# Individual Safety Perceptions of Women in Public Space

Towards Socio-Spatial Indicators for Improving the Environment

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# **Abstract**

Feelings of unsafety limits a person's accessibility and usage of public spaces, especially for women as they experience higher levels of fear compared to men. Hence, gender differences in safety perceptions in public spaces have been widely studied among scholars. However, in such research women, and men, are often seen as a homogenous group, whilst there may be significant differences in in safety perceptions among them. Hence, this research aims to explore the differences in individual safety perception among women in public spaces of Holendrecht, in the south-eastern part of Amsterdam, using qualitative research methods like interviewing and mental mapping. Two identities explicitly come forward, women with a large social network, who are older, live longer in the neighbourhood and have a Surinam or Ghanese ethnicity, tend to report lower levels of feelings unsafe. And those with a small social network in the neighbourhood, who are younger, live there for a shorter period and have a Dutch ethnicity, are more in need of additional factors to enhance their feelings of safety. Such factors are familiarity and physical factors influencing visibility. These results indicate the importance of taking an intersectional approach, to see how social categorization intervene with different perceptions of safety. This way, decisions on maintenance and improving public spaces can be better informed to create more equal access of public spaces.

**Keywords**: individual safety perceptions, women, public space, Holendrecht, social control, social networks, visibility, familiarity, multi-ethnic neighbourhood

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#### Introduction

Cities are about people. The places where people go to, meet, or relax are at the core of urban functioning. The public spaces within cities facilitate these functions for the people. The key to city planning is the creation of lively and pleasant public spaces, as it is these places that give a city its vibrancy. Carr et al. (1992, p.50) defined public spaces as "open, publicly accessible places where people go for group or individual activities". By offering a place for gathering, leisure activities or simply functionality, public spaces are a crucial aspect of a well-functioning city (Carmona, 2015). However, there are concerns among scholars around the inaccessibility and the exclusion of groups, among them women, from these places (Cattell et al., 2008; Soraganvi, 2017). These concerns are expressed in the global sustainability agenda and therefore a call to action. Sustainable development goal 11.7 states that, by 2030, we must "provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities" (UN DESA, 2015, p. 26).

This research grounds in the observation that the accessibility of public spaces is not the same for each individual. According to Ratnayake (2013), concern for personal safety limits a person's freedom and choice to move in a public space, thus reducing its accessibility and use. In the Netherlands, there appears to be a gender difference in safety perception in public space. The Netherlands' Safety Monitor tracks the opinions and experiences of the Dutch general population about the habitability and safety of the neighbourhood, fear and prevention of crime, victimisation, and attitudes toward the police and municipality (CBS, 2022). The monitor of 2021 shows that women feel more unsafe compared to men, both in their own neighbourhood (17 percent against 11 percent) and in general (42 percent against 24 percent). Especially, young women between 15 and 25 years old feel the most unsafe. 25 percent of them sometimes feel unsafe in their own neighbourhood, 59 percent sometimes feel unsafe in general. In this monitor, this percentage is presented as twice of that of young men in the same age group (CBS, 2022). Although binary approached, such gender differences in feelings of safety are exemplary for unbalanced experiences and consequently unequal access and use of public spaces in the Netherlands \(^1\).

#### Safety Perceptions in Public Spaces

Unequal access to public space does not necessary correlate to cases of offence towards individuals. In fact, feelings of safety, or perceived safety, are notably not the same as an individual's actual risk of crime. Actual safety refers to the risk of being a victim of crime, evaluated by a range of metrics and crime statistics. Perceived safety relates to people's perception of their safety via the lens of fear and anxiety (Ceccato, Asiago & Nalla, 2020). Perceived safety is a person's perception of the probability of becoming a victim of crime (Jansson, 2019), which limits individuals to use certain public spaces. A person's feelings of safety influences one behaviour as many people try to adjust to, and minimise, their perceived risk of becoming a victim. One out of ten young women in the Netherlands have

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<sup>&</sup>lt;sup>1</sup> This research focusses on the meaning and significance of gender by the investigation of safety perceptions of women in public space. By emphasising individual perception as a starting point, the research acknowledges the criticism towards binary gender and sex systems, More so, it aims to challenge a presumed unisex approach toward public space. Although, still, the research defines one social group of study in line of such systems and it refers incidentally to older research applying dichotomously classification – woman and man, or female and male –, it does understand gender as diversely experienced and expressed. The author and supervisors do respect anyone whose identity falls outside of such binary boxing of human beings.

their keys, deodorant, or self-defence spray ready to secure their risk in places which they perceive as unsafe (Vlaanderen, 2022). Others modify their activities and hide their valuables (Jansson, 2019). Besides, feelings of unsafety cause people to avoid places and reduce their personal radius (Blöbaum & Hunecke, 2005). As Kaouthar Darmoni, director of Atria, a knowledge institute for emancipation and women history, sated: "Women feel much more unsafe than men. It makes them behave differently outside. They are not free in public space." (Vlaanderen, 2022, p. 1).

The problems caused by the gender-diversity in perceived safety are visible on both individual and various societal levels. Perceived safety can be included in debates of just public space (Haas & Mehaffy, 2018) and the universal right to the city when viewed as a spatial justice concern (Harvey, 2012). David Harvey explains that the 'right to the city' is a common right to "claim some kind of shaping power over the processes of urbanisation, over the ways in which our cities are produced and remade, and to do so in a basic and radical manner" (Harvey, 2012, p. 5). To claim this 'shaping power,' women, like other social groups, must have access to public areas and the opportunity to engage in their activities. Additionally, perceived safety has direct effects on the individual. Behavioural modifications and restrictions in outdoor movement, as well as the emotional reactions of feeling unsafe, have been found to have a negative impact on life quality, as they can harm psychological well-being, reduce community trust and cohesion (Jansson, 2019). To minimise the genderdifference of feelings of unsafety and create more inclusive public spaces, the accessibility to the public space should not only be defined by geographical proximity, instead these feelings should be seen as a significant barrier for access and use of the public space (Gargiulo et al., 2020), and considered when (re)designing public spaces.

#### Design and Planning of Public Space

One promoted strategy to tackle issues of perceived safety in public space is the design and planning of the urban environment (Blobaum & Hunecke, 2005; Jansson, 2019; Gargiulo et al., 2020). Valentine (1990) argues that, particularly for women, "public environment can have an influence on...perception of safety and hence on their willingness to use spaces and places" (p.301), and so careful design and planning of public spaces should foster their use. Understanding aspects of public space on women's safety perception is of great importance to support decision-making intended to enhance feelings of safety of women and create more inclusive public spaces.

A wealth of research studied how personal, social, and physical factors in public spaces affect feelings of safety (source). Harvey et al. (2015), for example, demonstrate how street skeleton — greenery, alignments, and continuity of buildings, and building street ratios — influence the perception of safety in public space, and Blobaum & Hunecke (2010) argue that lighting and a clear view are essential for enabling the early recognition of danger. In such research, women as a group play a prominent role on this topic, as it is argued that they face personal safety concerns when entering public spaces (Navarrete-Hernandez, Vetro & Concha, 2021). Also, a large body of literature documents gendered differences in public domain usage. For instance, Soraganvi (2017) argues that poorly designed urban public spaces, such as those with poor lighting, empty lots, a lack of public toilets, or inadequate signage, are especially discouraging to women.

In such research gender is often seen as a significant predictor for feelings of unsafety (Navarrete-Hernandez, Vetro & Concha, 2021; Gargiulo et al., 2020 & Sreetheran & van den Bosch, 2014), whilst individual perceptions of safety are not the same for every woman. Yates

& Ceccato (2020) stress the importance to not treat those who feel unsafe as a homogenous group. Also, Gargiulo et al. (2020) point out the importance of researching the different women's profiles of safety perceptions of the environmental factors in the public space. There is a need to take an intersectional approach. Intersectionality is an approach that considers multiple identities of the population in order to tie them through categorization, instead of only focussing on gender. This allows the identification of interaction between these identities and the experiences of individuals (Ceccato, Assiago & Nalla, 2020; Levin, 2015), in this case the experience of safety. Hence, the aim of this research is to take an intersectional perspective to understand the relationship between multiple identities in relation to safety perceptions in relation to the design of the public space and work towards socio-spatial indictors for improving the environment.

# Towards Gender-Sensitive Public Space Placemaking

Detailed examination of individual safety perceptions of women in public space desires a specific study area. For this, the neighbourhood Holendrecht, located in the Southeast of Amsterdam, has been chosen. It is one of 32 neighbourhoods in Amsterdam, which is assigned as "development neighbourhoods" by the municipality (Municipality of Amsterdam, 2022c). For each neighbourhood, the priorities, and how to tackle them, are examined together with residents, corporations, and other parties. By investing in homes, social accommodations, basic facilities, the neighbourhood economy, and living environment, future-proof neighbourhoods are created. In Holendrecht, the public space, the greenery, and some sports and play facilities need to be replaced as these are outdated (Municipality of Amsterdam, 2022c). Besides, several places in the area do not feel safe, such as around the tunnels and in the parking lots along the roadsides (Municipality of Amsterdam, 2022c). The Municipality of Amsterdam will invest in the redevelopment of Holendrecht over the coming years, and one key area on which the municipality is focussing is safety.

In line with the aim of general research, this study contributes to knowledge about different safety perceptions among women in Holendrecht in relation to the design of the public space. With extended knowledge on different women's profiles of safety perceptions, decisions on how to maintain and improve inclusive public spaces can be better informed, resources can be more efficiently invested as illustration to other real-world cases, and equal opportunity to use public space for all people can be better ensured. In search of an answer to this aim, this study is guided by the following research questions:

What are the different identities of women's safety perceptions in public spaces in Holendrecht?

Sub-research question 1: What are the characteristics of the physical and social urban fabric of Holendrecht?

Sub-research question 2: What are personal, physical, social factors affecting an individual's safety perception in public space?

#### Outline

The next part discusses the central concepts and theories which support this research, which gives this study a well-defined and proven basis of argument. Second, the methodology explains what has been done and why to evaluate this research's reliability and validity. Afterwards, the research results are presented as a foundation to answer the research

questions. The interpretation and implications of these results are discussed in the discussion, accompanied by the limitations of the methodology and results. Finally, a concluding chapter answers the main research questions and proves recommendations for future researchers and the Municipality of Amsterdam.

# Theory

Individual safety perceptions relate to the concept 'fear of crime', which occasionally explicitly is detailed to women's fear of crime, and specifically in public spaces. As such, from this base, the theoretical background discusses the personal, social, and physical factors, which influence the feelings of safety in public spaces.

# Feelings of safety

A group of loitering youth at the corner of the street, a lonely bike ride after a night going out, two gay lovers walking hand in hand in a conservative neighbourhood, or a traumatised migrant during the New Year's Eve fire work. Feelings of unsafety take many different forms, it can refer to feelings, perceptions, meanings, or behaviour about safety (Pleysier, 2011). A lot of research has been carried out to explore diverse feelings of unsafety, as well as defining the term, and how it should be measured (Pain, 1999; Skogan, 1986; Valentine, 1992). Perceived safety can be expressed in many different forms, of which fear of crime is one of the most discussed. In this research there is a focus on fear of crime, as it distinguishes from different forms of perceived safety, such as general feeling safe in society or traffic safety. Koskela and Pain (1999) describe the fear of crime as 'an emotion which is situated in the local details of individuals' circumstances and life courses and sensitive to spatial, temporal, and social contexts' (p.271). Fear can be viewed as an uncomfortable emotional state triggered by the perception of risks and threats (Ruiter et al., 2001). These perceived risks and threats have an objective and a subjective dimension. The objective dimension is defined as what actually occurs and that may have real negative impacts, the objective safety or actual risk of crime. The subjective dimension concerns phenomena that are perceived or interpreted as dangerous, the subjective or perceived safety. Thus, the objective dimension is the actual risk of crime and the subjective dimension is a perception of a person's risk of crime.

Addressing fear of crime cannot only be tackled by addressing crime, because there is a lack of scientific evidence showing a positive relation between actual crime and feelings of unsafety (Bannister and Fyfe, 2001). This means that crime rates in a neighbourhood reduce whilst the feelings of safety of a community remain unchanged. Hence, it is recognised that the fear of crime is often a larger problem than the actual risk of crime (Bannister and Fyfe, 2001). People who are fearful of becoming victims frequently alter their routines (e.g., staying at home more often, avoiding certain streets, and not using public transit) (Skogan, 1986; Miethe, 1995). Therefore, it is important to look further than the absence of violence while addressing safety perceptions of women, to ensure women's confidence in moving through and accessing public space.

#### Women's Feelings of Safety in Public Spaces

One of the most consistent findings in research on fear of crime is that women report a greater degree of fear than men (Pain, 1991; Yates & Ceccato, 2020). Although numerous explanations have been proposed, the most convincing argue that fear of sexual harassment and rape is at the root of women's greater fear (Pain, 2001; Valentine, 1989). However, this study was criticised for essentializing gender and, in doing so, associating femininity with only fearfulness, while ignoring other intersecting factors such as ethnicity, socioeconomic status, and place of residence (Pain, 2001).

Another frequently discussed theory is the vulnerability hypothesis. The vulnerability hypothesis argues that perceived safety is the product of an individual's conception of their

own vulnerability to victimisation (Hale, 1996; Baur, 2007). Compared to men, women's physical and social vulnerability results in a greater perception of risk in the built environment (Skogan & Maxfield, 1981). Indeed, studies show that women's susceptibility to "harassment and (sexual) violence, including staring, groping, remarks and stalking as well as assault" (Whitzman, 2013, p.39), contribute to feeling less safe in public than men, regardless of reported crime rates (Pain, 1997; Warr, 1984). Besides, the emotional gender-stereotypes hypothesis postulates that while women are encouraged to express their emotions, men are expected to repress these feelings, including fear (Sutton & Farrall, 2005). Men are taught to play a protective role and to believe that physical strength can prevent them from becoming victims of crime. This can lead to a tendency to minimise their fear and the risk of victimisation in a public space (Tulloch, 2000).

