ALL OVER THE PLACE?

A contextualized and experiential perspective of ADHD

"It sounds pretty illogical, but for some reason it works for me."

Master's thesis
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Abstract

While it is acknowledged that ADHD affects all aspects of life, existing ADHD-research is dominated by a psycho-medical discourse. This disregards context and invalidates ADHDers' lived experiences, both in content as well as methodologically, resulting in an incomplete and stigmatized understanding of ADHD. Disability geography and neurodiversity have established the necessity of contextualized experiential perspectives in constituting a more holistic understanding of other body-mind differences, but have not yet provided such perspectives on ADHD. This thesis contributes to the destigmatization and a holistic neurodiversity-understanding of ADHD by exploring a contextualized and experiential perspective adopting a methodology suiting ADHDers' ways of being, knowing, and doing. Data were collected through a negotiated qualitative approach, consisting of a pilot group interview, walking interviews, and participant-generated data. The study was conducted with eight participants living in the region of Groningen, The Netherlands. Four inextricably connected and continuously shifting themes that shape ADHDers' experience of and interaction with environments were identified: the tendencies 1) openness, and 2) a constant pursuit of balancing stimulation; and the tactics 3) renegotiating environmental encounters, and 4) utilizing environmental encounters to renegotiate ADHD. The findings suggest that ADHD is a relational phenomenon that is not inherently negative nor positive, but manifested in the interaction between person and place, which can only be fully understood and valued through ADHDers' experiences. Therefore, a reconceptualization of ADHD as an embodied process of being different rather than an inherent state of being deficient is proposed.

Key words: ADHD; neurodiversity; lived experience; relational approach; destigmatization; walking interviews.

Preface

I am an ADHDer. Or, I have ADHD. It depends. Being a substantial part of my life, my academic journey, and who I am, it is not surprising that ADHD became the subject of my master's thesis. And I am glad that I took on this project, although in all honesty, I am equally happy that it is finished. It has been educational undertaking, both personally as well as academically. Undeniably, the process has been challenging and at times proven to be a painful confrontation with my obstacles. More than once, I have questioned the validity of the perspective that I explored. In hindsight, I realize that it is exactly this doubt that made me take on this project in the first place: to offer a perspective of ADHD *by* ADHDers, which is in my opinion often too easily overlooked or invalidated. After finishing this project, I can wholeheartedly conclude that ADHDers' do and should have a vital say in how we understand ADHD.

I owe my gratitude to the ADHDers who contributed to this research for so openly sharing their experiences with me. Without the detailed insights into your particular ways of being, knowing and doing, I would not have been able to conduct this research in the first place. I also want to thank my supervisor, Dr. Bettina van Hoven for the numerous brainstorm sessions and feedback rounds, and for making time for me in her busy schedule, but mostly for her encouragement and belief in me and this project. Then, I want to thank Annika and Lisanne for providing feedback on earlier drafts. But above all, my special thanks goes out to the people closest to me, especially Daniël, Lisanne, my mom and my sister. Without you, I could not have finished this thesis. Words cannot describe what your unconditional love and support means to me. Knowing that you will have my back no matter what inspires me to keep moving forward.

I hope you will find my thesis enjoyable and informative!

Liselotte Vreeling

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I. Introduction

"Now that we're walking here, it slowly gets… less... I automatically get more relaxed in my head… Less distractible. That's also why I chose this forest route. (…) Well, I'd sit down at one of those trees, at sunrise or sunset, because I… there's this meadow [to look at]. The benefit of an open meadow is that there are no stimuli, and that makes you think more calmly… because you don't get so distracted." [i]

Felix (32, ADHD-C)

This quote is from my interview with Felix. While we were walking, we encountered a location that was important to him. Reading the quote, you can almost feel the relaxation that Felix describes; exemplifying the interaction between him and the place. Moreover, it radiates a sense of agency, since Felix utilizes this place to his benefit. Finally, it paints a picture that may differ from the stereotype that people have of ADHD and ADHDers[1]: a child, most likely a boy, who cannot contain himself and bothers others. The name 'Attention Deficit Hyperactivity Disorder' in itself reflects the second-hand understanding of what ADHD is and who ADHDers are, as it describes an interpretation of observed behavior rather than internal experience. Judging by the quote, there appears to be a discrepancy between ADHDers' experiences and the stigma of ADHD. This discrepancy forms the heart of this thesis.

It is due to this discrepancy that I struggled when I was diagnosed with the Combined Type of ADHD (ADHD-C) at age 21. I remember feeling simultaneously comforted and confused; as if I was pushed into a box that kind-of-but-not-quite fitted me. I had always behaved in ways that could be difficult to understand for others and at times myself, and the ADHD-label in itself did not change that, but still: getting the diagnosis implied that I fit the stigma. Although, in hindsight, I had already experienced and internalized this ADHD-stigma long before my diagnosis. For example, when people scoffed: 'heb jij je pilletje wel gehad?'[2] – can you act normal – when I was so enthusiastic that I simply seemed to burst with energy. This would always upset me, as I did not understand how enthusiasm could be abnormal, and felt that I was nothing like the disruptive ADHD-boys in my class. Was I?

This thesis is a deeply personal project. While such an explicit stance is traditionally rejected in research, as academics are expected to be objective and distant, my positionality forms a unique strength in this case. I make no pretenses of my ability to represent the diverse ADHD-community as a whole, and I do not intend to do so. Yet, my position gives me the ability to examine ADHD-being *as* an ADHD being. In so doing, this project forms a (modest) answer to the call by neurodiversity academics for neurodivergent scholars to explicitly include their own lived experiences for "[t]he nurturing of greater understanding and appreciation of neurologically different ways of knowing, thinking and doing

[1] A discussion of the importance of terminology in the context of this research and the justification of why I chose to use the term 'ADHDer/s' in this thesis can be found in Box 1, p. 6

[2] Best translated to: 'did you take your pills?'

(…)" (Judge, 2018, p. 1102). Thereby, this thesis connects to wider societal and academic debates on how 'difference' or 'diversity' is treated and understood. Throughout my personal and academic life, I have stumbled upon a gap between how I experience ADHD and how it is often understood. Many things are thought and said *about* my 'knowing, thinking and doing', but somehow my own perspectives appeared to be invalid. However, I also found my perspectives resonated and validated within online spaces of ADHD and neurodiversity. As a geographer, this made me wonder: how about ADHDers' perspectives in relation to physical space?

In western societies, ADHD is the most diagnosed and researched neurodevelopmental disorder today, and is acknowledged to affect all aspects of people's lives (Armstrong, 2010; Carr-Fanning, 2020; Erlandsson & Punzi, 2017; Lloyd, Stead & Cohen, 2006; Prosser, 2008). This is increasingly recognized within society. For example, 'low-stimuli'-events at fun fairs, supermarkets, and museums (e.g. Rijksmuseum, 2021), have gained popularity over the last couple of years (NOS, 2018). This entails that for limited time, music and lights are muted to allow people who are sensitive to stimuli, such as autistic people, ADHDers, and epileptic people, to have a positive experience without getting overstimulated. Thus, there is some awareness that while locations may be common or enjoyable for some, they may be unpleasant or even exclusionary for others.

However, existing ADHD-research fails to fully address this societal awareness. Research is still dominated by a psycho-medical discourse and focused on identifying individual deficits as opposed to a predetermined 'standard', and how these can be treated or cured. Limited attention is paid to the interplay between various environments and these presumed deficits. When context is considered, these are contexts with strict social expectations, such as the classroom (e.g. Carbone, 2001), the workplace (e.g. Lasky *et al.,* 2016), or driving (e.g. Biederman *et al*., 2007; Reimer *et al*., 2010). Moreover, studies often focus observable and measurable behaviors, while ADHDers' inner experiences are not or limitedly included, both in content (what is studied) as well as methodologically (how this is studied) (Carr-Fanning, 2020; Erlandsson & Punzi, 2017; Judge, 2018; Prosser, 2008). Finally, by concentrating on deficits, positive characteristics associated with ADHD, such as creativity and entrepreneurialism, are disregarded, contributing to the stigmatization of ADHD as inherently negative (Carr-Fanning, 2020; Erlandsson & Punzi, 2017; Sedgwick, Merwood & Asherson, 2019).

This dominance of a psycho-medical discourse is comparable to the academic and societal tendency to pathologize and stigmatize other body/mind differences (Hansen & Philo, 2007; Imrie, 1996; Kitchin, 1998). Academics within disability geography and neurodiversity have extensively demonstrated the necessity of contextualized and experiential perspectives in countering this tendency. For example, disability geographers have provided such insights into various groups with body/mind differences, ranging from physical and sensory impairments (e.g. Chouinard, Hall & Wilton, 2010; Hansen & Philo, 2007; Kitchin, 1998) to mental illnesses and disorders (e.g. Boyle, 2019; Davidson, 2000;

McGrath, Reavey & Brown, 2008). Recently, neurodiversity has been included in disability geography by studies on how autistic people experience and interact with environments (e.g. Davidson & Henderson, 2010; Toronyi, 2019). Neurodiversity is a relatively new concept in which neurological differences are reconceptualized as natural human variations in ways of being, knowing and doing rather than inherent pathology (Armstrong, 2010; Craine, 2019; Judge, 2018). In these fields, it has been established that: 1) people experience and interact with environments in different, at times problematic ways due to their body-mind characteristics; 2) social and physical space is imbued with assumptions about how a person uses or experiences them, which disabled people are expected to meet; and 3) people with body/mind differences are aware of (potentially) problematic environmental encounters, and adopt a variety of renegotiating tactics. Despite these insights, such contextualized and experiential studies on ADHD from a neurodiversity perspective are, to the best of my knowledge, nonexistent.

There are two overlapping gaps in the current understanding of ADHD. The first gap exists in psycho-medical research on ADHD, which is limited both in scope as well as in focus. As such, ADHDers' lived experiences and the influence of context on the manifestation of ADHD are overlooked. The second gap is found in disability geography and neurodiversity, wherein researchers have provided contextualized experiential insights in order to destigmatize the understanding of various other body/mind differences, but have not yet addressed ADHD. With this thesis, I aim to put ADHD on the map. The objective is to begin filling these gaps by geographically exploring the experiences of ADHDers in their daily environments. More specifically, this thesis aims to shed light on the interaction between ADHDers and various environmental characteristics. The research questions are:

- How do ADHDers living in (the region of) Groningen experience and interact with their everyday environments?
    - To what extent do they adopt tactics in these experiences and interactions, and why?
    - To what extent do they utilize environments in their experience of ADHD, and why?

This thesis is an explicit critique of the medicalization of ADHD and a deliberate move away from epistemological frameworks "(…) that define the object of concern before participants have even begun to speak" (McGrath *et al.*, 2008; p. 63). As is emphasized within neurodiversity, to fully understand neurodivergent lived experiences, how these are examined should be conform the ways of being, knowing and doing of the studied group. Therefore, the second aim of this thesis is to adopt a methodology that suits ADHDers' experiences and their way of communicating these. In order to do this, I adopted a negotiated qualitative approach, using a pilot study, walking interviews and participant-generated data. In so doing, I hope to contribute to a more holistic and destigmatized neurodiversity-perspective of ADHD, which aims to understand and value people's ways of knowing, thinking, and doing, rather than to compare them to a pre-determined standard. This research may serve as an entry

point for future geographical and/or neurodiversity studies on ADHD, and help to identify ways for urban planners and policy makers to include ADHD and neurodiversity in general into their plans. Together, this may induce a greater understanding and appreciation of different ways of being, knowing, and doing, and ultimately lead to a more inclusive society.

In the following chapter of this thesis, I first discuss the current psycho-medical understanding of ADHD. Then, I review contextualized and experiential insights into various groups of body/mind differences, and how these may inform this thesis, both in content as well as methodologically. Thirdly, I review existing insights into the interrelation between ADHD and context. In the third chapter, the methodological choices and ethical considerations are discussed. In Chapter 4, the main findings of this thesis are presented. In Chapter 5, these findings are connected to existing knowledge on ADHD, disability geography, and neurodiversity. In the final chapter, I present the conclusions of this research, along with its limitations and recommendations for future research.

II. Theoretical Framework

Disabilities and disorders, or body-mind differences (Kitchin, 1998), can be understood in diverse ways. This thesis aims to offer a bottom-up and contextualized perspective of ADHD. How a disability, disorder, or difference is conceptualized determines the kind of research that is conducted and thus the knowledge that is generated (Davidson & Henderson, 2010; Hansen & Philo, 2007; McGrath *et al.*, 2008). The terminology that is used to describe the researched group plays a substantial part in this. An overview of terminological considerations and the justification of the terminology adopted in this thesis can be found in Box 1 (p. 10). This chapter is divided into four sections. First, I outline the current psycho-medical understanding of ADHD, and discuss the consequences and limitations of this understanding. Secondly, I introduce disability geography and review how the embedded social model of disability in this field can contribute to the understanding of ADHD. In the third section, I consider how neurodiversity relates to the social model of disability, and offer a description of ADHD from a neurodiversity perspective. Lastly, I highlight the contextuality of ADHD, and review existing ADHD research that considers context to illustrate the necessity of including ADHDers' contextual experiences in research, both in content as well as methodologically.

1. The psycho-medical understanding of ADHD

ADHD is the most diagnosed and researched neurodevelopmental disorder in Western societies today (Carr-Fanning, 2020; Prosser, 2008; Stewart, 2017). Still, ADHD is a controversial diagnosis, and the exact causal mechanisms are unknown (Stewart, 2017). Comparable to other body-mind differences, such as physical and mental disabilities and autism, research on ADHD is dominated by a psycho-medical discourse (Davidson, 2000; Hansen & Philo, 2007; Judge, 2018; Prosser, 2008). This discourse entails that research is approached through the medical model of disability. The principle of the medical model of disability is that someone suffers from an inherent physical or mental impairment preventing them from being 'normal' or 'healthy'. Consequently, this impairment requires treatment or a cure, such as therapy, technological/mechanical aids, or medication (Erlandsson & Punzi, 2017; Hansen & Philo, 2007; Kitchin, 1998; Woods, 2017). Underlying this model is an assumption of a 'standard' or 'normal' body or mind, and that those who divert from this should be helped to meet this standard (Hansen & Philo, 2007; Kitchin, 1998). Research conducted through the medical model thus locates the source of impairment *within* the individual, and conceptualizes disability as something that a person *is* as opposed to a standard (Carr-Fanning, 2020; Hansen & Philo, 2007; Kitchin, 1998; Lloyd *et al.,* 2006).

Psycho-medical research provides the following understanding of ADHD. In the Fifth Diagnostic and Statistical Manual of Mental Disorders (DSM-5), the common handbook for psycho-medical

professionals to diagnose and treat mental conditions, ADHD is classified as a neurodevelopmental disorder with three main symptoms (American Psychiatric Association, 2013; Rothstein, 2012):

- Hyperactivity – The inability to sit still;
- Inattention – The inability to sustain focus;
- Impulsivity – The inability to control one's actions.

Based on these symptoms, three behavioral subtypes are distinguished: Predominantly Inattentive Type (ADHD-I; also known as ADD), Predominantly Hyperactive/Impulsive Type (ADHD-H), and Combined Type (ADHD-C) (American Psychiatric Association, 2013). Depending on the subtype, ADHDers may have trouble sustaining focus, sitting still, following instructions, and finishing tasks, and may disrupt others, intrude on conversations, or daydream..

In addition to the main symptoms, research demonstrates that ADHD is often accompanied by other mental conditions such as anxiety disorders, Obsessive-Compulsive Disorder, depression, autism,

BOX 1 – TERMINOLOGY: ADHDER, PERSON WITH ADHD, OR ADHD PERSON?

The terminology that one uses to refer to (groups of) people is significant in any research, because it both signifies as well as shapes how they are perceived (Davidson & Henderson, 2010; Sinclair, 2013; Stewart, 2017). Therefore, choosing the appropriate terminology requires careful consideration. Within disability studies, there is widespread debate on what exactly is appropriate and why, and it should be noted that there is no 'ideal' choice. Two broad perspectives can be distinguished: person-first language (e.g. person with ADHD, or person who has ADHD), and identity- or condition-first language (e.g. ADHDer, or ADHD person). Underlying these perspectives is a distinction in how disability or disorders are perceived: as a solely negative condition, or as part of someone's identity (Davidson & Henderson, 2010; Stewart, 2017).

Researchers working in psycho-medical fields often adopt person-first terminology. Supporters of this terminology contend that by literally locating the 'person' before the 'condition', it is emphasized that they are first and foremost a human being, regardless of their physical or mental disability. Authors using this terminology argue that using identity- or condition-first language is a form of reductionism; reducing an individual to their condition, thereby neglecting their humanity and human rights (Carr-Fanning, 2020; Davidson & Henderson, 2010; Sinclair, 2013; Stewart, 2017).

However, person-first terminology is rejected by others, who contend that this confirms an ableist assumption that a disability lessens someone's value, and therefore the person *should* be seen separately from their condition (Davidson & Henderson, 2010; Stewart, 2017). As Sinclair (2013, p.17) argues: "it is only when someone has decided that the characteristic being referred to is negative that suddenly people want to separate it from the person". Neurodiversity advocates take this criticism of person-first language even further and argue that this language insinuates that a neurotype (otherwise perceived as disorder) *can* be separated from an individual, while they contend that separating the neurotype from the person is not just undesirable, but impossible, because it is part of their identity (Craine, 2019; Davidson & Henderson, 2010; Sinclair, 2013).

Following this argumentation, I have chosen to refer to adopt the term 'ADHDer/s'. This thesis is about exploring the experiences of ADHDers from a neurodiversity perspective, meaning that ADHD is conceptualized as a distinct way of being in the world rather than a disorder. Therefore, the terminology that I use should reflect the participants' experiences of ADHD. The participants of this study referred to and identified with ADHD is diverse ways. Their 'ADHD story' often reflected a certain ambivalence, as they sometimes referred to ADHD as a condition that they *have*, and other times as part of who they *are.*

and Bipolar Disorder (Carr-Fanning, 2020; Stewart, 2017). ADHD is acknowledged to cause impairment in many, if not all, aspects of a person's life (Carr-Fanning, 2020; Nielsen, 2017; Lloyd *et al.*, 2006; Prosser, 2008). To illustrate this: ADHDers are more likely to underperform in school, have relational and social issues, have low self-esteem, commit suicide, and have a lower socio-economic status than their non-ADHD peers (Armstrong, 2010; Carr-Fanning, 2020; Erlandsson & Punzi, 2017; Prosser, 2008).

While the exact causal mechanisms of ADHD are thus far unknown, psycho-medical research indicates that its origin is neurobiological (Lasky *et al.,* 2016; Lloyd *et al.*, 2006; Stewart, 2017). Moreover, ADHD is considered to be highly heritable, meaning that ADHD-children most likely have at least one parent who meets diagnostic criteria too (Lloyd *et al.*, 2006; Stewart, 2017). While discussing the exact neurological processes is outside the scope of this thesis, it is relevant to mention their consequences. Studies on ADHD-brains indicate that there are shortages in the neurotransmitters dopamine, serotonin, and norepinephrine, or "the brain's reward system" (Nielsen, 2017; p. 269), as compared to typical brains. Due to this, ADHD-brains need more stimulation to avoid boredom, have trouble with executive functions such as planning and organizing tasks, and regulating emotions and attention (Armstrong, 2010; Lasky *et al.,* 2006; Lloyd *et al.*, 2006; Nielsen, 2017; Rothstein, 2012; Stewart, 2017). Treatment of ADHD mostly consists of a combination of stimulant medication, such as methylphenidate, (aka Ritalin or Adderall) and cognitive-behavioral therapy (CBT) to offset these shortages (Prosser, 2008; Rothstein, 2012; Stewart, 2017)

This psycho-medical research has contributed to the increased recognition and treatment of ADHD. However there is increasing criticism on this psycho-medical understanding (Carr-Fanning, 2020; Erlandsson & Punzi, 2017; Prosser, 2008). A first strand of criticism revolves around the diagnostic criteria and resultant research. Firstly, although it is increasingly recognized that ADHD persists into adulthood, the diagnostic criteria and most research still focus on children and adolescents (Lasky *et al.,* 2016; Lloyd et al, 2006; Stewart, 2017). Secondly, while it was previously believed that ADHD mostly affected males, over the last two decades it is acknowledged that females are just as likely to have ADHD, but that it is manifested differently (Carr-Fanning, 2020; Lloyd *et al.,* 2006). Nevertheless, most ADHD-research is still conducted on boys. Thirdly, the cause for the increase in ADHD diagnoses can be ascribed to multiple causes. For instance, parents, teachers, and psychologists could be more aware of ADHD and thus more likely to recognize it, leading to more diagnoses. Or, as people who are skeptical about the legitimacy of ADHD argue, this is due to a societal tendency to medicalize "difference" (Erlandsson & Punzi, 2017; Lloyd *et al.*, 2006; Nielsen, 2017; Prosser, 2008). But, as others argued, this diagnostic increase could also be due to changing (western) societal contexts, such as an increase in distractions provided external stimuli (e.g. social media, cell phones) or an emphasis on productivity and achievement. Consequently, more people, at one time or another, may run into such serious obstacles that they end up being diagnosed (Carr-Fanning, 2020; Nielsen, 2017; Prosser, 2008).

The second strand of criticism on the psycho-medical understanding of ADHD is directed at its individual- and deficit-focus. This is argued to both disregard the role of socio-spatial contexts in the creation and amelioration of ADHD-related difficulties, as well as to overlook positive characteristics associated with ADHD. Consequently, this has resulted in a stigmatized understanding of ADHDers as "inherently dysfunctional" (Erlandsson & Punzi, 2017, p. 3). Moreover, psycho-medical research is criticized for concentrating on observable behaviors rather than inner experiences, thereby invalidating ADHDers own perspectives (Carr-Fanning, 2020; Erlandsson & Punzi, 2017; Nielsen, 2017; Prosser, 2008). Thus, if you only look at what could be wrong with someone and how this could be cured, then you can never fully understand and value their ways of being, knowing, and doing. As Prosser (2008, p. 81) stated: "If only medical questions are asked, only medical answers will be found". Thus, in order to destigmatize ADHD and to establish a more holistic understanding, ADHD should be studied outside of psycho-medical contexts (Carr-Fanning, 2020; Erlandsson & Punzi, 2017; Levine, 1997; Prosser, 2008).

