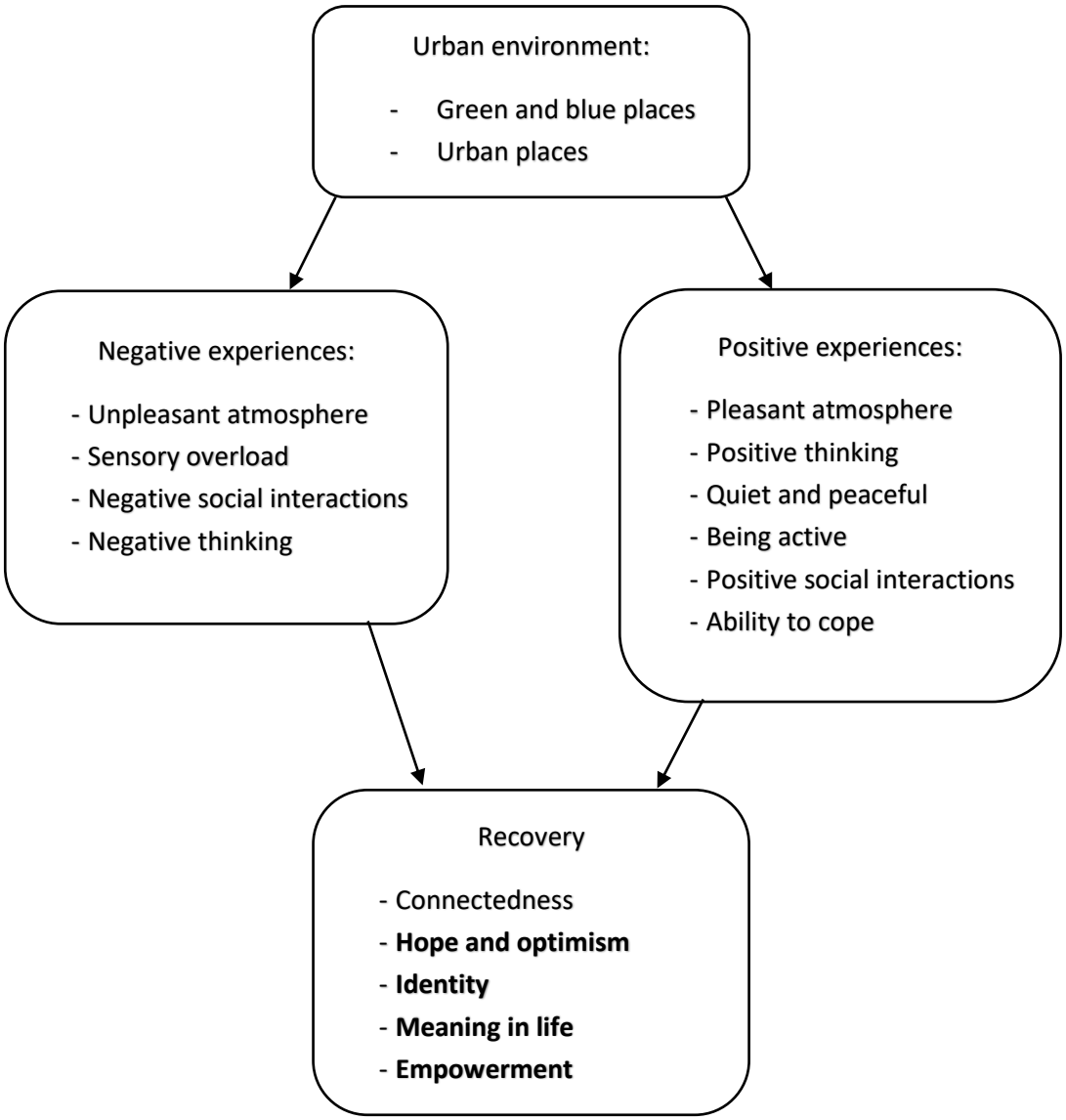


Figure 5.1: Summary of results (source: own design)

5.2 Discussion

The model in figure 2.1 (page 14), based upon existing theories, showed that the positive effect of the urban environment on recovery can be explained through the fact that the environment offer places for being, doing, becoming and belonging (Doroud et al., 2018). The research design in this thesis distinguishes between experiences and the consequences of these experiences. The six themes of positive experiences are comparable to the classification of Doroud et al. (2018). Places where a pleasant atmosphere and peacefulness is experienced can be seen as places for being. In some cases the places are described that can be seen as therapeutic landscapes, such as the view over the Amsterdam-Rijnchannel or the park bench in the Maximapark. The positive experiences of being active or experienced at places for doing. That the urban environment also offers a place for becoming appears from the experiences in which a growing ability to cope with difficult situations is experienced.

In these difficult situations the participants can show themselves that they are progressing in their recovery processes. Finally Doroud et al. (2018) named places for belonging. The results of this thesis show that the urban environment, when looking at public places, is not directly associated with meeting people to create feelings of belonging. Positive social interactions that are experienced are particularly important for gaining trust in one's self and in others. Few participants named the value of public places for a sense of community.

The urban environment, according to this research, offers places for being, doing and becoming, but not so much for belonging. This could be explained by the fact of this research's focus on public places within the urban environment. Other studies apply a broad definition of urban environment, in which they include work and home environments as well as third places. Public places are associated with the wellbeing of the general population (Cattell et al., 2008). Crowded places are then often experienced as pleasant because of the presence of people. It is possible that this works differently for people who experience mental health issues, as crowded places also lead to negative experiences, including sensory overload. Future research could focus on the question *how people with mental health issues experience social interactions in crowded public places in order to enable a sense of belonging?*

The role of green places is interesting. There are three existing theories that explain the positive relationship between green (natural elements within public space) and mental health (see 2.3.1). Green has stress-reducing capacities; green places offer pleasant places for physical activities; and because they are places where social interactions take place. The first two explanations surface from the results of this research. Green, and blue, places are often described when talking about quiet and peaceful places and places with pleasant atmospheres. These places are therefore also deliberately sought out to relax and recharge. The quietness, peacefulness and pleasant atmosphere make green places ideal for a daily walk, which works relaxing as well. As discussed before, the importance of social interactions in public space is minimal for the participants. Green places are thus not necessarily positive because they facilitate social interactions. The positive social interactions that do take place, are important for trust and confidence and no so much for a sense of community. The results of this research, however, lead to a fourth possible explanation for the importance of green places for this specific group of people (experiencing mental health issues). Green corridors are used by the participants to move through the urban environment without experiencing sensory overload. Green places therefore affect the mobility of the participants. Mobility can be an important aspect of (mental) health (see for example Gatrell, 2013). Green places can thus contribute to a life with mental health issues, but with experiencing less constraints. Future research should be conducted to answer the question *how green places in the urban environment can contribute to the mobility of people who experience mental health issues.*

People with mental health issues, however, experience the urban environment not exclusively positively. All participants in this research have negative experiences at places in the urban environment. These negative experiences appear to do have negative consequences for mental health and recovery. Especially when the participants already are not doing well, these negative experience can worsen mental health at those moments. When doing okay, these places are often not experienced as negatively, or the consequences are not as bad. From these results you can argue that the urban environment can hinder recovery. When not doing well, these experiences can stop progression in the recovery process: stagnation. Stagnation means a standstill in the recovery process (Onken et al., 2002; van Hoof et al., 2014). In some cases recovery is really hindered by the negative experiences. Various experiences lead to limited capacities to handle situations, to a negative self-image or a lack of confidence. The feeling that you are progressing in your recovery process is important to keep

perspective and hope that a life without problems is possible. Experiencing problems in the urban environment can lead to a loss of perspective.

The urban environment is a source of stress for the participants. Söderström et al. (2016) argue that the urban environment serves as four sources of stress: because of the density of crowds; sensory overload; obstacles in pedestrian mobility; and role-management. This research shows that sensory overload is a major issue for many participants. Mostly experienced at busy streets and intersections, this results from a combination of stimuli from crowds, sounds and lights, and of impressions from different road users. The importance of clear traffic situations becomes clear. A combination of an unclear situation and the large input of stimuli at an intersection can lead to problems. These problems are not limited to the actual situations, but can cause problems long after their occurrence. It is important to dwell upon the fact that negative experiences in the urban environment can have a significant impact on the daily life of people with mental health issues. Future research should focus on *which traffic situations can lead to problems for people with mental health issues and how these problems can be prevented*.

5.3 Limitations and strengths of the research

Firstly, this research is one of the first that tries to create insight in both the positive and the negative effect of the urban environment on mental health and recovery. This makes it possible to form a realistic image of the lived experience of the urban environment. This thesis therefore combined theories about recovery and the urban environment. A subjective definition of the urban environment is used, which is common within health geography but unusual in studies on mental health and recovery. The inductive coding process that was used, enables us to stay close to the narratives and the experiences of the participants. The themes of experiences that resulted from the process, are therefore really a summary of the narratives.

The photo elicitation method has led to deep conversations, despite the fact that because of the situation around the Covid-19 pandemic the interviews were mostly taken through video calls. That despite the video interviews deep conversations could happen, might be explained by the use of the photographs. The participants were challenged to think about their experiences in the urban environment, because of the assignment to take photographs of these places. Showing them the photographs during the interview refreshed their memories of these places and experiences. The photographs also provided a relaxed atmosphere for the interviews, even if they were taken through a video call. The participant already did know what to expect: a conversation about their photographs. Because they themselves provided the photographs, they had an influence on what would be discussed during the interview.