# Factors Influencing Feelings of Safety in Public Space

A large body of research has been carried out to determine the factors influencing feelings of safety. Personal feelings of unsafety are shaped through the risk perception and the estimation on how to cope with these risks. The factors influencing these two estimations are categorised over three levels, namely the individual, the contextual and the socio-cultural factors (Sreetheran & van den Bosch, 2014). Both the individual and contextual factors are presented below (see Table 1). The contextual factors are divided into social and physical characteristics of the public space. The socio-cultural factors are not considered in this research as these are determinants which explain feelings of unsafety on societal levels, such as terrorism and individualisation, which goes beyond the scope of this research. Although gender is perceived as an individual factor influencing the feelings of (un)safety, the social and physical factors do not specifically consider a gender-sensitive perspective. The theories behind the social and physical factors often explain the feelings of (un)safety of "people" instead in general, whilst there could be significant differences among women. The aim of this research is to create a more gender-sensitive understanding of how safety is perceived in public spaces. Hence, these theories are used to explore the differences in individual safety perception among women.

Table 1: Overview of both the individual and contextual (both social and physical) factors influencing perceived safety in public space.

Factors influencing safety perceptions							
Individual factors	Socio-demographics, previous crime experience, and prior						
	information about crime						
Social factors	Trust, familiarity, frequence of visit, presence of others, social						
	incivilities						
Physical factors	Physical incivilities, limitation of sight, lurk lines, and escape						
	routes, and maintenance and surveillance						

#### **Individual Factors**

On an individual level there are many personal factors which play in important role in defining safety perceptions. These factors are socio-demographics characteristics, previous crime experience, and prior information about crime.

#### i. Socio-demographic characteristics

Certain socio-demographic groups tend to have higher feelings of unsafety. As discussed before, gender appears to be the most influential factor. It is considered that the influence of gender is twice as great as that of age or socio-economic situation (Ferraro, 1996). Age and socio-economic status are two other socio-demographic characteristic discussed in the literature, both explained by the vulnerability hypothesis. According to Hale, the general consensus among fear of crime researchers is that "as people grow older, they become more fearful" (Hale, 1996, p. 100). Although the victimisation rate is far lower than that of younger age groups, people over 65 tend to be more afraid of crime than those under 65 (Spark & Hope, 2000). Elderly see themselves physically more vulnerable, and therefore estimate their chances of victimisation higher (Hale, 1996; Spitshoven, 2017). Besides, economically disadvantaged people perceive themselves also as more vulnerable as they have fewer financial resources to protect themselves from crime (van Noije & Iedema, 2017).

#### ii. Previous crime experiences

Previous victimization is also a significant factor influencing perceptions of safety (Streetheran & Konijnendijk, 2014). Direct victimisation refers to those who have been directly affected by the actions of a criminal or who have suffered immediate losses as a result of victimisation (Mesch, 2000). Previous victims are more likely to define circumstances as risky and perceive that there is a larger probability of victimization (Mesch, 2000). However, there were studies that did not demonstrate a link between direct victimization and criminal fear (Westover, 1985; Fisher et al., 1995). This is due to the fact that individuals in public spaces are more likely to encounter these types of behaviours, and since they continue to frequent these areas, they do not appear to feel threatened (Westover, 1985). On the other hand, it could be said that those who have been exposed to threatening behaviours have not returned and are therefore underrepresented in public spaces (Westover, 1985). Additionally, those who recently experienced victimization (for example, within the last year) indicated higher feelings of fear. This implies that recent victimization is a more significant predictor of fear than past victimization (Fox, Nobles & Piquero, 2009).

#### iii. Prior information about crime

Indirect victimisation also contributed to an increase in people's feeling of unsafety in public space (e.g., as reported in the media and learnt through interpersonal communication). When people hear about other people's crime situations, they may feel the same feelings that arise from being a direct victim and experience victimisation vicariously (Hanson et al., 2000; Clark, 2003). It is argued that interpersonal communication adds "a crime multiplier" to knowledge about crime, increasing the perceived risk of victimisation (Taylor and Hale, 1986, p. 156). The media could also intensify perceptions of victimisation risk, thereby inducing fear of crime (Lane and Meeker, 2003).

#### **Social Factors**

Not only do individual characteristics determine whether feelings of unsafety are experienced, the social factors also play an important role. How feelings of safety are shaped by the social environment is influenced by the trust, familiarity, frequency of visit, the presence of others and social incivilities.

#### *i.* Trust and familiarity

Some scholarly explained how fear of crime is influenced by the degree of social integration an individual enjoys (Hunter & Baumer, 1982; Lewis & Salem, 1986; Rountree & Land, 1996). However, empirical studies of the relationship between social integration and fear of crime have yielded contradictory findings (Babe & Austin, 1989; Riger, LeBailly & Gordon, 1981; Austin, Woolever & Baba, 1994). According to Bursik and Grasmink (1993), the inconsistent operationalization of social integration is responsible for these contradictory results. Nonetheless, these operationalizations share the presence of trustworthy relationships and the readiness to exercise informal social control (Gibson et al., 2002). This is related to the concept of social capital, according to Gibson et al. (2002). The core concept of social capital as it relates to neighbourhoods is that trusting relationships between neighbours translate into neighbours' willingness to participate in neighbourhood affairs and act as informal social control agents. Collective efficacy refers to the presence of such trustworthy relationships and the willingness to exert informal social control among neighbourhood members (Sampson, Raudenbush & Earls, 1997). Individual perceptions of collective efficacy, which are based on residents' perceptions of how trustworthy they perceive their neighbours to be and whether they perceive their neighbours to be willing to intervene as agents of informal social control, are contingent on the degree to which individuals feel integrated or at home in their own neighbourhood. These two aspects of collective efficacy are considered as a crucial determinant for perceived safety (van Noije & Iedema, 2017).

According to Blokland (2008), a missing notion of familiarity can decrease the sense of informal social control and trust of a neighbourhood which increases the feelings of unsafety. In this view, familiarity is not about the social network of an individual but about shallow, repetitive contacts in the public space (van Noije & Iedema, 2017). These contacts enable a resident to trust its fellow citizens. Besides, frequently visiting a place makes a person more familiar which reduce feelings of unsafety. Regularly visiting a place could lead to familiarity (Krenichyn, 2004). Familiarity is comforting, whilst the unknown is unpredictable and therefore considered dangerous.

Moreover, fear of crime appears to flourish in neighbourhoods where residents perceive themselves to be in close proximity to individuals of diverse racial, ethnic, and cultural backgrounds (Doran & Burgess 2012). In ethnically diverse neighbourhoods, a lack of understanding of each other's unique behaviour leads to mistrust and the perception of each other as "dangerous others" (Doran & Burgess, 2012, p. 35). People believe that "others" have different societal ideals, perspectives, and community commitments than they do (Covington and Taylor, 1991; Lane and Meeker, 2003).

#### iii. Presence of others

Women prefer to be in public space with other people or at the very least with their dogs rather than going alone (Koskela and Pain, 2000). In public spaces, there is a positive correlation between the absence of other people and the fear of crime (Goffman, 1971; Nasar & Jones, 1997; Warr, 1990; Whyte 1980; MacNaghten and Urry, 2000). For example, the majority of women also reported feeling secure in the presence of others, such as strangers or other other indicators of organised activity (MacNaghten and Urry, 2000).

#### iv. Social incivilities

Another social factor influencing the perceptions of safety are social incivilities at a particular site. According to the social disorder theory, it is not only criminality which evokes fear, but

also signs of social incivilities (van Noije & Iedema, 2017). This theory argues that social disorder is the result of weak social control in a community where local authorities are not capable of preventing or coping with disorder. Signs of social disorder give people the idea that there are opportunities for criminality, which enhances feelings of unsafety (Wilson & Kelling, 1982). Social disorder is about the presence of people who show anti-social behavior such as public drunkenness, gathering, loudness or loitering.

#### **Physical Factors**

The situational context in which safety is perceived is not only shaped by social factors, but also by physical factors. Several theories describe the potential mechanisms through which the built environment could impact perceived safety. The following are found to be most important for understanding feelings of unsafety in public spaces.

#### i. Physical Incivilities and state of the environment

In line with the social disorder model discussed before, the "broken windows" theory explains how physical signs of disorder shape the safety perceptions in public space. These arguments draw from Wilson and Kelling (1982), who argue that vandalised, neglected and poorly maintained areas provide clues to criminal activity in the area and show that residents care little about the social or physical condition of their neighbourhood. These physical signs of disorder show potentially lacking social cohesion and control which increases an individual's sense of vulnerability and then results in a higher perception of unsafety (van Noije & Iedema, 2017). Farrall, Jackson, and Gray (2009) list the following physical incivilities: inadequate lighting, graffiti, litter, vandalism, dog faeces, criminal hiding places, dilapidated buildings, and areas bordering vacant areas such as parking lots, parks, and factories.

The physical condition of the environment is viewed as a general indicator of the social fabric of the neighbourhood's resident community. This relates to Newman's theory of defensible space (1972). Defensible space is a model for residential environments that deters crime by creating the physical manifestation of a defending social fabric (Newman, 1972). Individuals' physical characteristics enable them to play a crucial role in ensuring their safety. People fear crime less in a well-kept environment because it reveals a strong social fabric that acts as a buffer against crime and fear of crime: it demonstrates that residents are capable of defending themselves due to shared goals and responsibility for the safety and upkeep of the environment (Newman, 1972).

#### ii. Limitation of sight

A commonly known theory to promote safety is to establish an urban environment that ensures greater visibility of the public space, or one that allows for more "eyes on the street". The "eyes on the street" theory originated from sociologist and urban planner Jane Jacobs who argues that accepted behaviour is enforced by the people themselves (Jacobs, 1961). The logic is rather simple, the greater the number of people around the safer a place becomes, as their eyes in the street provide natural surveillance. Natural surveillance is promoted by creating attractive streets where people are at all times of the day. From this perspective visibility and use of public space has become fundamental for safety perceptions (Gargiulo et al., 2021). To achieve a safe atmosphere visible control is improved by lighting systems and the removal of solid walls (walls without door or windows). Besides, diverse streets with constant urban activity supported by mixed uses case natural opportunity for "eyes on the street".

#### iii. Lurk lines and escape ways

The prospect and refuge theory argues that landscape design can increase feelings of safety. This theory posits that allowing victims to see potential threats and offenders without being seen by them increased their sense of safety. Appleton (1975) theorised that people favour spaces that offer an unobstructed view (prospect) and options for avoiding potential danger (refuge). Prospect is the ability to observe and see others, whereas refuge is the capacity to hide or remain anonymous (and potential perpetrators). The theory proposes preferred design characteristics for enhancing the perception of safety, such as the absence of hiding places and an increased depth of view (El-Metwally, Khalifa & Elshater, 2021).

#### v. Maintenance and surveillance

The last concept relating physical factors to perceived safety is crime prevention through environmental design principles. Based on the ideas of Jacobs (1961) and Newman (1972), the Crime Prevention through Environmental Design (CPTED) argues that crime can be prevented by taking away the opportunity for crime by the environment (Crowe, 2000). The theory consists of multiple principles that discourage crime and promotes security. Territoriality and natural surveillance, as explained before, are two of these principles. A second principle is access control, which requires the delineation of distinct types of space and the creation of privileged-user-accessible private and semi-private zones (Bockaga, 2020). Its purpose is to reinforce a sense of ownership over one's "own" space, eliminate potential escape routes, and create a feeling of being observed. Barriers, enclosures, and entry portals may be installed in a given space to provide access control. Besides, the maintenance principle of CPTED argues that well-maintained areas show that they are free from crime and disorder, creating a sense of protection over the area and discouraging crime (Bockaga, 2020). Physical security is another principle that can often come in the form of CCTV, proactive security, locks, and lighting.

# Methods

The individual safety perceptions of women in Holendrecht in the Southeast of Amsterdam are analysed to see whether and how these individual perceptions differ from each other to gain insights to enhance access and usage of public spaces for women. This chapter discusses the design of this research by explaining the philosophy embedded in this research and the general research design. Furthermore, it explains how the data is gathered and which methods are used for the analysis.

#### Research Design

Starting from a constructivist point of view (Creswel, 2003), this research aims to create a more gender-sensitive understanding about the factors influencing feelings of safety of women in public spaces. This understanding will be created based on multiple individual safety experiences of young women in Holendrecht.

This study adopts a qualitative approach to stay as close to the meanings people bring to them, in an attempt to make sense of it (Denzin & Lincoln, 2000). The design of this study is inspired by Toolkit for the Ethnographic Study of Space (TESS). The method is based on ethnography and is aimed to study the everyday life of a certain public place. According to Low, Simpson & Scheld (2018), this approach helps to uncover the cultural rules, beliefs and feelings that make up public life which aligns the constructivists point of view in this study. Such an approach helps to learn what is already known, as well as confirm whether certain new ideas, plans and goals are in fact correct. Moreover, a TESS study is a way to uncover the causes and dynamics of social exclusion, lack of diversity, and inequality in the use and access of a space (Low, Simpson & Scheld, 2018). To produce different understandings of space, multiple methods such as mental mapping, interviewing, and documenting, are used to create an inclusive description of how safety is perceived in public space. This technique of comparing different methods is called triangulation and is the basis of the methodological utility of TESS (Low, Simpson & Scheld, 2018).

# Study Area

This research is conducted in Holendrecht. Holendrecht is a neighbourhood located in the Southeast of Amsterdam (see Figure 1). The neighbourhood has been built from 1976 till the early 1980's and had almost 10.000 inhabitants on the 1st of January 2021 (Municipality of Amsterdam, 2022b). Holendrecht is characterized by a population with diverse ethnic background and a diversity in typology of the built environment.

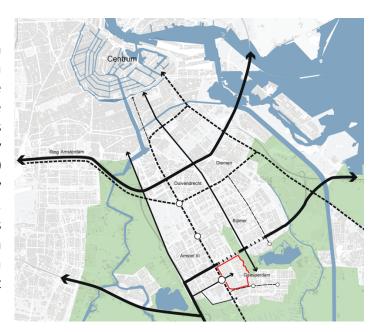


Figure 1: Location from Holendrecht highlighted in red. From Principenota Holendrecht, June 2020.

#### **Data Collection Methods**

This research consists of a combination of both primary as well as secondary data that was derived both from fieldwork as well as desk research. The selection of data collection methods was based on what were the most sensible, practical, and ethical options to be considered.

#### Semi-structured interviews

Primary data was derived by conducting in-depth interviews with respondents. The initial idea as to conduct go-along interviews. The respondents should be asked to take the interviewer to a place which they perceive as unsafe. At this location, the interviewer conducts a go-along interview. In a go-along interview, the researcher can go one step further by exploring the context with the participant in real time, with the participant serving as an expert guide who explains the significance of the environment. A go-along interview involves participating in a participant-led tour of the participant's actual living environment.