2. Disability studies

The dominance of a psycho-medical discourse and its inclination to pathologize difference can also be observed for other body-mind differences (Davidson & Henderson, 2010; Hansen & Philo, 2007; Imrie, 1996; Kitchin, 1998). Scholars working within the fields of disability geography and neurodiversity have exemplified the necessity of contextualized and experiential accounts in establishing a more holistic understanding of body-mind differences. In this section, I review their contributions and how these may inform this thesis.

a) The social (-relational) model of disability

These contextualized and experiential perspectives of various body-mind differences are provided through the social model of disability. In the 1980s, the social model of disability was developed to counter the medical model of disability, initiated by disability activists who felt discriminated by the treatment of disabled people as e.g. tragic, broken, or 'Other'. Their criticism of the medical model revolves around two arguments (Carr-Fanning, 2020; Erlandsson & Punzi, 2017; Hansen & Philo, 2007; Judge, 2018; Kitchin, 1998; Lloyd *et al.,* 2006; Stewart, 2017):

1. By merely focusing on the individual, the role of society in creating or augmenting people's experience of impairment through its physical and social composition is disregarded;
2. The psycho-medical discourse leads to a deficit-focused understanding of disabled people, contributing to their stigmatization and marginalization. If the only focus is on someone's impairment as opposed to a pre-determined 'standard', this results in incomplete knowledge, and does not do justice to disabled people's ways of being, knowing, and doing.

Within the social model, 'disability' is reconceptualized as a social construct: a form of social and spatial oppression. Consequently, disability is no longer something that a person *is* compared to a pre-determined standard, but something that a person "*experiences* in different ways, times, and places" (Lloyd *et al.,* 2006, p. 47; italics added). Thus, a disabled person is not inherently dysfunctional, but they are dis-abled through society's physical, social and institutional organization that fails or refuses to accommodate for disabled people's ways of being and doing (Hansen & Philo, 2007; Kitchin, 1998; Lloyd *et al.*, 2006). Social structures in this sense refer to people's expectations, behaviors, norms and values, institutional structures refer to rules and regulations, and physical structures to the design of buildings and public spaces (Cele, 2006; Hansen & Philo; Kitchin, 1998). Through the social model of disability, the emphasis of research shifts from identifying individual deficits to 1) examining the contextualized lived experiences of disabled people, and 2) uncovering the role of social, institutional and physical structures in the creation of disability and exclusion of disabled people (Imrie, 1996; Kitchin, 1998).

However, the social model of disability has also been criticized. Among others, Hall (2000); Chouinard *et al.* (2010), and Hansen and Philo (2007) object the social model's overly constructionist and disembodied approach. This means that research tended to only focus on the society's disabling features, but left the specificities of someone's impairment (i.e. their body-mind characteristics) out of the analysis, due to fear of returning to the medical model's individual focus. Therefore, scholars urged for a social-relational model of disability, wherein individuals would form the center of analysis, "(…) but always in relation to the kinds of spaces that non-disabled people have created (…), which differentially, but rarely in a helpful manner, impact upon most cohorts of disabled people." (Hansen & Philo, 2007; p. 494). Thus, research should not focus on either the individual or their environments, but on how the individual, with their body-mind characteristics, interacts with a multitude of environmental characteristics (Chouinard *et al.,* 2010; Hall, 2000; Hansen & Philo, 2007).

b) Disability geography

For geographical disability research, Hansen and Philo (2007, p. 494) argue that adopting the social-relational model of disability "[demands] a critical stance on the underlying 'ableism' of a non-disabled society that creates a world in its own able-bodied image." Ableism refers to the discrimination and stigmatization of disabled people, based on the assumption that there is a 'normal' body-mind (Hansen & Philo, 2007; Imrie, 1996). In other words, Hansen and Philo (2007) urge that attention needs to be redirected towards the ableist contexts in which people, with their body-mind characteristics, operate. In their article suitably titled *The Normality of Doing Things Differently,* Hansen and Philo (2007) discussed that people with body-mind differences are ultimately dis-abled because their agency is obstructed through the physical and social construction of places. To meet the implicit and explicit expectations imbued in place, disabled people are demanded to depend on other people, and/or to

adopt certain (physical, mechanical or technological) aids or tactics. For example, when a building only has a staircase and no ramp, a wheelchair user is excluded from entering said building due to its physical characteristics, which do not meet the wheelchair user's needs. Secondly, because of how disabled people look and behave, they often feel 'out of place' and experience society to be unaccepting. This is partially because of how disabled bodies and their ways of doing are *socially* perceived (e.g. 'freaky', 'sub-human' or 'broken'), but also because environments are *physically* designed to meet an assumed 'standard' way of being and behaving, and thus not necessarily meet the needs of people who divert from this. Consequently, disabled people feel pressured to behave 'as normally as possible' to meet these standards, even though this may not be their own normal way of doing.

Disability geographers have also provided contextualized and experiential insights for a range of hidden disabilities or mental conditions (mind differences), such as mental illnesses and phobias (e.g. Boyle, 2019; Davidson, 2000; McGrath *et al.*, 2008). Davidson (2000) presents a spatial and embodied account of agoraphobic women's lived experiences, in which she reconceptualizes agoraphobia as "the problematization of boundaries between inner and outer lived space" (2000, p. 38). Participants described especially crowded places as highly intrusive, and therefore felt the urge to shield or distance themselves from these places. Protective or renegotiating tactics ranged from avoidance to creating a 'boundary' between themselves and their surroundings, e.g. by driving a car, or wearing sunglasses.

Similarly, Boyle (2019) examined the inherently spatial "relational and embodied practices" (p. 31) of people with Social Anxiety Disorder. Participants described their experience of social anxiety as causing intense embodied uncertainty. Due to the unpredictable and chaotic nature of crowded social and spatial environments, this led to a "constant presence of anticipation" (p. 34). Comparable to the tactics described by Davidson (2000), participants adopted a range of tactics to renegotiate their interaction with such places. Interestingly, Boyle (2019) also described how her participants *utilized* certain locations and their environmental characteristics to deal with the experience of social anxiety. For example, one participant described how she took walks along a river in the early morning to collect herself before embarking on her daily business. So, seeking out the calmness of this location was a tactic to cope with her social anxiety. McGrath *et al.* (2008) also provided an experiential account of social anxiety, but focused on embodied expressions of distress in public spaces. They argued that dominant dichotomies of 'normal' and 'pathological', and "(…) research agendas that define the object of concern before participants have even begun to speak" (p. 63) can be overcome by approaching social anxiety through embodied experience. They contended that through lived experiences, behaviors which may seem pathological or illogical to others can be reconfigured "(…) as a reasonable response to a disorientating and invasive experience" (p. 57), and thus lead to better understanding of social anxiety.

To summarize, through the social-relational model of disability, disability geographers have demonstrated the necessity of contextualized and experiential insights to counter the dominant psycho-

medical discourse around body-mind differences. By examining the 'taking place' of both visible and hidden disabilities, these academics have illustrated that:

1. People experience and are affected by environments in different and at times problematic ways due to their body-mind characteristics;
2. Social and physical spaces are imbued with assumptions about how a person uses or experiences them, which disabled people are expected to meet;
3. Disabled people are aware of (potentially) problematic encounters with various environments, and consequently adopt a variety of renegotiating tactics.

Recently, disability geography has broadened to include neurodiversity, especially autism (Davidson & Henderson, 2010; Toronyi, 2019). To some extent, neurodiversity can be conceptualized as the social model of disability applied to neurological difference.

3. Neurodiversity

Neurodiversity is a relatively novel concept (Armstrong, 2010; Craine, 2019; Judge, 2018; Toronyi, 2019). Around twenty-five years ago, the socio-political neurodiversity movement was founded by autistic people to counter the impairment-focused psycho-medical discourse around autism (Craine, 2019; Rothstein, 2012). Later, the movement was broadened to include other groups of neurological difference (e.g. ADHD, mood disorders, schizophrenia, and learning disabilities such as dyslexia) (Armstrong, 2010; Craine, 2019; Toronyi, 2019; Woods, 2017). Through the neurodiversity movement, neurological differences are reconceptualized as natural and valuable human variations that are only considered mental disorders because of how society is structured. Rather than a normal/pathological dichotomy, neurodiversity conceptualizes human brains to exist on a spectrum. Everyone has their unique mental setup, similar to the ways in which cultures, ethnicities, or species are not more or less normal, but *different.* Those who fall within societal norms and expectations are considered to be 'neurotypical' (NT), whereas those outside these thresholds are defined as 'neurodivergent' (ND) (Armstrong, 2010; Craine, 2019; Judge, 2018).

To some extent, neurodiversity can be understood as the social (-relational) model of disability applied to neurological difference (Armstrong, 2010; Toronyi, 2019). Similar to the physical and mental disabilities discussed above, neurodivergence has also been predominantly studied within psycho-medical contexts and conceptualized as an inherent individual impairment. This has caused ND-people to be defined by their deficits, which is a violation of their human rights as they are perceived as inferior and abnormal (Carr-Fanning, 2020; Craine, 2019). Moreover, research is more often than not conducted *on* rather than *with* or *by* neurodivergent people (Armstrong, 2010; Carr-Fanning, 2020; Craine, 2019). However, within neurodiversity it is explicitly emphasized that neurodivergence should be valued and not only be respected or understood, because it is and should be associated with positive and

sometimes unique abilities. Because of these attributes and their value for society, a classification as 'disorder' is argued to be unjust, since this implies that a condition is solely negative (Armstrong, 2010; Craine, 2019; Rothstein, 2012). A notable example of the societal value of neurodivergent attributes is the intentional recruitment of autistic people by companies in the ICT-sector, because of their notable ability to detect and interpret data-patterns (Armstrong, 2010; Rothstein, 2012).

The neurodiversity movement has also been criticized. Firstly, medical and psychiatric specialists have argued that it downplays the difficulties that people diagnosed with a neurodevelopmental disorder and those close to them may experience, and the vast benefits that can be gained by medical and psychological interventions (Jaarsma & Welin, 2012; Rothstein, 2012). However, as Armstrong (2010) discusses in his book *The Power of Neurodiversity – unleashing the advantages of your differently wired brain*, the neurodiversity movement does not intend to do so. Rather, the objective is to rectify an imbalance in the way these conditions are predominantly understood, i.e. as an inherently negative condition, without consideration of lived experiences, attributes, or the role of various contexts. A second criticism of the neurodiversity movement is that the dichotomy neurotypical/neurodivergent is just another way of categorizing people as 'normal' or 'abnormal' (Craine, 2019; Jaarsma & Welin, 2012). However, neurodiversity proponents emphasize that the intention is not to draw a binary division between people with and without labels, but to offer a different conceptualization of how human brains are set up: that there is no such thing as a 'normal' brain, and a binary division does not exist. Consequently, by balancing how society and academia understand neurological difference, wherein these are valued and accommodated for rather than pathologized, ND-people can be empowered to lead happy, fulfilling lives in ways that suit them, and make a positive contribution to society (Armstrong, 2010; Craine, 2019; Judge, 2018; Rothstein, 2012).

Adopting a neurodiversity approach entails that research should revolve around people's lived experiences, consider attributes and deficits in relation to various contexts, and be conducted *with* or *by* rather than *about* people (Davidson & Henderson, 2010; Judge, 2018). This means that people's ways of being, knowing and doing are central, not just in terms of content, but also methodologically: *how* knowledge is produced should resonate the participants' ways of being and communicating. This is necessary to counter "[a] legacy of damaging stigma around neurological-difference, [which] deters much professional disclosure, continuing to enforce a silencing of voices that have long been spoken for, and about" (Judge, 2018; p. 1102). In this sense, the neurodiversity paradigm shares commonalities with the feminist paradigm, which also sets out to counter traditional (male dominated) research practices and give a voice to those who are traditionally marginalized (Babbie, 2013; Craine, 2019).

a) ADHD from a neurodiversity perspective

Thus, to counter psycho-medical discourse, proponents of neurodiversity emphasize the need for a more holistic understanding of neurological difference (Armstrong, 2010; Craine, 2019; Judge, 2018; Toronyi, 2019). From this neurodiversity-perspective, ADHD is associated with positive traits such as creativity, divergent thinking, high energy levels, enthusiasm, quick problem-solving capacities, generosity, adventurousness, and hyperfocus (Armstrong, 2010; Erlandsson & Punzi, 2017; Hupfeld, *et al.*, 2018; Sedgwick *et al.*, 2019). Hyperfocus is a state of intense and extended concentration on a task that someone is interested in (Hupfeld, *et al.*, 2018). ADHDers have described that while hyperfocusing, it feels as if the world around them does not exist. Consequently, they may go on for hours without a sense of time or a need to take breaks, eat, or sleep. Because of this trait, ADHDers often reconceptualize their presumed *attention deficit* as a difference or difficulty with *regulating* attention (Hupfeld, *et al.*, 2018; Lasky *et al.,* 2016; Stewart, 2017).

Due to these attributes, ADHDers can be highly suitable for careers as inventors, artists and entrepreneurs, for example (Armstrong, 2010; Carr-Fanning, 2020; Prosser, 2008; Sedgwick *et al.*, 2019). This is illustrated by numerous people who have become successful not despite, but because of their ADHD, such as Jochem Myjer (Dutch comedian), Simone Biles (American gymnast), and Ingvar Kamprad (IKEA founder) (Jochemmyjer.nl, 2021; The Conversation, 2017; WebMD, 2020). These examples suggest that there are contexts in which ADHD-traits may be desirable.

b) Neurodiversity geography

There have been some geographical studies into neurodiversity. As Davidson and Henderson (2010, p. 472) asserted: "(…) the more we can see (or at least imagine) other ways of being in and engaging with the world, the less likely we are to construct those experiences and interactions as pathological." To examine autistic place-experiences, Davidson and Henderson (2010) drew from autobiographies of autistic authors, because writing is a preferred communication method by autistic people. The aim was to contribute to a holistic neurodiversity perspective of autism, but also to uncover ways in which societal structures "serve to render certain individuals and groups 'out of place'" (Davidson & Henderson, 2010; p. 463). Their findings indicate that autistic people often feel misunderstood because their experience of and responses to stimuli often differ from what neurotypical people would expect or consider 'normal'. For example, autistic authors described repetitive behaviors such as chair-rocking or tip-toeing as an embodied necessity to regain their "sense of self in place" (p. 470), while these behaviors were deemed unacceptable by non-autistics.

Toronyi (2019) proposes a research project aimed at examining autistic people's sensory experience of environmental characteristics to inform how design might help to accommodate for their experiences. Toronyi (2019) discusses literature in which certain characteristics which may go unnoticed

by neurotypicals, such as texture, loud or 'scratchy' noises, and TL-lighting, are pointed out as potentially painful and thereby exclusionary for autistic people, whereas other sensory characteristics may not evoke such negative responses, or may even be beneficial. Although valuable and relevant, such 'neurodivergent accounts' of place-experiences, or spatial accounts of neurodiversity, appear to be limited to autistic ways of "knowing, perceiving and embodying place" and do not encompass ADHD (Toronyi, 2019, p. 3). Therefore, I argue that it is time to adopt their approach in the study of ADHD: to open-mindedly explore the contextualized experiences of ADHDers in their own words and on their own terms. How do they experience and interact with various environments? And what is a suitable way to investigate this? In the following section, I review some existing studies on the relation between ADHD and context and lived experiences of ADHD.

4. The contextuality and experience of ADHD

Despite psycho-medical research' predominant individual-focus, there are some studies on the relation between ADHD and context. Moreover, the name 'Attention Deficit Hyperactivity Disorder' and the diagnostic criteria described in the DSM-5 already reflect that ADHD-traits are inextricably connected to context, both in terms of how they are manifested as well as how they are interpreted (Lasky *et al.,* 2016; Prosser, 2008). Diagnostic descriptors such as "Often leaves seat in classroom or in other situations in which remaining seated is expected" and "Often has difficulty sustaining attention in tasks or play activities" (APA (2000), in Prosser, 2008, p. 84), illustrate that an ADHDer's behavior is considered to not meet the behavioral expectations in these situations (i.e. to stay seated and to stay focused). From a critical sociological perspective, Prosser (2008) argued that rather than only perceiving an ADHDer as failing to meet pre-determined social expectations of education, academics should direct their attention towards the consequences of such expectations and the existing mismatch between such expectations and many groups of children, including ADHD children.

a) ADHD and context

Some studies have previously considered ADHD in relation to context. For example, in the context of inclusive education, Carbone (2001) proposed a range of physical adjustments to the classroom 'with an eye and ear' for ADHD children. For each of the main ADHD-symptoms, or "detrimental dimensions" (p.75), he described general behaviors of ADHD children and how these could be alleviated. Especially behaviors of overstimulation (fidgeting) or understimulation (gross motor movements), associated with hyperactivity, are described as major challenges as these are considered to prevent both the ADHD child and other children from doing their tasks. Proposed interventions in the classroom to regulate stimulation and concentration levels "to the appropriate degree" (p. 73) ranged from placing the ADHD child at the front of the classroom, timeouts, and eliminating visually distracting features, to seating

them next to a 'well-behaved' role-model child. However, Carbone (2001) focuses on behavior rather than ADHD children's inner experiences, and only discusses negative consequences of ADHD on the child and other children.

Biederman *et al.* (2007) examined the driving abilities of ADHD adults as compared to non-ADHD adults using a laboratory driving-simulator. They hypothesized that ADHD adults would have difficulty sustaining attention, resulting in dangerous situations when an object suddenly appeared. The results of their analysis indicated that ADHDers were significantly more likely to collide with this object than non-ADHDers. These outcomes were concurred by Reimer *et al.* (2010). However, they added the importance of context in influencing the driving abilities of ADHDers. Notably, the results of their research suggested that while it was significantly more difficult for ADHDers to sustain attention in low-stimulus environments, such as rural areas, there was no significant difference between ADHDers and non-ADHDers in high-stimulus environments, such as urban contexts. However, while it may very well be that ADHD affects driving ability, neither Biederman *et al.* (2007) nor Reimer *et al.* (2010) considered the potential effects of their methodology on ADHDers' performance in the driving simulator. From an experiential perspective, it could be argued that placing an ADHDer who is sensitive to stimuli in a laboratory driving simulator with numerous stickers and wires attached to them, while being aware that someone is judging their driving ability, in itself affects said abilities and thus leads to a bias in the results.

Söderlund *et al.* (2007) reported of a study into the effects of environmental noise, such as music, on the cognitive performance of ADHD children. The results of their research indicated that background noise improved the performance of the ADHD-group, while it had a negative effect on non-ADHD children. Thus, because of their cognitive setup, ADHDers appear to be affected by and respond to environmental noise differently, and what could be considered disadvantageous for NT-children (to have to perform in a noisy environment), actually seems to be beneficial for ADHDers' behavior.

Thus far, the literature discussed here has provided information on ADHD in relation to context, especially regarding the effect of various environmental characteristics, on how ADHDers function, such as the amount of stimulation. However, these studies are focused on 'measurable' effects on behavior or the brain rather than ADHDers' own experiences. Secondly, they appear to be mostly focused on identifying areas in which ADHDers are impaired, and how to 'help' them to behave 'appropriately'. Thirdly, the contexts that are considered have certain strict social expectations of how to behave, i.e. the classroom and participating in traffic. Finally, these researchers do not consider whether their methodology is suitable for the group that they studied. In the following section, I will outline some studies which provide experiential accounts of ADHD in various contexts.

b) Contextual experiences by ADHDers

The idea that disability or neurodivergence affects someone's experiences and interactions with places, is not new. Places, designed for and by an 'ableist', or "Predominant Neurotype" (Woods, 2017; p. 1091), society do not always meet the needs of people whose body or mind differs from the dominant group, and this may lead to their exclusion and stigmatization (Davidson & Henderson, 2010; Hansen & Philo, 2007; Kitchin, 1998; Woods, 2017). Researchers both in the field of disability geography as well as neurodiversity have demonstrated this through contextualized and experiential accounts. To the best of my knowledge, there is no existing research that adopts a neurodiversity perspective to examine such geographical experiences of ADHDers. However, there are some studies into (adult) ADHDers' lived experiences in relation to other contexts that are worth discussing.

Firstly, Gallichan and Curle (2008) studied ADHDers' experiences in social contexts, and conceptualized the experiences of ADHDers as them being a 'square peg' trying to fit into a 'round hole': their characteristics differed from society's norms, which caused them to not fit in. For example, ADHDers felt that their need for physical movement was often misinterpreted as them being uninterested or rude. However, participants also described ADHD to be less challenging when they felt that their characteristics matched the social expectations in a certain location, or when they were allowed to be themselves. Therefore, Gallichan and Curle (2008, p. 350) concluded that "a reciprocal relationship between themselves and their context" was "[f]undamental to respondents' experiences". Consequently, in order to let ADHDers fit into society, they argued that both the 'peg' needs to be adjusted as well as the 'hole'.

In occupational environments, Lasky *et al.* (2016) investigated how various contexts affected young adults' experiences of their ADHD. Through interviews with 125 ADHDers, they argued that ADHD-research should include context as a "fundamental piece of the puzzle" (p. 166), resonating the conclusion by Gallichan and Curle (2008). Over half of the participants of this study felt that ADHD-symptoms were context-dependent; certain environments tended to amplify difficulties, such as distractibility, while these appeared to be non-existent in other environments. Participants described fast-paced, highly stimulating work environments as most suitable, because these prevented them from getting bored and consequently distracted. Moreover, Lasky *et al.* (2016) emphasize the liberating potential of relocating the cause for impairment from the individual to the *interplay* between individual and environment, i.e. a relational understanding of ADHD. This allowed participants to "[see] themselves as different rather than defective." (p. 163), consequently feeling less inadequate and more capable of adjusting their context to their preferences. Although this research focused on occupational contexts, it does offer a similar viewpoint to what is discussed in this thesis: how ADHD is manifested is relational, and failing to consider a person's environment results in incomplete knowledge and stigmatization.