There are however some limitations to this research design. Firstly, the recruitment of participants appeared to be difficult. One explanation is the fact that it is a group of people that is hard to reach. The use of the term ''serious psychiatric disorder'' probably discouraged some potential participants. Five of the eight participants enrolled in this research after the selection criteria were changed to ''people who experience mental health issues'' and the criteria of Utrecht as place of residence was lifted. Changing the selection criteria might have had an effect on the results. Individuals with less severe mental health issues were able to participate. These individuals might therefore also experience less issues in the urban environment. Nevertheless, the used method led to interviews that were rich with information, thus leading to theoretical saturation. A larger research population would increase the power of the results, but would probably not have led to major changes in the results. Future research could handle more strict criteria in order to find *whether the severity of the mental health issues affect the experiences in the urban environment*?

Second, the research population was more homogeneous that expected beforehand. Six of the eight participants were female. The reason for the discrepancy is difficult to determine. One possible explanation is the higher number of women with mental health issues. The statistics of the municipality of Utrecht of the mental health of its residents shows us that relatively more women experience mental health issues compared to men., without providing an explanation for this difference. In 2018 32% of women between 19 and 64 years old experienced mental health issues compared to 25% of men (Volksgezondheidsmonitor Utrecht, 2020a). Another explanation could be that the method, with the making of photographs, attracts women more than men. Multiple female participants noted their decision to participate was partly based upon the fact that photography is a hobby of theirs. Lastly, the difference could be explained by fact that men experience more problems with speaking about their mental health. Self-stigma appears to be more problematic with men than women (Latalova et al., 2014). This might mean that men would be less likely to participate in a study in which they are asked to speak about their mental health (issues).

If this affect the results of the study is hard to tell. Some experiences can be associated with the gender of the participant, such as feeling threatened because of clothing in summer. These specific experiences will affect women more than it would affect men. However, with most of the discussed experiences it is not possible to directly connect them to gender. Additional research could be conducted to find out *to what extent gender affects the experiences in the urban environment of people with mental health issues*.

Thirdly, seven out of eight participant is between 20 and 30 years old. Again, it is difficult to determine the cause. It is possible that the chosen method attracts younger adults more than it does older adults. An introductory meeting was conducted with various potential participants that were over 30 years old. The most common explanation for denying participation was the time it would take to participate. It is not clear if this affects the results. All participants have dealt with their mental health issues for a longer period of time. They all could speak about periods in which the issues were experienced differently, through which it could be argued that the younger participants were not per se in a different stage of their recovery (mental health issues do also not necessarily develop at a young age). It is, however, likely that people between 20 and 30 years old are in a different stage of life. They for example are still students instead of working fulltime. The research design did not focus on background information about the participants, such as living condition, relationship status, education or employment. This research design does not enable us to determine if the stage of life affect these experiences. Repeating this research with populations of different ages, and with more participant background information, could clarify *if age and/or stage of life influences the experiences in the urban environment*.

Taking photographs of places that are experienced negatively appeared to be problematic for multiple participants. At a moment when sensory overload is experienced, the participant rather does not stay in that situation for too long, or these moments are avoided at all. Prior to the period of photographing, the participants were told that it was not expected of them to look for these situations when they would usually avoid them. This resulted in a relatively high number of photographs of positively experienced places. This, however, probably did not affect the results. During the interviews the negative experiences of places that were not photographed were discussed. At the end of the interview the participants were asked if there were places that they did not make a photograph of because whatever reason. When using a photo elicitation method it is thus important to keep in mind that negative experiences might be photographed less often. Extending the periods in which the photographs are to be made, could increase the possibility that the participants are able to photograph a negative experience.

5.4 Recommendation

The previous two paragraphs already led to multiple recommendations for future research. On basis of the results it is also possible to state recommendations for practice, for example for the team of healthy environments advisors of the municipality of Utrecht. Following recommendations are, however, also interesting for other municipalities or organization that focus on (re)designing healthy environments, as well as organization that work with people with mental health issues.

1. **Include people with mental health issues in policy on healthy environments.**

It has become clear that the environment has multiple general health implications. Besides that, recently more interest has been given to the effect the environment has on mental health (see Shields-Zeeman et al., 2021). This thesis shows that the urban environment is important in the lives of people experiencing mental health issues. The urban environment, in particular public places, is a source of various challenges for people experiencing mental health issues. On the other hand the study shows that in the right conditions, some places in the urban environment can contribute to the recovery process.

Municipalities should be aware of the impact experiences in the urban environment can have on the daily life of people who experience mental health issues. While everyone can come across a difficult or unpleasant situation, the consequences for these people might last after this situation. Negative experiences can, for example, affect work and education. Additionally, this thesis demonstrates that avoiding places is a common result of negative experiences. Finally, it must be recognized that we are speaking about a significant portion of the population, as the health monitor of the municipality of Utrecht shows us that 29% of adults between 18 and 65 years old experience to some extent experience mental health issues.

Based upon this thesis it is recommended to include the experiences of people with mental health issues in (re)designing the urban environment, just as is done with people with physical disabilities or a visual impairment. An inclusive environment should be accessible for everyone. Seeing that people with mental health issues regularly avoid places because of negative experiences, it could be argued that urban environments are not inclusive yet.

2. **Include the experiences of vulnerable groups by using research methods such as photo elicitation.**

The use of the photo elicitation method appears to be a sufficient way to include people with mental health issues in policy. The use of photographs ease the start of a conversation about very personal experiences. The use of photo elicitation resulted in interesting and surprising insights. Because this method stays close to the narratives of the participants, this research design is open for unexpected results. The importance of green places as a way to comfortably move through the city and the symbolism assigned to aesthetic elements are examples of results that appear to be significant experiences but were not necessarily expected from the review of the literature. This enables the researcher to identify challenges and possibilities in the urban environment. While this appears to work for people who experience mental health issues, it could be used on research to the experiences of other vulnerable groups. Photo elicitation, and related methods, are already used in research with people with dementia (Bartlett, 2012), homeless people (Tran Smith et al., 2015) and children (Dennis et al., 2009). Using this method could therefore contribute to a truly inclusive city.

3. **Consider the role of green urban places through the eyes of people experiencing mental health issues.**

Green places are important for promoting the mental health of the general population (Maas et al., 2006). This thesis states that experiences of places, including green places, are dependent on the context of the situation. Green places like parks and walking paths are important as places to walk and to relax and recharge. It becomes, however, hard to relax when these places become overcrowded. A simple alteration to the design of a place could enable people with mental health issues to relax and recharge. Facing a park bench away from the path is an example of how a small element can work as a shield from the stimuli.

Additionally, green spaces might contribute to the mobility of people who experience mental health issues. Green places are regularly used to move through the city without experiencing sensory overload. Green corridors through and between neighborhoods could serve as pleasant alternatives for people who have trouble processing input of stimuli and impressions of the city. Green corridors might help them to better deal with the urban environment as well as with other moments in day-to-day life.

5.5 Conclusion

Developing healthy environments is important to promote the mental health of the urban population. This research underscores the importance of healthy urban environments in the lives of people experiencing mental health issues. The photo elicitation method, in which self-made photographs were used as input for an in-depth interview, enabled us to stay close the experiences of the participants in this research. The urban environment appeared to be a source of both positive and negative experiences and thereby impact the recovery process positively as well as negatively. The results confirm the consisting theoretical framework as certain places can do enable recovery. At the same time the result contribute to the theoretical framework as the constraining role of the urban environment is found. Negative experiences, including but not limited to stress, in the urban environment are found to have a significant effect on recovery.

The urban environment is a source of challenges for people with mental health issues. Under the right circumstances the urban environment can enable recovery. To create an inclusive environment it is needed to consider the experiences of people with mental health issues in (re)designing the urban environment by reducing challenges and seizing opportunities to create enabling environments.

References

Anderson, B., & Ash, J. (2015). Atmospheric Methods. In P. Vannini (Ed.), *Non-Representational Methodologies: Re-Envisioning Research* (pp. 34–51). Routledge. https://www.routledge.com/products/9780415713016.

Anderson, B. (2009). Affective atmospheres. *Emotion, Space and Society*, *2*(2), 77–81. https://doi.org/10.1016/J.EMOSPA.2009.08.005

Andresen, R., Caputi, P., & Oades, L. (2006). Stages of recovery instrument: Development of a measure of recovery from serious mental illness. *Australian and New Zealand Journal of Psychiatry*, *40*(11–12), 972–980. https://doi.org/10.1111/j.1440-1614.2006.01921.x

Anthony, W. A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal*, *16*(4), 11–23. https://doi.org/10.1037/h0095655

Bartlett, R. (2012). Modifying the Diary Interview Method to Research the Lives of People With Dementia. *Qualitative Health Research*, *22*(12), 1717–1726. https://doi.org/10.1177/1049732312462240

Barton, J., & Pretty, J. (2010). What is the best dose of nature and green exercise for improving mental health- A multi-study analysis. *Environmental Science and Technology*, *44*(10), 3947–3955. https://doi.org/10.1021/es903183r

Baxter, A. J., Scott, K. M., Vos, T., & Whiteford, H. A. (2013). Global prevalence of anxiety disorders: A systematic review and meta-regression. *Psychological Medicine*, *43*(5), 897–910. https://doi.org/10.1017/S003329171200147X

Bell, S. L., Foley, R., Houghton, F., Maddrell, A., & Williams, A. M. (2018). From therapeutic landscapes to healthy spaces, places and practices: A scoping review. *Social Science and Medicine*, *196*(November 2017), 123–130. https://doi.org/10.1016/j.socscimed.2017.11.035