However, due to difficulties with finding respondents to participate, I decided to broaden the scope of this research and include women living in the adjacent student buildings in Amstel-III and medicine students of the AMC. As these women still have a close connection with Holendrecht, because of their frequent use of Holendrecht Station and the shopping center, it was assumed that these women have a good idea of how they perceive their safety in Holendrecht. Finally, I was able to talk with 19 women about feelings of (un)safety in Holendrecht.

Respondents were selected based on purposive and snowball sampling (Gill, 2020). Purposive sampling was chosen to because of the convenience of finding potential participant in an area the research is unknown. Potential participants were approached on the street, via the community centre, via community organization's mail and social media, and the researcher's own network. This sampling method was complemented by snowball sampling, where participants recommended other persons who were willing to participate.

In total 19 women were interviewed. The connection of these women with Holendrecht varied from between residency and studentship. 17 of the interviewees were residents, six of them living in Holendrecht-Oost, seven in Holendrecht-West and four in Amstel-III. Three of the women who lived in Amstel-III are medicine students at AMC., and one woman who lived in Holendrecht-Oost is a medicine student at AMC. Only two of the interviewed women were not a resident, but only medicine students at AMC. The ages from these women varied from 19 to 68 years old (see Table 2). For privacy reasons, I anonymized their names.

Before the interviews, an interview guide was created with a set of questions based on the theories presented in the previous chapter (see Appendix A). This guide provided the foundation for the unstructured and semi-structured interviews. The beginning of the interview was to get to know each other, followed by several questions about the respondent's experience of living in Holendrecht. Afterwards, the respondent's feelings of (un)safety were discussed in relation to Holendrecht in general and specific places. Talking about specific places helped with the identification of factors in public space.

Table 2: Overview of the women who participated in this research, presented in order of the time, specifying their anonymized names, residency or studentship, neighbourhood, age, ethnicity and years in the neighbourhood.

#	ANONYMISED NAMES	RESIDENT OR NI STUDENT	EIGHBORHOOD A	AGE	ETHNICITY	YEARS HOLENDRECHT	IN
1	Dolores	Resident	Holendrecht-Oost	40	Surinam	15	
2	Tamara	Resident	Amstel-III	21	Dutch	0,5	
3	Eva	Resident	Holendrecht- West	28	Dutch	1,5	
4	Nikki	Resident	Holendrecht-Oost	29	Dutch	25	
5	Melisa	Resident + Student	Amstel-III	27	Surinam	2	
6	Nancy	Student	-	23	Dutch	-	
7	Mila	Resident + Student	Holendrecht-Oost	22	Dutch	1	
8	Jessica	Resident + Student	Amstel-III	23	Dutch	1,5	
9	Samira	Resident	Holendrecht-Oost	38	Dutch	10	
10	Celine	Student	-	24	Dutch	-	
11	Carmen	Resident	Holendrecht- West	27	Dutch	2	
12	Naomi	Resident + Student	Amstel-III	19	Dutch	1	
13	Во	Resident	Holendrecht-Oost	41	Dutch	19	
14	Ali	Resident	Holendrecht- West	65	Surinam	12	
15	Ursela	Resident	Holendrecht- West	29	Surinam	2	
16	Fatima	Resident	Holendrecht- West	59	Surinam	44	
17	Iris	Resident	Holendrecht- West	68	Surinam	25	
18	Afina	Resident	Holendrecht-Oost	37	Ghanese	9	
19	Judith	Resident	Holendrecht- West	30	Surinam	8	

Two walk-along interviews were conducted, four interviews were conducted in person and 13 interviews were conducted online via Microsoft Teams. For the walk-along interviews, the women were asked where they would prefer to meet, one woman preferred to meet at home, and I met the other woman at the shopping centre of Holendrecht. Both women were asked to choose a route which crosses several places which were perceived as unsafe. Four women preferred to do the interviews in person but not in the form of a walk-along. Two of them were interviewed at the central square of Holendrecht, and the other two in the community centre.

For both the online as well as the interviews in person the setup was semi structured, meaning that even though a set of structured interview questions was used, there still was a possibility to deviate from these questions or elaborate further. All the interviews were recorder. The walk-along interviews were recorded by phone and the online interviews were recorded by Microsoft Teams and lasted between 23 and 45 minutes. Almost all the interviews were held in Dutch, and one interview in English because the Ghanese respondent did not speak Dutch. The interviews where recorded and then transcribed.

#### Mental maps

During the first set of interviews, it was noted that it was difficult to ask for physical factors. Most of the respondents linked their feelings of safety to social factors such as physical incivilities, instead of physical. When respondents were asked if there were physical factors which influenced their feeling of unsafety the answers were limited. Therefore, an additional data collection technique was added to this research, namely mental mapping. According to Lynch (1960) and Gould and White (1974) mental mapping is a powerful method for understanding the ways in which people visualize a place based on their own experiences and perception.

These mental mappings provided the core elements by which the respondents construct their image of the neighbourhood, such as paths, edges, nodes and landmarks. Before the interview took place, the respondents were asked to create a mental map of how they envision Holendrecht. The women interviewed in person were provided with a blank paper and a pen. The online interviewees drew their map before the interview and shared it as a picture via Whatsapp. During the interview, the women were asked what they have drawn and why. The elements drawn in the mental maps were also the starting point to talk about physical factors influencing their perception of safety. The mental maps are included in Appendix B.

#### Desk research

Policy documents, scientific literature, and news-and other media articles were used as data resources in order to create a general description of the neighbourhood. Moreover, it was used to create a contextual overview of policies to create a picture in the readers mind of information about the cases and an outline of the political environment relevant to this research (Yin & Davis, 2007).

#### Data Analysis Method

Once, all the data was collected it was organized in files that are labelled by the type of data, for each respondent a folder was created which included the recording of the interview and if available the mental map. These folders were expanded with the transcripts of the interviews. When the transcripts of the interviews were made, cover sheets were created which list any major points or questions that arose during the interviews. During the process of cleaning the data, the first ideas about what is going on in the study area are written down in the form of memos, to familiarise the researcher with the data. The cleaned data will be imported to the computer-assisted qualitative data analysis software called 'Atlas.ti'.

First, open coding was done by highlighting key parts of the interviews and labelling them with a code (Bryman, 2012). Afterwards, axial coding was done to by analysing patterns and overarching themes for codes and code groups (Bryman, 2012). Finally, selective coding was done by interpreting and reviewing the collected themes for their relevance to answering the sub-questions of this research (Bryman, 2012). Quotes used in this report were translated to English from Dutch transcripts if needed. In addition, some quotes were changed partially to enhance readability.

Besides, the mental maps were also analysed in the data analysis software to search for overlapping themes in the drawings. Again, first open coding was performed followed by axial coding. Also, secondary data was analysed by initially scanning documents and then carefully reviewing those that were deemed to be pertinent. Additionally, the documents were highlighted and annotated by hand. Finally, the differences among the women were

explored through the creation of a table in Excel with the respondent on one axis and the influencing factors on the other axis. This matrix was used to identify patterns among the women with a special focus on the personal characteristics to categorise the women according to their safety perceptions (see Appendix C).

# Results

Safety perceptions in public spaces are influenced by factors on personal, social, and physical level, which represent the structure of this chapter. First, a general description of the physical and social urban fabric, as well as the personal challenges in Holendrecht are presented. Afterwards, these topics are addressed from the respondents their point of view, in relation to the factors which shape their feelings of safety. How these individual perceptions differ among each other is presented in the last part.

# General Description of the Physical Urban Fabric

Holendrecht is a neighbourhood located in the city district Gaasperdam, situated in the Southeastern part of Amsterdam. Gaasperdam, including Holendrecht has been built in the 1970s and 1980s to offer affordable houses for the urban dwellers of Amsterdam

(Municipality of Amsterdam, 2019). The initial idea was to continue the build of the characteristic high-rise flats of the Bijlmer (see Figure 2), the city district located in the northwestern part of Gaasperdam. However, due to criticism about this urban design, Gaasperdam became a mix of low-, middle-, and high-rise buildings (Municipality of Amsterdam, 2019). Besides, public spaces in Gaasperdam are characterized by green space and water. It is a different experience than other neighbourhoods in Amsterdam, because of the variety of parks, nature reserves, and green courts in between the buildings. The neighbourhood of study, Holendrecht, is also characterized by these elements. Holendrecht consists of two smaller urban areas, each different in physical representation; Holendrecht-West and Holendrecht-Oost.



Figure 2: Part of the model showing the Southeastern urban expansion of Amsterdam in 1965. From Bijlmermeer (Amsterdam), by Wikipedia, n.d.

#### Holendrecht-West

Holendrecht-West, separated from Holendrecht-Oost by the street Meerkerkdreef, consist of gallery flats with a height of four floors, built from 1976 to the late 1970s. The physical urban fabric in Holendrecht is shaped by the 'Radburn' design, a design that refers to the garden city Radburn from 1929 (Municipality of Amsterdam, 2022a). This design was adopted in Amsterdam for medium-high buildings in, for example, Buitenveldert. This resulted in an allotment plan with two north-south oriented meander strips on either side of the car-free, green foot and cycle path. The housing consists of four floors with portico access and storage on the ground floor. The residential entrances are located on the stone courtyards facing outward, where several parking lots are located. The green courts turn inward to the lobes of the park lane, which creates a lot of pocket green as well as a park-ish in-between public space (see Figure 3).

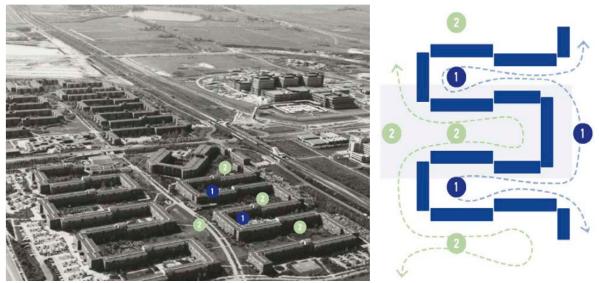


Figure 3: The meandering building blocks in Holendrecht-West with (1) a stoney court and (2) a green court in between the blocks. From Projectnota Holendrecht, by Gemeente Amsterdam, February 2022.

Both in Holendrecht-West and Oost, there is a segregated traffic system (see Figure 4), where car traffic, the metro and bike paths are located separately (Municipality of Amsterdam, 2022a). The train and metro track and the car lanes are elevated above the residential area, and there is an intricate network of bike paths in the neighbourhood that walks under the tracks and lanes. This is an undeniable quality of the area: motorists, cyclists and pedestrians can move through the neighbourhood unhindered. The elevated lanes and tracks also create hard boundaries between the different neighbourhoods. The lanes are not crossable, and the neighbourhoods are only at a few points connected by tunnels. The car lanes are wide furnished with trees and shrubs and therefore work as green passageways. Besides, the green separates the lanes from the residential areas (Municipality of Amsterdam, 2022a). There are several cycling routes through the area, in a north-south direction Abcouderpad towards Bijlmer Centrum. The Meibergpad runs in an east-west direction from the Amstel III area to the Gaasperplas. At the intersection of these two cycle paths is the centre of Holendrecht is located. The centre of Holendrecht is characterised by a central public square (Holendrechtplein) with mainly low-rise shopping and community facilities around. Here are some restaurants, a shopping centre, two primary schools and a community centre located. The Holendrecht tram and metro station is located nearby this central square.



Figure 4: two maps showing the segregated traffic system in Holendrecht-West. The left map shows the bike path, and the right maps shows the car lanes. From Principenota Holendrecht, June 2020.

#### Holendrecht-Oost

The eastern part of Holendrecht consists of mostly of single-family homes, dating from the late 1970s and early 1980s. The low-rise building blocks are linear strips with front- and back yards. The houses are located at car free paths and parking lots are constructed in between every two strips of building blocks (Figure 5), which gives more car traffic through the neighbourhood compared to Holendrecht-West. The Mijehof, a primary cycling route, runs through the neighbourhood from north to south and connects the larger urban area of Amsterdam with Reigersbos. Also, the Meibergpad continuous in an east-west direction from Holendrecht-West to the Gaasperplas.

The low-rise design is accompanied by a different distribution of the green. The park-ish public space in Holendrecht-West is here replaced with green around the lanes and narrow public gardens; the



Figure 5: Map of both Holendrecht-Oost (left) and Holendrecht-West (right). Showing the difference in urban design. Holendrecht-West characterized by the meandering buildings and Holendrecht-Oost by the straight single building blocks. From Pincipenota Holendrecht, June 2020.

front and backyards are private gardens. In the middle of the district is a wider green strip that is connected to Central Park Gaasperdam. Recreational facilities are in Central Park Gaasperdam: tennis court, basketball court, soccer field and soccer field. In addition, a petting zoo, utility gardens and schoolwork gardens are present in the park. Besides, there are two schools and a building block for seniors.

Holendrecht's administrative borders are formed by infrastructural barriers and neighbourhoods with a different urban fabric (see Figure 6). The A9 national road, Gaasperdammerweg, divides the neighbourhood from the north and the larger Amsterdam urban area. The national railway line, interconnecting the cities between Amsterdam and Utrecht, divides the neighbourhood from the west. On the other side of the railway the neighbourhood is called Amstel-III. This is an urban area which could be described as business park, with Academic Medical Center (AMC), large-scale entertainment, sports, and shopping facilities, and another national road A2 the further west (Municipality of Amsterdam, 2022a). Along the national railway, also a few buildings for student housing and dormitories are recently developed, such as the Blue-Grey building (formerly offices), and the newly build OurDomain.

The Reigerbos neighbourhood in the south is very different in its urban fabric and public space structure (see Figure 6). The neighbourhood was built and completed in the first half of the 1980s and is characterized by U-shaped medium-high building blocks, forming delineated streets. The courtyards of these blocks are green and car free. Part of the courtyards are made of stacked low-rise buildings with raised pedestrian levels and exterior stairways (Municipality of Amsterdam, 2021b). Only around the shopping centre are high-rise buildings, with offices and a retirement home. In the southwest, Reigersbos borders with

nature reserve Hoge Dijk and in the northeast the neighbourhood is connected to a green belt along the Gaasperplas. Similarly, the Gein neighbourhood in the east is also very different in its urban fabric and public space structure (see Figure 6). Gein mostly consists of rectangular residential blocks and streets with low-rise single-family homes and duplex dwellings, and middle-rise gallery flats apartments at the area adjacent to Reigersbos (Municipality of Amsterdam, 2021b). On distance a green belt along the Gaasperplas in the north and the border with the Province of Utrecht in the southwest.