Through rhythmanalysis, Nielsen (2017) also examined ADHD as an embodied and relational phenomenon; "a certain way of being in the world" (p. 260). She reconceptualized ADHD as an impairment in sense of time and a difference in rhythm. Based on interviews, ADHDers' experiences were described to be out-of-sync with the pace of their (social) surroundings, especially in terms of feelings of bodily restlessness and inner chaos. Consequently, participants adopted a range of 'resynchronization strategies' to fit in. Even though this research is concerned with ADHDers' lived experiences, the study still revolved about experienced *issues*, which were explained as 'a state of desynchronization', rather than a natural or normal 'way of being'. Moreover, Nielsen (2017) did not adapt her methodology to fit her participants, and she noted on this herself (p. 266):

> *"While Peter has difficulties finding inner calmness, the interview probably adds to his feeling of restlessness. I demand concentration on specific details and I guide our conversation following a certain structure, which I know is difficult for Peter."*

This observation points out that a standard 'seated' interview does not necessarily match ADHDers' being (restless). Therefore, it can be disputed whether this methodology is the most suitable way for ADHDers to communicate their experiences.

Comparing the literature discussed in section 4a and this section, there appears to be a discrepancy between the lived experiences by ADHDers and the interpretation of their observed behavior. For instance, Carbone (2001) discussed 'hyperactivity', 'impulsivity' and 'distractibility' as inherently detrimental behaviors of ADHD, whereas the lived experiences of ADHDers paint a different picture, illustrating them as relational dimensions. However, despite variations in interpretation and focal points, the literature described in both sections does have one thing in common, which is that they report of ADHD as a mismatch between individual characteristics and contexts. Finally, as is indicated by research on ADHDers' experiences in the context of the classroom, driving, time, and the workplace, indicates that minor adjustments or 'tactics' can renegotiate the interaction between individual and place, transforming an environment from obstructing to accommodating ADHDers' ways of being, knowing and doing (Carr-Fanning, 2020; Lasky *et al*., 2016; Prosser, 2008). Thus, ADHD cannot be fully understood, let alone valued, without careful consideration lived experiences in relation to socio-spatial contexts. Moreover, ADHDers' lived experiences can only be fully understood and appreciated if these are at the core of the research, both in terms of content as well as methodologically.

III. Methodology

Introduction

The aim of this thesis was to explore how ADHDers experience and interact with their daily surroundings. The second aim was to adopt a methodology that enabled participants to share their knowledge on their own terms. To achieve these aims, I adopted a neurodiversity perspective. Judge (2018, p. 1102) underscores that a neurodiversity perspective can be complicated to fit in with traditional methodologies, because it brings a certain messiness to the research process as it requires "(…) flexibility around how knowledges are co-produced, embodied, engaged, and expressed". To account for this, I adopted a participatory, negotiated approach employing qualitative research methods. The co-creation of data and a more equal distribution of power between researcher and researched is at the core of this approach (Clifford, French & Valentine, 2010; Craine, 2019; Davidson & Henderson, 2010; Judge, 2018). As Cornwall & Jewkes (1995, in Trell & Van Hoven, 2010, p. 93) asserted, participatory research allows the researcher to "focus on reflection and action *with* and *by* research participants rather than *on* them". Thereby, the participatory approach suits the aim of people 'on their own terms'. As opposed to quantitative methods such as surveys, qualitative methods are preferred for eliciting in-depth personal experiences and opinions. The data collection consisted of three phases: a pilot group-interview, walking interviews, and independent data-collection by participants. Simultaneously, this thesis has been an opportunity for me to approach the research in line with my ways of being, knowing and doing, heightening my awareness to the methodological sensitivities of doing ADHD-research as an ADHDer. This will be further elaborated on in the ethical considerations section of this chapter.

Data collection

Participants

Participants were recruited by a combination of convenience and snowball-sampling. Some of them were found by posting a message in a Facebook-group for ADHDers living in or near Groningen, and others through my personal network. Twelve potential participants were found, of which eight participated in the study. Two people did express interest in participating but did not respond when I contacted them to schedule an interview. Furthermore, the covid19-

Participant	Gender	Age	Diagnosis	Type of data collected
Anne	Female	23	ADHD-I	Pilot; walking interview; photos; voice recording
Blair	Female	22	ADHD-I	Pilot; walking interview; photos
Christine	Female	25	ADHD-C	Walking interview; photos, voice recording
David	Male	22	ADHD-I	Walking interview; videos.
Emily	Female	54	ADHD-H	Walking interview; photos.
Felix	Male	32	ADHD-C	Walking interview
Hannah	Female	15	ADHD-I	Walking interview
George	Male	28	ADHD-C	Walking interview

TABLE 1 - OVERVIEW OF PARTICIPANTS (PSEUDONYMIZED)

pandemic created some issues for the recruitment of participants, as some people were hesitant to meet up in person. When new measures to prevent the spread of the coronavirus were announced in December 2020, two potential participants cancelled the interview and expressed that they no longer felt safe to participate in the study. Considering the aim of the research to collect in-depth information about subjective, sensory place-experiences, it was deemed vital that the interviews were conducted in person and *in situ* rather than online. Therefore, I decided to continue the research with a smaller number of participants than I initially intended, which may pose limitations to the generalizability of the findings of this thesis. An overview of the eight participants' characteristics, their diagnosis, and the type of data that they contributed can be found in Table 1. The participants' names have been pseudonymized to safeguard their privacy.

Pilot study

Because of the exploratory nature of the research, the first phase of data collection was a pilot study. In September 2020, I had a group interview with two friends who are also ADHDers: Anne (23, ADHD-I) and Blair (22, ADHD-I), which lasted 44 minutes. The benefit of conducting the pilot study with two people I know was that we were already familiar with one another, which benefitted informal and egalitarian communication. We discussed our place-experiences and behaviors, along with ways in which the topic could best be researched. I had prepared a list of topics beforehand based on literature and personal experiences, but mostly let the conversation flow naturally. Topics ranged from general experiences with ADHD and getting diagnosed, to how we experienced various locations and how we felt that ADHD affected this, and which daily places we (dis)liked and why. We also discussed ways in which the participants felt that they would best be able to communicate their experiences to supplement the interview. Both thought that taking pictures would be the best way for them, because then they could visualize what they had discussed. For example, Blair said that she would often take walks in a park as a break from studying (Figure 1[ii]). In her explanation of why she took the photo, she mentions that while she was walking, she tended to avoid other people. At the end of the interview, I asked the participants to record their experiences in their own time and way. Although it took two reminders over the course of a month, they both shared photos along with a brief explanation, and Anne made voice-recordings as well.

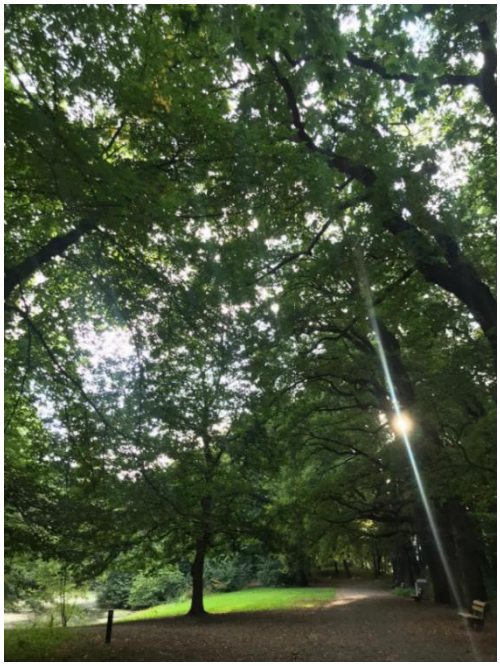

FIGURE 1 - PHOTO TAKEN BY BLAIR AFTER THE PILOT INTERVIEW. CAPTION: "THIS AFTERNOON I RAN INTO PEOPLE FOUR TIMES, AND I NOTICED THAT EVERY TIME PEOPLE WERE HEADING MY WAY THAT I WOULD GO TO ANOTHER PART OF THE 'FOREST'🤏."

Directly afterwards, I evaluated the pilot interview to identify topics for further exploration and areas of improvement. Firstly, we had noticed that it was difficult to access experiences of certain places from memory. Secondly, I observed that it was challenging to sustain attention for both myself as well as the participants, and that we tended to go off-topic at times, although this may be partially due to our familiarity. I also detected some physical restlessness in myself, as I found it hard to focus on the conversation while sitting still, and felt the urge to move or fidget. Due to these insights, both participants were invited for an individual walking interview, to examine if this method would be more effective in: 1) eliciting lively accounts of place experiences and behaviors, and 2) allowing the participants and myself to physically move to help sustain attention. This will be further elaborated on in the following section. Interestingly, after we had finished the interview, and the participants were heading home, they both put in earphones before getting on their bicycles. This was not discussed during the interview but incented me to further explore this topic in the walking interviews.

Walking interviews

The second phase of data collection consisted of semi-structured walking interviews in one or more locations of the participant's choosing. I selected walking interviews for three reasons. Firstly, according to literature on qualitative methodologies in geography, walking interviews are preferred over conventional interviews when investigating place-experiences, because physically being in a location enables people to better access and share their experiences of said location (Cele, 2006; Finlay & Bowman, 2017; Sin, 2003). Moreover, spontaneous stimuli such as sounds, traffic, and other people can prompt experiences which would not have come to mind otherwise (Cele, 2006; Evans & Jones, 2011; Finlay & Bowman, 2017; Sin, 2003; Trell & Van Hoven, 2010). For this reason, walking interviews provided an effective and relatively time-efficient method to collect rich data on spatial experiences, as compared to ethnography, for example (Evans & Jones, 2017).

Secondly, Finlay & Bowman (2017) emphasize that the walking interview, especially when the participant decides the route taken or places visited, allows for a more informal and collaborative conversation and shifts the power dynamics between the researcher and the researched towards a more equal distribution. Moreover, as found in literature on ADHD (e.g. Carbone, 2001; Lasky *et al.,* 2016; Nielsen, 2017) and as I noticed in the pilot phase, walking interviews may be especially suitable for ADHDers, because physical movement (or not having to sit still) helps them to focus. As one of the research aims was to adopt a methodology fitting for the researched group, the more egalitarian and mobile characteristics of walking interviews were deemed favorable over other types of interviewing.

Eight ADHDers participated in the walking interviews, which took place in or near the city of Groningen in October, November and December of 2020. The interviews lasted between 54 and 119 minutes. Each participant chose the location(s) that they wanted to visit, and was mostly made up on-

the-go. I offered guidance when participants asked for this. This mostly came down to reassuring the participant that any location or route would be suitable, as long as they had certain experiences there that they wanted to share. I did this to ensure that the location and route reflected the participant's rather than my preferences, thereby contributing to the relatively egalitarian character of walking interviews. I prepared a list of questions and topics based on literature, the pilot interview, and previous interviews, but mostly let the conversation flow naturally. This list is included in Appendix A. Since all participants and I are from The Netherlands, the interviews were conducted in Dutch to safeguard easy and accurate communication. For this thesis, quotes have been translated in English. The original Dutch quotes can be found in Appendix D.

Overall, the walking interviews were experienced as positive. Participants expressed that they enjoyed the walk-and-talk structure, because they could move around, but also because they were already spending a lot of time indoors due to the covid19-pandemic. Moreover, walking around provided valuable insights into how participants interacted with locations. For example, during the interview with Anne, we passed the Herestraat, the main shopping street in Groningen. We seemed to instinctively hold back our step, and when I asked Anne which direction she wanted to go, she looked down the shopping street and said:

Anne	*"Well, I do know what I don't want!"*
Liselotte	*"…And that's going in the Herestraat?"*
Anne	*"Yes. Nice!"*
Liselotte	*"Yeah, I also like that."*
Anne	*"I really don't want to do that."*
Liselotte	*"Well, we could do it, but then we might as well stop the interview now."*
Anne	*"I was gonna say, then the recording is ending now. *both laugh* No, I think that would be a really bad idea, I really hate it."*
Liselotte	*"Yeah, me too."*
Anne	*"I automatically get angry when I'm cycling there, too."* [iii]

Despite the benefits of walking interviews in prompting topics and eliciting information about subjective experiences, I also noticed a downside. Because the interviews were conducted outdoors, background noises and/or wind sometimes led to poor recording quality. This posed an obstacle for two interviews. I attempted to improve these recordings as much as possible with the program Audacity 3.0.3 (Audacity, 2019). Unfortunately, the quality of the recording of Emily's walking interview was so poor that parts could not be transcribed, limiting the usability of said interview.

During the interviews, precautionary measures were taken to safeguard the participants' and my own safety in light of the covid19-pandemic, and to let the research take place in line with

governmental safety measures. Firstly, the participant and I had separate recording devices, which were thoroughly cleaned after each interview. Secondly, participants were asked to disinfect their hands before the start of each interview, and a safe distance (1.5 meters) was kept at all times. I asked the participants if they preferred that we both wore face masks as well, but none of them opted for this.

Participant-generated data

The final form of data used for this research consisted of material that participants individually collected to supplement the experiences they discussed during the walking interview. This participant-generated data has two benefits applicable to this study. Firstly, it contributes to a more equal distribution of power in research, as the researched is in charge of how knowledge is created, rather than the researcher (Trell & Van Hoven, 2010). Moreover, data could be collected in more naturally occurring situations in participants' daily lives, contributing to the aim of exploring ADHDers' experiences in everyday environments. Secondly, as Stevenson & Holloway (2017) argued, participant-generated data allows for a move away from a traditional focus on oral and textual forms of generating and communicating knowledge, and clears the way for exploring other ways of sharing experiences of place.

These benefits of participant-generated data were considered to fit the research aims to collect intimate subjective place-experiences and to conduct the research on participants' terms, by letting them choose how to share their knowledge. At the end of the walking interview, all participants were asked to individually record their spatial experiences and behaviors, in ways that they saw fit. This meant that the participant decided when, where, how, and how often they would collect their data, which they could e-mail to the researcher on an agreed date, three to four weeks after the interview. Although I set out to keep this part as independent as possible, I did offer guidance and examples to give participants an idea of how others had collected their data, but mostly to assure them that as long as they felt that it accurately captured their experience, any form of data would be fitting. The provided data consisted of pictures, three voice recordings, and one video. For example, Christine (25, ADHD-C) shared a picture of when she was taking a walk (Figure 2), with the following caption:

> *"[This] was during Christmas. The social pressure to be sociable and the knowledge that there would be nobody outside during dinner time, made me decide to go out. And it was exactly what I had hoped: no people, no cars, no cyclists. I could really unwind there."* [iv]

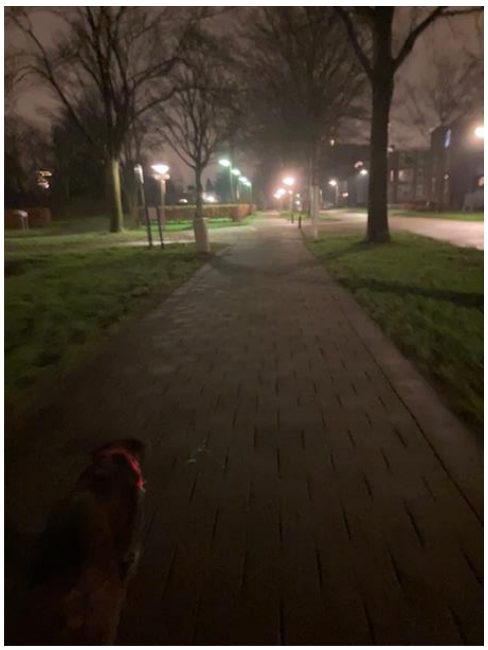

FIGURE 2 - EXAMPLE OF PARTICIPANT-GENERATED DATA. PICTURE TAKEN BY CHRISTINE.

In practice, although all participants expressed willingness to contribute to this phase of data collection, not all of them followed through. Despite reminders via e-mail or text on and right after the date we had agreed on, three out of eight participants did not share individually collected data. Because I did not want to pressure the participants, I sent a maximum of two reminders, and then decided to work with what I had.

Since the 'additional dataset' did not include all participants' experiences and their experiences were highly subjective, I decided to not separately analyze this data, but to only use it to supplement what the participant in question discussed during the interview. The additional data included in this thesis was anonymized. Some of the data was recorded within people's homes. This data was not included in this thesis because of participants' and others' privacy. In hindsight, I may have underestimated the amount of time and effort it would cost the participants to contribute to this part of the study. It may have been better to bring a camera to the walking interviews, so participants could take pictures of locations they were talking about during the interview. However, this would have limited the independent and empowering character, since I would have decided the type of data that was collected (pictures) and when (during the interview). Moreover, experiences of daily locations that were not visited during the interview could also not be recorded.

Data analysis

All interviews were recorded and verbatim transcribed by me. The voice recordings that participants submitted were also transcribed. During transcription, all names, addresses and other information that could infringe on the privacy of participants were pseudonymized or omitted. Then, I thematically analyzed the pilot interview and walking interviews using the program ATLAS.ti 8.4 (ATLAS.ti, 2019). A combination of inductive and deductive codes was attached to the interviews. Deductive codes were derived from 1) existing knowledge on ADHD, especially in relation to the main characteristics (hyperactivity, inattention, and impulsivity) and stimulation, and 2) disability geography and neurodiversity, especially in relation to renegotiating tactics to shape the interaction with environments. However, most codes were inductive, thus originating from the data itself. In order to maintain individual particularities, codes were created to as closely reflect an individual's experience as possible. An overview of these codes and code families, can be found in Appendix B.

After an initial coding process, another round of coding was conducted, to establish code groups and identify main themes. Preliminary results were then discussed with the supervisor of this thesis. Due to the exploratory character of the study and its focus on subjective experiences and tactics, a large number of topics were discussed during the interviews, resulting in a wide range of codes and themes. Considering the limited extent of this thesis, only those themes that were present throughout all interviews were included in the analysis.

Ethical considerations

Careful consideration of ethics is vital to any research. Researchers have a responsibility to conduct their research ethically and to protect their participants (Clifford *et al.*, 2010; Hay, 2016). The most important ethical components of social research are: voluntary and informed participation, not doing harm, and anonymity/confidentiality (Babbie, 2013). I ensured voluntary and informed participation by providing an information document to the participants in advance of interview, wherein the aim and content of the research along with participants' rights were explained. This document can be found in Appendix C. In this document, I stated that participation was voluntary, and that they could stop their participation at any time without giving a reason. Both the participant and I signed a copy of the information document before starting the interview.

Another ethical consideration concerns the participants' and my own privacy. Since this research aimed to explore personal accounts of spatial experiences in relation to ADHD, a trust relationship between myself and the participants was fundamental. To achieve this, participants needed to be certain that their data is handled confidentially: that any information they shared could not be referred back to them by anyone other than the researcher. In order to do so, only I had access to their names and contact information. Pseudonymized interview recordings, transcripts, and additional data were stored in a password-protected digital environment which was only accessible by me. The interview recordings were deleted after the transcription had been finished. How participants' privacy was protected was also included in the information document (Appendix C). Secondly, in all interviews, there was a mutual sharing of personal and at times painful experiences, for example about childhood traumas. Therefore, I have decided not to include the transcripts in this thesis. Although these are as anonymized as possible, there could be a third party who knows a participant could connect the dots. Secondly, I considered my own privacy. I also discussed highly personal topics, which are retraceable to me, since I am 'the interviewer'. I am not comfortable with the idea of third parties having access to these experiences that, even if they are related to ADHD, are outside the scope of this thesis.

Conducting the interviews *in situ* posed an additional issue regarding participants' privacy. First of all, they could be recognized by outsiders as being interviewed, which could lead to discomfort and/or hesitation in disclosing personal experiences. I accounted for this by concealing 'the interview process' as much as possible: recording devices and microphones were hidden, so it would look as if we were having a conversation. Secondly, participants could run into people they know during the interview, which happened on two occasions. When this happened, I stayed at a distance and let the participant decide whether they wanted to tell that they were being interviewed. Thus, while I could not entirely eliminate infringement of participants' privacy during the interview, I have sought to minimalize this.

There is another notable ethical concern in this research regarding participant confidentiality: my supervisor knows three participants. Therefore, she may recognize information that they shared with me. I have tried to account for this by discussing with the participants in question whether there was anything that they had shared with me that they did not want my supervisor to know. If that was the case, I would omit that section from the analysis. Although this would pose a limitation to the research content-wise, I consider participants' confidentiality to be my primary responsibility. However, none of the participants expressed concerns, so no passages were omitted for this reason.

Another ethical concern in this research project revolved around how much was demanded of the participants, and how this may have affected them. Compared to other approaches, participatory research can be relatively demanding to participants (Clifford *et al.*, 2010; Trell & Van Hoven, 2010). Participants needed to invest quite some time in the walking interview and individual data collection process. This demanding character may be most evident in the fact that not all participants followed up on collecting their individual data, as I discussed in the previous section of this chapter. I have sought to account for this by limiting the amount of reminders to avoid that they would feel pressured.

Finally, one of the participants was underage. When conducting research minors, additional ethical considerations need to be taken into account. Not only the participant, but also one of their parents needs to consent to their participation. I accounted for this by discussing the research with both the participant and one of their parents, and let both of them signed an informed consent form.

Positionality

A central component throughout this research process was my positionality as ADHD-researcher. Positionality refers to the researcher's position as opposed to the subject and the participants (Babbie, 2013; Judge, 2018). Feminist researchers emphasize the importance of the researcher's positionality, because they argue that rather than extracting knowledge from a participant, knowledge is constructed in the interaction between the participant and the researcher. Considering that the inspiration from this research stems from my personal experiences with ADHD, the advantages and limitations of this positionality need to be addressed. First of all, my position as 'insider' may have resulted in a relatively equal distribution of power and more open accounts by the participants, leading to a more complete understanding of the topic. Moreover, to fully contribute to the understanding and valuation of neurodivergence, neurodivergent authors emphasize the necessity of explicitly including one's own views as a neurodivergent researcher, (Craine, 2019; Judge, 2018). As Judge (2018, p. 1105) argued:

> *"Only by engaging with difference through insider accounts and reflexivity can neurodiverse contribution potentials be fully acknowledged, appreciated, and – when needed – appropriately supported to facilitate transforming limitations into strengths."*

However, I needed to stay aware that the research revolved around participants' experiences and their knowledge, rather than my own, or my interpretations of their experiences. Secondly, due to my position, there may at times have been a certain 'unspoken understanding' between myself and the participant(s). However, it needed to be avoided that such accounts would get lost in translation in the process of transcribing and analyzing. Therefore, I made sure that what was understood was also communicated as much as possible.