Berto, R. (2005). Exposure to restorative environments helps restore attentional capacity. *Journal of Environmental Psychology*, *25*(3), 249–259. https://doi.org/10.1016/j.jenvp.2005.07.001

Beyer, K. M. M., Kaltenbach, A., Szabo, A., Bogar, S., Javier Nieto, F., & Malecki, K. M. (2014). Exposure to neighborhood green space and mental health: Evidence from the survey of the health of wisconsin. *International Journal of Environmental Research and Public Health*, *11*(3), 3453–3472. https://doi.org/10.3390/ijerph110303453

Biddle, S. J. H., & Mutrie, N. (2008). Psychology of physical activity: Determinants, well-being and interventions. In *Psychology of Physical Activity: Determinants, Well-being and Interventions* (2nd ed.). Routledge, New York. https://doi.org/10.4324/9780203019320

Bird, V., Leamy, M., Tew, J., Le Boutillier, C., Williams, J., & Slade, M. (2014). Fit for purpose? Validation of a conceptual framework for personal recovery with current mental health consumers. *Australian and New Zealand Journal of Psychiatry*, *48*(7), 644–653. https://doi.org/10.1177/0004867413520046

Blair, A., Ross, N. A., Gariepy, G., & Schmitz, N. (2014). How do neighborhoods affect depression outcomes? A realist review and a call for the examination of causal pathways. *Social Psychiatry and Psychiatric Epidemiology*, *49*(6), 873–887. https://doi.org/10.1007/s00127-013-0810-z

Boers, S., Hagoort, K., Scheepers, F., & Helbich, M. (2018). Does residential green and blue space promote recovery in psychotic disorders? A cross-sectional study in the Province of Utrecht, the

Netherlands. *International Journal of Environmental Research and Public Health*, *15*(10). https://doi.org/10.3390/ijerph15102195

Borg, M., & Davidson, L. (2008). The nature of recovery as lived in everyday experience. *Journal of Mental Health*, *17*(2), 129–140. https://doi.org/10.1080/09638230701498382

Bowler, D. E., Buyung-Ali, L. M., Knight, T. M., & Pullin, A. S. (2010). A systematic review of evidence for the added benefits to health of exposure to natural environments. *BMC Public Health*, *10*(456), 1–10.

Cabassa, L. J., Nicasio, A., & Whitley, R. (2013). Picturing recovery: A photovoice exploration of recovery dimensions among people with serious mental illness. *Psychiatric Services*, *64*(9), 837–842. https://doi.org/10.1176/appi.ps.201200503

Cattell, V., Dines, N., Gesler, W., & Curtis, S. (2008). Mingling, observing, and lingering: Everyday public spaces and their implications for well-being and social relations. *Health and Place*, *14*(3), 544–561. https://doi.org/10.1016/j.healthplace.2007.10.007

CBS. (2021a). *Mentale gezondheid*. https://www.cbs.nl/nl-nl/nieuws/2021/35/mentale-gezondheid-in-eerste-helft-2021-op-dieptepunt/mentale-gezondheid

CBS. (2021b, September 3). *Mentale gezondheid in eerste helft 2021 op dieptepunt*. https://www.cbs.nl/nl-nl/nieuws/2021/35/mentale-gezondheid-in-eerste-helft-2021-op-dieptepunt

Conradson, D. (2005). Landscape, care and the relational self: Therapeutic encounters in rural England. *Health and Place*, *11*(4), 337–348. https://doi.org/10.1016/j.healthplace.2005.02.004

Creswell, J. W. (2013). *Qualitative Inquiry & Research Design:Choosing Among Five Approaches* (3rd ed.). Sage.

Cummins, S., Curtis, S., Diez-Roux, A. V., & Macintyre, S. (2007). Understanding and representing "place" in health research: A relational approach. *Social Science and Medicine*, *65*(9), 1825–1838. https://doi.org/10.1016/j.socscimed.2007.05.036

de Graaf, R., ten Have, M., & van Dorsselaer, S. (2010). De psychische gezondheid van de Nederlandse bevolking. In *Trimbos instituut*. Trimbos-instituut.

De Lange, A., Hulsbosch, L., Knispel, A., & Kroon, H. (2020). *Impact coronacrisis op mensen met ernstige psychische aandoeningen: tweede meting Panel Psychisch Gezien*.

de Vries, S., ten Have, M., van Dorsselaer, S., van Wezep, M., Hermans, T., & de Graaf, R. (2016). Local availability of green and blue space and prevalence of common mental disorders in the Netherlands. *BJPsych Open*, *2*(6), 366–372. https://doi.org/10.1192/bjpo.bp.115.002469

de Vries, S., Verheij, R. A., Groenewegen, P. P., & Spreeuwenberg, P. (2003). Natural environments - Healthy environments? An exploratory analysis of the relationship between greenspace and health. *Environment and Planning A*, *35*(10), 1717–1731. https://doi.org/10.1068/a35111

Deacon, B. J. (2013). The biomedical model of mental disorder: A critical analysis of its validity, utility, and effects on psychotherapy research. *Clinical Psychology Review*, *33*(7), 846–861. https://doi.org/10.1016/j.cpr.2012.09.007

Dennis, S. F., Gaulocher, S., Carpiano, R. M., & Brown, D. (2009). Participatory photo mapping (PPM): Exploring an integrated method for health and place research with young people. *Health and Place*, *15*(2), 466–473. https://doi.org/10.1016/j.healthplace.2008.08.004

Devine-Wright, P., Pinto De Carvalho, L., Masso, A. Di, Lewicka, M., Manzo, L., & Williams, D. R.

(2020). “Re-placed”-Reconsidering relationships with place and lessons from a pandemic. *Journal of Environmental Psychology*, *72*, 101514. https://doi.org/10.1016/j.jenvp.2020.101514

Dinas, P. C., Koutedakis, Y., & Flouris, A. (2010). Effects of exercise and physical activity on depression. *Irish Journal of Medical Science*, *180*, 319–325. https://doi.org/10.1007/s11845-010-0633-9

Doroud, N., Fossey, E., & Fortune, T. (2018). Place for being, doing, becoming and belonging: A meta-synthesis exploring the role of place in mental health recovery. *Health and Place*, *52*(May), 110–120. https://doi.org/10.1016/j.healthplace.2018.05.008

Duff, C. (2011). Networks, resources and agencies: On the character and production of enabling places. *Health and Place*, *17*(1), 149–156. https://doi.org/10.1016/j.healthplace.2010.09.012

Duff, C. (2012). Exploring the role of “enabling places” in promoting recovery from mental illness: a qualitative test of a relational model. *Health & Place*, *18*(6), 1388–1395. https://doi.org/10.1016/j.healthplace.2012.07.003

Duff, C. (2016). Atmospheres of recovery: Assemblages of health. *Environment and Planning A*, *48*(1), 58–74. https://doi.org/10.1177/0308518X15603222

Erdner, A., Andersson, L., Magnusson, A., & Lützén, K. (2009). Varying views of life among people with long-term mental illness. *Journal of Psychiatric and Mental Health Nursing*, *16*(1), 54–60. https://doi.org/10.1111/j.1365-2850.2008.01329.x

Evans, G. W. (2003). The built environment and mental health. *Journal of Urban Health*, *80*(4), 536–555. https://doi.org/10.1016/B978-0-12-409548-9.11009-7

Faris, R. E. L., & Dunham, H. W. (1939). *Mental disorders in urban areas: an ecological study of schizophrenia and other psychoses*. Univ. Chigaco Press.

Foley, R., & Kistemann, T. (2015). Blue space geographies: Enabling health in place. *Health and Place*, *35*, 157–165. https://doi.org/10.1016/j.healthplace.2015.07.003

Fuller, R. A., Irvine, K. N., Devine-Wright, P., Warren, P. H., & Gaston, K. J. (2007). Psychological benefits of greenspace increase with biodiversity. *Biology Letters*, *3*(4), 390–394. https://doi.org/10.1098/rsbl.2007.0149

Galper, D. I., Trivedi, M. H., Barlow, C. E., Dunn, A. L., & Kampert, J. B. (2006). Inverse Association between Physical Inactivity and Mental Health in Men and Women. *Mental Health in Men and Women. Med. Sci. Sports Exerc*, *38*(1), 173–178. https://doi.org/10.1249/01.mss.0000180883.32116.28

Gascon, M., Mas, M. T., Martínez, D., Dadvand, P., Forns, J., Plasència, A., & Nieuwenhuijsen, M. J. (2015). Mental health benefits of long-term exposure to residential green and blue spaces: A systematic review. *International Journal of Environmental Research and Public Health*, *12*(4), 4354–4379. https://doi.org/10.3390/ijerph120404354

Gatrell, A. C. (2013). Therapeutic mobilities: Walking and “steps” to wellbeing and health. *Health and Place*, *22*, 98–106. https://doi.org/10.1016/j.healthplace.2013.04.002

Gemeente Utrecht. (n.d.). *Gezonde leefomgeving*. Retrieved October 5, 2021, from https://zorgprofessionals.utrecht.nl/gezondheid/gezonde-leefomgeving/

Gemeente Utrecht. (2016). *Kadernota Kwaliteit Openbare Ruimte*. https://www.utrecht.nl/fileadmin/uploads/documenten/ondernemen/Kadernota-Kwaliteit-Openbare-Ruimte.pdf

Gemeente Utrecht Volksgezondheid. (2019). *Gezondheid voor iedereen*. Gemeente Utrecht.