Figure 6: Photo of Holendrecht, its administrative borders and surrounding neighbourhoods. From Principenota Holendrecht, June 2020.

#### Challenges and Future Perspective

In the last decade, Amsterdam Southeast has been targeted for a lot of urban redevelopment projects. But this redevelopment is less visible in Holendrecht. Since 2015 the Municipality of Amsterdam performed several projects to better the situation in Holendrecht. The northwestern part of Holendrecht has been renovated, but the other parts are not renovated yet (Municipality of Amsterdam, 2019). Several spots in public space, the green and some sportand play facilities need to be replaced, and there are places which are perceived as unsafe among the residents. Besides, like in other neighbourhoods in Amsterdam, there is also a housing shortage in Holendrecht (Municipality of Amsterdam, 2019).

According to the plans of the Municipality, the physical urban fabric will be targeted by focusing on improving the quality of public spaces and providing more facilities and sustainable infrastructure (Municipality of Amsterdam, 2022a). The existing quality, the greenery in the area, remains an important aspect and will be strengthened where necessary. With a new design of the area, housing will be mixed with the social and commercial facilities so that a lively new centre is created. Until 2035, the Municipality of Amsterdam will transform the physical urban fabric of Holendrecht by (Municipality of Amsterdam, 2022a):

- 1. Creating a safe and attractive centre, a place where people can meet
  - a. Combining functions such as shops, facilities, and schools with housing so that there are always eyes on the street.
  - b. High-quality public space linked to important nodes and routes
  - c. To embrace the car-free character of Holendrecht.
  - d. Reinforcing the routes which connect Holendrecht to the surrounding neighbourhoods.
- 2. Make maximal use of station locations in the city.
  - a. Densification around the station, by adding houses
  - b. Mixing of functions in the building blocks around the station
  - c. Improving the connectedness of the area by lowering the lane in the vicinity of the station and improving connections with the Amstel III area.

#### General Description of the Social Urban Fabric

Just as the neighbourhoods differ in their physical urban fabric, there are also large differences in the social urban fabric. On the first of January 2021, 9609 residents lived in Holendrecht, 7104 of them lived in Holendrecht-West and 2505 in Holendrecht-Oost (Municipality of Amsterdam, 2022b). In both neighbourhoods' women are the majority, in Holendrecht-West 54% of the residents is female and in Holendrecht-Oost this percentage is 51%. Besides, in Holendrecht-West the population is younger. The age groups 0-15 years old (21% compared to 15%) and 15-25 years old (14% compared to 9%) are bigger in Holendrecht-West, and the age group 65+ years old is twice as high (28% compared to 14%) in Holendrecht-Oost. There are also differences in ethnicity. In Holendrecht-West the group of residents with a non-Western migration background is much bigger (75% compared to 44%), whilst in Holendrecht-Oost the group of residents without a migration background is more than twice as much bigger (43% compared to 18%). However, for both neighbourhoods counts that almost half of the residents with a migration background come from Surinam.

Besides, there are also some differences from socio-economic perspective. In Holendrecht-Oost most of the houses are owner-occupied homes (55%), 28% of the homes are from housing corporations and 17% private rental housing. In Holendrecht-West most of the houses is owned by housing corporation (92%), 9% is owner occupied houses and 1.5% is private rental housing. Furthermore, the average gross annual wage in Holendrecht-West is lower than in Oost, 21.900 euro per year compared to 25.800 euros per year. Also, there are differences in educational levels. In Holendrecht-West the number of people with low educational attainment (44%) is twice as high compared to Holendrecht-Oost (22%). On the other hand, the resident in Holendrecht-Oost with high educational attainment (37%) is more than triple as high compared to Holendrecht-West (10%).

In Amstel-III the situation is slightly different. The neighbourhoods counted 1345 residents on the first of January 2021, 58% of them are female. As mentioned before, this neighbourhood is popular among students because of the student housing (100% private rental) provided here. This is also reflected in the number of young adolescents living here and the average gross annual wage. 73% of the residents are between 15 and 25 years old, and 26% are between 25 and 45 years old. Also, the average gross annual wage in this neighbourhood is the lowest among the three neighbourhoods, namely 11.200 euro per year. Besides, there is a diversity in people who have or have not a migration background. 42% of the residents have a non-Western migration background, 30% do not have a migration background and 28% of the resident have a western migration background. While most of the

residents with a non-western migration background in Holendrecht-West and Oost are Surinam, the majority in Amstel-III comes from another country ("another" refers to countries other than Maroc, Antilles, Surinam and Turkey).

Several women play an important role in the social urban fabric from an entrepreneurial perspective. The Groene Hub might be one of the most prominent community organizations in Holendrecht. This organization, led by Maartje Bos, is a community where residents can learn about sustainability (Groene Hub, 2022). It is a place for services which enhance a sustainable and social society. Another organization which often organizes events for women is the community center. Every second and fourth Saturday of the month, this community center organizes a women lunch, where women make lunch and eat together and talk about everyday subjects (Vrouwen Lunchcafé, 2022). Also, this community center organizes several courses for women, for example for young female entrepreneurs and for women who are traumatized by previous relationships (Buurtkrachtgroep Holendrecht, 2021). Finally, the organization Buurvrouwennetwerk Gaasperdam offers a lively and active network for women in Gaasperdam. It is their mission to stimulate social cohesion, fight social isolation and stimulate empowerment (Buurvrouwennetwerk Gaasperdam, 2021).

#### Challenges and Future Perspective

The residents of the neighbourhood encounter several challenges. There is a lot of litter nuisance in public spaces. Besides, from a social-economic perspective Holendrecht lags behind compared to other neighbourhoods in Amsterdam (Municipality of Amsterdam, 2022a). Also, there is a housing shortage, especially for youngsters and elderly there are not enough opportunities to move to a new home in Holendrecht (Municipality of Amsterdam, 2022a). Finally, over the last 20 years Holendrecht has been targeted with several short-term projects to better the neighbourhood, whilst structural improvements stayed behind. For each project input from the residents was desired which resulted in participation fatigue among the residents, a problem resulting from many conversations about a promising future but with limited results (Meershoek, 2020). This fatigue is accompanied by distrust from residents in local politics which could even worsen the willingness to participate.

According to the Municipality's future development plans for Holendrecht, the focus is mainly on the housing problem and the social-economic position of the neighbourhood (Municipality of Amsterdam, 2022a). Two objectives were formulated:

- 1. Create a more diverse housing stock that better matches the wishes of the residents.
  - a. Quantitative: create more houses
  - b. Qualitative: build for specific target groups and improve opportunities residential mobility
- 2. Improve social-economic position of residents
  - a. Renew schools
  - b. Renew social/communal spaces

# General Description of the Personal Challenges in the Neighbourhood

The residents of Holendrecht encounter several challenges on personal/individual level. Poverty is already a major problem in Holendrecht for many years (Municipality of Amsterdam, 2019). Unemployment is twice as high as the city average and four times as many people are in debt counselling. Many residents of Holendrecht live on a minimum income and struggle with health issues. Besides, a quarter is illiterate. Also, one quarter of the population

are single parent families. Finally, these problems increase the vulnerability of the young people in the neighbourhood (Municipality of Amsterdam, 2021a).

Besides, there are also challenges for young people in Holendrecht. This is common in the South-eastern part of Amsterdam, the Bijlmer. In the Bijlmer more young people feel unsafe and experience more crime in their neighbourhood compared to other neighbourhoods in Amsterdam (Municipality of Amsterdam, 2021a). Also, the number of young people who are suspected of crime is much bigger in the Bijlmer compared to the rest of Amsterdam (Municipality of Amsterdam, 2021a). Because of the challenges described before, the vulnerability of these young people increases, which eventually increases the attractiveness of crime, for example where people experience inequality of opportunity.

#### **Future Perspective**

Apart from the future development plans for Holendrecht presented in February 2022, the Municipality introduced Masterplan Zuidoost in 2021. The focus in the plan is on children, young people and adults up to the age of 31, who should have the same opportunities and possibilities to develop, grow and find a good job like other young people in Amsterdam and the Netherlands (Municipality of Amsterdam, 2021a). Based on the Masterplan, an order has been given to investigate in Holendrecht whether youth housing can be realised, with special attention to the young people who don't have much to spend (Municipality of Amsterdam, 2021a).

# Physical Urban Fabric through the eyes of the respondents

To create an understanding of how the physical urban fabric of Holendrecht is perceived by the respondents, ten respondents created a mental map (see Appendix B). Almost all the women drew buildings, varying from the building they live into the school and the shopping centre. Also, the bike paths, trees and the Holendrecht Station was given attention to. This part discusses how the respondents perceive the physical urban fabric of Holendrecht by analysing the mental maps. Besides, the physical factors which influence the safety perceptions of the respondents in the public space are presented. This subchapter concludes with a paragraph about the different perspectives of the respondents.

#### **Buildings**

The buildings returned in the mental maps of almost all the women. For 6 of them, the gallery flat located Holendrecht-West appartements in characterize the neighbourhood, even though only two of them live in that neighbourhood. For example, Mila who lives in Holendrecht-Oost drew characteristic flat because she immediately thinks of these them. She mentioned: "From my house it was a 5-minute bike to the university, so I always went by bike. During this ride I crossed Holendrecht centre and the surrounding flats...Yes, I crossed it every day so that is my association". The typology of these gallery flats was also mentioned by Carmen (see Figure 7). According to Carmen these flats give her a sense of a residential area. She said: "It's just a residential area. A lot of buildings,

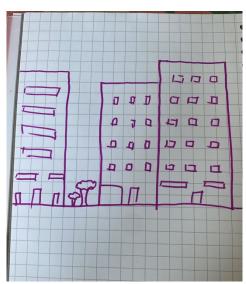


Figure 7: Mental map of Holendrecht created by Carmen

a couple park lanes and a supermarket. That's it... Yes, there are just a lot of buildings. There is nothing much to do here. There is a small shopping centre but foremost there are just a lot of buildings...For me it is literally a residential area with a supermarket". See Figure 8 for an impression of these buildings in Holendrecht-West.

The three women who live in Amstel-III all highlighted the characteristic building OurDomain and the AMC in their mental maps. For all of them, these two buildings exemplify Holendrecht. Both buildings catch the eye when you leave the western entrance of Station Holendrecht. On the northern side the newly build student flat OurDomain with its cascade of cubes of bright colours on the blank outer walls. On the southern side the academic hospital and medical faculty spread out over a large surface. Naomi said: "If I think of Holendrecht, I immediately envision the building where I live (OurDomain) and the building where I study (AMC)". One of the women who lives in Amstel-III also drew the shopping centre on the other side of the railway, in Holendrecht-West, as well as Samira and Bo who both live in Holendrecht-Oost. Samira, who lives in Holendrecht-Oost, mentioned: "We also have some stores. Holendrecht has the facilities to live a pleasant live. There is green, there are schools, education, there is a bit of everything". Samira and Bo also drew the school in Holendrecht and the community centre. Bo, who lives in Holendrecht-Oost said about the neighbourhood: "It really is a pleasant neighbourhood, it is nice and quiet. There is a school. Yes, it is just pleasant and child-friendly". Both examples show how Bo and Samira enjoy living in Holendrecht(-Oost), partly because of the facilities offered.



Figure 8: A picture of the meandering building blocks in Holendrecht-West. From Zuidoost City, 2021 June.

#### Paths

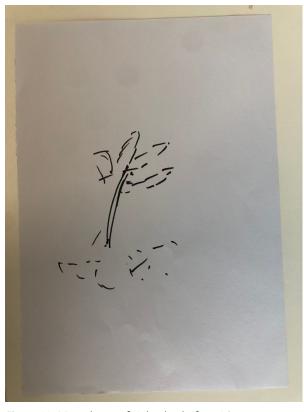
Another returning aspect are the bike paths (see Figure 10). Bo mentioned: "If I think of Holendrecht, I envision the bike paths. I do everything by bike, doing groceries or picking up the kids from school. Sometimes I take public transport but the most I do by bike". The separated traffic system in Holendrecht is experienced very pleasant among the respondents. Figure 10: Mental map of Holendrecht created by Mila



Also, Eva, who did not draw a mental map, mentioned "In terms of traffic safety it is perfectly arranged here in Holendrecht. It is pleasant to bike here. It is very streamlined so you can just choose a cycle path and it will take you easily through the Holendrecht and surrounding neighbourhoods. So, it is very relaxed and well-arranged in terms of spatial layout".

#### Green

Three women also acknowledged the greenness in the area, drawn by trees in their mental maps (see Figure 11). Mila said: "It is quiet and green here, and that is also basically it. It gives me the vibe of the small village where I grew up. This gives me a comfortable feeling". Carmen refers to the greenspaces in between the buildings as "little parks". Also, Samira pointed out how she enjoyed the greenspace of Holendrecht. Figure 11: Mental map of Holendrecht from Iris. She said: "I really enjoy living here in



Holendrecht. It is beautiful, there is so much green. It is also child friendly. There are a lot of courts, so the children really have a place to play". However, Samira also mentioned that there are also places where the greenness has become too dense. She mentioned: "There are a lot of trees, especially in between the buildings. I don't think we have to remove the trees but at some places I miss a bit of overview. Also, it may be maintained a bit better".



Figure 12: A picture of the bike path which crosses Holendrecht-West. From Municipality of Amsterdam, n.d.

#### **Nodes**

Another central point in the neighbourhood is Station Holendrecht, which has been mentioned by four women in their mental maps. Celine mentioned: "The station is just fine, it does what it should do. I don't have to wait for long times, so that is nice...It would be nice to have a bit more facilities around the station. A small shop where you can get something to drink or to eat. There is a small stent in front of the station, but this only sells quiet special food like donuts and stuff". The station separates Holendrecht-West from Amstel-III and facilitates both a metro and train station. The respondents perceive the station as a central point in Holendrecht, but also as a physical border between the neighbourhoods. Tamara said: "Holendrecht really has two different sides which are divided by the railway. On one side, it is impoverished and there I see a lot of homeless and loitering people. On the other side, where I live (Amstel-III), live mainly students and young professionals. This people attract me more".