Besides me being and ADHDer, I have other positions that affect this research. First of all, I am a woman, and therefore participants may have shared different insights, or shared their insights in different ways, than they would have if I were a man. Therefore, in the future, it may be interesting for a man to examine whether participants communicate other experiences about their ADHD than they have with me. Secondly, my position as 'researcher' influences the communication between me and the participants, as it puts me in a relative position of power. I have sought to equalize this as much as possible by assuring participants that they could guide the form and content of the interview. Finally, my age may have affected the research in how participant shared their information. Not all participants were in the same age group as me. While my age may have led to a sense of companionship with participants who were about my age, the younger participant could have perceived me as relatively senior, and the older participant could have seen me as relatively junior.

IV. Findings

"The best way to think of AD[H]D is not as a mental disorder but as a collection of traits and tendencies that define a way of being in the world." [3]

This quote by Dr. Edward Hallowell, a psychiatrist and ADHDer adequately summarizes the experiences shared by this study's participants, and how I have analyzed them: many doors into ADHDers' ways of being in the world are opened when we step away from perceiving ADHD as merely a disorder – that negatively affects a person and should be treated, so they can be normal. Participants described a variety of ways in which they each construed their 'way of being in the world', navigated obstacles and sought out solutions, to shape their experience in line with their own "normal".

During the analysis, I observed a great deal of diversity between the participants, which complicated the process of distilling one main narrative. But perhaps, that in itself *is* the main narrative. Each participant had their own story regarding their ADHD, their experiences, and their tactics. Moreover, their environmental experiences and tactics were not only subjective; they were complex and continuously shifting. Hence, it is not either the individual or the context that matters, but the *encounter* between the two; how they relate to one another. Despite this subjectivity and complexity, two interconnected tendencies and two consequent tactics can be distinguished based on the encounters discussed by participants: the tendencies 1) openness, and 2) a matter of balancing stimulation; and the tactics 3) renegotiating environmental encounters, and 4) utilizing environmental encounters to renegotiate ADHD-tendencies. Each of these themes will be discussed in this chapter, while upholding their subjectivity, complexity, and flexibility as much as possible.

1. Tendency: Openness

When discussing how they experienced environments, all participants mentioned a certain way of 'being open for' or 'susceptible to' things happening around them. These things were often referred to as "prikkel", best translated as "stimulus": "A thing that arouses activity or energy in someone or something; a spur or incentive" (Lexico, 2021). In other words: something that affects someone and evokes a mental or physical response. The stimuli that participants discussed mainly revolved around sensory input, things they saw, heard, or felt; ranging from sounds, lights, and information (such as billboards, product labels, or traffic signs), to the presence or behavior of other people.

Some participants particularly discussed how they felt that they differed from other people because that they had difficulty *filtering* stimuli, and how this affected their mood and behavior. For

[3] In: Hallowell, E.M. & Ratey, J.J. (2005). *Delivered from Distraction: Getting the Most out of Life with Attention Deficit Disorder.* New York: Ballantine Books, p. xxxii

instance, Hannah (15, ADHD-I), the youngest participant who was diagnosed around the age of 10, and is in high school, described how she started noticing that her "brain works differently than other children's brains" in primary school, which led to her diagnosis. In the following passage, Hannah also touches upon how 'openness' affects her differently in various contexts:

(1) Liselotte: *"And in which ways would you say that your brain works differently? If you would give an example of that?"*

Hannah: *"Well I think it's mostly in… filtering all the stimuli. That's harder for me."*

Liselotte: *"Yeah? And do you notice that in the classroom, for example, or here [on the street] as well?"*

Hannah: *"Well here… it's doable. But eh, in class it's really bad, and that's also how we found out that I have problems with concentration. I would be working and then… (…) I would hear the clock ticking and people moving their chairs and pens clicking and things happening outside (…)."* [v]

Another participant, Christine (25, ADHD-C), who recently graduated from university and was diagnosed with ADHD-C when she was 23, also commented on how she felt different from others before she was diagnosed, because of her openness and response to stimuli, and that the diagnosis provided her with an explanation for this. Christine also described how she needs to find a balance between what she wants or needs to do, and the physical and emotional consequences of these activities:

(2) *"I can take less than other people, I always found that really difficult and I could never explain it. And when I didn't… listen to that, to my own feeling of wanting to do less than someone else, I would always get sick, for example. A lot of headaches, you know? I get sick more easily, just more vulnerable. And I always had this feeling of 'how can this be? Other people can do all these things. You know, work out and study and work and have a social life, why can't I do all of that?' Ehm... I'm really sensitive to stimuli, just... at home when my mom is humming while doing a puzzle, I could actually explode with anger like 'just shut up!' - You know? That sort of things. Well, and the environmental stuff, in terms of stimuli, everything outside, not liking to go to the supermarket, ehm... getting overloaded easily. For example, I think festivals are the best things ever, but it takes me three weeks to recover from them. But because I enjoy them so much I still want to go."* [vi]

Further analysis indicates that whether participants experienced their openness was not either positive or negative, but relational: dependent on the context. The 'context' in this sense entails both characteristics of the location, such as the physical features, the time of day, the presence and behavior of other people, and social norms and expectations of how to behave, as well as the individual's

characteristics, such as previous experiences, mode of transportation, familiarity with the place, their reason for being there, and their mood. In the following paragraphs, I will elaborate on the encounters in which participants experienced their openness as more positive or negative. Again, it should be noted that experiences varied greatly between participants, and that an encounter described by of them does not necessarily apply to all ADHDers who contributed to this study.

Openness as beneficial

Some participants discussed their openness as a positive characteristic in relation to situations where it benefitted them to notice "many things at once", rather than being focused on one thing. Some of them, including Blair, related 'openness' to the ability to navigate. Blair is 22 years old and a student, and was diagnosed with ADHD-I at age 20. During the pilot interview, she said that on vacation, she could utilize her openness to find her way, especially in terms of navigating back to a certain location:

(3) Blair: *"When I'm abroad, then for me it's because I'm looking around so much that I recognize things, so then when we have to get back to the car, then I'm like 'o I've seen that! So we have to go that way'."*

Liselotte: *"So then, it kind of helps you that you're focused on… so many things at once?"*

Blair: *"Yeah, I think so. My mom is also always like 'you and [your brother] know where the car is anyway, so I don't have to remember it."*

Anne: *"That's really nice indeed, because you've seen it once, then you can reproduce it. Like 'o but that was there, and I saw that, so that means we have to go this way'."*

Blair: *"Exactly! And sometimes it's like, that red car isn't there anymore, but the parking meter is the same so that means…"* [vii]

This resonates with the experience of David, who is 22 years old, recently graduated from university, and was diagnosed with ADHD-I less than a year ago. For his work as a photographer and capturing the right moment, David also describes 'openness' as an advantage:

(4) *"People who know me well tell me that I'm a completely different person when I'm taking pictures. Because then I'm really focused on what I'm doing and them I'm really detailed, I notice every branch, everything that's in the way, I see lots of possibilities like 'o this is nice, this is nice, I want to use this and this… (...) Then I can stay focused on one goal for a really long time. When I'm working at an event, like a wedding then… I wouldn't easily miss something. Which is funny because you'd think I get distracted."* [viii]

However, in the context of driving a car, David explained that he does not experience this 'openness', or at least not as an advantage. This brings me to the following section about encounters in which participants mainly referred to 'openness' in a negative manner.

Openness as problematic

When I asked David about his sense of direction, he said that he was not good at finding his way, and that he would certainly get lost if he did not use Google Maps. He explained why:

(5) *"It's probably because I see so much that I don't actively pay attention to what I see. Like, I've seen a hundred things on the way, but if you'd ask me if we passed a church five minutes or an hour ago, then I wouldn't know. I know that I've seen it, but..."* [ix]

David's contradictory experience of 'openness', working in his advantage when he is photographing but not when he is driving, stipulates the observation that these tendencies are not static, but relational: how openness is manifested depends on the encounter between the individual and the context.

Participants also discussed encounters in which their tendency of openness was experienced as problematic. For instance, as Hannah commented earlier (quote (1)), in the context of the classroom was problematic for her, as this distracted her. In terms of day-to-day locations, shopping streets or malls, certain traffic situations and supermarkets were often mentioned as locations that could be problematic. Participants named a combination of characteristics that caused this, such as bright lights, noise and music, choice of products, advertising, and other people. In combination with their purpose of being in at the location (e.g. in the supermarket to buy something) and fulfilling this goal (i.e. not forgetting an item), this was experienced to result in being overwhelmed, forgetful, tired, anxious or angry. Felix, who is 32 years old, works for an internet company, and was diagnosed with ADHD-C as a child, discussed the supermarket as a highly stimulating location in relation to his tendency to be open, and comments that this results in him being forgetful:

(6) *"The supermarket is... I don't think there's a much more stimulating environment than the supermarket. (…) And for ADHDers, things and objects all count as plus one, so every object is a 'thing'... (…) There are letters on it… it has information-value. And then there's people, they are especially distracting. You have to buy things, and go over [what I have to buy] forty times because I always forget things. Without a doubt, you always forget one thing."* [x]

Anne, a 23-year-old student who was diagnosed a year ago, also described the emotional consequences of her unpleasant experience of the supermarket. Especially other people's behavior or presence makes her frustrated and angry, because this complicates achieving her goal. Altogether, this makes visiting the supermarket a stressful activity, and Anne often feels tired and unproductive afterwards:

(7) Anne: *"It's a disaster. Especially now that everyone has to use a shopping cart [because of covid19-measures] - you can't take a basket. And then there's people with carts everywhere, and people bump into you, and then you exit an aisle and there's this*

stream of people with carts and that drives me nuts. It makes me angry, even thinking about it makes me a little angry."

Liselotte*:* *"So, do you make sure that you don't have to go there at those times, or...?"*

Anne: **laughs* In theory, I could make sure of that, but in practice that doesn't always work out. But, yeah… (…) I get so frustrated and sick of it that I'm not productive at all afterwards."* [xi]

The supermarket is also an unpleasant location for Christine (25, ADHD-C), who explained that she rather avoids going there altogether because of how overwhelmed she feels by the stimuli, such as the lighting, other people, and the amount of choices:

(8) *"I never go to supermarkets, because then I... I can't handle it you know, in the sense that [there are] many people, bright lights, ehm... a lot of noise, people yelling…. So I'd rather not go there. Plus I get really overwhelmed by all the choices I have to make, and then I'm like: 'I don't know, why is there not just one choice of chocolate sprinkles, it's so difficult!' So… I always wear my headphones, if I go there, and I only go at times when I know it's going to be quieter. So I really try to time it, that I'd go at eight in the morning or on weekends around one in the afternoon, when I know that there won't be many people."* [xii]

This section has illustrated that the tendency of openness is experienced highly subjective and relational by participants. However, openness can be experienced as either beneficial or as more negative or even problematic. Three participants have described the supermarket as a context in which the encounter between their tendency of 'openness' and environmental characteristics, such as lighting, choices, and other people, becomes problematic. This problematic encounter between participants' openness and the supermarket appears to be related to the amount of stimulation they get from the supermarket, which is experienced as "too much". I expand on this observation in the following section.

2. Tendency: Stimulation - A matter of balance

The second tendency that participants described is concerned with stimulation, and more specifically finding a balance in the amount of stimulation that is experienced. There were notable differences between the participants within this tendency, especially in terms of how much stimulation they preferred and why, and which kinds of locations they liked or disliked because of this. Especially when it came to encounters with busy or crowded environments, such as city centers and shopping malls, participants expressed diverging opinions. Nevertheless, for each of them, there appeared to be a 'right balance' between not enough stimulation (understimulation) on the one hand, and too much stimulation (overstimulation) on the other hand.

Some emphasized that they enjoyed or needed a certain level of sensory input from the environment, because they felt that these places inspired them, calmed them down, or allowed them to focus better. For example, Felix discussed that he preferred or dwelled better in environments that provided more stimulation, such as cities, because of his 'openness':

(9) *"I'm very observational, and that's why I function fine in the city. Because I notice everything. You know, it's all happening around me. And I enjoy paying attention to many things at once, but that actually calms me down. Because you are paying attention that, then you can focus."*[xiii]

As Felix describes, he generally prefers to be in a more stimulating environment, which, paradoxically, seems to help him to deal with his ADHD: it allows him to focus. Moreover, as he commented later, Felix also feels that he calms down because of the amount of stimulation he gets in a busy environment:

(10) *"I function best in busy places. The more stimuli there are, the better I can focus. There actually is a sort of... overload of stimuli, and that calms you down."* [xiv]

However, in the context of the supermarket discussed earlier, which Felix described as highly stimulating, he feels that there is *too much* stimulation, which makes him distracted and forgetful. This indicates that even though Felix generally prefers stimulating environments, he somehow needs to balance the amount of stimulation. This 'balance' is also illustrated by George, a 28-year-old student who was diagnosed as a child. He compares his experience of 'busy' environments with 'calm' environments. Paradoxically, George gets restless if there is less going on (i.e. when he feels understimulated) than when there is more going on:

(11) *"(…) On the one hand, yeah sometimes it's really too much and I'm like 'screw this', but I also think that... those environments kind of inspire me or something. And if it's too calm I also get very restless. Yeah, that drives me totally nuts."* [xv]

The tendency of 'balancing stimulation' is also described by George. Later in the interview, he said that he sometimes needs to withdraw from stimulation, echoing what Christine said about music festivals earlier: they enjoy them, and want to experience it, but they need some time to recharge:

(12) George: *"So. This is interesting. I used to live in the [street in the city center], but now they're doing construction work there (...). And I really enjoy bustle and stuff... but not all the time, not continuously. So when I'm... living there [at his new apartment outside the city center] and there would be buses passing our house all day everyday... like a constant flow, then that would drive me crazy. I need to alternate it, you know?"*

Liselotte: *"Okay, so you can decide for yourself like, 'not now'?"*

George: *"Yeah, yeah, that's important. Then I can recharge, so to speak. That kind of characterizes me."* [xvi]

During the walking interview, Felix discussed that he usually preferred stimulating environments. However, for the interview itself, he chose a location where he goes to relax when he feels stressed or emotional: a forest area near his home. The following quote provides a telling illustration of how the encounter with this location helps Felix to unwind:

(13) *"(...) And actually now that we're walking here, in this part right here, it slowly gets less... I automatically get more relaxed in my head, less distractible. That's also why I chose this forest route. And this spot here, where we are heading now... well I would sit down at one of those trees, at sunrise or sunset, because I... then I have this wide open field. (...) The benefit of an open field is that there's no impulses, and that makes you think calmer… because you don't get so distracted."* [xvii]

There were also participants who mostly described negative experiences in relation to the amount of stimulation they got from crowded environments. For example, as opposed to George's experience of feeling restless when understimulated, Anne described that it depends what kind of environment she seeks out: when she is already feeling restless or stressed, she does not want more stimulation:

(14) Anne: *"It really depends [what kind of environment I prefer]. When I'm already feeling restless, then I'd indeed rather not be in the city. Well, inside my house it's fine then, but I'd rather not go to crowded places, because that only makes me feel more restless, and that... doesn't help things."*

Liselotte*:* *"And when would you say that you are feeling restless, for example?"*

Anne: *"When I have a lot going on, or, eh, when there's a lot that I need to do, like studying, or when I… When I need to do stuff that I don't necessarily want to do *laughs*. Actually, in all situations that are not related to leisure *laughs* Those are the times that I really like it if it's not too enclosed… (….) a place that's kind of clear or open."* [xviii]

Hannah (15, ADHD-I) discussed balancing stimulation in relation to how she experiences too much silence (not enough stimulation) as 'not right' due to her tendency of openness. She feels that this is because she is used to noticing what is going on, and therefore to some extent needs stimulation:

(15) *"Well, if it's like really silent or something than I feel kind of strange. That feels as if it's not right. Well probably because... because you don't really filter stuff so you always notice everything that's going on... if everything is silent then it really is silent. (Liselotte: uhu). And yeah, I think that's why, when I'm in my room and it's really silent, that's probably why I like listening to audiobooks, because then it's not completely silent."* [xix]

Consequently, this experience that silence is 'not right' makes her find ways to renegotiate this, in this case by listening to audiobooks. This renegotiating tactic is the topic of the next section.

3. Tactic: Renegotiating environmental encounters

During the walking interviews, all participants discussed a range of tactics to renegotiate or shape their encounters with various contexts along their tendencies of 'openness' and 'balancing a spectrum of stimulation'. Some of these tactics have already briefly been touched upon, such as timing visits, or avoiding or seeking out certain locations due to their physical or social characteristics. In this section, I will highlight two tactics that all participants incorporated into their lives in one way or another.

3.1. Timing/avoidance

When talking about their negative encounters with the supermarket, both Anne and Christine discussed how they tried to time their visits to renegotiate their experience. During the interview, Anne (quote (7)) discussed that she prefers going to the supermarket early in the morning, when there are as few people as possible. When this is not possible, because she forgets or has classes, going to the supermarket results in a negative experience. Christine (quote (8)) even said that she rather does not go the supermarket at all, and when she has to go, she carefully times her visit too. In George's case (quote (12) timing meant being able to withdraw or take a break for stimulation.

The tactic to time visits does not only apply to locations that are experienced as unpleasant. For instance, one of Blair's (22, ADHD-I) favorite places in Groningen is the market in the city center, which is held on Tuesdays, Fridays and Saturdays. However, she makes sure to only go there on Tuesday mornings, when there are few other people, so her encounter with the market is as positive as possible. We visited this marketplace during the walking interview, on a Tuesday afternoon. This experience led her to reflect on how she usually experiences going to the market, and why she usually times her visits:

(16) *"I always really enjoy going to the market. But usually I go in the mornings, because now I think it's too crowded (Liselotte: yeah?). Yes, I immediately get... I get a little chaotic in my head."* [xx]

3.2. Utilizing sound

Wearing headphones and listening to sound, such as music, podcasts, or audiobooks, is a tactic that all participants of this study applied in one or more contexts. As I argued earlier, how participants experienced their tendencies of 'openness' and 'balancing stimulation' was relational rather than static. Hence, participants renegotiated potentially negative encounters with various contexts by listening to sounds, to prevent that their tendency of openness would be 'detrimental' and to fulfill their tendency of needing to balance stimulation. Even though there was wide variety between the participants in terms of when and what kind of sound they listened to, and why, most of them discussed listening to sound in relation to this helping them to relax or sleep, to avoid getting bored, or to concentrate better. The reason for using this tactic appears to be twofold: 1) to create a filter for sensory input (to avoid overstimulation), and 2) to create stimulation (to avoid understimulation).

As a filter

Listening to sounds was sometimes described as a way of creating a filter for sensory input, to avoid getting distracted or overstimulated. The following quote by Christine exemplifies how wearing (noise-cancelling) headphones functions as a filter for stimuli:

(17) *"Usually I just do it, because… Well like now, I hear that scooter, I hear those birds, I hear everything and I just feel as if… well then I can't really relax. But if I'm listening to some music, I can just kind of fantasize in my own world, and I enjoy that. So it really is a way of withdrawing from all the stimuli. So yeah, I think I mostly do it to, well, be closed off from the stimuli outside of my home."* [xxi]

When Christine does not wear her headphones, such as during the walking interview, she notices all kinds of stimuli due to her tendency of 'openness'. However, when she wears her headphones, she cannot hear what is going on around her, and she is able to withdraw from these stimuli and fulfil her goal for taking a walk in the park: to relax after a day of working. In other words, Christine creates a kind of 'barrier' between herself and her surroundings, so that her tendencies of 'openness' and 'balancing stimulation' do not prevent her from having a positive encounter.

Anne (23, ADHD-I) told me that she always wears headphones when she leaves her house. While we were discussing this during the walking interview, we passed an intersection (shown in Figure 3). Anne used this to exemplify how anxious she feels if she is not wearing her headphones while participating in traffic, because she cannot achieve a balance in the amount of stimulation. Although the picture may not seem very 'chaotic', as Anne describes, the intersection still evoked this emotional response. After the interview, Anne took some pictures as well. Figure 4 shows an intersection that she chose to photograph, which she experiences as unpleasant because of how anxious it makes her feel.

(18) *"Well I think… that this place demonstrates it pretty well. Here you have traffic lights, and everyone is properly waiting for their turn, doing their thing, and it is all going smoothly. When I'm not listening to music it kind of feels as if I'm standing in the middle of the intersection and people are driving past me from all directions and cycling and walking and… I just can't handle that. It's just very unsettling. (…) There are so many things happening at once and… (Liselotte: And if you're listening to music, then that's less?) Yes, because then there is one… stable sound you know, driving out the rest of the noise. (…) It's actually driving out sounds with other sound. And that… it sounds pretty illogical but for some reason it works for me."* [xxii]

FIGURE 4 - PICTURE TAKEN BY ANNE DURING THE WALKING INTERVIEW.

FIGURE 3 - PICTURE TAKEN BY ANNE AFTER THE WALKING INTERVIEW (ANONYMIZED). CAPTION: "HATE THIS INTERSECTION FOREVER" (CAPS IN ORIGINAL)

In this last sentence, Anne touches on a point that appears to be important to all participants. It is not so much the kind of sound that they listen to, or the kind of tactic they apply in general, that re-negotiates a potentially negative encounter into a positive one, but the fact that they use this tactic because it is what works for *them*, even though it may "sound pretty illogical" to other people. Thus, having the agency to decide for themselves to renegotiate their encounter in a certain way is important, such as listening to a certain sound (music) so that they do not have to hear, or be aware of, other sounds (in this case: traffic). Moreover, the wide variety of tactics described by participants illustrates that they were both aware of how they experienced certain locations and how this could potentially be problematic, as well as able to find ways in which they could renegotiate these.