Generaal, E., Hoogendijk, E. O., Stam, M., Henke, C. E., Rutters, F., Oosterman, M., Huisman, M., Kramer, S. E., Elders, P. J. M., Timmermans, E. J., Lakerveld, J., Koomen, E., Ten Have, M., De Graaf, R., Snijder, M. B., Stronks, K., Willemsen, G., Boomsma, D. I., Smit, J. H., & Penninx, B. W. J. H. (2019). Neighbourhood characteristics and prevalence and severity of depression: Pooled analysis of eight Dutch cohort studies. *British Journal of Psychiatry*, *215*(2), 468–475. https://doi.org/10.1192/bjp.2019.100

Generaal, E., Timmermans, E. J., Dekkers, J. E. C., Smit, J. H., & Penninx, B. W. J. H. (2019). Not urbanization level but socioeconomic, physical and social neighbourhood characteristics are associated with presence and severity of depressive and anxiety disorders. *Psychological Medicine*, *49*(1), 149–161. https://doi.org/10.1017/s0033291718000612

Gesler, W. (1996). Lourdes: healing in a place of pilgrimage. *Pergamon Health & Place*, *2*(2), 95–105.

Gidlöf-Gunnarsson, A., & Öhrström, E. (2007). Noise and well-being in urban residential environments: The potential role of perceived availability to nearby green areas. *Landscape and Urban Planning*, *83*(2–3), 115–126. https://doi.org/10.1016/j.landurbplan.2007.03.003

Gidugu, V., Rogers, E. S., Harrington, S., Maru, M., Johnson, G., Cohee, J., & Hinkel, J. (2015). Individual Peer Support: A Qualitative Study of Mechanisms of Its Effectiveness. *Community Mental Health Journal*, *51*(4), 445–452. https://doi.org/10.1007/s10597-014-9801-0

Giles-Corti, B., Broomhall, M. H., Knuiman, M., Collins, C., Douglas, K., Ng, K., Lange, A., & Donovan, R. J. (2005). Increasing walking: How important is distance to, attractiveness, and size of public open space? *American Journal of Preventive Medicine*, *28*(2 SUPPL. 2), 169–176. https://doi.org/10.1016/j.amepre.2004.10.018

Glaw, X., Inder, K., Kable, A., & Hazelton, M. (2017). Visual Methodologies in Qualitative Research: Autophotography and Photo Elicitation Applied to Mental Health Research. *International Journal of Qualitative Methods*, *16*(1), 1–8. https://doi.org/10.1177/1609406917748215

Handy, S. L., Boarnet, M. G., Ewing, R., & Killingsworth, R. E. (2002). How the built environment affects physical activity: Views from urban planning. *American Journal of Preventive Medicine*, *23*(2 SUPPL. 1), 64–73. https://doi.org/10.1016/S0749-3797(02)00475-0

Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual Studies*, *17*(1), 13–26. https://doi.org/10.1080/14725860220137345

Harvey, S. B., Hotopf, M., Overland, S., & Mykletun, A. (2010). Physical activity and common mental disorders. *The British Journal of Psychiatry*, *197*, 357–364. https://doi.org/10.1192/bjp.bp.109.075176

Jeon, J. Y., Jo, H. I., & Lee, K. (2021). Potential restorative effects of urban soundscape: Personality traits, temperament, and perceptions of VR urban environments. *Landscape and Urban Planning*, *214*, 169–2046. https://doi.org/10.1016/j.landurbplan.2021.104188

Jokela, M. (2014). Are neighborhood health associations causal? A 10-year prospective cohort study with repeated measurements. *American Journal of Epidemiology*, *180*(8), 776–784. https://doi.org/10.1093/aje/kwu233

Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, *15*(3), 169–182. https://doi.org/10.1016/0272-4944(95)90001-2

Keniger, L. E., Gaston, K. J., Irvine, K. N., & Fuller, R. A. (2013). What are the benefits of interacting with nature? *International Journal of Environmental Research and Public Health*, *10*(3), 913–

935. https://doi.org/10.3390/ijerph10030913

Krabbendam, L., & Van Os, J. (2005). Schizophrenia and urbanicity: A major environmental influence - Conditional on genetic risk. *Schizophrenia Bulletin*, *31*(4), 795–799. https://doi.org/10.1093/schbul/sbi060

Kuo, F. E., Sullivan, W. C., Coley, R. L., & Brunson, L. (1998). Fertile ground for community: Inner-city neighborhood common spaces. *American Journal of Community Psychology*, *26*(6), 823–851. https://doi.org/10.1023/A:1022294028903

Latalova, K., Kamaradova, D., & Prasko, J. (2014). Perspectives on perceived stigma and self-stigma in adult male patients with depression. *Neuropsychiatric Disease and Treatment*, *10*, 1399. https://doi.org/10.2147/NDT.S54081

Latham, A. (2010). Diaries as a Research Method. In N. Clifford, S. French, & G. Valentine (Eds.), *Key Methods in Geography* (2nd ed., pp. 189–202). Sage.

Leamy, M., Bird, V., Le Boutillier, C., Williams, J., & Slade, M. (2011). Conceptual framework for personal recovery in mental health: Systematic review and narrative synthesis. *British Journal of Psychiatry*, *199*(6), 445–452. https://doi.org/10.1192/bjp.bp.110.083733

Lee, A. C. K., & Maheswaran, R. (2011). The health benefits of urban green spaces: A review of the evidence. *Journal of Public Health*, *33*(2), 212–222. https://doi.org/10.1093/pubmed/fdq068

Lorenc, T., Clayton, S., Neary, D., Whitehead, M., Petticrew, M., Thomson, H., Cummins, S., Sowden, A., & Renton, A. (2012). Crime, fear of crime, environment, and mental health and wellbeing: Mapping review of theories and causal pathways. *Health and Place*, *18*(4), 757–765. https://doi.org/10.1016/j.healthplace.2012.04.001

Lupton, D. (2017). How does health feel? Towards research on the affective atmospheres of digital health. *Digital Health*, *3*, 1–11. https://doi.org/10.1177/2055207617701276

Maas, J., van Dillen, S. M. E., Verheij, R. A., & Groenewegen, P. P. (2009). Social contacts as a possible mechanism behind the relation between green space and health. *Health and Place*, *15*(2), 586–595. https://doi.org/10.1016/j.healthplace.2008.09.006

Maas, J., Verheij, R. A., Groenewegen, P. P., De Vries, S., & Spreeuwenberg, P. (2006). Green space, urbanity, and health: How strong is the relation? *Journal of Epidemiology and Community Health*, *60*(7), 587–592. https://doi.org/10.1136/jech.2005.043125

Macdonald, E., Sauer, K., Howie, L., & Albiston, D. (2005). What happens to social relationships in early psychosis? A phenomenological study of young people's experiences. *Journal of Mental Health*, *14*(2), 129–143. https://doi.org/10.1080/09638230500060052

Mackett, R. L. (2021). Mental health and wayfinding. *Transportation Research Part F: Traffic Psychology and Behaviour*, *81*, 342–354. https://doi.org/10.1016/J.TRF.2021.06.014

Mair, C., Diez Roux, A. V., & Galea, S. (2008). Are neighbourhood characteristics associated with depressive symptoms? A review of evidence. *Journal of Epidemiology and Community Health*, *62*(11), 940–946. https://doi.org/10.1136/jech.2007.066605

Malpas, J. (2012). Putting space in place: Philosophical topography and relational geography. *Environment and Planning D: Society and Space*, *30*(2), 226–242. https://doi.org/10.1068/d20810

Markevych, I., Schoierer, J., Hartig, T., Chudnovsky, A., Hystad, P., Dzhambov, A. M., de Vries, S., Triguero-Mas, M., Brauer, M., Nieuwenhuijsen, M. J., Lupp, G., Richardson, E. A., Astell-Burt, T., Dimitrova, D., Feng, X., Sadeh, M., Standl, M., Heinrich, J., & Fuertes, E. (2017). Exploring

pathways linking greenspace to health: Theoretical and methodological guidance. *Environmental Research*, *158*(February), 301–317. https://doi.org/10.1016/j.envres.2017.06.028

McCormack, G. R., Rock, M., Toohey, A. M., & Hignell, D. (2010). Characteristics of urban parks associated with park use and physical activity: A review of qualitative research. *Health and Place*, *16*(4), 712–726. https://doi.org/10.1016/j.healthplace.2010.03.003

Moran, G. S., Russinova, Z., Gidugu, V., Yim, J. Y., & Sprague, C. (2012). Benefits and mechanisms of recovery among peer providers with psychiatric illnesses. *Qualitative Health Research*, *22*(3), 304–319. https://doi.org/10.1177/1049732311420578

Nemesis. (n.d.). *Nemesis-2 | Diagnostisch interview*. Retrieved November 24, 2021, from https://www.nemesis-2.nl/wat-is-nemesis-2/meetinstrumenten/diagnostisch-interview

Oldenburg, R., & Brissett, D. (1982). The third place. *Qualitative Sociology*, *5*(4), 265–284. https://doi.org/10.1007/BF00986754

Oliver, M. (1986). Social Policy and Disability: Some theoretical issues. *Disability, Handicap & Society*, *1*(1), 5–17. https://doi.org/10.1080/02674648666780021

Oliver, M., & Barnes, C. (2010). Disability studies, disabled people and the struggle for inclusion. *British Journal of Sociology of Education*, *31*(5), 547–560. https://doi.org/10.1080/01425692.2010.500088

Onken, S., Dumont, J., Ridgway, P., Dornan, D. H., & Ralph, R. O. (2002). Mental health recovery: What helps and what hinders? A national research project for the development of recovery facilitating system performance indicators. *{…} Health Program {…}*, *October 2002*, 161–162. http://www.mhcc.org.au/TICP/research-papers/NASMHPD-NTAC-2002.pdf

Pain, H. (2012). A literature review to evaluate the choice and use of visual methods. *International Journal of Qualitative Methods*, *11*(4), 303–319. https://doi.org/10.1177/160940691201100401

Place, C., Michon, H., & Hulsbosch, L. (2015). *Mensenrechten. Bericht panel Psychisch gezien*.