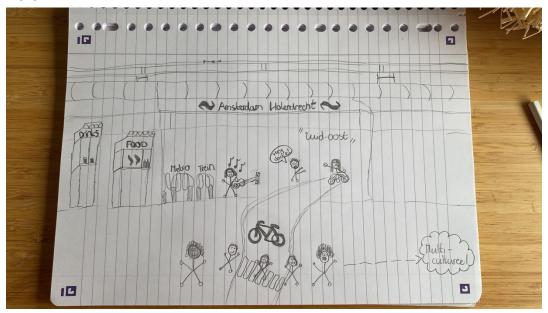


Figure 13: Mental map of Holendrecht from Celine.

#### Places perceived as Unsafe

During the interviews, several places were highlighted as unsafe by the respondents. The following part discusses the places in Holendrecht's physical urban fabric which are perceived as unsafe. This part provides a summary of the physical, social, and personal factors which make a place unsafe. Further explanation of these factors is provided in the next parts.

#### Holendrecht-West

Holendrecht-West there are six places which were frequently mentioned during the conversations with the women. Most often Station Holendrecht was mentioned (see Figure 14). The women experience nuisance, in form of street harassment, from the loitering and begging



Figure 14: The western entrance of Station Holendrecht, which also visualizes the segregated traffic system. The metro and train rails above and bike and pedestrian paths underneath. From Vrijetijd Amsterdam, (n.d.).

people at the station, and several physical nuisances such as litter. Besides, the north and south entrances of the station give a secluded impression and there is only one exit at the train station which limits the escape routes. Finally, there are limited facilities at the station. However, the continuous presence of people does enhance the feeling of safety.

The tunnels underneath the car lanes which connect the different neighbourhoods are also perceived as unsafe. As there are no houses or shops overlooking most of the tunnels, the eyes on the street at these places dimmish in the evening which strengthens feelings of unsafety. Especially, the tunnel at the shopping centre. In accordance to the response of the women, there is almost every day a group of loitering men underneath that tunnel who are drinking in public. In addition, the liveliness at the shopping centre decreases in the evening. Due to the separate traffic system in Holendrecht, and the separation of residential and commercial functions in the area, the number of people at the shopping centre decreases when the shops are closed, hence the eyes on the street which strengthens feelings of unsafety.



Figure 15: Holendrechtplein, located in Holendrecht-West. From Stadsfontein, (n.d.).

Another places which often is perceived as unsafe is Holendrechtplein (see Figure 15), the central square in the centre of Holendrecht. The square offers a lot of space for the adjacent schools and community centre, however, due to loitering people and street harassment this place is preferably avoided by the respondents.

Four women mentioned the two central bike paths

which cross Holendrecht-West from the north to south and from east to west, and the parking lots in the neighbourhood. The bike paths are perceived as unsafe because of previous experiences of street harassment, and other prior crime incidents such as shootings. Besides, the experience is that the lighting is not always working properly. This also account for the parking lots, where the respondents often report dysfunctional streetlights to the municipality. This gives the residents the feeling that these parking lots are impoverished which evoke feelings of unsafety. Also, due to previous crime experiences and the presence of loitering people these feelings are enhanced.

#### Holendrecht-Oost

Only one place in Holendrecht-Oost was perceived as unsafe by two women. This is the park at the west side of the neighbourhood, Centraal Park Gaasperdam, with facilities such as the schoolwork gardens, children's farm 't Brinkie and the scouting, the Gaasperplas and nature reserve De Hoge Dijk. In general, the park is perceived as a pleasant area because of the greenness and the presence of other people due to the facilities the park offers. However, due to previous stories about others of crime and the not always working street lighting, this park is avoided at night by two respondents.

#### Amstel-III

In Amstel-III the path which goes from Station Holendrecht to the academic hospital is among multiple women mentioned as a place where they would rather not walk alone in the evening. This is only reported among the women who study at the AMC and/or live in Amstel-III, probably because these are the only respondents who use this space. According to them, there are sometimes clients from the psychic part of the hospital walking there which the women find hard to connect with. Due to a lack of surveillance and high vegetation density, these women prefer to be in a group when they walk this path.

#### Other

Finally, the shortest bike path from Holendrecht towards the centre of Amsterdam is often avoided at night, whilst this path is preferred during the day. Because this path crosses remotely industrial areas where there is no sight from residential buildings on this path, it is perceived as unsafe at night. Hence, one woman takes a longer route which crosses residential areas and someone else only uses public transport at night.

#### Physical Factors Influencing the Safety Perceptions

The following part discusses how certain physical factors influence the safety perceptions of the women. Most women mentioned how maintenance and surveillance influenced their perception of safety. Also, the effects of lighting and dark areas were commonly discussed. Some women also mentioned long distance views, physical incivilities and vegetation density as influencing factors.

#### Maintenance and surveillance

Regarding the physical factors, 13 respondents highlighted the maintenance and surveillance of an area as a factor influencing their feelings of safety. For this aspect, three different actors were seen as responsible: the Municipality of Amsterdam, the housing associations, and the police. The respondents highlighted the issue of proper maintenance of litter and street lighting of the Municipality of Amsterdam. There is a serious litter problem in Holendrecht and according to the respondents, the Municipality lacks the ability to solve this problem. Ali mentioned about the litter problem: "We have a problem with the litter deposit which causes a lot of nuisances in the neighbourhood. I initiated the idea of container adopters, people from Holendrecht who can open the container if it is stuck. However, now the municipality expects that the adopters also clean the trash around the containers. That is not okay, because the Municipality makes from their problem ours". Besides, Dolores mentioned about the lighting problem that this is "neglected by the municipality, even though I reported it several times". The notion of maintenance and surveillance was also mentioned in relation with the housing associations. The residents of Our Domain in Amstel-III feel safer due to surveillance in front of their building. Naomi mentioned: "I feel really safe in and in front of my building because there is 24/7 surveillance. This was also one of the requirements my parents had when I moved to Amsterdam". On the other hand, a lack of maintenance from housing associations also enhances feelings of unsafety. Carmen, who lives in Holendrecht-West, said: "In winter, homeless people often sleep in our stairwell because our door is easy to open. We have reported this before, but the housing association is not doing anything about it either". In both cases, the lack of maintenance of the responsible actor sustains the problem. An illmaintained area is often perceived as unsafe because it gives the idea that people are not control of the area. This is linked to the broken-window theory as the presence of a disorderly appearance space negatively impacts a person's safety perception (Wilson & Kelling, 1982). In the case of Holendrecht, the actors who are seen as responsible, the Municipality of Amsterdam and the housing corporations, are not in control of the area which gives the impression that this area is more easy to target with physical incivilities.

Also, there seems to be a relation between the surveillance of the police and the feelings of safety of the women in Holendrecht. According to some women, the police patrol through the neighbourhood encourages feelings of safety of the women. Afina mentioned: "There is always policy control roaming around which gives me the feeling of safety". Also, CCTV is seen as a measure to enhance feelings of safety, as it creates a feeling of (social) control and surveillance by the police. Dolores mentioned: "I prefer security cameras because I have the feeling that the police watched over me and behaviour is observed. Also, I'm not scared of my privacy, I don't have the feeling my privacy is violated". However, this feeling only accounts for those who have a positive relation with the police. Some of the women had a negative experience with the police or heard negative stories of others which shaped their perception of the police. For example, Judith and her neighbours had close contact with the police about a man who had a visitation ban for their neighbourhood, she mentioned: "At a certain point we saw the man again in our street and we were really scared, so we contacted the police. Then, the police told us that the visitation ban was over and that he was allowed to go to our neighbourhood again. I really don't understand why the police didn't tell us this before because they knew how scared we were". This incident, which is comparable with incidents other respondents had, created a certain distrust in the police. For example, Samira said: "It is good that the police is around but I don't have the feeling that they can help me if I really need them...But that is also from what other's told me. You report about something to the police, but hardly you hear ever back from them". Hence, the police and CCTV are not always seen as a measure which guarantee the respondents' safety. Judith mentioned that after the incident the policed places security cameras in her street, "I find it ridiculous. It also doesn't give me a safer feeling. When something dangerous happens, the camera's don't protect me and the police also barely doesn't take any action".

#### Lighting

Poor lighting was remarked as an important safety-related issue in the public space. 13 respondents highlighted the importance of lighting to ensure their feelings of safety in public spaces. Most of the women reported that lighting was an important feature in terms of creating an environment safe from personal victimisation. Melissa mentioned: "If there is good lighting you have a better overview of the situation. You can see what is going on and others can also see you. So, I can see better, but others are also able to see me better". For the respondents it is important to be able to see whether a situation is dangerous, but also be visible to others if a dangerous situation occurs. According to the respondents, the parking lots, the bike paths, the children's playgrounds, and the tunnels are poorly lit. Consequently, respondents tend to adapt their behaviour because of poor lighting to ensure their safety. Nancy mentioned: "If I walk somewhere and it is dark, I feel less comfortable. I tend to walk faster and look backwards to check my surroundings. This is not the case if it is during the day or if there are enough streetlights". The adaptation of behaviour implies higher feelings of unsafety (DuBow, McCabe, and Kaplan 1979; Ferraro 1995; Garofalo 1981). As this adaptation behaviour did not happen with previous factors this might indicate that poor lighting has a stronger influence on feeling unsafe than other factors where respondents did take measures to ensure their perceived safety.

Only one respondent, Afina who is the oldest women interviewed, highlighted the quality of the lighting. She said: "I think better lighting is important. The streetlights are not sharp in the tunnels and in the streets. I find them a bit dull. I would like the lights to be a bit sharper. For example, in my porch, where the lights shine brighter when you pass by". For most of the women, proper lighting is seen as important because it increase visibility, but it is also linked to being visible for others. As Lorenc et al. (2013) argues, lighting also act as an indicator for the presence of others. This is also mentioned in the examples above, where the respondents explain how they are also visible to others if a place is well-lit.

Dark areas were observed to heighten feelings of unsafety in the public space. This is linked to lighting, as the reason why dark areas are perceived as unsafe is the lack of overview which decreases the ability to estimate whether a situation is unsafe. As Dolores mentioned: "I don't feel unsafe during the day, but I do when it starts to get dark". Nancy explains that when it starts to get dark this gives her an "uncomfortable feeling" and created the need to "look more around". About half of the respondents tend to stay at home when it becomes dark/night. As Jessica mentioned: "After 10 o'clock I basically don't come out here anymore. Because I know it can be dangerous and I don't want expose myself to that". According to Pain (1997) and Valentine (1992) there is a certain social construction of fear of crime manifested in the gendered division of space. During night-time, and in darkness, women feel their presence is less "legitimate" or "allowed". Going to outside when it is dark would mean that they expose themselves to danger, hence increasing their risk of victimization. This social construction as also mentioned by Melisa: "This is what you were taught. When it is dark it is unsafe because there are strangers who are scary. This is why I'm anxious when it is dark".

#### Open view

An open view and view distance were also found to have a strong association with perceived safety. Clear sightlines allow users of the public space to verify the presence of people who may threaten them. Melisa mentioned: "I prefer open places, for example at a road, because there is more overview there. If you go further into a residential area, or to a narrow alleyway, it feels like you have less overview of the situation". An open view is often linked with high levels of prospect, which is a crucial element in the assessment of a situation, and the potential to feel safe (Struyf, 2020). Especially, corners at the streets are perceived as unsafe, because the women are unable to estimate whether there is a dangerous situation at the other side of the corner. Seven respondents mentioned that the sightlines at Holendrecht Station are limited. Especially, at the entrances of the station which are situated underneath the platform. Whereas the platform is perceived as on open space because it is located at the top of a bridge, the entrances feel enclosed due to the narrow hallway and the "harsh" corners. Jessica mentioned: "The entrances of the station are underneath a bridge because the railway is on top of it. If you want to go to the platform you need to take the escalator through a narrow hallway. Then you are not really in the open air and quite shielded from others. This is not very pleasant and makes it a bit harder to feel safe over there". Also, the gates to enter the station are shielded from the road and with some blind walls. Tamara told about this: "If I pass the gates, I don't know who's standing there and what I'm going to encounter". Places which are not visible because they are isolated, or were sightlines are obstructed are perceived to increase the risk of attack, and hence fear. Such obstructions also create a feeling of being "trapped" (Lorenc et al., 2013).

#### Physical incivilities

The physical appearance and signs of negligence or physical incivilities were noted as significant factors in evoking feelings of unsafety in the public space. A decline of the public space conditions encourages anti-social behaviour and crime, according to the "broken window theory", which subsequently increase feelings of unsafety. The respondents highlighted dirty, neglected, and unmaintained areas, the presence of litter on the ground, and overfull trash containers, as well as degraded buildings and parking lots. The litter problem in Holendrecht was mentioned the most. Samira said: "There is so much litter nuisance here in Holendrecht that causes a lot of vermin. People become really restless because of this". Also, Bo mentioned: "My court is always dirty. There are always garbage bags on the floor, it is always messy, while there are enough containers. I find that a pity. Because of this I see my neighbours as scum". The presence of litter on the ground creates the perception that the neighbourhood is not well cared for, managed, or controlled, and therefore is susceptible to criminal activity. Selected studies also prove that garbage in public spaces may heighten the sense of insecurity (Robinson, Lawton & Taylor, 2003).

Besides, some respondents highlighted the neglected physical appearance of the buildings, parking lots and playground in Holendrecht-West. According to the respondents there is a clear division between physical appearances between Holendrecht-West and the other neighbourhoods, which makes them more attentive when visiting that area. As Nikki mentioned: "Here it is quite impoverished, it doesn't look like it has been taken care of. This image of the neighbourhood influence how I walk when I'm there". Again, this is an aspect which creates the image that there is a lack of control which generates feelings of unsafety because this is perceived to be warning signs of crime and criminal threat.