So far, I have discussed how participants use listening to sound as a tactic to create a filter for *external* stimuli. However, participants also discussed this tactic as a way of creating a filter for *internal* stimuli, such as their own thoughts, especially at times when they wanted or needed to relax or sleep, or stay focused. In these cases, the self-selected sound provided something other than their own thoughts to pay attention to, and helped them to renegotiate their tendency of needing to balance stimulation. For example, Hannah (15, ADHD-I) said she always listens to audiobooks when going to bed, to help her relax her mind:

(19) Hannah: *"I also listen to audiobooks a lot, especially when I'm sleeping (…) or when I go to sleep. I have been doing that for a long time, and it helps me sleep. When I was younger, we also tried meditation music, but that doesn't help me. Because that makes me think more, for some reason." (…)*

Liselotte: *"And do you listen to that when you're going to bed, or when you're asleep?"*

Hannah: *"Ehm, when I'm going to bed and then... it often happens that I... And while I'm listening [to the audiobook] I am also reading a book, but I don't know why I can do that at that time, but... when I'm asleep that thing [the audiobook] is often still playing, and then... yeah it helps me to fall asleep more easily."* [xxiii]

My walking interview with her was in a park/forest, which she regularly visits to take a break from studying. During her walks, she said she often listens to podcasts or calls her mom. When I asked her if her encounter with the park was different now that we were conducting the walking interview as compared to when she was there by herself during her study breaks, she said:

(20) *"Yes. Normally… Now I'm thinking about how I look at everything and stuff, and what I pay attention to. Normally, I'm just walking, listening to some music, looking around, and then this is a moment that I'm not really thinking. And I think that's actually why I'm always listening to a podcast, so I can focus on that so I don't think about other stuff going on in my head."* [xxiv]

So, for Blair as well, listening to sound while she is taking a walk functions as a filter for her thoughts, and as a way of achieving a balance in stimulation. Consequently, she can fulfill her goal of not thinking, or relaxing.

As a stimulation

Secondly, participants commented on how they utilized listening to sounds as a way of creating a stimulation, to avoid understimulation. For example, Emily (54), the oldest participant in this study, who works in health care and was diagnosed with ADHD-H two years ago, discussed that there needs to be some kind of 'sound' when she is at home. The kind of sound, however, depended on her mood:

(21) *"Yeah and music as well. It's not the really loud stuff I used to listen to when I was younger, you know? But I also have the television on, or the radio, or just… I need to have some sound around me, I like that. But not too loud. (...) I do have that. And if I feel good, then I do enjoy certain kinds of loud music, so that differs. But I don't feel good, then..."* [xxv]

Other participants expressed using sound as a form of stimulation in other situations, such as participating in traffic. For example, David (22, ADHD-I) discussed how listening to music while driving helps him to stay focused on the 'whole', which benefits his participation in traffic:

(22) *"If I'm listening to music, then I can feel more comfortable in traffic, because if I don't listen to music, I kind of hyper-focus on other stuff. For example that I would be keeping an eye on one car, which causes me to overlook another cyclist or something. So I actually notice that if I don't listen to music… it's not that I can't concentrate at all, but that I hyper-focus on one sound or one car, causing me to… You know, traffic is about having an overview, you can't just focus on one thing. You have to [look] left and right, and then I notice that I lose the overview because I am only focusing on one thing."* [xxvi]

Similar to David, Blair (22, ADHD-I) also commented on how she prefers to listen to music when she is cycling. In the following passage, Blair reflects on whether it would be more or less safe to listen to music while cycling:

(23) *"I think I would be better able to focus if I wasn't listening to music. But not completely, because then I get bored and then I start looking around too much… so I don't know… It's hard to figure out what would be safer. You know… I think it's … for me it would be best if I wasn't listening to music at first, but when I start looking around too much, then I would turn on the music. But I actually always just listen to music, because I think it's fun."* [xxvii]

In her case, she feels that listening to music prevents her from getting bored due to understimulation. And if she gets bored, she feels that not listening to music is less safe because then she tends to seek some kind of stimulation by looking around, making her focus less on cycling and taking part in traffic.

4. Tactic: Utilizing environmental encounters to renegotiate ADHD

So far, I have discussed two tendencies, openness and a need to balance stimulation, and renegotiating tactics, such as timing, avoidance, and using sound, that shape ADHDers' experience of and interaction with various environments. This reciprocal relationship between the individual and the environment is re-emphasized in the final theme that can be distinguished in the interviews. All participants discussed ways in which they utilized environmental characteristics or employed spatial tactics as a way of renegotiating ADHD-tendencies in relation to their day-to-day activities. More specifically, the data analysis suggests that the ADHDers in this study physically balance or stimulate mental activity. Often when discussing their daily activities, such as studying, working, doing homework, or (digitally) attending classes, participants mentioned a need to incorporate some kind of physical activity. This way, they felt they could regulate their attention and/or control their physical energy levels, allowing them to concentrate better, especially on sedentary tasks. These tactics can be divided into three sections: 1) the right place at the right time; 2) get me out of here; and 3) on the move.

4.1. The "right" place

Firstly, participants described going to or being in a certain location in relation to a need for stimulation. For example, George (quote (11)) and Felix (quotes (9) and (10)) both discussed that they preferred being in crowded environments, even though they also emphasized that this was not the case at all times. The second reason that participants named to explain why they visited certain location was to relax mentally. For instance, earlier in this chapter Felix (quote (13)) described going to a quiet location to collect himself if he was feeling stressed or emotional. In his case, the encounter with the open meadow, where he feels that there are few stimuli, enables him to achieve his goal.

Blair chose a small forest near her home as the location for the walking interview, because she often goes there to take a break from studying (Figure 5). Because it is green and there are few other people, she felt that being in the natural and quiet characteristics of this location helped her to take her mind off the things she had to do, so she could relax:

(24) *"I always have to, or, I feel like I have to go outside when I'm studying. Because then my head's kind of full and then I'm like, 'some fresh air would be good'. And here it's always really quiet, and it's close to my home. So then I like to go walking here because it's really small as well, it's called a forest but it's more of a park with a lot of trees. But, then I always go for a little walk here and then I'm home again, I like that. (…) Most of the time I just listen to a podcast, or I call my mom. And I don't really walk in a circle, but kind of crisscross. Because, like over there are so many people now and normally I would go to the left here, because I don't feel like seeing people. (…) When I go walking here I do it to relax and stuff, then I… when I see those people, I'm like 'I don't need that now'."* [xxviii]

FIGURE 5 – PICTURE TAKEN BY BLAIR AFTER THE PILOT INTERVIEW. CAPTION: "THIS AFTERNOON I RAN INTO PEOPLE FOUR TIMES, AND I NOTICED THAT WHENEVER THEY WERE HEADING MY WAY THAT I WOULD GO TO ANOTHER PART OF THE 'FOREST'🌲."

This passage and picture exemplify that Blair still utilizes some tactics to renegotiate the encounter to ensure that she can relax in this location: by listening to sounds and adjusting her route in such a way that she does not run into other people. However, it should be noted that Blair does not always avoid other people. For instance, she noted that when she was at her parents, she would always walk towards the city center, so she could watch people. So, her preferences and spatial behavior depend on the context: whether she is taking a break from studying, or taking a walk during a day off.

During the walking interview, Christine also discussed that she liked to go on walks because this helps her relax. After the interview, she sent the picture shown in Figure 6. About why she took the picture, she commented:

(25) *"[This] is during one of my walks. I really like this route because since the lockdown, there are very few cars driving through the city center, as well as few cyclists, so it feels as if I'm by myself in the city center. This gives me a sense of calm."* [xxix]

She also sent a voice recording in which she elaborated this:

(26) *"I recently moved to the [street] and I'm walking a lot, like three times a day, and I noticed that, when I step outside my door, I'm really selective in which direction I go to. And what I avoid is actually two directions. I don't walk to the Noorderplantsoen, because I know that it's really crowded there. And I also don't go to the Oude Kijk in 't Jatstraat, because I find that a really unpleasant street, in the sense that there's a narrow sidewalk and a lot of shops. Even though they're not open now, they're there anyway, and I get the feeling that I need to look inside. Many cyclists, many cars, many trucks. So I don't usually walk there, I noticed that today. So I usually walk towards the Hoge or Lage der Aa, or towards the station, like the more quiet locations with wide sidewalks where there's no other people."* [xxx]

FIGURE 6 - PICTURE TAKEN BY CHRISTINE AFTER THE WALKING INTERVIEW.

Thus, even though this did not come up during the walking interview, Christine later noticed that she sub-consciously adapts her route to make sure that she finds the right balance in stimulation: certain locations help her to relax, whereas others have a counterproductive effect.

4.2. Get me out of here

In line with what Blair said about why regularly visiting the park, both Hannah (15, ADHD-I) and Christine (25, ADHD-C) shared how they noticed a need to 'get out'. However, in their case, rather than being in a certain location or physically moving, there appears to be a need to *not* be in a location: to create physical distance between themselves and a mental activity (in that location). Hannah, for instance, described that when she feels stressed, she starts to feel trapped or claustrophobic in her room:

(27) *"(...) When I'm more stressed or something, I tend to get the feeling that I'm stuck. So when I'm in my room, it starts to feel like I'm trapped in a box. So then... I don't know, because I'm thinking so much and then it feels as if all the walls are square and the ceiling is square... And I know that there are windows but at that moment it kind of feels like they don't exist."* [xxxi]

Christine also discussed how she physically notices that she needs to balance stimulation by spatially distancing herself from her work during a workday:

(28) *"I notice it in my body, I'll get trembling legs or hands. So my body is really well-conditioned in that sense, to indicate it. And also mentally, getting frustrated because you knock something over, and then you're like 'blegh, it's just not working anymore'. Small things like that. Really just the feeling I just need to… even though it sounds silly… get some fresh air. (…) And that the walls are closing in on me… (…) Yeah, just… you notice like 'there's nothing in this room I can do that's not the same as what I was doing before.' (…) Maybe it sounds kind of abstract… but for example when I'm working, and I feel like the walls are closing in on me, and then 'o so let's fold the laundry', but… that doesn't solve the problem. I really need to get out - out of that space. (…) A change of scenery, that's it."* [xxxii]

From both what Hannah and Christine describe, these feelings of 'being trapped' or 'needing to get out' appear to be pre-conscious: their body already starts to feel and behave in a certain way before they are aware of it.

4.3. On the move

Finally, some participants specifically referred to playing sports or working out as a tactic to handle their physical energy and to find a balance in stimulation. The consequences of the covid19-pandemic were also mostly discussed in relation to this tactic to be 'on the move': some participants said that they noticed that they had no outlet for their physical energy, since otherwise regular spatial movements such as commuting, playing team sports, and participating in social activities were not or less possible during the lockdowns. Consequently, they felt that relaxing, sleeping, or concentrating on work or study was more difficult. For example, the walking interview with George took place at the end of December 2020, when the Netherlands was in lockdown. Balancing mental and physical energy is important to George, as he described that he functions best when these two are "in sync". He discussed playing sports and working out as his most important way of 'handling' his physical energy ever since he was a child:

(29) *"I used to play a lot of basketball. Now I swim, do fitness, go running... just to stay fit. And maybe it's... sports also keep me kind of relaxed, you know. So, for me, I really can't do without."* [xxxiii]

When discussing how he dealt with not being able to go to the gym because these were closed during the lockdown, George told me about a spatial tactic he had discovered during the first lockdown, in the spring of 2020:

(30) *"I went running or cycling. In that first lockdown, (…) I was really busy with classes and writing my thesis. So what I did, and this may sound a little strange, but you have these apps to track your steps, and they always recommend ten thousand steps. And I'm obsessed with numbers and differences… (…) And I just wanted… I always want to get ten thousand steps, and that's easy to do when there's no corona. But with corona it's more difficult. So what would often*

happen, is that I was studying during the day and then at night I would still have to get some physical movement in… And besides, sitting still doesn't feel right to me. Then it's like my blood stops flowing. So, what I'd do was, I'd go cycling in the middle of the night, every day, around the Paterswoldsemeer. So I would get the ten thousand steps. And it sounds really weird and I know that, but I really thought like: 'this is the way to go'." [xxxiv]

What George describes here about his nightly cycling trips, maybe sounding weird to other people but working for him, is in accordance with what I previously argued about participants' tactics. George is aware of his tendency of needing to balance stimulation and consequently finds his own ways of incorporating this into his life, even though it may not be considered 'normal' for other people.

David (22, ADHD-I), who recently graduated from university and was diagnosed at age 20, even said that his ADHD remained undetected because he used to play sports so much as a child, allowing him balance mental tasks with physical movement. It was only after he went to university and he did not have the time to play sports as much, that his physical energy became problematic. Thus, a change in his context caused him to be no longer able to apply his tactic of playing sports. Consequently, his physical energy level became an obstacle for performing mentally, again emphasizing the argument that ADHD is not static but relational:

(30) *"I have actually known my whole life that I… bounce and enjoy everything. But I… you know, I played sports twenty-four hours a week, so I was physically tired enough to not have to worry about it. Because when you're tired, then you can… I can still only read a book when I'm really tired. Otherwise reading is… three words and then I look at the wall, and another three words and then I look at something else again. Eh… so yeah, I noticed that sports… Back in the day I did enough sports to be tired when I wasn't doing sports, like physically. So yeah, I actually only noticed it at the university, after I quit playing top-level sports, that I had an abundance of physical energy."* [xxxv]

Moreover, David discussed how his tendency to physically balance mental activity became an issue during his internship, which was why he sought to get an ADHD-diagnosis. David said that he could get medication if he was diagnosed, which he expected would help him meet the social expectations of how to behave in the office. However, his experience with medication was a negative one, so he ended up not using it. During his internship, at an office with an open floor plan, he often felt the need to stand up, move around, or dance. However, he was afraid that this would distract other people and that they would find him annoying. David said that some days, he would only focus on being quiet to fit in with the social expectations. However, this was counterproductive to him, because he could not act on his tendency to physically balance his mental activity. To this end, the covid19-pandemic offered a solution,

since he ended up working at the office by himself. Without the presence of other people, David could behave the way he wanted without feeling self-conscious. He utilized the physical characteristics of the building to accommodate for his tendency to balance stimulation:

(31) *"(…) I love stairs. I always go up and down stairs a hundred times. Just because I think it's nice... And it's just… It provides just enough cognitive load that you are engaged in it, but you can still think about something else. Because if I fidget [with my hands] my head still goes all over the place. (…) What I remember from the office building is that… (…) there was a large staircase and downstairs was a big room with a whiteboard in it. So I would, you know, write down my ideas on the whiteboard and then go upstairs again, and then I would… Instead of moving the whiteboard to my office, I thought: 'No, I like this, just leave it downstairs, so I can go down the stairs, write on the whiteboard, and then go upstairs again to my laptop."* [xxxvi]

In this section, I have highlighted three ways in which participants incorporated environments or spatial behavior into their lives as a tactic to renegotiate their experience of ADHD: 1) by seeking out the "right place" in order to fulfill a certain need or desire, such as relaxing or finding stimulation, 2) by physically distancing themselves from a location associated with a certain mental activity, and 3) by utilizing sports or environmental characteristics to balance physical and mental energy. These tactics, just as the other tendencies and tactics found in this thesis, appear to be in constant interaction with the social and physical context in which the ADHDers of this study operate.

In summary, four main themes are identified: the tendencies 1) openness and 2) balancing stimulation, and tactics to 3) renegotiate environmental encounters and 4) utilizing spatial encounters to renegotiate ADHD-tendencies. I want to emphasize that for the purpose of structuring the analysis, I have discussed and illustrated each of these themes separately. Yet, differences between and contradictions within these themes are observable throughout this chapter, and more often than not, participants' quotes applied to multiple themes. Therefore, the tendencies and tactics need to be regarded as deeply personal, inextricably connected, and continuously shifting interactions, rather than distinct themes.

V. Discussion

By letting participants speak for themselves as much as possible, I have sought to explore a contextualized and experiential perspective of ADHD. The findings suggest that there is no such thing as 'the' ADHD experience of and interaction with environments. Rather, it is the *encounter* between the individual and various contextual characteristics that seems to matter. These encounters varied and at times contradicted between, but also within participants. Yet, the experiences that the ADHDers in this research described do, to some extent, resonate with existing knowledge on ADHD, disability geography, or neurodiversity. For each of the four themes, I discuss how they relate to previous studies and highlight how the findings of this study add to or modify existing insights.

Openness

Firstly, the participants of this study all described a certain 'openness' to stimuli. The observation that ADHD affects a person's experience of and response to stimuli corresponds with existing literature. Medical studies on ADHD-brains have indicated that due to a lack of dopamine, ADHDers are more susceptible to external stimuli, as their brain is constantly seeking stimulation to fill this shortage (Lloyd *et al.*, 2006; Nielsen, 2017; Stewart, 2017). Some research has previously contextualized this. For instance, Carbone (2001) argued that ADHD-children are more susceptible to distractions in the classroom, and therefore proposed that (visual) distractors should be minimized, so that they do not prevent the child from paying attention and finishing their work. However, Carbone (2001) conceptualizes openness as an inherent and static impairment, which always leads to detrimental behavior and should be treated. While this could be the case for a context with strict behavioral expectations as the classroom, the experiences of this study's participants suggest that openness to stimuli is in some cases detrimental, e.g. causing forgetfulness and anger in the supermarket, but at other times an advantage, e.g. noticing many things at once when navigating.

From a neurodiversity perspective, it can thus be argued that openness is neither negative nor positive, but relational: dependent on the context. The 'context' in this study entailed both the characteristics of the location (e.g. physical features, time of day, or the presence and behavior of other people), as well as the individual's characteristics (e.g. previous experiences, their mood, and familiarity with and reason for being in a location). This relational experience of openness described by the participants is in accordance with previous studies on ADHDers' experiences in relation to other contexts. For instance, Gallichan and Curle (2008), when discussing their participants' experiences, exemplified that "a reciprocal relationship between themselves and their context" is "fundamental" to how ADHD was experienced (p. 350). Likewise, Lasky *et al.* (2016), in their study of ADHDers' experiences of work environments, found that some contexts seemed to ameliorate ADHD-related difficulties, such as distractibility and restlessness, whereas these appeared to be non-existent in others. This finding

confirms the stance within disability geography and neurodiversity that a true understanding and appreciation of body-mind differences can only be accomplished if research revolves around contextualized lived experiences, since there may be a discrepancy between observed behavior and inner experiences (Davidson & Henderson, 2010; Hansen & Philo, 2007; Kitchin, 1998).

Stimulation: a matter of balance

The second tendency described by participants was a need to balance stimulation, both in terms of sensory input as well as in physical and mental activities. The need to balance stimulation resonates with some existing literature on ADHD. For instance, when proposing a rhythm-based understanding of ADHD as an embodied and relational phenomenon, Nielsen (2017) discussed how everyone has an "optimal level of stimulation" (p. 269), in which there is a balance between too little and too much stimulation. This appears to apply to the ADHDers in this study, as they discussed experiences with and consequences of being under- and overstimulated. For instance, Blair said that when she was cycling (without listening to music), she tended to get bored, which led her mind to wander. In the context of cycling, she discussed this experience of understimulation as negative, because she cannot adequately pay attention to traffic. Therefore, she listens to music as a way of creating stimulation. At the other end of the spectrum, participants elaborated on environmental encounters that caused overstimulation, such as city centers, especially when they were already feeling restless or stressed.

However, some participants noted that they *needed* a certain amount of stimulation, because too little stimulation "feels as if it's not right" (to quote Hannah) and that they therefore "functioned best" (to quote Felix) in busy places that provided more stimulation. This stimulation could be through sounds or sights, but also embodied stimulation through physical movement, such as fidgeting or walking. This is interesting, because authors such as Carbone (2001) proposed minimizing "distractors" (p. 77; i.e. stimuli) in the classroom in order to regulate ADHDers' attention "to the appropriate degree" (p. 73), while from the participants' experiences, this can be argued to have a counterproductive effect, as being understimulated made them feel restless, bored, or distractible. There thus seems to be a discrepancy between how others interpret ADHDers' behavior and their own experiences. The perspectives of this study's participants indicate that interpretations such as 'too many stimuli are always detrimental' are too narrow and too absolute, and that it is more about finding a balance between too little and too much stimulation. This emphasizes the necessity for research to revolve around lived experiences rather than interpretations of observed behaviour to truly understand ADHD.

Renegotiating environmental encounters

The third theme of this study consists of tactics that participants adopted to renegotiate (potentially) problematic encounters, or to ensure a positive encounter. The necessity for these tactics stems from the interaction between their tendencies of 'openness' and 'needing to balance stimulation' on the one hand, and environmental characteristics on the other hand. While participants discussed a variety of

tactics, two categories stood out. Firstly, they discussed timing their visits to or avoiding certain locations, such as the supermarket. Secondly, all participants described listening to sound as a renegotiating tactic in one or more contexts, both as a way of creating a filter to avoid overstimulation as well as creating stimulation to avoid understimulation. The value of sound in renegotiating encounters observed here connects to the findings of Söderlund *et al.* (2007), who reported that environmental noise was beneficial to the cognitive performance of ADHD children. However, this study adds to these insights that sound is not just beneficial to measurable behavior or performance of, but also to how ADHDers experience and interact with various environments.

These renegotiating tactics also connect with disability geography and neurodiversity, wherein the (need for) tactics for other groups with body-mind differences has been provided. The description of creating a filter or barrier to stimuli corresponds with the tactics and practices of agoraphobic women and people with social anxiety disorder discussed agoraphobic found by Boyle (2019), Davidson (2000), and McGrath *et al.* (2008). The women in Davidson's study, for example, described themselves as intensely susceptible to sensory input, which at times led to such discomfort that they were (almost) unable to be in certain locations or to participate in certain activities. As a way of dealing with or preventing this, the women had tactics to create a barrier between themselves and their environment. This also seems to be the case for at least some ADHDers in this study. However, this thesis contributes to these insights by observing that for ADHDers, tactics are not just used as a way of creating a filter, but also as a way of creating stimulation.