Prestopnik, J., & Roskos, B. (2000). The Relations Among Wayfinding Strategy use, Sense of Direction, Sex, Familiarity, and Wayfinding Ability. *Journal of Environmental Psychology*, *20*, 177–191. https://doi.org/10.1006/jevp.1999.0160

Pretty, J., Peacock, J., Sellens, M., & Griffin, M. (2005). The mental and physical health outcomes of green exercise. *International Journal of Environmental Health Research*, *15*(5), 319–337. https://doi.org/10.1080/09603120500155963

Price-Robertson, R., Obradovic, A., & Morgan, B. (2017). Relational recovery: Beyond individualism in the recovery approach. *Advances in Mental Health*, *15*(2), 108–120. https://doi.org/10.1080/18387357.2016.1243014

Price, M. (2013). Defining Mental Disability. In L. J. Davis (Ed.), *The Disability Studies Reader* (4th ed., pp. 298–307). Routledge.

Rasidi, M. H., Jamirsah, N., & Said, I. (2012). Urban Green Space Design Affects Urban Residents' Social Interaction. *Procedia - Social and Behavioral Sciences*, *68*(November), 464–480. https://doi.org/10.1016/j.sbspro.2012.12.242

Richardson, R., Westley, T., Gariépy, G., Austin, N., & Nandi, A. (2015). Neighborhood socioeconomic conditions and depression: a systematic review and meta-analysis. *Social Psychiatry and Psychiatric Epidemiology*, *50*(11), 1641–1656. https://doi.org/10.1007/s00127-015-1092-4

Rose, G. (2016). *Visual Methodologies: An Introduction to Researching with Visual Materials* (4th ed.). Sage.

Sartorius, N. (2002). Iatrogenic stigma of mental illness. *British Medical Journal*, *324*(7352), 1470–1471. https://doi.org/10.1136/bmj.324.7352.1470

Shakespeare, T. (2013). The Social Model of Disability. In L. J. Davis (Ed.), *The Disability Studies Reader* (4th ed., pp. 214–221). Routledge.

Shields-Zeeman, L., Bon-Martens, M. van, & Smit, F. (2021). *Samen werken aan een mentaal gezonde samenleving: Bouwstenen voor mentale gezondheidsbevordering en preventie*.

Simmel, G. (2012). The Metropolis and Mental Life. In J. Lin & C. Mele (Eds.), *The Urban Sociology Reader* (2nd ed., pp. 37–45). Routledge.

Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health Psychology Review*, *5*(1), 9–27. https://doi.org/10.1080/17437199.2010.510659

Söderström, O. (2017). "I Don't Care About Places": The Whereabout of Design in Mental Health Care. In C. Bates, R. Imrie, & K. Kullman (Eds.), *Care and Design Care: Bodies, Building, Cities* (pp. 56–73). John Wiley & Sons, Ltd.

Söderström, O., Empson, L. A., Codeluppi, Z., Söderström, D., Baumann, P. S., & Conus, P. (2016). Unpacking 'the City': An experience-based approach to the role of urban living in psychosis. *Health and Place*, *42*(January), 104–110. https://doi.org/10.1016/j.healthplace.2016.09.002

Stathopoulou, G., Powers, M. B., Berry, A. C., Smits, J. A. J., & Otto, M. W. (2006). Exercise Interventions for Mental Health: A Quantitative and Qualitative Review. *Clinical Psychology: Science and Practice*, *13*(2), 179–193. https://doi.org/10.1111/J.1468-2850.2006.00021.X

Ströhle, A., Höfler, M., Pfister, H., Müller, A. G., Hoyer, J., Wittchen, H. U., & Lieb, R. (2007). Physical activity and prevalence and incidence of mental disorders in adolescents and young adults. *Psychological Medicine*, *37*, 1657–1666. https://doi.org/10.1017/S003329170700089X

ten Have, M., van Weeghel, J., van Dorsselaer, S., Tuithof, M., & de Graaf, R. (2015). Houding van de algemene bevolking ten opzichte van (ex-) psychiatrische patiënten ; resultaten van NEMESIS - 2. *Tijdschrift Voor Psychiatrie*, *Thornicroft 2006*, 423–425.

Tew, J., Ramon, S., Slade, M., Bird, V., Melton, J., & Le Boutillier, C. (2012). Social Factors and Recovery from Mental Health Difficulties: A Review of the Evidence. *British Journal of Social Work*, *42*(3), 443–460. https://doi.org/10.1093/bjsw/bcr076

Thompson Coon, J., Boddy, K., Stein, K., Whear, R., Barton, J., & Depledge, M. H. (2011). Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A systematic review. *Environmental Science and Technology*, *45*(5), 1761–1772. https://doi.org/10.1021/es102947t

Thrift, N. (2006). Space. *Theory, Culture & Society*, *23*(3), 139–146. https://doi.org/10.1177/0263276406063780

Tran Smith, B., Padgett, D. K., Choy-Brown, M., & Henwood, B. F. (2015). Rebuilding lives and identities: The role of place in recovery among persons with complex needs. *Health and Place*, *33*, 109–117. https://doi.org/10.1016/j.healthplace.2015.03.002

Ulrich, R. S. (1984). View through a window may influence recovery from surgery. *Science*, *224*(4647), 420–421. https://doi.org/10.1126/science.6143402

Ulrich, Roger S., Simons, R. F., Losito, B. D., Fiorito, E., Miles, M. A., & Zelson, M. (1991). Stress

recovery during exposure to natural and urban environments. *Journal of Environmental Psychology*, *11*(3), 201–230. https://doi.org/10.1016/S0272-4944(05)80184-7

Valentine, G. (2008). Living with difference: reflections on geographies of encounter. *Progress in Human Geography*, *32*(3), 323–337. https://doi.org/10.1177/0309133308089372

van der Hoek, B. (2021). *Een mentaal gezonde samenleving en de rol van de ggz* (p. 17). Trimbos-instituut, Utrecht.

van Hoof, F., van Erp, N., Boumans, J., & Muusse, C. (2014). *Persoonlijk en maatschappelijk herstel van mensen met ernstige psychische aandoeningen*. Trimbos-instituut, Utrecht.

Vert, C., Gascon, M., Ranzani, O., Márquez, S., Triguero-Mas, M., Carrasco-Turigas, G., Arjona, L., Koch, S., Llopis, M., Donaire-Gonzalez, D., Elliott, L. R., & Nieuwenhuijsen, M. (2020). Physical and mental health effects of repeated short walks in a blue space environment: A randomised crossover study. *Environmental Research*, *188*(June), 109812. https://doi.org/10.1016/j.envres.2020.109812

Volksgezondheidsmonitor Utrecht. (2020a). *Open data Volksgezondheidsmonitor Utrecht*. https://www.volksgezondheidsmonitor.nl/tableau.php?id=6&doelgroep=jongeren&thema=Lichamelijke en psychische gezondheid&onderwerp=Psychische gezondheid&jaar=2019&indicator

Volksgezondheidsmonitor Utrecht. (2020b). *Psychische gezondheid*. https://www.volksgezondheidsmonitor.nl/psychische-gezondheid-utrecht/page70.html#bron_word_200

Wakefield, S., & McMullan, C. (2005). Healing in places of decline: (Re)imagining everyday landscapes in Hamilton, Ontario. *Health and Place*, *11*(4), 299–312. https://doi.org/10.1016/j.healthplace.2004.05.001

Weden, M. M., Carpiano, R. M., & Robert, S. A. (2008). Subjective and objective neighborhood characteristics and adult health. *Social Science and Medicine*, *66*(6), 1256–1270. https://doi.org/10.1016/j.socscimed.2007.11.041

Whitley, R., & Drake, R. E. (2010). Recovery: A dimensional approach. *Psychiatric Services*, *61*(12), 1248–1250. https://doi.org/10.1176/ps.2010.61.12.1248

Wiles, R., Cott, C., & Gibson, B. E. (2008). Hope, expectations and recovery from illness: A narrative synthesis of qualitative research. *Journal of Advanced Nursing*, *64*(6), 564–573. https://doi.org/10.1111/j.1365-2648.2008.04815.x

Williams, A. (1998). Therapeutic landscapes in holistic medicine. *Social Science and Medicine*, *46*(9), 1193–1203. https://doi.org/10.1016/S0277-9536(97)10048-X

Yanos, P. T., Roe, D., & Lysaker, P. H. (2010). The impact of illness identity on recovery from severe mental illness. *American Journal of Psychiatric Rehabilitation*, *13*(2), 73–93. https://doi.org/10.1080/15487761003756860

Yanos, P. T., Rosenfield, S., & Horwitz, A. V. (2001). Negative and supportive social interactions and quality of life among persons diagnosed with severe mental illness. *Community Mental Health Journal*, *37*(5), 405–419. https://doi.org/10.1023/A:1017528029127

Zhang, Y., Kang, J., & Kang, J. (2017). Effects of Soundscape on the Environmental Restoration in Urban Natural Environments. *Noise & Health*, *19*(87), 65. https://doi.org/10.4103/NAH.NAH_73_16

Appendix 1: Informationflyer professionals

Psychische gezondheid in de stad

Voor het onderzoek 'Psychische gezondheid in de stad' willen we weten hoe inwoners met een psychiatrische aandoening de openbare ruimte in de stad ervaren. Daarvoor hebben we uw hulp nodig. In deze folder leest u meer over het onderzoek en welke hulp wij van u vragen.