#### Vegetation density

Four women also highlighted how vegetation density influenced their perception of safety. Two of them link a densely vegetated area with a lack of visibility. Eva mentioned: "If there are a lot of trees and shrubs, I have less overview of an area. Then you don't really know what to expect. It comforts me if I have more overview". Also, Melisa exemplifies how a place which is less dense vegetated gives her a safer feeling, according to her a densely vegetated area is "more sheltered which gives you less overview of a situation". Both women explain how their fantasy can control their safety perception if they have overview of a situation. Eva explains how she "fantasises of a situation" if she has less overview, and Melisa told how "her head gives its own interpretation". The association between closed areas and a lack of control, with fewer opportunities for overview and escape, may explain why they are regarded as dangerous. Overview enables the user to identify nearby individuals and determine whether they pose a threat. Appleton's prospect-refuge theory can be connected to the role of overview and control in relation to the perception of personal security (1975). A location is deemed "safe" if it provides the opportunity to observe the surroundings (perspective) and to conceal oneself (refuge). Therefore, people will feel safest in settings where they can see without being seen. Too much overview might also limit safety perceptions. Nikki explains how the open green space surrounding the bike path from the shopping centre towards Reigersbos give her an uncomfortable feeling. She mentioned: "There are some trees on both sides of the bike path and there is a lawn. I think that's kind of a weird part. It is very wide and open, so I have the impression that I stand out". This distinction was also found in a Swedish study of young women's perceptions of a Stockholm park (Cele, 2009). Instead of believing that increased visibility would encourage them to use the park at night, the women believed that it would expose them to more unwanted eyes.

# Concluding paragraph

According to the respondents, the physical urban fabric of Holendrecht is mainly characterized by the typology of Holendrecht-West. Even though not all the respondents live in Holendrecht-West, the meandering building blocks, the pocket parks in between the buildings and the easily accessible bike paths surrounded by green lanes. Besides, the shopping centre and Station Holendrecht were marked as distinctive elements of the neighbourhood.

The maintenance and surveillance, and the lighting factors were most often mentioned, both by 13 respondents. However, as most of the respondent tend to change their behaviour if areas are dark, the lighting factors is seen as the most influential factors. The open view factor was mentioned by 8 respondents and mostly related to the limited visibility at the entrance of Holendrecht-Station. 7 respondents mentioned how physical incivilities affected their feelings of unsafety, and most of these incivilities were observed in Holendrecht-West. Finally, five respondents reported how the several densely vegetated areas, the bike path in Holendrecht-West and the park in Holendrecht-Oost, influenced their feelings of safety.

There is an overlap between the two factors maintenance and surveillance, and physical incivilities. As the lack of maintenance and surveillance enhance some of the physical incivilities experienced in the neighbourhood. For example, the Municipality did not find a solution yet for the litter nuisance and the façade of some buildings is neglected by the housing associations. The physical incivilities and state of the environment give the impression the residents are not in control of their area; hence this factor relates to the residents themselves. This research distinguishes the maintenance and surveillance factor from the physical incivilities because the respondents mentioned the responsibility of a third actors to take control over these incivilities.

#### Social Urban Fabric through the eyes of the respondents

The following part discusses the respondents' perceptions of the social urban fabric in Holendrecht. Even though the mental mapping technique was used to analyse the physical characteristics of the neighbourhood, two respondents also drew how they perceive certain social aspects. This first part discusses these aspects. Afterwards, the social factors which influence the safety perceptions are presented. The last part concludes with how the different female perceptions differ among each other.

#### Social Nuisance

Two women, Tamara and Celine, paid attention to the social nuisance they experience at Holendrecht Station. Both women mention that when they are at Holendrecht Station they often experience men making comments about for example their appearance or ask whether they want to join the men. They both drew humans with word balloons (see Figure 16). Tamara explained about these balloons: "When I walk there, I often hear men saying 'hey baby, are you coming with us?', or they start whistling or something". Celine, who also drew a person playing guitar, mentioned: "There is always someone who is singing or playing music at the station if I walk there. I Like that. However, there are also people who yell at you. They just stand there and yell at you". For both, these comments became something regular, or

"normal". Celine even mentioned: "I don't really care if these things happen, but I can image this might bother others. Therefore, I always say something about it if it is not directed to me, because I am not really intimidated by those men".

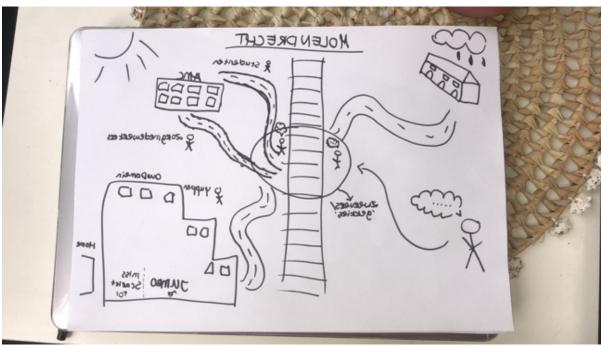


Figure 16: Mental map of Holendrecht, created by Tamara.

#### Differences between the Neighbourhoods

A returning aspect in the mental maps was the division between the different neighbourhoods. The differences in typology and the physical separation of the neighbourhoods by the car lanes, and the metro and train track. This division is also experienced among the women interviewed in this research. They see clear differences and experience a contrasting ambiance in the neighbourhoods. Especially between Holendrecht-West and the two other neighbourhoods Holendrecht-Oost and Amstel-III. Tamara drew this division very clear in her mental map (see Figure 16). The side where she lives, Amstel-III, is embraced by the sun, while Holendrecht-West on the other side of the railway is being covered by a cloud and rain. This negative connotation is a common thread in the interviews with the respondents, especially in relation to the other neighbourhoods. Tamara mentions about the neighbourhood she lives: "It is not the cosiest neighbourhood to live but there is OurDomain, a restaurant, a supermarket and there are a lot of like-minded young people which make feel okay to live here". Tamara explained that Amstel-III is not a neighbourhood where she would hang out with her friends, for that she will go to the centre of Amsterdam. But as the neighbourhood has all the essential functions of a residential area it makes it "okay" to live here. When she compares Amstel-III with Holendrecht-West she mentions: "That is still a very traditional neighbourhood where I'm not really feeling at home. I think this is because of the cultural differences between me and the people who live there. I am not used to that. Besides, I receive a lot of comments about my appearance when I'm there, which makes me have the feeling that I stand out".

Nikki experiences this difference as well. She lives in Holendrecht-Oost and enjoys the calm and quietness, and the closeness of the shopping centre and nature. From her experience, the main difference between Holendrecht-Oost and West is the people. She

mentions: "In my neighbourhood there are no people who loiter purposeless on the street and become drunk. No children either. In the other part (Holendrecht-West) I do experience this. I think this is because there is a shopping centre over there and the different kind of people who live there. You have way more social rent houses over there which is a big difference compared to where I live".

# Social Factors Influencing the Safety Perception *Social incivilities*

Fourteen of the respondents highlighted the presence of disorderly people in the public space in Holendrecht, i.e., those violating the social norms of official laws or acting in an unpredictable and threatening manner. Among them different types of incivilities were mentioned. Mostly mentioned were *street harassment* and *loitering and begging people*.

#### Street harassment

Seven respondents experienced street harassment in Holendrecht. This harassment varied from receiving unwanted (sexualised) comments and expressions to being chased. Four of them experienced receiving unwanted comments, like "Hey baby, are you going with us?", honking and wolf whistling. Most of the respondents mentioned that they are used to this and therefore it does not immediately influence their perceived safety, but when they are alone outside at night this enhances feelings of unsafety. As Carmen mentioned: "Before I started living here, I really had the assumption that I should be careful when living in Bijlmer. But it is much better than expected. Of course, things happen which are not okay. Often, I receive unwanted comments and things like that. I also rarely experience this in other places. But it doesn't make me feel unsafe. I became used to it. You hear it but you just simply ignore it".

Besides, five of the respondents experienced that they were being chased by a man in Holendrecht. Most of these situations occurred when going home from the station or going to the supermarket. Dolores brought her children to school and experienced the following: "I was cycling on my half of the bike path while a men biked towards me, also on my side. Until, the latest moment, he moved to his part. This made me angry, so I jelled at him. Eventually, I saw that he was following me, and he started screaming at me. I was shaking. I decided to bike further and ignore him. Luckily, he did the same, but from now on I will keep my mouth shut when someone does this to me". For almost all the respondents who experienced being chased, they adjusted their behaviour. For example, Tamara dresses differently when going to certain places in Holendrecht and Melisa avoid going alone to her study faculty. Melisa mentioned: "One time I walked out of the metro, and I mentioned I was being followed by a man. So, I grabbed a stranger by the arm and said that I had the idea I was being followed and asked if I go along with that person. Then I just walked into a random building and waited until the men was gone. I saw him walking there for quite some time... I became much harder from this. I try to make as less contact with people as possible, especially with men in public transport. I used to smile back to people, but now I don't do it anymore...Since that accident I always have defence spray with me. I know it is illegal, but it gives me some trust to get out of trouble". According to the interviews, it seems that unwanted (sexualised) comments and expressions occur more often than being chased but being chased affects the unsafety perception more strongly because it results in adjustments of behaviour.

# Loitering people and beggars

Five of the respondents mentioned that the presence of loitering youth/people affected their feelings of safety, especially at the central square and the viaduct at the shopping centre. Two respondents mentioned that at the central square there are often teenage boys in a large group. According to them, this gives a "strange" and "intimidating" feeling. Eva also has the need to walk an alternative route in such a situation. She mentioned: "Sometimes there is a big group, most of them are teenagers from 11 till 14 years old. It does not make me feel unsafe but is still gives me a strange feeling. Then, I prefer to walk a different route". Besides, there is often a group of men who are located at the tunnel at the shopping centre. These men are adults and are often drunk according to multiple respondents. Nikki said: "I don't really like walking from the central square to the supermarket. In that tunnel there are always homeless people and alcoholics. They are a certain group of people, and I don't really like that. Especially not at night, then I tend to avoid this area". Again, this gives the respondents a "not a good feeling" and makes them not want to walk alternative routes, even though this group is not linked with harassment. As the respondents mentioned that this group is drinking in public, this might be seen as anti-social behaviour which enhances the feeling of unsafety. However, this is not shared among all respondents. Ali mentions: "At this viaduct there is often a group of men. I really like it when this group of men is there, it does not bother me what they are doing. People call them loitering men, but I really do not care. I just pass them, greet them, and walk further". This presence of illegitimate individuals or social cues may induce fear of crime in individuals, but as shown by the previous example it does not have to result in feelings of fear.

It is also found that the presence of begging people enhances feelings of unsafety. The women mentioned the presence of begging people only at Station Holendrecht. Tamara said: "When I walk out of the metro, the same man is always there asking for money. When you check out and walk through the gate, he comes very close. That gives me a very oppressive feeling because you can't go anywhere in the gate". Besides this oppressive feeling, the presence beggars are also experienced as intimidating because they can be very "demanding". According to Jessica: "They can be very pushy. They talk to you all the time and ask you for money. If you indicate that you have no cash, they will ask if you want to transfer money with your phone. I find that very annoying". However, all the women mentioned that the more often these interactions happen, the more used they become to the situation. This enables them to not see the situation as dangerous as the beggars are only asking for money.

#### Social Networks

The social network one has in a neighbourhood also appears to be a factor affecting safety perceptions. There is a group of women who have a large social network in Holendrecht. This group varied from women who have an active role in the community, e.g., organizing activities in the community centre, or being the first point of contact for the municipality. All the women with a stronger social network lived in Holendrecht-West or Oost. Samira who lives in Holendrecht-Oost said: "My neighbours and I are socially active within our neighbourhood because I have really nice neighbours. Also, there are more and more young families starting to live here which I really enjoy". Besides, Eva told about Holendrecht-West: "In this neighbourhood I have the most contact with my neighbours compared to all the other places I lived before. Everybody is just really kind". The group with a weaker social network is smaller than those with more social contacts in Holendrecht. All the students who live in Holendrecht mentioned that their social network is not situated in Holendrecht, but more in the city centre

of Amsterdam. Tamara said: "I really have nothing to do here. All my social contact live in the centre of Amsterdam. For social activities I always go there". Besides, Dolores mentioned: "I don't feel really welcome in Holendrecht. I'm from Hindustan and in Surinam there has always been a tension between us and the Creole community. As there are many people living here from the Creole community I don't really feel at home. Also, because I wear a hijab, I have the feeling that the people here are less willing to communicate with me". Social networks within neighbourhoods provide a protective effect regarding fear; as an individual's social networks increase, fear of crime decreases (Scarborough et al., 2010). This also aligned with what the respondents mentioned. The women who reported a large social network tend to have stronger feelings of safety, compared to the group of women who have a smaller social network. As Samira, who has a large social network, mentioned about her neighbours: "We know each other, and we look around for each other. You are being seen, and you see them".

In addition, social integration is enhanced by the frequency of contact between residents, the amount of assistance they provide one another, and the level of satisfaction with that assistance (Thompson and Krause, 1998). When the women were asked about proving and receiving help to one another, two women mentioned the difference between Holendrecht-Oost and West. Bo, who lives in Holendrecht-Oost, said: "I've the feeling that in my neighbourhood people are more willing to help. We also do a lot of things together, also because everything is owner-occupied houses and at the other part there are only social-rent houses. So, we do a lot of maintenance together and if you leave some litter behind you were confronted about this by other residents". Another woman who lives in Holendrecht-Oost, Nikki, said: "I also think that if you are in Holendrecht-West, people are less willing to help you in case of emergency because they are used to it. Here, in Holendrecht-Oost that is different because we are not used to a lot of criminal activities". Both women, assume about Holendrecht-West based on their good experiences in their own neighbourhood. These assumptions about a weaker social integration at 'the other part' also increased their feelings of unsafety in Holendrecht-West. Whilst this weak social integration is not experienced by all the women who live in Holendrecht-West. In fact, the predominant Creolse community in the neighbourhood is built upon extreme tight social integration. Ali, living in Holendrecht-West and part of the Creoles community, said: "I am born and raised in Surinam, and it really feels like one big family system. Your uncles, your aunts, your nephews, and nieces always looked out for each other, because everywhere there was someone you knew. I think my feeling for safety has its roots here. Because even in the most unsafe neighbourhood in Paramaribo I would feel the safest because I knew everybody keeps an eye one me". These strong social ties of this community are also experienced by Carmen, who is Dutch and lives in Holendrecht-West. She mentioned: "I feel safe here because I know there is always someone to help me if something bad happens. Especially these Surinam grandmas who are sweet, but also really feisty if something bad happen".