The renegotiating tactics can also be related to studies on ADHD and driving ability, both content-wise as well as methodologically. In a lab study, Reimer *et al.* (2010) found that ADHDers were significantly more likely to get distracted than non-ADHDers in a low-stimulus environment, whereas this difference was not present in high-stimulus environment. However, they do not deepen this observation, while my findings indicate that this difference between less and more stimulation is a vital piece of the puzzle in understanding ADHDers' ways in being and doing in the world. Moreover, based on the findings of this study, it can be argued that a laboratory driving simulator is not suitable to examine ADHDers' driving ability, as it may lead to a bias in the results, because they can get distracted by the stimuli of the simulator itself and cannot apply their normal way of doing, such as listening to music, as Blair and David described. Again, this accentuates the need for people's lived experiences to be central in research, both in content as well as form.

Utilizing environmental encounters to renegotiate ADHD

The fourth theme consists of spatial tactics as a way of renegotiating ADHD. All of the participants incorporated environment or environmental encounters into their lives in one way or another, and three sub-tactics were distinguished: 1) seeking out the "right place" in order to fulfill a certain need,

such as relaxing or finding stimulation, 2) creating spatial distance between themselves and a mental activity, such as working or studying, and 3) utilizing environmental encounters to balance physical and mental energy. This observation of utilizing environments or spatial behavior to renegotiate ADHD connects to Boyle's (2019) findings on women with Social Anxiety Disorder, who described to incorporate visiting certain locations or adopting certain spatial behaviors to renegotiate their experience of anxiety in their daily lives.

How participants referred to physical activity as an integral part of their lives and their experience of ADHD offers a different perspective of the symptom 'hyperactivity', defined as 'the inability to sit still when expected' (Rothstein, 2012). In existing literature on ADHD, hyperactivity is often referred to as a detrimental characteristic that prevents ADHDers and those around them from paying attention. However, the findings of this study indicate that rather than preventing concentration, physical movement is *needed* to concentrate. This is exemplified by David's experience at his internship: in order to concentrate, he needed to move around, but he felt that this did not match the social expectations at the office. However, if he tried to meet those expectations by not moving, this was counterproductive for his ability to focus, as it was not his normal 'way of doing'. From this perspective, I argue that demanding an ADHDer to not move is more detrimental than allowing them to behave in a way that comes natural to them. This resonates with the stance of Hansen and Philo (2007): when disabled people were forced to behave in certain ways, this led to a struggle and discomfort in trying to adhere to these expectations. However, when they got the chance, they proved to be deeply able of finding their own ways of doing things differently. Likewise, when given the freedom, the participants of this study radiated a sense of agency, creativity and innovativeness in finding ways to live their lives conform their own ways of being, knowing and doing. Even if these may seem paradoxical to outsiders, or as Anne said: "it sounds pretty illogical, but for some reason it works for me."

To this end, this study connects to the call by disability and neurodiversity geographers to counter ableist or neurotypical interpretations of behavior through contextualized lived experiences. As Davidson and Henderson (2010, p. 472) asserted: "(…) the more we can see (or at least imagine) other ways of being in and engaging with the world, the less likely we are to construct those experiences and interactions as pathological." In the case of ADHD and hyperactivity (or rather physical energy), if one can imagine that an ADHDer feels as if his "blood stops flowing" (as George said) when he has to sit still, then it is easier to understand his way of being as being naturally different rather than interpreting his behavior as an inherent impairment.

VI. Conclusion

Although it is acknowledged that ADHD affects all aspects of people's lives, the existing understanding of ADHD is dominated by a psycho-medical discourse, leading to incomplete knowledge and the stigmatization of ADHD. Within disability geography and neurodiversity, the necessity of countering this discourse through contextualized and experiential perspectives has been established for other body-mind differences, but such a perspective has not yet been provided for ADHD. Therefore, this thesis aimed to 1) provide a contextualized and experiential perspective on ADHD, and to 2) examine ADHDers on their own terms by adopting a methodology conform their ways of being, knowing, and doing, as is urged within neurodiversity (e.g. Craine, 2010; Judge, 2018). The research questions were:

- How do ADHDers living in or near Groningen experience and interact with their everyday environments?
    - To what extent do they adopt tactics in these experiences and interactions, and why?
    - To what extent do they utilize environments in their experience of ADHD, and why?

Through a negotiated, participatory approach consisting of a pilot study, walking interviews, and participant-led data gathering, I have identified four deeply subjective, inextricably connected and continuously shifting themes: 1) openness, 2) a need to balance stimulation, 3) renegotiating environmental encounters, and 4) utilizing environmental encounters to renegotiate ADHD.

The findings suggest that ADHDers' experience of and interaction with their everyday environments is shaped by their tendencies of openness and needing to balance stimulation. In some contexts, openness was described as positive because it made participants 'notice many things at once', whereas in other locations, they referred to this tendency as negative because they were 'unable to filter stimuli'. The second tendency shaping ADHDers' interaction with environments was a need to balance stimulation on a spectrum ranging from under- to overstimulation. This balance was both in terms of sensory input, as well as between physical and mental activity. This tendency connects to the first, since participants described that because they were used to being 'open', they needed a certain degree of stimulation. Consequently, understimulation led to boredom, restlessness, distractibility or mind-wandering. At the other end of the spectrum, overstimulation was associated with stress, exhaustion, forgetfulness, or overwhelm.

Secondly, the ADHDers in this study described a myriad of tactics in relation to encountering environments, of which I have highlighted two: avoiding and timing visits, and utilizing sound. The necessity for these tactics stemmed from the reciprocal relationship between ADHDers' tendencies on the one hand, and environmental characteristics on the other hand. In some cases, this interaction was problematic, causing participants to renegotiate or shape the encounter to foster a more positive experience. To address final research question, participants of this study discussed utilizing

environmental encounters to renegotiate their ADHD-tendencies, especially in relation to needing to balance stimulation. More specifically, I have elaborated on three ways in which participants utilized environments or environmental encounters in their experience of ADHD: by seeking out the right location in order to fulfill a certain goal, such as relaxation or inspiration, by spatially distancing themselves from mental activities, and by physically balancing mental activities. In so doing, they incorporated 'context' as an integral part of their day-to-day lives. The 'messiness', the reciprocal and shifting nature of the four themes, exemplifies that ADHD is manifested in the interaction between person and place. In this case, ADHDers both adopt tactics to renegotiate environmental encounters as well as utilize environmental encounters to renegotiate ADHD.

To some extent, these findings resonate with existing knowledge on ADHD, disability geography, or neurodiversity. For instance, the observations that ADHDers are open to stimuli and need a certain amount of stimulation has been established in previous studies. However, this study contributes a contextualized and experiential dimension, and problematizes the psycho-medical interpretation of these tendencies as wholly negative. The findings also connect to disability geography, as the ADHDers in this study were not only aware of potentially problematic interactions between their ways of being, knowing, and doing, and various contexts, but also radiated a sense of agency through their creativity and innovativeness. Therefore, I suggest that ADHDers are not passive consumers or 'victims' facing the consequences of something outside of their control. Rather, they are constantly, consciously and unconsciously, finding their *own* ways, in terms of environmental encounters, and in their ADHD. Even if these ways seemed 'pretty illogical' to outsiders, they 'worked for them'. Yet, I want to stress that I do not seek to downplay ADHD. In some cases, it undeniably was problematic. However, this was always in relation to context. For instance, when there was a mismatch between participants' ways of being, knowing and doing and the social and physical expectations imbued in place, or when their behaviors were interpreted differently than they experienced them. This accentuates a discrepancy between how behavior is observed and interpreted and lived experiences. Thus, in line with disability and neurodiversity geographers, I argue that ADHD can only be understood and valued, and thus that a truly inclusive society can only be accomplished, by considering people's contextualized lived experiences.

Since these experiences resist neat classification, this thesis challenges the psycho-medical interpretation and categorization of ADHD-related behaviors into the distinct diagnostic criteria hyperactivity, impulsivity, and inattention. Rather, participants seemed to experience them differently, and as intrinsically connected. Firstly, they appeared to be not 'unable to sit still', but to have a unique embodied experience of, need for, and response to stimulation. Consequently, they did not seem to be 'unable to focus', but they needed a certain balance in stimulation, be it physically or mentally, in order to concentrate, suggesting the interconnectedness of hyperactivity and inattention. Finally, participants did not appear to be 'unable to control their actions', but they were thoroughly able to renegotiate their

(inter)actions with and within contexts. In other words, the contextualized experiences that I explored in this thesis were, in the most literal sense, *all over the place:* deeply subjective, inextricably connected and continuously shifting. Therefore, I propose a reconceptualization of ADHD as an embodied process of being different rather than an inherent state of being deficient.

The second contribution of this thesis lies in its form: in how I have come to the findings that I described above. With this project, I sought to examine ADHDers on their own terms, as urged within neurodiversity studies. By adopting a negotiated and participatory approach, this thesis illustrates for the necessity of putting those with lived experience at the core of research, both in content as well as form. Not only did this form suit the aims of eliciting place-experiences and allowing participants to share their knowledge on their own terms, the process of finding the most suitable method in itself provided valuable insights into ADHDers' contextualized lived experiences, thereby informing the content. Finally, I hope that this thesis may be an example for other ADHD-researchers, within or outside of geography or neurodiversity, by showing that explicitly and reflexively including your own ways of being, knowing, and doing in research can provide a stepping stone towards the destigmatization of ADHD. In conclusion, with this thesis, I hope to have contributed to a more holistic understanding of ADHD. For academia, for society, and for ADHDers, including me.

Limitations and recommendations for future research

There are some limitations to this study. Firstly, it was conducted with eight participants, limiting the generalizability of the findings. Due to this, variations between participants could not be clarified by other characteristics such as age or gender. Further research is needed to examine if the insights gained with this study resonate with other ADHDers in other contexts, and whether the tendencies described in this study can be further scrutinized by age or gender. Secondly, the topics that were not covered in this thesis exceed the topics that were, leaving much room for future academic endeavors. For example, I have not explicitly analyzed place-experiences in relation to modes of transportation or the use of medication. Future research could more explicitly take these into account. The final limitation concerns the participant-generated data that I sought to include. In practice, this part did not work out as I had thought, since three participants did not send in additional data. This limited the implementation of this data, as I did not have it for all participants. In hindsight, this part may have been more demanding of the participants than I expected. In the future, it may be better to combine the walking interview and the additional data collection, although this does limit to the empowering component of participatory research. However, *not* independently gathering data may have been conform these ADHDers' ways of communicating, and thus conform researching them on their own terms.

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VIII. Appendices

Appendix A – Interview guide

Introduction

- How ADHDers experience and interact with their daily living environments?
- What do ADHDers like or dislike, and which tactics they use, for example?
- Curious to learn how this is for you. What do you find pleasant or unpleasant, and why? How do you behave in certain locations?
- This may be difficult to communicate or access
- Walking around, but we could also sit down if you prefer. You decide
- You're in charge. This may be difficult, if you feel unsure I can always help. We could also go to multiple locations, we'll make the route up as we go.
- The most important thing is that you feel comfortable
- Lasts about an hour, may be longer. We could also continue at a later time
- I can imagine that it could feel awkward to tell me a lot about yourself, while I don't share that much about myself. Shall I tell you something about myself first? You can always ask me questions, if you like.
- Could you tell me something about yourself? How old are you, where do you live, where have you lived? What are your hobbies? What kind of work/study do you do? What does your daily life look like?

About this location

- Where are we, and why did you choose this location?
- How often do you come here, and why? What mode of transportation do you use? What memories do you have here? What kind of feeling does this location give you? And when you come back home?
- Do you always take this route? What sticks out in the environment? What are you thinking about when you walk here?

Other locations/spatial behavior

- What are your favorite locations, and why? Where do you go to relax, or would you rather stay at home?
- What are your least favorite locations, and why? What do you experience when you're there? And afterwards?
- Do you find it easy to navigate? Pay attention to traffic? When/when not?
- Do you listen to music when you're outside? Why (not)?
- Do you have your driver's license? How do you feel about driving?
- Doing groceries, shopping for clothes, going to work/school
- Do you like going outside? E.g. Hobbies, get some fresh air, movement…
- How would you describe your room/house?

Personal questions

- Is it okay if I ask some questions about your ADHD? If you prefer, we could go somewhere quiet.
- Can you tell me something about your diagnosis? When and why did you get diagnosed?

- What does having ADHD mean to you?
- How do you feel about having ADHD?
- What role does ADHD play in your daily life? In which cases would you say that you 'notice' it the most?
- How do you deal with ADHD?
- Do you use medication? How do you experience this?
- Does your social environment know that you have ADHD?
- How do you feel about ADHD in general?
- Attention, impulsivity, hyperactivity, emotions, stimuli

Probes/questions based on previous conversations

- Assessing traffic, overview, predictability, 'openness'
- Seeking 'stimulation' or avoiding, how do you experience this?
- Shopping streets → crowd, forgetting what to get… do you adjust your behavior?
- Music. Why (not)? Safety?
- Aware of traffic, or autopilot?
- What does being outside mean to you?
- Feeling different after you've been here
- Supermarket
- Avoiding certain locations or at certain times, adjusting behavior
- Studying at home, first adjust the location/cleaning/tidying
- Tactics (music, working out, timing, online, quiet routes…)
- Where do you look at when you're walking on the street?
- 'Needing' movement? → To clear head, outlet for energy…
- Adventurous? Risky behavior?

Additional data

- Record your experiences in your own way, on your own time
- Why do you record this experience, location, or situation?
- Why is this an example of how you experience X?
- Should we set an appointment for when you will send this to me?
- If you don't get around to it, that is okay.

Closing questions/remarks

- What did you think of this walk?
- Do you feel like you have been able to share everything you wanted to?
- Are there locations that are important to you, but that we haven't visited?
- Are there things that you told me, which you rather wouldn't have wanted to? Are there things that you don't want to have transcribed? Or that you don't want to have included in the research?
- If you want, I can send you the transcript. You always have the right to change or omit your answers. Then I will not include them in the research.

Appendix B – Codes and definitions

Code group	Code	Definition (when not self-explanatory)
ADHD symptom/ characteristic		
	ADHD as advantage	The participant mentions a characteristic, situation, or location in which they feel that ADHD provides an advantage
	Active	Participant discusses themselves as active or energetic (as compared to others)
	Adventurous	Participant describes themselves as adventurous
	(Sustain) attention	Participant discusses something related to paying attention or sustaining attention
	Chaotic	Participant describes themselves as chaotic or 'all over the place'.
	Creative	Participant discusses creativity, innovative
	Daydreaming	Participant discusses experiences of daydreaming/mind wandering
	Emotion	Participant discusses ADHD in relation to (regulating) emotions
	Fidget/move	Participant discusses experiences of fidgeting/moving around/physical restlessness
	Frustration	Participant discusses feeling frustrated with ADHD, in general or in relation to a certain situation/location
	Hyperfocus	Participant discusses hyperfocus or situations in which they hyperfocus
	Impulsive	Participant discusses experiences of being impulsive
	In society	Participant discusses how (they feel that) ADHD is perceived or treated within society
	Job	Participant discussed ADHD in relation to their job/career
	Misunderstanding	Participant discusses misunderstandings that other people may have regarding ADHD
	Not aware/don't notice	Participant mentions to not be aware about how ADHD would affect certain aspects of their lives, or whether they behave a certain way because of their ADHD or 'because that is their character'
	Open/no filter	Participant discusses experiences of not having a filter or being open to external stimuli
	Overview	Participant discusses ADHD in relation to having an overview over situations/locations

	Problem solving	Participant discusses how ADHD affects their problem solving abilities
	Social	Participant discusses ADHD in relation to social situations, other people, or social expectations
	Stigma	Participant discusses experiences of ADHD stigma
	Tactics	Participant discusses a tactic they apply to cope with ADHD characteristics
Emotions/ consequences		Consequences of being in a certain location or certain spatial behavior
	Angry	
	Anxious	
	Calm/relaxed	
	Can't sleep	
	Distracted	
	Energetic	
	Focused	
	Forgetful	
	Happy	
	Indecisive	
	Inspired	
	Restless	
	Tired	
	Uncomfortable	
	Unproductive	
Experience		How a participant discusses that they experience themselves (in relation to others, a certain situation, or location)
	"Different look"	Participant discusses how they feel they see or notice different things than others
	"Hoofd vol"	Participant discusses experience of their head being "full", or them being overwhelmed
	"It gets too much"	Participant discusses experiencing a certain situation or location as being overwhelming or too much to handle.
	"Kan me ervoor afsluiten"	Participant mentions that they are able to "close themselves off" for stimuli
	"See different things"	Participant discusses that they experience seeing/noticing different things than others, e.g. when walking on the street.
	Better focus	Participant discusses that they are better able to focus
	Bored	

	Clumsy	
	Direct	Participant describes being direct or blunt
	Disrupting others	Participant describes their behavior as being (potentially) disruptive/annoying to others
	Need to get out	
	Need breathing room	
	Need novelty	
	Need stimulation	
	No filter	
	Observative	
	Physically balance mental activities	Participant discusses that they feel that they need to balance physical and mental behavior
	Need structure	Participant discusses that they need structure, be organized
	(Over)thinking	
	Unaware/involuntary	
	Difficulty estimating traffic	
	Walls closing in	
Location		The location that a participant discusses (i.r.t. an experience)
	Ideal environment	
	City (traffic)	
	Coffeehouse	
	Intersection	
	Family home	
	Highway	
	Home (room)	
	Library	
	Market	
	Park/forest	
	Rural	
	School	
	Shared space	
	Shopping street/mall	
	Study	
	Supermarket	
	Work	
Personal		Topics that were not directly related to spatial experiences or behaviors
	Background	

	Competitive	Participant describes being competitive and/or enjoying a challenge/to challenge themselves
	Diagnosis	
	History	
	Hobby	
	Medication	
Place characteristics		Characteristics of places that are discussed i.r.t. experiences or behavior
	Difference	As opposed to another type of location
	Physical	Physical design, such as tiling, architecture, stairs, plants/nature.
	Pleasant	
	Social	
	Symbolic	
	Unpleasant	
	Built	
	Busy	
	Calm	
	Chaotic/unpredictable	
	Choices	
	Clear/overview/predictable	
	Familiar	
	Lights	
	Natural	
	Noisy	
	Other people	
	Tall buildings	
	Unfamiliar	
Sensory		Codes that relate to (the experience of) sensory characteristics
	Deprivation	Participant describes feelings of not having enough/somewhere not providing enough stimulation
	Overload	Participants describes experiences of having too much/somewhere providing too much stimulation
	Seeking	Participant describes behaviors of seeking sensory stimulation
	Stimulation	Participant describes needing or preferring sensory stimulation, or situations that provide stimulation

(Spatial) Behavior		Codes relating to spatial behavior
	Autonomy	Participant describes having autonomy or agency (as important)
	Commute	
	Difference	
	Going out	
	Going to bed	
	Navigation	
	Break	
	Pleasure	
	Shopping	
	Studying	
	Taking a test/exam	
	Therapy	Participant describes going outside/moving/to a location as a form of therapy
	Getting lost	
	Working out/sports	
Tactics		Tactics that a participant discusses to renegotiate environmental experiences and/or their experience of ADHD
	Looking up/down	Participant describes looking down (at the street) or up (to the sky)
	Audiobook/music	Participant describes listening to music/audiobook/podcast
	Google Maps	
	Moving around	
	No phone	
	Not alone/with others	
	App/lists	Participant describes using an app or list to organize their tasks or set reminders.
	Overview	
	Alternate stimulation	
	Quiet place	
	Reading	
	Route	
	Seek out location	
	Sleep	
	Sports	
	Stimulation	
	Tidying/cleaning up	

	Timing (night)	
	Go outside	
	Internet	
	Fidget	
	Buy extra product	
	Avoid people	
	Alcohol	
	Alarm	
	Avoid location	
	Cannot see distractions	
	Create noise	
	Downside of tactic	Participant discusses a (potential) downside of a tactic
	Self-decided/created	
	Filter (music/sunglasses)	
Mode of transportation		Mode of transportation that is discussed (in relation to an experience or behavior)
	Bicycle	
	Car	
	Foot	
	Moped	
	Public transportation	

Appendix C – Information document (Dutch)

Geachte heer/mevrouw,

Deze brief is een uitnodiging om vrijwillig mee te doen aan een sociaalwetenschappelijk onderzoek. Ter afronding van mijn master-opleiding, doe ik onderzoek naar hoe mensen met AD(H)D hun leefomgeving ervaren en hoe zij zich hierin gedragen, om zo te verkennen hoe deze groep mensen omgaat met de wereld om hen heen. Het onderzoek bestaat uit twee delen: een (wandel)interview en het individueel verzamelen van materiaal over hoe u uw leefomgeving ervaart (bijvoorbeeld foto's of video's). Meedoen aan het onderzoek duurt in totaal ongeveer drie uur. Om mee te doen, en om mij toe te staan uw gegevens te verzamelen en verwerken, is wel uw schriftelijke toestemming nodig.

Voordat u beslist of u wilt meedoen aan dit onderzoek, krijgt u uitleg over wat het onderzoek inhoudt. Lees deze informatie rustig door en vraag mij, de onderzoeker, uitleg als u vragen heeft. Mijn contactgegevens vindt u onder punt 5 aan het einde van de Informatie voor Deelnemers. Het kan raadzaam zijn om uw deelname te bespreken met bijvoorbeeld uw partner, vrienden, of familie. Mocht u nog vragen hebben, stel deze dan gerust.