Onderzoek

Dit onderzoek is bedoeld om meer inzicht te krijgen in hoe mensen met een (ernstige) psychiatrische aandoening de openbare ruimte in de stad ervaren, en wat de rol hiervan is bij hun herstel. Dit inzicht helpt de gemeente om bij de inrichting van die openbare ruimte hier meer aandacht voor te hebben. Daarom wordt dit onderzoek in samenspraak met de Gemeente Utrecht uitgevoerd.

Welke deelnemers zoeken we?

- Mensen met een (ernstige) psychiatrische aandoening,
- die tussen de 18 en 65 jaar oud zijn,
- woonachtig zijn in de gemeente Utrecht,
- Nederlands verstaan en spreken,
- beschikken over een digitale camera of smartphone én de vaardigheden om hiermee foto's te maken en te verzenden.

Wat houdt deelname aan het onderzoek in?

Het onderzoek bestaat uit twee delen.

1. We vragen deelnemers binnen een week 10 foto's te maken van belangrijke plekken in de stad die zij tegenkomen in hun dagelijks leven.
2. We maken een afspraak voor een gesprek van ongeveer 1 uur waarin de onderzoeker de foto's met de deelnemers bespreekt. Daarbij gaat het over de betekenis van de gefotografeerde plekken voor mentale gezondheid van de deelnemer.

   In dit gesprek stelt de onderzoeker geen directe vragen over de aandoening of de behandeling.

In overleg met de deelnemer vinden de gesprekken fysiek plaats op een nog te bepalen locatie, óf online door beeldbellen met een applicatie naar keuze. Als waardering voor hun deelname krijgen de deelnemers een VVV-bon t.w.v. €10,- aangeboden.

Wat vragen we van u?

Als organisatie of professional bent u in direct contact met Utrechtse inwoners die voldoen aan de inclusiecriteria voor deelname. Wij vragen u om een aantal van deze inwoners te polsen of zij mogelijk interesse hebben om aan ons onderzoek deel te nemen.

Bij interesse verzoeken wij u om deze inwoners in contact te brengen met de onderzoeker. U kunt hiervoor, uiteraard mét toestemming van de desbetreffende persoon, de contactgegevens doorsturen naar de onderzoekers. Ook kan de potentiële deelnemer zelf contact opnemen.

We maken dan eerst een afspraak waarbij het onderzoek en de werkwijze worden toegelicht. De geïnteresseerde deelnemer krijgt daarna de tijd om zijn of haat keuze te maken.

Contact en aanmelden

Neem voor vragen en aanmelden contact op met Jits van den Ende, via jende@trimbos.nl.

Appendix 2: Informationflyer potential participants

Psychische gezondheid in de stad

Voor het onderzoek 'Psychische gezondheid in de stad' willen we weten hoe inwoners met psychische klachten de openbare ruimte in de stad ervaren. In deze folder leest u meer over het onderzoek en over wat we van u vragen bij deelname.

Onderzoek

Dit onderzoek is bedoeld om meer inzicht te krijgen in hoe mensen met psychische klachten de openbare ruimte in de stad ervaren, en of dit invloed kan hebben op het herstel hiervan. Dit inzicht helpt de gemeente om bij de inrichting van die openbare ruimte hier meer aandacht voor te hebben. Daarom wordt dit onderzoek in samenspraak met de Gemeente Utrecht uitgevoerd.

Welke deelnemers zoeken we?

- Mensen die psychische klachten ervaren of hebben ervaren,
- die tussen de 18 en 65 jaar oud zijn,
- woonachtig zijn in de gemeente Utrecht,
- Nederlands verstaan en spreken,
- beschikken over een digitale camera of smartphone én de vaardigheden om hiermee foto's te maken en te verzenden.

Wat houdt deelname aan het onderzoek in?

Het onderzoek bestaat uit twee delen.

1. We vragen u om 10 foto's te maken van belangrijke plekken in de stad die u tegenkomt in uw dagelijks leven.
2. We maken een afspraak voor een gesprek van ongeveer 1 tot 1,5 uur waarin de onderzoeker de foto's met u bespreekt. Daarbij gaat het over de betekenis van de gefotografeerde plekken voor uw mentale gezondheid. In dit gesprek stelt de onderzoeker geen directe vragen over de aard van de klachten of de behandeling.

In overleg met de deelnemer vinden de gesprekken fysiek plaats op een nog te bepalen locatie, óf online door beeldbellen met een applicatie naar keuze. Als waardering krijgt u bij deelname een VVV-bon t.w.v. €10,- aangeboden.

Wat vragen we van u?

Bent u geïnteresseerd in het onderzoek, en denkt u er over na om deel te nemen? Dan kunt u contact opnemen met de onderzoeker. Zijn contactgegevens zijn onder aan deze pagina te vinden. Ook voor vragen kunt u terecht bij de onderzoeker.

Bij interesse maken we eerst een afspraak waarbij het onderzoek en de werkwijze worden toegelicht. U krijgt daarna de tijd om te beslissen of u deel wilt nemen aan het onderzoek.

Contact en aanmelden

Neem voor vragen en aanmelden contact op met Jits van den Ende, via jende@trimbos.nl.

Appendix 3: Instruction photographs

Instructies foto's

In dit eerste deel van het onderzoek vraag ik u om foto's te maken van plekken in de stad, die belangrijk voor u zijn. Deze handleiding kan u hierbij helpen. We geven hier aan wat u op de foto's kan zetten. Daarna geven we ook informatie over het maken van de foto's en het opsturen van de foto's.

1. Wat zet u op de foto?

We willen weten welke plekken in de stad Utrecht belangrijk voor u zijn. We vragen u om komende week goed op te letten als u buiten uw huis bent. Zijn er plekken die u een bepaald gevoel geven? Dit kan op twee manieren zijn:

- Een plek kan u een fijn gevoel geven.
- Een plek kan u een slecht gevoel geven.

Sta deze week dus ook extra stil bij uw gedachten als u buiten bent. Als u een plek ziet die u een **goed óf slecht gevoel** geeft, maakt u hier een foto van. Denk dan ook na waarom deze plek belangrijk voor u is.

U kiest zelf de plekken die u op de foto's zet. Ook al lijkt de plek nog zo ''normaal''. Het is belangrijk dat het plekken zijn in de openbare ruimte. Dat betekent dat het gaat om plekken die buiten te vinden te zijn. Dus op straat, op pleinen of in parken.

Aan het einde van de week stuurt u **10** foto's op. Om ervoor te zorgen dat er voldoende is om over te praten tijdens het gesprek mag u niet meer of minder dan 10 foto's opsturen. Heeft u meer foto's gemaakt tijdens deze week? Dan is het aan u om een selectie te maken van 10 foto's. U mag dan zelf bepalen waar u de keuze op baseert. Er zijn geen foute keuzes.

2. Praktische informatie

U maakt de foto's met uw eigen digitale camera of smartphone.

Let op met wat u op de foto's zet.

- Foto's in openbare ruimtes (op straat, parken, pleinen, enzovoort) zijn in de meeste gevallen toegestaan.
- Zet geen mensen herkenbaar op de foto. Het fotograferen van mensen van een grote afstand, in een groep, of onherkenbaar (op de rug gezien) mag wél.
- Respecteer de privacy van anderen. Als iemand aangeeft dat hij/zij niet op de foto wilt, maak de foto dan niet.

Aan het einde van de week stuurt u de foto's op naar de onderzoeker. Dit doet u met Cryptshare. U heeft hiervan een handleiding gekregen.

Heeft u tijdens het maken van de foto's nog vragen over wat wél en wat niet mag, stuur dan een email naar: Jende@trimbos.nl

Appendix 4: Topic list interviews

Topiclist interviews

Inleiding

- Welkom en toelichting interview
- Informed consent (indien nog nodig)
- Audio-opname
- Recht op te stoppen

Introductievraag:

- Waarom heeft u deze plekken uitgekozen om foto's van te maken?
- Is er een foto waar u mee zou willen beginnen? (als de participant niet uit eigen initiatief over een foto begint)

Vervolgvragen per foto:

- Waar is deze foto gemaakt?
- Wat ziet u op deze foto?
- Hoeveel tijd brengt u door op deze plek?
- Heeft u bepaalde herinneringen van deze plek?
- Heeft deze plek invloed op hoe u zich voelt, op uw stemming?
- Draagt deze plek bij aan uw herstel of juist niet?
- Waarom is deze plek van belang?
- Zijn er dingen die u anders zou willen zien in deze specifieke plek?