#### Cultural differences

The example of Dolores, who does not feel welcome in Holendrecht because of her Hindustian roots, is also linked to another factor that made the respondents feel unsafe in public spaces, the cultural differences in the neighbourhood. As Dolores is part of the Hindustan community, which is visibly noticeable as she wears a hijab, she feels "uncomfortable" in Holendrecht. Due to the tension between the Hindustan and Creole communities in Surinam, she has the feeling that there is a lack of awareness about others' values and ethos, resulting in decreased acceptability by the predominant Creole community

in Holendrecht. Also, the three students who moved from a smaller town towards Amsterdam mentioned how they experienced the cultural differences between Holendrecht and their hometown. Tamara mentioned: "I really don't feel at home here. There are really a lot of cultural differences here and I'm not used to that at all. I'm from Oldenzaal, a small town in Twente, where everyone says hello to each other. That is not the case here". Also, Mila talks about the differences in greeting each other in her previous hometown and Holendrecht, she said "I come from a small village where everyone knows each other. I'm used to saying hello to everyone. That is less desirable in Amsterdam in my opinion. Everyone looks at you very strangely...It was very normal in Driebergen, I've been doing that since I was nine or something. Just say hello to everyone I meet. If you don't say hello, you're rude". Besides, Naomi expressed how she experiences the cultural differences in Holendrecht and her previous hometown: "I come from a very small village, Westland. You didn't have many different cultures there. So, I didn't grow up with that at all...It is a very different environment than what you are used to at home".

In public spaces, preference for co-ethnic socialization is a typical behaviour. Peters & de Haan (2011) note that this selecting behaviour predominates in environments that are substantially multi-ethnic. They argue that there is a "code of conduct" that governs behaviour in public spaces, when behaviour fits within that framework, individuals feel safe and a sense of belonging. Lofland (1998, p. 26) refers to this "normality" of public conduct as a kind of "legal" system of public space, which patterns public human activity based on shared standards and expectations for interactions. In ethnic neighbourhoods, "unexpected intrusion" and a different code of conduct can challenge the implicit "normality" of space. This can transform previously-felt security into fear and avoidance.

In the case of Dolores, from her point of view she differs from what is "normal" as she wears a hijab which is uncommon in Holendrecht. Her behaviour is not aligned with the socially acceptable code of conduct which influences her sense of belonging, and eventually her feelings of safety. Also, the three student who moved from a smaller town to Holendrecht experience a different "normality" of space compared to where they came from. Both Tamara and Mila mentioned how they were used to greeting others on the street, even though if these people were strangers. Due to what both are familiar of, Tamara and Mila copied this code of conduct to their new living environment in Holendrecht. However, they both experienced how greeting each other is not the shared expectation for interactions as it is an uncommon thing to do among the residents. Mila even mentioned: "Some people don't really understand why I greet them. Once I said hello to a man. Then he went cycling after me and asked why I said hello. Then I really thought I don't know, just because I was polite". Both Mila and Tamara were used to the code of conduct of the place where they grew up, however from their perspective there is a different "normality" in Holendrecht which influences their sense of feeling safe.

For Dolores, Mila and Tamara their desired behaviour or code of conduct deviates from that what is socially accepted in Holendrecht, that what is "normal". On the other hand, Judith mentioned how a change of code of conduct in her neighbourhood affected her sense of belonging and transformed her previous feelings of safety into fear and avoidance. Judith said: "I had the feeling people lived more together at our court before it was renovated. For example, in summer, everybody was outside. There was a hairdresser, a small restaurant, and a bike repair shop, and this was all outside. People just did this at the sidewalk. There was always something, and you never knew what to expect, but it was always kind/friendly people. Surinam and Antillean people who are always friendly. I never experienced any nuisance;

everybody just did their own thing. You went home or chatted a bit with someone and that's it. But this changed over time when they renovated our court and people moved out. Now, people hardly ever say hello to each other. I also speak for myself, at the end I just thought I don't know anybody, and I also don't want that. I just want to go home or leave my neighbourhood for work, that's it". Judith eventually moved to another neighbourhood because she also experienced more and more crime. At one point, there was a shooting in the apartment above hers which was "the last straw". The example above exemplifies how the change in social structure, due to the renovation, affected the code of conduct at her court. The original residents of the neighbourhood were confronted with "unexpected intrusion" of the new residents which changed their code of conduct. Instead of how they were used to live together the residents became more individual. This affected Judith's sense of belonging and made her more aware of crime in the neighbourhood, which eventually also affected her perceived safety

### **Familiarity**

Familiarity the next factor influencing the safety perception of women. The respondents explained how familiarity with a situation, in terms of people and places affected their feelings of safety. Four women explained how small encounters with strangers makes them more familiar with these people. Three of them, all students who live in Amstel-III, link this to the homeless people and beggars at Holendrecht Station. Naomi said: "There are about 2 to 3 homeless people and I know them all a bit now. So, I just pass by and don't care about them". Also, Melisa explained how she became more familiar with the homeless people and beggars, she mentioned: "Now I recognize all the homeless and beggars who walk there so now I have slightly different ideas about that, I know them a bit more. But if I meet someone I don't recognize and who speaks to me, that's a completely different situation". This example shows how getting more familiar with the people in public space, helped her estimated their potential trustworthiness which influences her feelings of safety. If she encounters someone who she does not recognize, she found it harder to estimate whether it is a dangerous situation. Aslo, Tamara stated how being more familiar with people increased her feelings of safety, she mentioned: "At the metro there is always the same man begging... In the beginning I felt very unsafe there, but now I know that this man is standing there and that he is going to ask me for money. It's still not very pleasant but it already makes me feel less unsafe". Finally, Bo encountered a situation with loitering youth at the station when she did not know what to expect. She mentioned: "At one point I started working in the hospitality industry. Then I had to get out really early to take a night bus at the station. Once I saw all the boys standing there and then I thought oh god I must go there. But when I walked by, they kindly said 'good morning madam, how are you doing'. So ever since then I feel safe there". In all the four examples explained above, all the women created a sense of "public familiarity" by repeatedly coming across the same people in public spaces. Blokland (2003) noted that public familiarity results from the repeated encounters of interdependent anonymous individuals. Because the women repeatedly had encounters with the homeless people, the beggars, and the loitering youth they transformed from being strangers into acquittances. Sztompka (1999) pointed out: "Repeated routines that people follow make it possible to predict their conduct" (p.124) and estimate their "potential trustworthiness" (p. 96).

The notion of familiarity with place and people is also enhanced by the frequency of visit of a place. Three women explained that the more often they visited a place created a certain feeling of comfort. Naomi mentioned: "I feel safe here at home and around the

building. But also, the part from my building to the AMC. I walk that path 10 times a day so yes". After repeatedly walking the path from her residential to her study building, she became more familiar with that place, which enhances her feelings of safety. Also, Samira who preferably does not use the metro at night said: "If I don't have to, I won't be home late. But sometimes I work late and then I don't get home until 12 o'clock. In the beginning I was nervous to take the metro so late but at some point, you get used to it". As Seamon (198) argues, these repeated visits of spaces translate into familiarity with the environment which creates a sense of place and place-attachment. This sense of place increases feelings of safety in a specific area.

#### Alone/with others

The interviews revealed that the presence of people encourages the feelings of safety among the women. As described in Social Incivilities, the presence of other people can either increase or decrease fear, depending on the variety of individuals present. Some of the respondents mentioned that visiting a place where many people are present increases the feelings of safety, even though these people are not acquaintances. The respondents find the presence of others mostly pleasant at Holendrecht Station, one of the places which is regarded as most unsafe among the respondents. Celine mentioned: "I feel quite safe at the station because I'm always in the presence of others. I've never been alone over there. But I think that if it's at night and there is nobody and something strange happens like people who scream, then I would feel more unsafe because there are less people to help me". Interesting to see in this example, but also what is mentioned by the other respondents, is how the presence of others is linked to a certain "normality". It is normal to see people at the station which makes a place more perceived as safe. Absence of people at a station is less normal which enhances feelings of unsafety. This is also linked to the time of the day. Most of the respondents feel more unsafe during night-time because there are less people present to help them if a dangerous situation occurs.

Besides, two of the respondents tend to feel safe when accompanied by family and acquaintances. Naomi said: "Every time I go to my rowing club, I bike with a friend who lives nearby. I never go alone". Dolores even mentioned: "I feel way more confident when my husband is with me. There has been a lot of situations where I would have handled differently if I was not alone". Where for Naomi the presence of an acquaintance increases her feeling of safety because there is someone to help her if something happens, Dolores links the presence of her men with feeling more confident and standing up for herself and others if something happens.

#### Concluding remarks

According to the respondents, there are clear differences in the social urban fabric and the different neighbourhoods. In general, the respondents who live in Holendrecht-Oost and Amstel-III perceive their neighbourhood differently than Holendrecht-West. This is mainly due to the social nuisance experienced in Holendrecht-West. Again, most of the places which are perceived as unsafe in relation to the social factors are located in Holendrecht-West.

14 respondents explained how their feelings of unsafety are determined by the social incivilities in Holendrecht-West, mainly at Station Holendrecht but also the central square was mentioned. These incivilities varied from street harassment, to loitering people and beggars. Experiencing these social incivilities was the only social factor which led to behavioural adjustments. This indicates that these have a stronger influence on feeling unsafe compared

to other factors which did not result in taking personal measures. Besides, 12 respondents highlighted how the cultural differences affected their sense of belonging to the neighbourhood. Especially, the cultural differences between Amstel-III inhabited by students who did not grew up in Holendrecht, the younger and lower educated population of Holendrecht-West, and the residents of Holendrecht who mostly elderly and higher educated people are. The notion of familiarity also played an important role in shaping feelings of safety. 10 respondents explained how being familiar with either a place or the people gave a better understanding to estimate whether a situation is dangerous. Also, the 9 residents with smaller social explained how they did not experience collective efficacy which influenced their feelings of safety. Being in the presence of others also strengthened feeling of safety for 9 respondents, especially at Station Holendrecht where the presence of others is linked to a certain "normality".

# Public Spaces Personally perceived as Unsafe

The last sub-chapter of the results discusses the places which are perceived as unsafe among the individual women who participated in this research. Also, there is a linkage made between these places and the factors which gives the impression of unsafety. Besides, the personal factors which influence the feelings of safety are discussed. This sub-chapter concludes with how these personal factors differ among the women

#### Personal Factors

#### Direct victimisation experience

Direct victimisation experience was observed to heighten the feelings of unsafety. Four women had direct experiences with crime. Dolores experienced a shooting at the parking lot behind the shopping centre. She said: "While I was walking over the parking lot with my husband, we heard several shots. I didn't know what to do, do I have to run or hide myself behind a car. Then a policeman came by on a scooter who asked me where the guy went to. I saw a man running into a certain direction, so I pointed my fingers towards there. I was in shock. Soaked in sweat and shaking a lot ... Now I only feel safe outside when I'm with my husband". Besides, two women experienced theft of their bikes. According to both this made them fearful for their belongings.

It was also noted that those who had been victimised recently felt more unsafe compared to victimization which happened a longer time ago. Two women experienced robbery, the one who experienced this the latest was Eva. She said: "At our previous address I experienced a burglary twice, and during one of them I was at home. So now I am aware of closing all the windows and the doors when I leave the house". Samira who experienced the burglary at longer time ago said: "When you experience that, you become a bit more careful, but it also makes you harder. You become a bit more used to such things". Previous victims are more likely to perceive situations as dangerous and to perceive the risk of victimisation as greater (Mesch, 2000). This suggests that recent victimisation is a more significant predictor of fear than victimisation in the distant past (Fox, Nobles & Piquero, 2009).

### Prior information about crime

Indirect victimisation also contributed to the women's increased feelings of unsafety of public spaces (e.g. reported in the media and learned through interpersonal communication). Via various sources the women heard about fights, shootings, murder, sexual assault, and robbery. Dolores, a mother of two daughters and two sons, said "My daughters are going to

high school soon. Someone was once shot on the path they must cycle. I find that difficult. So, I'm already making plans to go with them in the winter". This example shows how feelings of unsafety are projected on someone else instead of on the person itself, in this case the daughters of Dolores. This is what often has been mentioned by the respondents. Eva mentioned: "Quite often incidences happen here, but it does not feel like something like this happens to me. Even though it's close by, I'm also far away from it. So, personally I don't feel threatened, but I'm scared something will happen to my neighbours or my cats". Eva emphasised that crime related incidences are often linked to drill-rap, and fights among different rap groups. As she is not part of one of these groups, she is able to distance herself from that. People can experience victimisation vicariously and may experience the same emotions as direct victims when they hear about other people's crime experiences (Hanson, Helmus & Thorton, 2000; Clark, 2003). Both Dolores and Eva experience a certain emotion after hearing about others' crime encounters, which results in feelings of unsafety. But instead of feeling personal unsafety, they perceive their loved ones as unsafe.

Also, the media enhances perceptions of risk of victimisations and therefore induce feelings of unsafety. Saira said: "What is in the news plays an important role. I've never witnessed any crime, but what has been shared in the media plays gives me a certain feeling. The more often this neighbourhood is mentioned in the news, the more it does to you It is assumed that the knowledge of crime gained through interpersonal communication heightens feelings of insecurity (Taylor & Hale, 1986). Jessica said: "A roommate was beaten up here once when he was cycling home. Because of this I'm never alone at night anymore". And Bo said: "In the Centraal Park Gaasperdam there are a lot of shrubs where often junks are. A friend of mine was harassed there once. She was grabbed and then they took her phone. Those are things I don't like to hear. Not so much for myself, but I don't let my daughter cycle there alone anymore". Both examples show how the respondents adapted their and others behaviour when they heard about crime related incidences from their friends.

#### Concluding remarks

From a personal perspective, most respondents mentioned how prior information about crime influenced their feelings of safety, 11 women in total. Most of this information was related to crime incidences in Holendrecht-West in general, and some specific incidences at the shopping centre. Besides, 5 women also experienced crime themselves. These incidences also occurred in Holendrecht-West, at the parking lot, the central square and the viaduct. Again, Holendrecht-West is highlighted as a place with a lot of nuisance.

# Differences in Individual Perceptions of Safety in Public Spaces

The previous three sub-chapters explained how different factors in public spaces influence the perceptions of the respondents. Yet, the aim of this research is to explore different women profiles in how safety is perceived in public space, to create a more gender-sensitive understanding. Based on a matrix (see Appenidx C) different women profiles were identified over five categories: age, ethnicity, years living in Holendrecht, the neighbourhood where some lives, and whether someone is a resident or a student. The following part discusses these five categories and how they shape female feelings of safety.