Vanwege de COVID19-pandemie zullen tijdens de dataverzameling een aantal voorzorgsmaatregelen worden getroffen om deze verantwoord te laten plaatsvinden. Zo wordt u gevraagd uw handen te desinfecteren, krijgt u uw eigen opnameapparaat en kunnen u en de onderzoeker, als u dit wilt, een mondkapje te dragen. Ook kan het zijn dat de actuele situatie het niet langer toestaat om (fysieke) interviews te laten plaatsvinden. In dat geval zal ik contact met u opnemen om een alternatief af te spreken. Het kan dus zijn dat de exacte invulling van uw deelname in de loop van het onderzoek verandert. Ik hoop hiervoor op uw medewerking en begrip.

Wanneer u voldoende bedenktijd heeft gehad, wordt u gevraagd te beslissen of u wilt deelnemen aan dit onderzoek. Indien u wilt deelnemen, zal ik u vragen deze op de bijbehorende toestemmingsverklaring schriftelijk te bevestigen. Door uw schriftelijke toestemming geeft u aan dat u de informatie heeft begrepen en instemt met deelname aan het onderzoek. Zowel uzelf als de onderzoeker ontvangen een ondertekende versie van deze toestemmingsverklaring.

Dank u voor uw aandacht.

Met vriendelijke groeten,

Liselotte Vreeling

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Faculteit Ruimtelijke Wetenschappen

Rijksuniversiteit Groningen

Informatie voor deelname aan sociaalwetenschappelijk onderzoek

Project: AD(H)D en leefomgeving

1. Over het onderzoek

Dit onderzoek wordt gedaan door een masterstudent aan de Faculteit Ruimtelijke Wetenschappen van de Rijksuniversiteit Groningen. Liselotte Vreeling, de onderzoeker, heeft zelf ADHD en is benieuwd naar hoe mensen met AD(H)D hun leefomgeving ervaren en hoe zij zich hierin gedragen. Het uitgangspunt is om mensen met AD(H)D de vrijheid te geven deze informatie op hun eigen manier te delen.

1.1 Doel van het onderzoek

Het doel van het onderzoek is om te verkennen hoe mensen met AD(H)D hun leefomgeving ervaren en hoe zij zich hierin gedragen. Hoewel er al veel onderzoek wordt gedaan naar AD(H)D, is over dit onderwerp weinig bekend. Uiteindelijk hoop ik door middel van dit onderzoek perspectief te bieden op hoe AD(H)D zich uit in het dagelijks leven, en zo bij te dragen aan een completer begrip van AD(H)D.

1.2 Meedoen

Deelname aan het onderzoek kost u niets. U wordt niet betaald voor het meedoen aan dit onderzoek.

U kunt meedoen als u aangeeft dat u:

- een diagnose ADD of ADHD hebt;
- 18 jaar of ouder bent, of uw ouders/verzorgers toestemming geven voor uw deelname;
- tijd heeft en bereid bent om deel te nemen aan beide onderdelen van het onderzoek;
- bereid bent om uw ervaringen met uw leefomgeving te delen met een onderzoeker.

Deelname aan dit onderzoek is geheel vrijwillig. Als u meedoet, kunt u zich altijd bedenken en toch stoppen, ook tijdens of na het onderzoek. U kunt dit laten weten aan de onderzoeker. U hoeft niet te zeggen waarom u stopt. Als u wilt, kan verzameld onderzoeksmateriaal worden vernietigd.

Uw deelname aan het onderzoek stopt als:

- alle activiteiten zoals beschreven onder punt 1.3 voorbij zijn;
- u zelf kiest om te stoppen;
- de onderzoeker het beter voor u vindt om te stoppen. Dit wordt altijd overlegd met u;
- de onderzoeker besluit om het onderzoek te staken.

1.3 Verzameling van gegevens

Als u meedoet aan het onderzoek, duurt dat in totaal ongeveer twee tot drie uren voor u.

Dit onderzoek bestaat uit twee onderdelen:

- Een wandelinterview, waar u de onderzoeker voor u bekende plekken uit uw leefomgeving laat zien, en over uw ervaringen vertelt. Dit interview zal worden opgenomen door middel van een geluidsopname. Ook kunnen tijdens dit interview foto's en video's gemaakt worden van plaatsen waar u over vertelt. Mocht blijken dat u een wandelinterview niet prettig vindt, dan kan dit aangepast worden naar een zittend interview buiten of binnen. Het interview duurt ongeveer een uur;
- Ten tweede wordt u gevraagd om zelf vast te leggen hoe u plaatsen ervaart. U mag zelf weten hoe, hoe vaak, en op welke momenten u dit doet. Denk bijvoorbeeld aan een logboek, notities, foto's, video's, spraak- of geluidsopnames, tekeningen, kaarten, of muziek. De onderzoeker zal

dit onderdeel verder uitleggen tijdens het interview. U kunt dit materiaal e-mailen naar l.h.vreeling@student.rug.nl of in persoon overhandigen.
- Het kan zijn dat de onderzoeker op een later moment contact met u opneemt met aanvullende vragen naar aanleiding van het door u geleverde materiaal.

De onderzoeker zal alle activiteiten aan u uitleggen. Het is belangrijk dat u weet dat ik in uw verhaal en uw ervaringen geïnteresseerd ben. Er zijn dus geen 'goede' of 'foute' antwoorden. Alle informatie die u met mij deelt is waardevol.

Als er nieuwe informatie over het onderzoek is die belangrijk voor u is, bijvoorbeeld met betrekking tot de coronapandemie, laat de onderzoeker dit aan u weten. U wordt dan gevraagd of u blijft meedoen.

2. Risico's van deelname

Omdat dit onderzoek over een gevoelig onderwerp gaat, kunnen sommige vragen die gesteld worden tijdens het interview sterke gevoelens bij u oproepen. Als dat gebeurt, zal de onderzoeker haar best doen om hierop te reageren, bijvoorbeeld door een korte pauze in te lassen. Het is belangrijk dat u weet dat u geen antwoord hoeft te geven op vragen als u dat niet wilt.

Gezien de huidige situatie met de COVID-19 pandemie, worden een aantal voorzorgsmaatregelen getroffen tijdens de interviews. U wordt gevraagd uw handen te desinfecteren en 1,5 meter afstand te houden van de onderzoeker. Ook krijgt u uw eigen opnameapparaat, zodat deze afstand gewaarborgd kan worden. Als u dit prettig vindt, kunnen u en de onderzoeker een mondkapje dragen tijdens het interview. Mocht u COVID19-gerelateerde klachten hebben, wordt u verzocht het interview te verplaatsen. Ook kan het zijn dat de onderzoeker genoodzaakt is het interview te verplaatsen vanwege dergelijke klachten. Mocht de actuele situatie het op dat moment niet toelaten om een wandelinterview op verantwoorde wijze te laten plaatsvinden, dan neemt de onderzoeker contact met u op om een alternatief af te spreken.

3. Wat doen we met uw gegevens?

Voor dit onderzoek worden enkele van uw persoonsgegevens verzameld. Het verzamelen, gebruiken en opslaan van deze gegevens is nodig om de onderzoeksvragen te beantwoorden. In rapporten en andere publicaties over het onderzoek zijn de gegevens nooit tot u te herleiden.

3.1 Hoe we uw gegevens beschermen

Om uw privacy te beschermen krijgen uw gegevens een code en worden ze opgeslagen in beveiligde elektronische omgeving die alleen toegankelijk is voor de onderzoeker. Alle gegevens worden zo snel mogelijk gepseudonimiseerd, wat betekent dat persoonsgegevens worden vervangen door één of meer kunstmatige codes. Dit heten pseudoniemen. Dit maakt het veel moeilijker om u als persoon te identificeren. Later, bijvoorbeeld in rapporten, worden uw gegevens geheel geanonimiseerd, wat betekent dat ze niet tot u als persoon te herleiden zijn. Als u meer informatie wilt over hoe we uw gegevens beschermen, neemt u dan gerust contact op met de onderzoeker.

Contactgegevens – Uw contactgegevens (naam, telefoonnummer, emailadres en leeftijd), en andere gegevens die kunnen worden gebruikt om u te identificeren, zijn alleen bekend bij de onderzoeker en zullen niet worden gedeeld. Om dat te garanderen, gebruik ik een codesysteem. Zodra u deel gaat nemen aan het project, wijs ik uw gegevens een code toe. De link tussen de code en uw persoonsgegevens is alleen zichtbaar voor de onderzoeker. Deze link zal veilig worden opgeslagen in een beschermde elektronische omgeving (niet online).

De gegevens uit het interview – bevatten informatie over uw dagelijkse ervaringen van uw leefomgeving, maar ook eventueel gevoelige informatie over uw diagnose AD(H)D. De interviews worden opgenomen en daarna uitgeschreven door de onderzoeker. De transcripten bevatten mogelijk persoonsgegevens,

zoals uw naam of die van anderen, bijnamen en adressen. Deze gegevens worden vervolgens verwijderd of gepseudonimiseerd.

De geluidsopnames zullen worden beveiligd met een wachtwoord. Alleen de onderzoeker heeft toegang tot de opnames. De geluidsopnames worden direct na afronding van het onderzoek verwijderd.

Het aanvullende materiaal – bevat informatie over plekken die u bezoekt en uw ervaringen hiermee. Dit materiaal kan privacygevoelig zijn. Mocht er bijvoorbeeld op een foto of in een video iemand (herkenbaar) in beeld zijn, of iemands naam of woonadres worden genoemd in een geluidsopname, dan worden deze altijd onherkenbaar gemaakt of gepseudonimiseerd. In publicaties is dit materiaal dus nooit te herleiden tot u of iemand anders. Het materiaal dat u aanlevert wordt gekoppeld aan uw unieke code (pseudoniem) en digitaal opgeslagen in een elektronische omgeving die alleen toegankelijk is voor de onderzoeker. Na afronding van het onderzoek wordt al het aanvullende materiaal direct verwijderd.

3.2 Toegang tot uw gegevens voor controle

Het is nodig om te kunnen controleren of het onderzoek goed en betrouwbaar is uitgevoerd. Daarom kan de coördinator van dit onderzoek (dr. Bettina van Hoven) toegang vragen tot al uw gepseudonimiseerde gegevens.

3.3 Bewaartermijn gegevens

Uw gegevens worden bewaard totdat het onderzoek is afgerond. Daarna worden deze verwijderd.

4. Uw rechten

Voor algemene informatie over uw rechten met betrekking tot de verwerking van uw persoonsgegevens, raden we u aan om eerst contact op te nemen met de onderzoeker. U kunt ook contact opnemen met de Functionaris voor de Gegevensbescherming van de Rijksuniversiteit Groningen (zie de Contactgegevens onder punt 5).

4.1 Het recht op toegang en correctie

U heeft het recht om uw eigen gegevens in te zien, om te kijken welke gegevens verzameld zijn. Ook kunt u vragen om eventueel onjuiste verzamelde gegevens te wijzigen. De onderzoeker zal aan het einde van het wandelinterview vragen of u het transcript wilt inzien. Dan zal zij deze naar u opsturen zodra het transcript af is. U kunt op ieder moment toegang vragen tot uw gegevens door contact op te nemen met de onderzoeker (zie de Contactgegevens onder punt 5).

4.2 Het recht om uw toestemming in te trekken

U heeft het recht om uw toestemming om deel te nemen aan het onderzoek, en voor het gebruik van uw gegevens, weer in te trekken. Dit is mogelijk totdat de resultaten zijn gepubliceerd. De gegevens die zijn verzameld tot het moment dat u uw toestemming intrekt worden nog wel gebruikt in het onderzoek.

Als u besluit uw toestemming in te trekken, kunt u contact opnemen met de onderzoeker (l.h.vreeling@student.rug.nl)

5. Contactgegevens

5.1 De onderzoeker

Het is belangrijk dat u contact opneemt met de onderzoeker als:

- U vragen heeft over uw deelname;
- U niet meer wilt meedoen aan het onderzoek;
- U vragen heeft over deelname n.a.v. de COVID-19-pandemie;
- Uw contactgegevens veranderen.

Contactgegevens

- Liselotte Vreeling BSc, email: l.h.vreeling@student.rug.nl. Bereikbaar op maandag t/m vrijdag

5.2 Coördinator

Voor onafhankelijk advies over uw deelname kunt u contact opnemen met de coördinator van het project. De coördinator weet veel over het onderzoek, maar is er niet bij betrokken.

Contactgegevens:

- dr. Bettina van Hoven, email: b.van.hoven@rug.nl. Bereikbaar op maandag t/m vrijdag.

5.3 Functionaris voor de Gegevensbescherming van de Rijksuniversiteit Groningen

Voor algemene informatie over uw rechten met betrekking tot de verwerking van uw persoonsgegevens, kunt u contact opnemen met de Functionaris voor de Gegevensbescherming van de Rijksuniversiteit Groningen

Contactgegevens:

- Mr. Arjen Deenen, tel. 050-3635751, email: a.r.deenen@rug.nl. Beschikbaar op maandag t/m vrijdag.

Samenvatting informatie over project “AD(H)D en leefomgeving”

1. Over het onderzoek

Het onderzoek wordt uitgevoerd door Liselotte Vreeling, een masterstudent aan de Faculteit Ruimtelijke Wetenschappen van de Rijksuniversiteit Groningen. Zij heeft zelf ADHD. Het onderzoek gaat over hoe mensen met AD(H)D hun leefomgeving ervaren. Het uitgangspunt is om mensen met AD(H)D de vrijheid te geven om hun ervaringen op hun eigen manier te delen. Uw verhaal staat centraal; er zijn geen ‘goede’ of ‘foute’ antwoorden.

Het onderzoek bestaat uit twee onderdelen. Deelname duurt in totaal zo’n drie uur. Het eerste onderdeel is een **wandelinterview** in uw leefomgeving, dat ongeveer een uur duurt. Van het interview wordt een geluidsopname gemaakt. Tijdens dit interview kunt u foto’s en video’s maken van zaken waarover u vertelt. Ten tweede wordt u gevraagd zelf **aanvullend materiaal** te verzamelen en te delen met de onderzoeker. U mag zelf weten hoe vaak, wanneer, en op wat voor manier u dit doet. Het kan zijn dat de onderzoeker op een later moment contact met u opneemt met vragen over dit materiaal.

Meedoen aan het onderzoek is vrijwillig. Het kost u niets. Uw deelname stopt wanneer u zelf besluit te stoppen, de onderzoeker het beter voor u vindt om te stoppen, het onderzoek is afgerond, of de onderzoeker het onderzoek in het geheel stopzet.

Informatie m.b.t. COVID-19

Gezien de huidige situatie met de COVID-19 pandemie worden een aantal voorzorgsmaatregelen getroffen tijdens de interviews. U wordt gevraagd uw handen te desinfecteren en 1,5 meter afstand te houden van de onderzoeker. Ook krijgt u uw eigen opnameapparaat. In overleg kunnen u en de onderzoeker een mondkapje dragen. Mocht u COVID-19-gerelateerde klachten hebben, neem dan contact op met de onderzoeker om het interview te verplaatsen. Ook kan het zijn dat de onderzoeker genoodzaakt is het interview te verplaatsen vanwege dergelijke klachten. Mocht de actuele situatie het niet toelaten om een fysiek interview verantwoord te laten plaatsvinden, dan neemt de onderzoeker contact met u op om een alternatief af te spreken. Het kan dus zijn dat de exacte invulling van uw deelname in de loop van het onderzoek verandert. Dit gebeurt altijd in overleg met u. Ik hoop hiervoor op uw begrip.

2. Risico’s van deelname

Tijdens het interview kunnen gevoelige onderwerpen ter sprake komen, die misschien sterke emoties bij u oproepen. Wanneer dit gebeurt, zal de onderzoeker hier zo goed mogelijk mee proberen om te gaan, door bijvoorbeeld een pauze in te lassen. U mag er altijd voor kiezen een vraag niet te beantwoorden. Daarnaast kunt u op ieder moment aangeven dat u het interview liever op een andere manier laat plaatsvinden, bijvoorbeeld zittend. Het gaat erom dat u zich op uw gemak voelt.

3. Wat doen we met uw gegevens?

Alle gegevens die over u worden verzameld, zoals uw persoonsgegevens, worden in een beschermde offline elektronische omgeving opgeslagen. Alleen de onderzoeker kan hierbij. Verder worden deze gegevens gepseudonimiseerd. Hierdoor zijn ze in publicaties nooit te herleiden tot u of iemand anders. Mocht u beeldmateriaal of geluidsopnames aanleveren als aanvullend materiaal, dan zullen bijv. gezichten, adressen en namen onherkenbaar worden gemaakt. Gepseudonimiseerde data kan worden ingezien door de coördinator van het onderzoek, om de kwaliteit van het onderzoek te controleren. Zodra het onderzoek is afgerond, worden alle gegevens verwijderd.

4. Uw rechten

Als deelnemer heeft u het recht om de gegevens die over u worden verzameld, zoals het transcript van het interview, in te zien en eventueel te laten wijzigen. De onderzoeker zal vragen of u dit wilt aan het einde van het interview. Dan zal zij het transcript zo snel mogelijk naar u opsturen. Ook kunt u op ieder moment zelf contact opnemen met de onderzoeker om uw gegevens in te zien.

U heeft het recht om op ieder moment uw deelname te stoppen en/of uw toestemming voor het verwerken van uw gegevens in te trekken. U hoeft hiervoor geen reden op te geven. Uw gegevens zullen dan direct worden verwijderd. Hiervoor kunt u contact opnemen met de onderzoeker. Dit is mogelijk totdat het onderzoek is gepubliceerd.

5. Contactgegevens

Als u vragen heeft over uw deelname, neem dan vooral contact op met de onderzoeker:

Onderzoeker: Liselotte Vreeling, BSc, l.h.vreeling@student.rug.nl. Beschikbaar op maandag t/m vrijdag.

Coördinator: dr. Bettina van Hoven, b.van.hoven@rug.nl. Beschikbaar op maandag t/m vrijdag.

Toestemmingsformulier

Project: AD(H)D en leefomgeving

- Ik heb de informatie voor deelnemers gelezen en begrepen. Ik had genoeg tijd om te beslissen of ik meedoe. Ook kon ik vragen stellen. Mijn vragen zijn voldoende beantwoord.
- Ik weet dat meedoen vrijwillig is. Ook weet ik dat ik op ieder moment kan beslissen om toch niet mee te doen of te stoppen met het onderzoek. Daarvoor hoef ik geen reden te geven. Ik begrijp ook dat de onderzoeker, in overleg met mij, kan beslissen om mijn deelname te stoppen.
- Ik geef toestemming voor het verzamelen en gebruiken van mijn gegevens voor het doel van dit onderzoek.
- Ik begrijp dat dat er gegevens verzameld worden die te herleiden zijn tot mij als persoon. Deze persoonlijke data zullen in een beveiligde omgeving worden opgeslagen. Ik begrijp dat deze gegevens in publicaties nooit zijn te herleiden tot mij als persoon en worden verwijderd zodra het onderzoek is afgerond.
- Ik begrijp dat er maatregelen worden getroffen om het onderzoek op verantwoorde wijze uit te voeren in het kader van de COVID-19-pandemie. Ik zal mij houden aan deze en door de overheid gestelde maatregelen. Ook begrijp ik dat de exacte invulling van mijn deelname in de loop van het onderzoek kan veranderen en dat dit altijd in overleg met mij zal gebeuren.
- Ik verklaar dat ik ☐ wel

  ☐ niet

  mee wil doen aan dit onderzoek.

Naam deelnemer:

Handtekening: Datum:

- Ik verklaar dat ik deze proefpersoon volledig heb geïnformeerd over het genoemde onderzoek.
- Als er tijdens het onderzoek informatie bekend wordt die de toestemming van de proefpersoon zou kunnen beïnvloeden, dan breng ik hem/haar daarvan tijdig op de hoogte.

Naam onderzoeker:

Handtekening: Datum:

Appendix D – Original quotes (Dutch)

[i] "En eigenlijk nu we hier dus lopen al, dit stukje, dan is het langzamerhand hier steeds minder... dan word ik dus automatisch ontspannen meer in m'n hoofd, minder snel afgeleid. Vandaar dat ik ook koos voor een bosroute, en dit is dan een plek, waar we nu komen, bij een van deze bomen ging ik dan zitten, bij zonsopgang of ondergang, omdat ik daar... dan heb ik dus een uitgestrekt veld. (…) Met uitgestrekte velden is het voordeel dat je gewoon geen impuls hebt, en daar ga je rustiger van denken, want je wordt niet afgeleid."

[ii] "Ik kwam vanmiddag 4x mensen tegen & merkte toen elke x als er mensen aankwamen dat ik in een ander stukje van het "bos" ging lopen 🙈"

[iii]

Anne: "Nou ik weet wel wat ik niet wil."

Liselotte: "…en dat is de Heerestraat in?

Anne: "Ja. Fijn!"

Liselotte: "Ja dat vind ik heel fijn."

Anne: "Dat wil ik namelijk niet.

Liselotte: "Nou dat kunnen we wel doen maar dan gaan we, dan stoppen we nu met het interview."

Anne: "Ik zou zeggen, dan stopt nu de opname. *lachen* Nee. Dat lijkt me een heel matig plan, daar heb ik echt een hekel aan."

Liselotte: "Ja. Ik ook."

Anne: "Ik word ook automatisch boos als ik daar fiets."

[iv] "Dit was tijdens de Kerst. De sociale druk van het gezellig doen en het weten dat er niemand rond etenstijd buiten is, deed mij besluiten naar buiten te gaan. En het was precies zoals ik hoopte: Zonder mensen, geen auto's, geen fietsers. Ik kon daar goed tot rust komen."

[v]

Liselotte: "En op wat voor manieren zou je zeggen dat je brein dan anders werkt bijvoorbeeld? Als je een voorbeeld zou geven?"

Hannah: "Eh nou ik denk vooral, dat alle prikkels filteren en zo. Dat is voor mij moeilijker."

Liselotte: "Ja? maar bijvoorbeeld dan in de klas, of ook hier?"