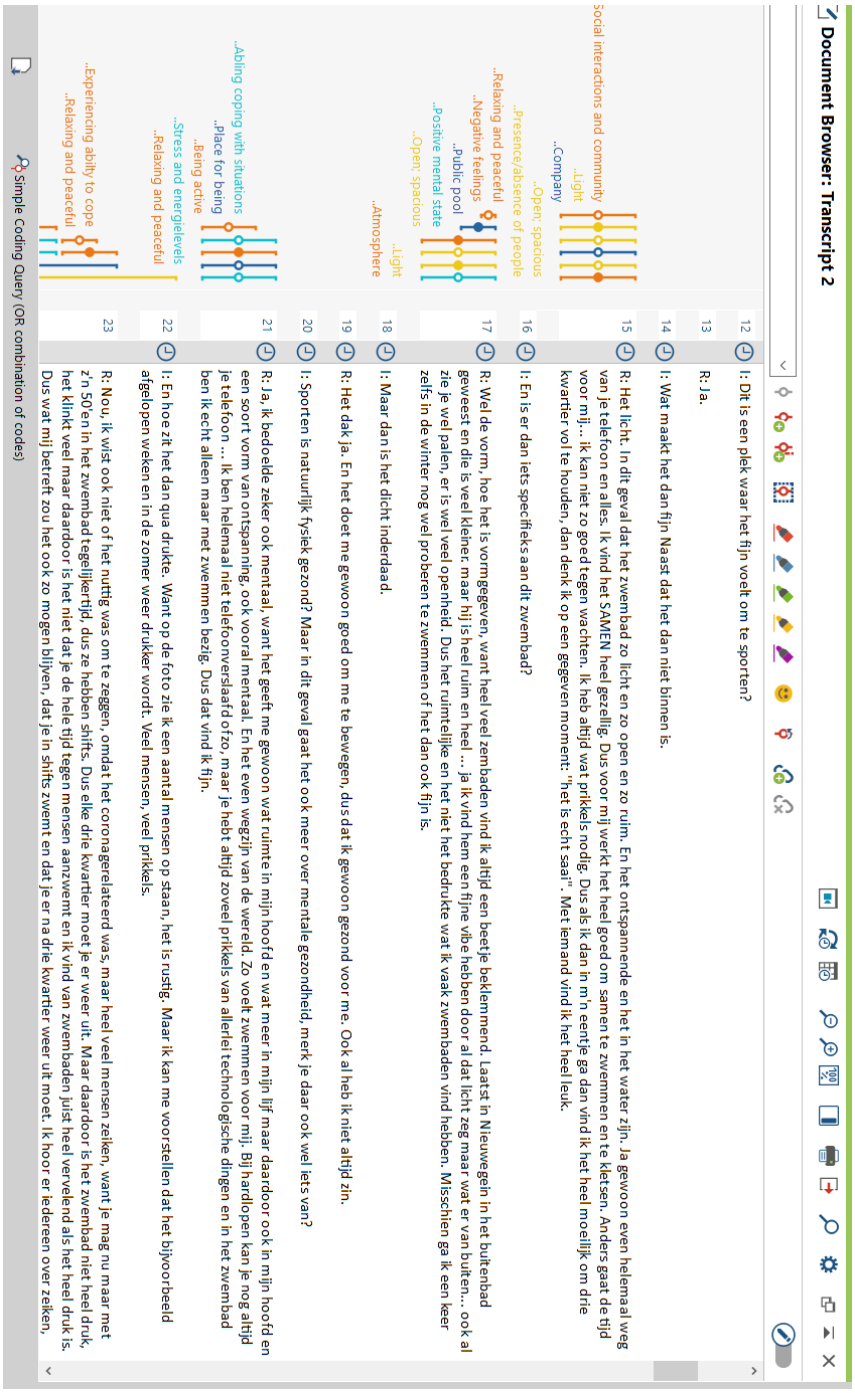
Algemene vragen:

- Zijn er plekken waar u wel een foto van had willen maken, maar wat om wat voor reden dan ook niet gelukt is?
- Zijn er plekken die u vermijd en daarom niet op een foto staan?

Afsluiting

- Stoppen opname
- Bedanken
- Toelichting wijze van verwerking
- Is er de wens om de transcriptie terug te koppelen?
- Vergoeding (indien van toepassing)

Appendix 5: Coding in MAXQDA



Appendix 6: Codebook

Photographs
Green
Urban
Places
(Semi-) public places
Places in general
Places outside the city
Private places
Public places: Streets and neighborhoods
Public places; Parks and playgrounds
Experiences
Negative experiences
Overflooded by impressions
Negative feelings
Negative social interactions
Negativity and negative thoughts
Positive experiences
Relaxing and peaceful
Atmosphere
Experiencing ability to cope
Positivity and good mood
Being active
Social interactions and community
Consequences
Positive consequences
Stress and energy levels
Abling coping with situations
Positive mental state
Hope and optimism
Negative consequences
Negative impact on abilities
Negative impact on mental state
Negative impact on level of stress and energy

Negative impact on self-image
Recovery
Connectedness
Hope and optimism
Identity
Meaning in life
Empowerment

Appendix 7: Original quotes in Dutch

3.2.1 A pleasant atmosphere

''Ja elk bankje heeft dus een quote: ''Be the reason someone smiles today''. Zo hebben ze allemaal een quote. Ik houd wel een beetje van esthetiek (…) Ik denk wel dat het voor mij iets heel simpels is dat die bankjes er zo leuk uit zien. Maakt voor mij wel echt uit voor de sfeer.'' (Anouk)

''Ik heb dan wel een foto van het winterse park Transwijk. (...) Ik ben lang geleden alweer op vakantie in Indonesië, dat was tijdens het regenseizoen dus dan staat echt de hele natuur in bloei en dat is voor mij echt genieten. Ik ben ook altijd blij als het weer voorjaar wordt, dan ben ik blij als de sneeuwklokjes weer uit de grond komen en als de fruitbomen weer in bloei staat met de bloesem.'' (Tjerk)

''Ja klopt (…) het is gewoon een tuin van iemand, maar die mensen hebben het zo... ja zo gezellig ofzo. Volgens mij is het ook half een moestuin en ik word daar gewoon heel vrolijk van, van hoe relatief wildgroei-achtig het is ingericht. Ja dat vind ik gewoon heel leuk.'' (Merel)

''Dit wandelpad is erg smal, wat ergens heel fijn is want het geeft een heel idyllisch beeld. Je wordt zelf bijna onderdeel van de natuur.'' (Christien)

''Ja, ik had de IBB gefotografeerd gewoon omdat ik... het gaat niet per se om de IBB, maar gewoon heerlijk zo'n studentengebied, ik geniet daar heel erg van om daar zelf wat in te zitten, omdat de sfeer die daar hangt gewoon heel chill is. En ik zou nou zelf niet eigenlijk niet op de IBB willen wonen, dat zou ik dan wel weer te rumoerig vinden, maar ik woon er dan wel super dichtbij en ik vind het altijd heel gezellig om er doorheen te lopen.'' (Merel)

3.2.2 Positive thinking

''Ja, nou goed.. als je hem ziet dan is het ... gewoon inderdaad een gevoel dat je thuis bent in je stad. Het is gewoon een landmark van de stad. Ook als je via de snelweg de stad binnenrijdt.. dan zie je van verre al de Domtoren staan en weet je van ''ik ben vlak bij huis''.'' (Tjerk)

3.2.3 Relaxing and peaceful

''(…) ik sta hier op een bruggetje eigenlijk, dat meestal mijn beetje standaard route is die ik dan loop in het park als ik daar gewoon ga lopen ... dan is het toch dat ik hier even stil sta om ... zo'n rustmomentje. Als ik dan toch even stil sta om even wat te drinken ofzo, dan kan ik het net zo goed doen op een plek waar ik nauwelijks prikkels heb. Waar ik alleen even af en toe de libellen voorbij zie komen (...)'' (Matthijs)

''Het geluid van de natuur, de geuren, de kleuren, het uitzicht, het water, het knisperende grind onder de voeten, top! Hier kom ik tot rust in mijn hoofd. Genieten van het hier en nu. Geen verwachtingen, geen verplichtingen. Gewoon even 'zijn'.'' (Christien)

''Het is op het wandelpad langs de Singel. In het najaar liep ik hier iedere dag, en vond ik het een hele prettige plek. Onder de prachtige grote bomen, een stukje natuur, in de oude stad. Hier vond ik toen rust in het drukke stadsleven.'' (Christien)

''Ik merk inderdaad dat als het wat minder goed gaat en ik kan een groene route nemen, dan kan ik de momenten daarna die weer wat drukker zijn, of socialer, meer stressvol, die kan ik dan wat beter hebben.'' (Jara)

3.2.4 Being active

''Ik denk dat ik me sowieso meer op m'n gemak voel... ik ben heel ongeduldig... of heel onrustig vanuit mezelf, ik weet niet zo goed, maar dat betekent dus ook dat ik me eigenlijk minder gestrest voel als ik iets aan het doen ben, dus ik voel me ook beter als ik wandel dan als ik ergens stil ga zitten.'' (Jara)

''Zeker als ik me depressief of somber voel en ik ga wandelen dan is het meer om mijn hoofd leeg te maken, maar dan ben ik ook aan het dagdromen maar dan gaat het meer... dan ben ik meer aan het verwerken waarom ik me zo depressief voel.'' (Nadine)

''Ik vind zwemmen echt heel erg fijn, alleen ik houd niet van die binnenzwembaden, maar nu zeg maar met Kromme Rijn (zwembad) *is in de zomer het dak eraf, dus je hebt een soort van binnen/buitenbad en het is natuurlijk, ik vind het nu extra speciaal na zo'n lange lockdown dat je gewoon weer kan en mag sporten en bewegen zeg maar. Dus voor mij is bewegen belangrijk en dat er een fijne plek voor is waar dat kan.''* (Anouk)