Hannah: "Ehm, ja hier... gaat het nu nog wel. Maar ehm, ik heb... in de klas heel erg, en dat is ook hoe we erachter kwamen dat eh... ik last heb van concentratie en als ik dan aan het werk was dan eh, ik weet niet meer wat ik aan het doen was in de klas, maar gewoon eh, schoolwerk en dan eh, hoorde ik de klok en mensen met stoelen schuiven en pennen klikken en dingen buiten…"

[vi] "Dat ik minder aankan dan andere mensen, heb ik altijd heel vervelend gevonden en kon ik nooit verklaren. En op het moment dat ik daar dan eh... niet naar luisterde, dus naar mijn eigen behoefte om... minder te doen dan een ander, dat ik altijd ziek werd bijvoorbeeld. Ehm, heel veel hoofdpijn weet je wel, gewoon sneller ziek, sneller kwetsbaar, en dat ik altijd het gevoel had van hoe kan dat nou, andere mensen kunnen dit allemaal wel. Zeg maar kunnen sporten en studeren en werken en een sociaal leven hebben, hoezo kan ik dat niet allemaal. Ehm... heel prikkelgevoelig, gewoon... echt thuis als m'n moeder aan het neuriën is bij het maken van een puzzel, echt dan kon ik gewoon uitbarsten van woede van echt hou je kop zeg maar. Die dingen. Nou ja, en inderdaad het omgevingsgebeuren, dus qua prikkels, alles buiten de deur, niet graag naar de supermarkt willen, ehm... snel overprikkeld zijn. Eh bijvoorbeeld ik vind festivals het leukste wat er is maar ik moet er drie weken van bijkomen. Maar omdat ik het zo leuk vind wil ik er echt heen, zeg maar."

[vii]

Blair: "En als ik bijvoorbeeld in het buitenland ben, heb ik omdat ik best wel veel om me heen kijk dat ik dingen herken, dus als we dan terug moeten naar de auto dan heb ik vaak zo van 'o ja dit heb ik gezien! we moeten daarnaartoe en we moeten daarnaartoe enzo'. Dus eigenlijk niet echt…"

Liselotte: "Dus dan helpt het je juist wel dat je gefocust bent... op heel veel dingen tegelijk?"

Blair: “Ja, dat denk ik wel dan eigenlijk, want mama heeft bijvoorbeeld altijd zoiets van ja, jij en [broertje] weten wel waar de auto staat dus ik ga niet opletten. En dat klopt ook eigenlijk altijd wel.”

Anne: “Ja, maar dat is chill inderdaad, dat als je het op een gegeven moment een keer gezien hebt, dat je het dan ook zo weer kunt reproduceren. Van o maar dat was daar en daar, en dat heb ik gezien, dus dan moeten we daarheen.”

Blair: “Ja! En soms dan is het wel, ja dan staat dat rode autootje er niet meer, maar ja de parkeermeter is nog wel hetzelfde dus dan…”

[viii] “Ik hoor... van mensen die me goed kennen dat als ik fotografeer dat ik een heel ander persoon ben. Omdat ik dan heel gefocust ben op wat ik doe en dan ben ik juist heel gedetaileerd, ik let op elk takje, op alles wat in de weg ligt, ik zie heel veel mogelijkheden van o dit is mooi, dit is mooi, dit wil ik gebruiken, dit wil ik gebruiken. (…) Ja ik kan me ook echt heel lang met een doel bezig zijn als ik fotografeer. als ik een evenment fotografeer zoals een bruiloft, dan... ik zou niet snel een moment missen. wat heel grappig is want je zou denken dat ik afgeleid raak.”

[ix] “Waarschijnlijk omdat ik zoveel zie dat ik eindelijk geen actieve aandacht besteed aan wat ik zie. Zegmaar ik weet dat ik honderd dingen heb gezien onderweg. Maar als je me vraagt was die ene kerk vijf minuten of een uur geleden, dat weet ik niet. Ik weet dat ik hem heb gezien.”

[x] “Maar de supermarkt is wel een eh… (…) er is een weinig prikkelendere omgeving dan de supermarkt denk ik. (…) en sowieso, ADHDers met... en ehm... spullen en objecten... ze tellen ze allemaal als plus 1, dus elk object is een ding... (…) Er staan letters op… het heeft informatiewaarde. En dan heb je mensen, die zijn al helemaal afleidend. (...) Je moet dingen kopen, en veertig keer nadenken want ik vergeet dingen. Ongetwijfeld, je vergeet altijd één ding.”

[xi]

Anne: “Ooh, ik vind dat echt een ramp. En helemaal nu iedereen met die karretjes moet, thuisthuis moet je dan echt een kar mee, mag je niet een mandje. En dan overal mensen met karren en iedereen rijdt tegen je aan en je loopt een gangpad uit en er komt een hele stroom mensen met karretjes voorbij en ik word gek. Ik word er boos van, echt als ik erover nadenk word ik er al een beetje boos van. Dus, dat is echt, nee.”

Liselotte: “Dus zorg je dan dat je eigenlijk niet op dat soort momenten hoeft? Of?”

Anne: “In theorie. *lacht* In theorie zou ik daarvoor kunnen zorgen, het schiet er in de praktijk weleens bij in. Maar, ja. Want dat vind ik echt, daar word ik zo gefrustreerd en naar van dat ik daarna ook echt niet productief meer ben, nee.”

[xii] “Ik ga letterlijk nooit naar de supermarkt, want dat kan ik... dat kan ik niet handelen zeg maar, qua veel mensen, fel licht, ehm, veel geluid, veel schreeuwende mensen voor mijn gevoel, dus daar kom ik liever niet. Plus ik word heel erg *overwhelmed* door alle keuzes die ik moet maken, en dat ik denk ik: ‘weet het niet, waarom is er niet gewoon één keuze hagelslag, ik vind het moeilijk!’ *lachen* Dus daar heb ik ook altijd mijn koptelefoon op als ik ga, ga ik echt alleen maar op momenten dat ik weet dat het rustig is. Dus ik probeer het echt te timen dat ik echt of om acht uur ‘s ochtends ga of in het weekend zo rond één uur als ik weet dat er ook weinig mensen zijn.”

[xiii] “Ik ben ook heel erg observatief. Dus ik... eh... ik moet als ik dat zie, daarom kan ik ook in de stad prima functioneren, want ik zie alles. Het gebeurt gewoon om me heen. En ik let ook graag heel erg veel op dingen, maar dat maakt me rustig. Want je let daarop, dus dan kan je je verder concentreren.”

[xiv] “Ik gedij het beste laat maar zeggen juist op drukke plekken. Omdat... hoe meer impulsen er zijn, hoe meer ik me kan concentreren. Je hebt eigenlijk een soort van... dikke *overload* aan impulsen en daardoor word je rustig.”

[xv] “(…) Aan de ene kant, ja soms is het echt wel teveel dat ik jezus *fack* ook maar, ik denk ook dat ik daar een beetje... ja toch van inspiratie of juist... dingen van krijg. Van de omgeving natuurlijk, en als het te rustig is dan word ik ook heel onrustig. (L Ja?) - Ja ja ja, dan word ik helemaal gek.”

[xvi]

George: “Maar dit is wel interessant. Ik woonde eerste daar in de [straat], en daar zijn ze nu aan het verbouwen. (…) En ik vind drukte heel chill... maar niet altijd. Niet continue, dus als ik er... als ik dan straks daar woon en er rijden elke dag alleen maar bussen.... Dan blijft die stroom dus continue, en daar word ik gek van. Ik moet het echt afwisselen zeg maar.”

Liselotte: “En ook dat je zelf kunt bepalen van ‘nee nu even niet’?”

George: “Ja, ja, dat is heel belangrijk. Dan kan ik me opladen ofzo. Dat typeert mij een beetje.”

[xvii] “En eigenlijk nu we hier dus lopen al, dit stukje, dan is het langzamerhand hier steeds minder... dan word ik dus automatisch ontspannen meer in m’n hoofd, minder snel afgeleid. Vandaar dat ik ook koos voor een bosroute, en dit is dan een plek, waar we nu komen, bij een van deze bomen ging ik dan zitten, bij zonsopgang of ondergang, omdat ik daar... dan heb ik dus een uitgestrekt veld. (…) Met uitgestrekte velden is het voordeel dat je gewoon geen impuls hebt, en daar ga je rustiger van denken, want je wordt niet afgeleid.”

[xviii]

Anne: “Het hangt er heel erg vanaf eh, als ik al onrustig ben dan ben ik inderdaad liever niet in de stad. Of nou ja, in mijn huis is het dan prima, maar dan ga ik liever niet heel veel drukke plekken opzoeken want dan word ik alleen maar onrustiger en dat... komt vaak niet alles ten goede.”

Liselotte: “En op wat voor momenten ben je dan bijvoorbeeld onrustiger?

Anne: “Als ik het druk heb, of eh, als ik eh veel moet doen, moet studeren, als ik... als ik dingen moet doen waar ik niet per se heel veel zin in heb *lacht*. Eigenlijk gewoon alle momenten die niet vrije tijd gerelateerd zijn. *lacht*. Dat zijn de onrustigere momenten dus dan vind ik het gewoon chill als het niet te ingesloten is… of op een plek waar je een beetje vrij... open...”

[xix] “Ja, nou... als het heel stil is ofzo dan voel ik me altijd wel een beetje apart. dan voelt het ook wel een beetje alsof het dan niet helemaal hoort. Want waarschijnlijk ook wel... omdat je... gewoon bijna niks echt filtert en dan altijd doorhebt dat alles aan de hand is... als alles dan stil is, is het opeens ook echt stil (Liselotte: ja, ja). Ja, nee ik heb volgens mij ook wel eens... dat als ik dan op m’n kamer zit en het helemaal stil is ofzo, dat is dan waarschijnlijk ook wel waarom een luister cd fijn is, omdat het dan niet helemaal stil is.”

[xx] “Ik vind het echt heel chill altijd op de markt. Maar ik ga dus zelf altijd vroeg, want ik vind het nu te druk. (Interviewer: ja?) Ja, ik word er echt gelijk… krijg er een beetje chaos van in m’n hoofd.”

[xxi] “Ehm.... over het algemeen doe ik het gewoon, omdat ik zoals nu, ik hoor die scooter, ik hoor deze vogels, ik hoor alles en dat vind ik dan... nou dan kom ik niet echt tot rust. Eh, terwijl als ik bijvoorbeeld een muziekje op heb dan kan ik een beetje fantaseren in m’n eigen wereld, en dat vind ik dan fijn. Dus het is echt een beetje onttrekken van alle prikkels die er zijn. Ehm... en dus ja, ik denk dat ik het voornamelijk doe om, nou ja, afgesloten te zijn van de prikkels die buiten mijn huis te vinden zijn.”

[xxii] “Nou ik denk... dat deze plek dat op zich wel vrij mooi demonstreert. Hier heb je dan stoplichten staan. En iedereen mag netjes op z’n beurt, z’n dingetje doen en dat gaat allemaal mooi geleidelijk. Het voelt een beetje als ik geen muziek in heb alsof ik daar midden op dat kruispunt sta en dat er van alle kanten mensen aan komen rijden en doorrijden en fietsen en lopen en... dat trek ik gewoon vrij slecht. Ik word daar gewoon heel onrustig van. (…) Ja, er gebeurt gewoon heel veel tegelijk en daar eh... (Interviewer: als je muziek in hebt dan is dat minder?) Ja want dan heb ik gewoon één... stabiel geluid zeg maar, wat de rest van de ruis uitdrijft. (…) Het is eigenlijk geluid uitdrijven met ander geluid. En dat... dat klinkt vrij onlogisch maar om een of andere reden werkt het wel voor mij.””

[xxiii]

Hannah: “Maar ik heb ook wel ehm... dat ik naar luister cd's luister ik heel veel, vooral als ik slaap. (…) Als ik ga slapen. Nou ja ik heb het dan al heel lang... en ehm... ja dat helpt me dan wel met slapen, ik had vroeger, hebben we volgens mij ook weleens van die meditatiemuziek geprobeerd alleen dat helpt voor mij niet, want dan ga ik daardoor teveel nadenken op een of andere manier. (…)

Liselotte: “En dat luister je dan als je in bed gaat liggen of echt tijdens het slapen?”

Hannah: “Ehm, als ik in bed ga liggen en dan... ik heb ook wel vaak dat ik dan... tijdens het luisteren lees ik ook nog een boek, maar ik weet niet waarom dat dan op dat moment wel kan, maar dan... als ik slaap staat dat ding meestal nog wel aan. En dan, voor mij helpt dat met gewoon beter in slaap komen.”

[xxiv] “Ja. Want normaal... nu ben ik er een beetje over aan het nadenken, bijvoorbeeld over hoe ik ook naar alles kijk... en waar ik op let en zo, en normaal loop ik gewoon een beetje dom, beetje muziek te luisteren, beetje om me heen te kijken en is dit juist eigenlijk een moment dat ik helemaal niet nadenk. En dat is eigenlijk denk ik ook waarom ik bijvoorbeeld ook altijd een podcast luister want dan heb ik zoiets van dan kan ik daarop focussen en dat ik niet over allemaal andere dingen in m’n hoofd nadenk.”

[xxv] “(…) Inderdaad, muziek. Het is niet meer zo van die hele harde zoals vroeger, weet je wel? Maar ik heb heel vaak de televisie aan staan, of de radio, of gewoon geluid… Moet ik wel en beetje om me heen hebben, dat vind ik wel fijn. Maar niet te hard hoor. (…) En ja, als ik me goed voel, dan houd ik wel van hele harde bepaalde muziek, dat verschil is er wel. Maar als ik me niet goed voel…”

[xxvi] “Ik heb als ik muziek heb, dan kan ik comfortabeler in het verkeer zijn, want als ik geen muziek op heb dat ik hyperfocus op andere dingen. Dat ik bijvoorbeeld een auto heel erg in de gaten houd waardoor ik een andere fietser over het hoofd zie ofzo. Dus ik merk juist als ik geen muziek heb, niet per se dat ik dan niet zo goed kan concentreren maar dan is het meer dat ik hyperfocus op een geluid of op een auto, waardoor ik juist, he het verkeer is juist totaaloverzicht, je kunt niet op een ding letten. Je moet en links en rechts... Dan merk ik soms dat ik het totaaloverzicht een beetje kwijtraak omdat ik op een ding focus.”

“Ik denk eigenlijk dat ik me beter zou kunnen concentreren als ik geen muziek op heb. Maar ook niet helemaal want dan ga ik me dus vervelen en dan ga ik te veel om me heen kijken... dus ik weet niet... ik vind het moeilijk om te bedenken wat veiliger is. Denk zeg maar dat het... voor mij het handigst zou zijn als ik in het begin geen muziek op heb, maar als ik dan te veel om me heen kijk dat er dan wel muziek komt. Maar ik heb dus eigenlijk altijd wel gewoon muziek op want dat vind ik gezellig.”

[xxviii] “Eigenlijk moet ik altijd, of nou ja, moet ik van mezelf tijdens het studeren naar buiten soms. Want dan is mijn hoofd een beetje vol en dan heb ik zoiets van, even buitenlucht is wel goed. En hier is het eigenlijk altijd super rustig, en het is echt naast mijn huis. Dus dan, wandel ik hier altijd graag want het is ook best wel klein, het heet een bos maar het is meer een soort park met heel veel bomen. Maar, dan ga ik altijd hier even een klein rondje wandelen en dan ben ik daarna gewoon weer thuis, en dat vind ik altijd wel *chill*. (…) Want meestal ga ik dan iets doen of ik ga een podcast luisteren, of ik ga met m’n moeder bellen ofzo, en ik loop ook niet echt een rondje, ik loop meestal een beetje zigzag. Want, daar lopen nu veel mensen en normaal ga ik dan bijvoorbeeld hier naar links omdat ik dan niet zo'n zin heb om zoveel mensen te zien... (…) omdat ik dan als ik hier ga wandelen doe ik dat juist om een beetje rustig te worden of zo, en dan vind ik... als ik al die mensen zie heb ik zoiets van... hoeft niet.”

[xxix] “[Dit] is tijdens een van mijn wandelingen waarbij ik deze route heel fijn vind omdat er sinds de lockdown nauwelijks meer auto's in het centrum rijden, evenals weinig fietsers waardoor het voelt alsof ik lekker alleen ben in de stad. Dat geeft mij een rustig gevoel.”

[xxx] “Ik ben namelijk sinds kort verhuisd naar de [straat] en ik ben heel veel aan het wandelen, eigenlijk wel drie keer per dag. en het is me opgevallen dat ik best wel, als ik mijn deur uit stap, selectief ben in welke kant ik op loop. en de kant die ik vermijd dat zijn eigenlijk twee kanten. Ik loop niet richting het Noorderplantsoen omdat ik weet dat het daar heel erg druk is, en ik loop eigenlijk ook niet richting de Oude Kijk in ‘t Jatstraat, dat vind ik namelijk een heel vervelende straat in de zin dat het een hele smalle stoep heeft en veel winkels, ondanks dat die nu niet open zijn, zijn ze er toch, waar ik dan het gevoel heb dat ik steeds naar binnen moet kijken. Veel fietsers, veel auto's, veel vrachtwagens. Dus ik loop eigenlijk nooit die kant op, dat viel me vandaag echt extra op, dus ik loop vaak richting de Hoge/Lage der Aa, of richting station. En de veel rustigere plekken met brede stoepen waar eigenlijk niemand anders loopt.”

[xxxi] “Ik heb wel als ik eh... meer gestresst ben ofzo dat ik dan meer sneller het gevoel heb dat ik ergens vastzit ofzo. Dus als ik in mn kamer zit, dan gaat alles heel erg voelen alsof ik in een doos zit. Dus dan... weet niet, omdat ik dan zoveel nadenk enzo dan... heb ik ook wel gewoon dan dat die muren gewoon allemaal vierkant zijn en het plafond vierkant... en dan zijn er wel ramen maar het voelt ook een beetje alsof die er niet zijn.”

[xxxii] "Nou sowieso lichamelijk dan krijg ik trillende benen of trillende handen. M'n lichaam is in die zin al heel goed geconditioneerd omdat zelf aan te geven. Maar mentaal gezien meer ook een beetje gewoon frustratie dat je dan eens een keer wat omgooit dat je denkt o gedver nou, weetjewel het lukt gewoon even niet meer. Kleine frustratiedingetjes die je dan merkt. Echt gewoon heel erg het gevoel van, ik moet echt gewoon eventjes... ja hoe stom het woord ook klinkt, maar echt even een frisse neus halen. (…) Ja en dat de muren op de af komen (…) Ja gewoon... dat je eigenlijk bemerkt van 'ik kan nu niks in deze ruimte doen wat voor mijn gevoel niet hetzelfde is als wat ik hiervoor deed'. Ja het klinkt misschien een beetje abstract, maar bijvoorbeeld ik ben aan het werk en ik denk de muren komen op me af, laat ik dan de was opvouwen, maar dan niet, dat lost het probleem dan niet op, dus ik wil er dan echt uit, uit die ruimte. (…) Beetje verandering van omgeving zegmaar."

[xxxiii] "Vroeger heel veel gebasketbald. Nu doe ik zwemmen, fitness, hardlopen... gewoon een beetje fit blijven. Ja ik... misschien is het, sport houdt me ook wel een beetje rustig zegmaar. Ja. dus voor mij, ik kan echt niet zonder."

[xxxiv] "Hardlopen, eh... fietsen... Nou eigenlijk... Die eerste lockdown die we hadden, duurde natuurlijk echt goed lang, we zijn nu pas twee weken bezig volgens mij. Toen had ik ook heel wat vakken en scripties en was veels te druk. En wat ik toen deed, eh, ik heb eigenlijk een soort eh, ja is een beetje raar wat ik ga vertellen, maar je hebt op die app heb je zo'n stappenteller, tienduizend stappen wordt altijd aangeraden. En ik dacht gewoon... Ik ben echt *obsessed* met getalletjes en verschillen... En ik wou gewoon...ik wil gewoon altijd tienduizend stappen en dat is prima te doen als er geen corona is. Maar met corona is dat lastiger. Dus wat er dan vaak gebeurde dan was ik overdag de hele tijd aan het leren en dan 's avonds moest ik nog bewegen, en daarnaast... stilzitten voelt niet zo goed voor mij. Voelt echt alsof je bloed niet meer stroomt. Dus wat ik dan deed was echt midden in de nacht fietsen. *lacht* elke dag, en rond het... Paterswoldsemeer. Dat ik elke dag zeg maar die tienduizend stappen had. En het klinkt superraar, en ik weet het ook wel van mezelf, maar ik dacht 'ja, *this is the way to go*'."

[xxxv] "Ik wist eigenlijk m'n hele leven dat je... dat ik... stuiter en alles leuk vind. Maar ik heb... ja ik sportte 24 uur per week, dus ik was zeg maar fysiek moe genoeg om er niets mee te hoeven doen, want als je moe bent kun je... ik kan ook alleen maar een boek lezen ofzo als ik echt heel moe ben. Want anders lezen... Drie woorden en dan kijk ik naar de muur, en dan weer drie muren en dan kijk ik weer ergens anders heen. Ehm dus ja ik merk dat voor mij sport... Vroeger had ik genoeg sport om mezelf als ik niet sportte om heel moe te zijn, fysiek, ehm... dus ja ik merk eigenlijk pas sinds de universiteit dat ik ben gestopt met op hoog niveau sporten dat je opeens fysieke energie *overload* hebt."

[xxxvi] "Ik hou van trappen, ik ga trappen altijd honderd keer op en af. Gewoon omdat ik het een fijne manier vind. En het is net... het geeft net genoeg cognitieve belasting dat je er wel mee bezig bent, maar je kunt wel nog goed nadenken over iets anders. Want als ik met iets pruts dan gaat mn hoofd alsnog alle kanten op. (…) Wat ik me herinner in dat kantoorgebouw is dat ze dus... het kantoor waar ik zat... daar hadden ze een grote trap naar beneden en daar was een grote ruimte en daar was een whiteboard. Dus ik schreef zegmaar op dat whiteboard mn ideeën en dan ging ik weer de trap op en dan ging ik weer... in plaats van dat ik dat whiteboard gewoon naar mijn kantoor rolde, dacht ik: 'nee dat is wel chill, laat maar gewoon beneden staan, dan kan ik te trap af en dan op dat whiteboard schrijven en dan de trap weer op naar m'n laptop'."