3.2.5 Positive social interactions

''Ik heb een hele positieve associatie met deze speeltuin, in de zomer hangen we daar aan de picknicktafel met een wijntje met de buren enzo en dan heel lang chillen. Dat is gewoon een gezellige plek met buren.'' (Anouk)

''In het park komen veel spelende kinderen met hun ouders en grootouders. Dus dat is gewoon een hele positieve omgeving, waarbij mensen ook … door belangstelling te tonen voor de kinderen, je ook snel een praatje kan aanknopen met die ouders of met die grootouders. En wat gewoon ook op prijs gesteld wordt, en gewaardeerd wordt. En dat geeft gewoon positieve energie.'' (Tjerk)

''Ik vind het SAMEN heel gezellig. Dus voor mij werkt het heel goed om samen te zwemmen en te kletsen. Anders gaat de tijd voor mij... ik kan niet zo goed tegen wachten. Ik heb altijd wat prikkels nodig. Dus als ik dan in m'n eentje ga dan vind ik het heel moeilijk om drie kwartier vol te houden, dan denk ik op een gegeven moment: ''het is echt saai''. Met iemand vind ik het heel leuk.'' ''Ik voel ook minder angst als ik met iemand ergens ben.'' (Anouk)

3.2.6 The ability to cope

''Het is inderdaad wel dat ik steeds beter leer om te gaan met die dingen omdat ik ... ik merk dan ''ik ben bij dit verkeerslicht'' of ''ohja ik ben bij deze rotonde, of bij dit kruispunt'', dat soort dingen... dat ik daar wel iets beter weet van ''ohja, wat is daar dan de bedoeling''.'' (Matthijs)

''Ik kan dat soort situaties … in elk geval kan ik me in dat soort situaties nog even redden en kan ik denken, ''weetje, ik had het misschien liever anders gezien, maar het is in elk geval is het een stuk minder'', ik denk ook dat het daarin ook gewoon is dat ik het makkelijker kan verwerken en dat die grens gewoon wat later komt. '' (Matthijs)

3.2.1 An unpleasant atmosphere

''Ik merk dat ik daar vooral last van heb als ik me inderdaad iets minder voel. Ik heb het niet zo erg dat ik die plekken echt moet vermijden, maar ik merk wel op dat soort momenten dat het niet echt bevorderlijk is voor hoe ik me voel. Dus als het op dat soort momenten niet hoeft, dan doe ik het ook niet.'' (Jara)

''Omdat ik in de supermarkt heel snel overprikkeld raak. Ik kan niet zo heel goed tegen ... Ik heb niet de angst voor de supermarkt, maar ik word snel getriggerd als mensen zo achter me lopen, nou met corona

is er iets meer afstand, maar achter je langs lopen of je even aantikken. Waardoor het me heel veel energie kost. En ik ben heel alert, dus ik zie alles. Ik scan altijd op gevaar'' (Anouk)

''Nou, ik heb soms wel wachtruimtes gehad waar je dan apart van elkaar zat. Dat je echt zo'n kleine ruimte had waar je wachtte, en ik kan me dan... het gaat nu wel echt heel erg goed met me, dus nu kan ik wel beter tegen dingen, maar ik was heel erg angstig voor bijvoorbeeld mannen die dichtbij me waren als er verder niemand bij was en dan houd ik dus van een wachtruimte waar bijvoorbeeld de assistente op uit kijkt.'' (Anouk)

''Dit is voor mij een onprettige plek. Dit viaduct is op mijn dagelijkse wandelrondje het moment dat ik van de natuur waar ik me prettig en rustig voel, weer terug de stad in ga. En daar is het helaas veel te druk voor mij!'' (Christien)

''Ik denk dat ik... het ligt er sowieso aan hoe het gaat op die dag, want als ik al wat meer gestrest of verdrietig ben, kan ik er wel gestrester of verdrietiger van worden. Maar ik realiseer me ook dat het vooral te maken heeft met mijn invulling van hoe dit eruit ziet.'' (Jara)

3.3.2 Sensory overload

''Twee minuten stilstaan voor een stoplicht terwijl er allerlei verkeer langs raast uit verschillende richtingen, verschillende geluiden: auto's, vrachtwagens, brommers, fietsers, getoeter, gepraat, het tikken van het stoplicht, het licht van het stoplicht enz. Voor een normaal mens misschien alleen maar saai vanwege het stilstaan en wachten, voor mij is het echt een complete hel! Op rustige kruispunten loop ik door rood om mezelf wat prikkels te besparen, maar alleen als het veilig is hoor.'' (Christien)

''Ja, en daardoor maakt het de situatie zo chaotisch dat je eigenlijk niet weet wie heeft als eerste voorrang, wie mag als eerste fietsen. Je ziet overal haaientanden en sommige fietsers zijn ZO voorzichtig dat ze opeens midden op de weg gaan stoppen en dat ik denk ''auto's komen overal vandaan''. Het is super druk, vooral op zaterdag als iedereen buiten is. Dus dan kies ik liever een andere route.'' (Nadine)

''Het is wel voorgekomen, maar dat is wel wat langer geleden, toen ik dus nog in Arnhem woonde. Dat als ik geen tijd had om een omweg te maken, en ik moest dan naar een heel druk college waarvan ik wist dat het interactief zou zijn. Als ik dan door de stad moest, dat ik alsnog kon kiezen, na te veel prikkels, ''nouja, laat dit college maar zitten. Ik haal het later wel in''. '' (Jara)

''Jaa, ik heb daar wel altijd dat ik wel redelijk overprikkeld wordt daardoor en dat ik dan merk dat dat toch zoiets is, zeker als ik een langere tijd daar moet zijn, dat het me dan toch wel beïnvloedt ook in hoe ik op de dingen reageer, maar ook hoe goed ik er op reageer. Dus bijvoorbeeld van ... ik word ook minder ... dat het minder snel is hoe ik kan reageren (…)'' (Matthijs)

''Wandelen is voor mij een manier om tot rust te komen en om op te laden, zolang de omgeving niet te druk is. Anders raak ik alsnog overspoeld met nieuwe indrukken waar ik dan weer van moet bijkomen als ik thuiskom. Mijn hoofd kan dan op hol slaan en dat kost me heel veel energie.'' (Christien)

''Dus wat mij betreft zou het ook zo mogen blijven, dat je in shifts zwemt en dat je er na drie kwartier weer uit moet. Ik hoor er iedereen over zeiken, maar als je het over prikkels hebt en over mijn mentale gezondheid, kan ik er niet tegen dat er zo veel mensen zijn, dan heeft het niet meer zo die ontspannende werking.'' (Anouk)

3.3.3 Negative social interactions

''Je wordt best wel vaak aangesproken: ''ooh maar mag je er wel mee naar binnen?'' (…) Voor mijn gevoel is er nog weinig bekend over hulphonden bij psychische problematiek. Waardoor ze wat minder vaak begrepen worden. (…) Ik heb niet echt negatieve ervaringen. MAAR ik voel wel veel onwetendheid. Dus het elke keer weer uit moeten leggen, dus dat is het meer wat ook wel bepaalde energie kost. ''Ja hij mag mee, want het is een hulphond''.'' (Anouk)

''Ik merk wel van, dat ik... ik bedoel ik sta daar drie dagen, die andere drie dagen worden door andere mensen opgevuld, dus er vind wel een soort overdracht plaats van de ene naar de andere dag. Dat ik dan wel heel gevoelig ben, gevoelig reageer op die overdracht. Dat als er andere mensen ... als collega's commentaar hebben, voel ik mij heel snel persoonlijk aangevallen van ''ik heb het niet goed gedaan'', en dan daar ben ik heel gevoelig voor en dan kan met één zo'n opmerking zo'n hele positieve dag teniet gedaan worden.'' (Tjerk)

3.3.4 Negative thinking

''Want soms kan ik ook juist denken van ''ooh die kinderen die...'', omdat ik zelf op de basisschool ook nog probleemloos was. En dan soms is dat wel of juist van dat vrije van een kind wat me blij kan maken of soms ook wel dat ik denk van ''ik hoop…'' dat ik er soms ook nog wel een beetje verdrietig van kan worden dat ik denk ''ja zo was ik ook vroeger, maar nu niet meer''.'' (Merel)

''Ik heb sowieso al heel snel, maar dat heeft inderdaad meer te maken met hoeveel mensen er zijn, ik heb heel snel dat als er heel veel mensen zijn, dan ben ik geneigd om heel veel voor die mensen in te vullen, terwijl natuurlijk de meeste mensen zijn helemaal niet bezig met andere mensen als ze ergens lopen maar meer met zichzelf. Maar doordat ik altijd toch een beetje door mijn klachten op mijn hoede ben en ik dingen voor andere mensen ga invullen, dan is het best wel vermoeiend soms om ergens te zijn waar heel veel mensen zijn.'' (Jara)

''Nou ook gewoon sowieso eigenlijk plekken. Dan dacht ik dat iedereen dat aan me kon zien en totaal niet waar maar... en dan dacht ik helemaal negatief over mezelf en dan dacht ik ''oh wat zullen ze van me denken'' en heel onzeker en dan alles bekeek ik vanuit een soort zwarte bril zegmaar. En alles was ook een trigger, ''ik kan er maar beter niet zijn'' of nog verdere gedachten zelfs. Dus ik heb toen ook wel een tijdje dingen vermeden maar dan maakte het niet uit.'' (Anouk)