#### Ethnicity

There appears to be a clear division between women who identify themselves as Dutch and those who do not, and the factors influencing their perception of safety. Especially within the

social factors. Seven out of the nine respondents who prefer the presence of others in the public space to ensure feelings of safety, identify themselves as Dutch. Besides, three out of four respondents whose feelings of safety are affected by public familiarity are Dutch as well. The cultural differences in the neighbourhoods were mostly for Dutch women a trigger for fear (seven out of 11 respondents). Finally, the frequency of visit, and being familiar with a place was preferred among Dutch women (five out of eight respondents were Dutch). On the other hand, the feeling of safety of those who did not identify themselves as Dutch, either Surinam or Ghanese, was mostly affected by the social network in the neighbourhood. Four out of five respondents who mentioned they had frequently contact with their neighbours were non-Dutch, and five out of six respondents with a large social network as well. Is seems that the women who identify themselves as Dutch find it more important to be familiar with someone, instead of actually knowing someone personally, which is preferred by the women who identify themselves as Surinam or Ghanese.

For the physical factors, Dutch women prefer open views (six out of seven) and proper lighting (six out of 10). The positive relation between the presence of CCTV and feeling safe was only mentioned by two respondents, both identifying themselves Surinam. The Dutch women more often mentioned the importance of visibility, good sight for themselves but also being visible for others. This could relate to the social factors which Dutch women prefer. As it is more important for them to be familiar with people in public spaces to ensure their safety, it is also important that there is clear visibility. On the other hand, for the Surinam and Ghanese women, visibility may be less important when they are in an environment where they have a large social network, as this is most important to them for ensuring safety in public spaces.

#### Age

Another characteristic which differentiates the way women perceive their safety in public spaces is age. There are three physical factors affecting feelings of safety which were most often mentioned by women between 18 and 30 years old. Six from the seven respondents who prefer open views and clear sightlines are between 18 and 30 years old. How vegetation density affected feelings of safety was mostly highlighted by this age group as well (three out of four respondents). Also, seven out of 10 respondents between 18 and 30 years old preferred lighting. This age group also shows clear distinctions for two social factors influencing perceptions of safety. All the six women who mentioned they had a strong social network in Holendrecht were older than 30 years old. On the other hand, those who identified their social network as weak were mostly younger than 30 years old (four out of seven respondents). Again, it seems there is a connection between having a social network in the neighbourhood and physical factors which enhance visibility. The age group (18 - 30 years old) who want physical factors in public space to enhance their visibility, have a weak social network. While those with a strong social network address the physical factors enhancing visibility less often. Finally, the two personal factors, previous crime experience and prior information about crime, were not mentioned by the three respondents older than 50 years.

# Residents and students

Whether the respondent was only resident, or a student also played a role in preference for several social and personal factors shaping safety perceptions. Three out of four women mentioned the importance of being familiar with people to feel safe are a student. Besides, the women who have a strong social network in Holendrecht are all not a student. All the

students mentioned how their social life is embedded more towards the city centre of Amsterdam. This could explain why the safety perceptions of the students are enhanced by being surrounded with people they are familiar with, because of the missing support from a social network in Holendrecht.

# Neighbourhood

Also, the place where the respondents live seem to be a differentiating factor in how safety is perceived. None of the women who live in Amstel-III mentioned how their feelings of safety were influenced by physical incivilities, this was only highlighted by those living in Holendrecht-Oost and West. The influence of familiarity (either with people or places) was only mentioned by the women living in Holendrecht-West and Amstel-III, none of the women who live in Holendrecht-Oost mentioned the notion familiarity. Besides, most of the women who live in Holendrecht-West noted that they have frequently contact with neighbours.

### Years in the neighbourhood

Finally, the number of years the respondents live in Holendrecht also appears to be a characteristic which distinguishes the safety perceptions of the women. The number of years living in Holendrecht was categorized between 0-5, 5-10, 10-15, 15+ years. Six out of seven respondents mentioned their need of open and long-distance views to ensure their feelings of safety live in Holendrecht shorter than 5 years. The same applies to those who prefer to be in an area by the presence of others, seven out of nine respondents live in Holendrecht for a period shorter than 5 years. For this same group, familiarity (both with places and people) in public spaces is also more important. The women with a strong social network all live longer in Holendrecht than 5 years. Besides, those who have frequently contact with their neighbours are the women who live in Holendrecht longer than 10 years. It seems like the longer the women live in Holendrecht, the stronger the social network within the neighbourhood and ties with neighbours. Hence, other factors seem to become less relevant. Whilst, the ones who live in Holendrecht less than 5 years, with a smaller social network and weaker social ties, are more in need of factors such as open views, the presence of others and familiarity to enhance their feelings of safety.

# Concluding remarks

The social network of respondents appears to be a returning aspect in the five categories explained above. Those with a large social network tend to report higher feelings of safety. These are mainly women who identify themselves as Surinam or Ghanese, live in the neighbourhood for a long time, and are older. The women with a smaller social network, often younger, identify themselves as Dutch and living in the neighbourhood the shortest, name more often the importance of familiarity with a place and the people. Besides, this group want physical factors which enhance their visibility of public space. Whereas the women with a large social network have trust in the collective efficacy of the neighbourhood, whether they feel that their neighbours are willing to intervene as agents of informal social control, want the women with a smaller social network more factors, such as visibility, to increase the perception of social control to feel safe.

# Discussion

Fear of crime is a topic widely addressed among scholars, and it is acknowledged that gender is a predicting factor in shaping feelings of crime. Hence, a wealth of research focussed on studying the factors influencing safety perceptions of women in public spaces. In such research, women are often seen as a homogeneous group whilst individual perception might differ. This research aimed to step away from the binary approach towards a more intersectional understanding of safety perceptions in public spaces. It was applied to a specific study site in Amsterdam, with the intention of working towards the fulfillment of three goals. First, developing an understanding of the social and physical urban fabric of Holendrecht. Second, analysing the personal, social, and physical factors influencing safety perceptions of women in public spaces. Finally, exploring differences and multiple identities between the individual safety perceptions of women in Holendrecht. This section presents the most important findings and describes them.

The results indicate that Holendrecht is a diverse neighbourhood, both physically and socially, which in turn affects the individual perception of safety. The neighbourhood is physically segregated by the different typologies, single family homes in Oost and gallery flats in West, and by the segregated traffic system creating physical boundary between the different parts. Moreover, the different social structures in the neighbourhood make Holendecht socially diverse. Holendrecht West has the highest share of young people, as well as residents with a non-western migration background, and many of whom are lower educated. On the other hand, Holendrecht-Oost has the largest shares of the elderly, higher educated people, as well as those without a migration background.. Also, almost all the residents of Amstel-III are students.

This segregation also can be understood through the different places which are perceived as unsafe. Most of these places are in Holendrecht-West, where Holendrecht Station is mentioned most often. In the other neighbourhoods however, Holendrecht-Oost and Amstel-III, only one place was regarded to be unsafe. What is more, the places highlighted as unsafe in Holendrecht-West are not only mentioned by the residents of this neighbourhood. In fact, comparatively speaking, more women who lived in Holendrecht-Oost regarded areas in Holendrecht-West as unsafe than the residents of that neighbourhood themselves.

The results also show a clear division between de type of factors affecting the individual safety perception in public spaces. The social factors seem to have the highest influence on the respondents, as these were mentioned twice as often as the physical factors. The personal factors were mentioned the least. The social factors most often mentioned are the social incivilities, followed by the cultural differences, and the social network the individual has in the neighbourhood. At the physical level, maintenance and surveillance appeared to be the most influential, followed by the lighting and open views. Finally, the personal factor mentioned the most was prior information about crime.

Finally, the results suggest that there are different women profiles in which factors are most important. The analysis demonstrated that women with a large social network in the neighbourhood less often mention the importance of physical factors. These are mainly women with a non-Western ethnicity background, who are older than 30, and who have lived in the neighbourhood for a long time. The women who do not have a large network, those often with a Dutch ethnicity, and who have lived in the neighbourhood less then 5 years, more often named the importance of physical factors which enhance their visibility, and the need to be familiar with people and places to ensure their feelings of safety.

# Safety Perception in the Physical Urban Fabric of Holendrecht

The physical factors influencing safety perceptions of women in public spaces in Holendrecht can be divided over two themes: (in)formal social control and visibility. The factors maintenance and surveillance, and physical incivilities are linked to (in)formal social control. Visibility is connected to the lighting, open view and vegetation density factors.

# (In)formal social control

The results indicate that poor maintenance and signs of physical deterioration in a neighbourhood are important indicators for feeling safe in public space. Both indicators are related to the notion of (in)formal social control. Ill-maintained areas with physical incivilities give people the idea that there is no control there and when visiting such areas they give people the idea that they are more vulnerable to crime themselves, thus increasing a feeling of unsafety (Gau, Corsaro & Brunson, 2014; van Noije & Iedema, 2017; Newman, 1972). The litter nuisance in the neighbourhood is such a specific sign of disorder in Holendrecht. According to the theory of Wilson and Kelling (1982), this could be perceived as a sign that in this area things happen which could threaten their safety. However, Blokland (2008) argues that such signs could also be perceived that in this area you cannot count on others and that you are there "on your own". In this sense, social control is about correcting each other's behavior which is not aligned with the normal code of conduct in the neighbourhood (Blokland, 2008). This feeling of being "on your own" is enhanced by the missing formal social control in the neighbourhood. According to the respondents, the municipality, the housing associations, and the police are also not taking their responsibility in preventing these incivilities. For example, the respondents perceive that the municipality does not take an active approach in tackling the litter problem in the neighbourhood. This creates the feeling that that these incivilities do not matter for the responsible actors (Blokland, 2008), which results in turn in less involvement of residents in taking care of the public spaces, thus reducing social control (Blokland, 2008; Newman, 1972). (Whether correct or not), residents may expect little help from their authorities in case of emergency when they feel that the authorities take little care of their neighbourhood. One will be less inclined to exercise social control when this support from the authorities is in doubt. (Blokland, 2008).

#### Visibility

Another overarching theme in the physical factors affecting feeling of safety is visibility. Visibility refers to seeing and being seen by others. The results show that it is important for the respondents to know and see everything that is happening in their surroundings, as well as having the idea that others are also being informed of what is going on. Open views, lighting and vegetation density are important determinants for a person's visibility. The results indicate that adequate lighting increases perceived safety because it improves the ability to see and look around for users of the space. Besides, too densely vegetated areas block the view and offer potential attackers to hide out of sight. this in turn increases feelings of unsafety. Also, open views enable women to be better able to identify people and elements of the surroundings, while too much openness conjointly increases the perception of too much visibility. There is a certain dual environmental perception, that people prefer places that offer enclosure and open views simultaneously, which is rooted in the prospect and refuge theory of Appleton (1975). Prospect gives people the idea that they can anticipate about who or what to encounter, while refuge offers potential escape routes and hiding

places (Fotios, Unwin, and Farrall 2015). Hence, it is about finding a balance between these two elements. For example, the entrance at station Holendrecht creates a feeling of being trapped, as for others, there is limited sight to the entrance, whilst the bike path from Holendrecht-West to Reigersbos is perceived as too open and offers too little concealment. In determining the availability of protective spaces or flight routes the visibility of and the visibility by others are two crucial determinants (Min, Byun & Ha, 2022), and it is about finding a balance between these two components. Yet, the results of this research provide little understanding of this balance which suggest an opportunity for future research.

When relating these themes (social control and visibility) to the physical urban fabric of Holendrecht, several places come forward which are perceived as unsafe. The meandering buildings in Holendrecht-West limit the sightlines in that area as these buildings are connected to each other in one block. In between these buildings there is one bike path crossing Holendrecht-West from the northern part to Reigersbos. The buildings are situated quite some distance from this path and the openness gives the feeling of too much visibility. Moreover, the green spaces in between the buildings and around the bike paths are ill-maintained which create a perception of lack of social control and decreases a person's visibility, Finally, Station Holendrecht is the place mentioned most often as an unsafe place. The entrance is experienced as enclosed, which creates the perception that a person is isolated from other people, so that they cannot ask for help when necessary.

# Safety Perception in the Social Urban Fabric of Holendrecht

The factors influencing an individual's perception of safety in the social urban fabric are linked to three overarching themes: social control and familiarity, and relation with others.

#### Social control

Social control relates to the social factors: social incivilities and the presence of others. The social incivilities perceived in the neighbourhood are, again, perceived as a lack of social control. These incivilities are perceived as social disorder which creates a perception among residents that there is a lack of social control which creates more space for the occurrence of crime, which results in increasing feelings of unsafety. Such social incivilities are the loitering people, beggars, and homeless people, but also street harassment in Holendrecht. Especially at Station Holendrecht and around the shopping centre, the presence of loitering people, beggars and homeless people enhance feelings of unsafety. Goffman (1963) explained how such incivilities are not about rules which are being offended, but about behaviour which does not fit in the "moral" framework of public life. This is connected to the notion of transgression of place. Dixon, Levine & McAuley (2006) showed how quite innocent behaviour such as drinking in public is experienced as occupying space, and these people are violating the normal code of conduct. According to van Stokkom (2009), this is because a lot of public space became quite sterile and homogenous. Therefore, behaviour which deviates from the normal code of conduct is seen as problematic because it is out of place. For example, Dixon, Levine & McAuley (2006) showed how the behaviour of homeless people is rejected by other urban dwellers because they perform "private behaviour" in public spaces. This exemplifies the difficulties with envisioning public spaces as heterogenous by urban dwellers. However, as also mentioned by some respondents it is also the right of loitering people, beggars and homeless people to use public spaces. Blokland (2008) argues that these people as also residents of the city who need a place. Hence, Blokland (2008) stress the importance of the notion of public familiarity as a factor to enhance feelings of safety when encountering people such as loitering people, beggars or homeless people. Public familiarity consists of being able to recognize valid codes and being able to place others in public space. Through observation one 'reads' the street and potential threats. For the experience of safety on the street, it is important that one knows what one thinks to expect from others: recognisability can take away fear and you can more easily address people on their actions. This is also linked to the factor, the presence of others. In general, this enhances feelings of safety because it increases the social control in a certain area. However, as noted by some respondents, the presence of others have to be aligned with a certain normality. For example, the presence of people at station during the night is not seen as "normal", which makes it more difficult for women to recognize someone's code of conduct.

Another aspect linked to social incivilities is street harassment. 'Street harassment' is commonly understood as an umbrella term referring to unwanted, targeted sexual attention from strangers in public spaces (Plan International UK, 2018). The results indicate that the women who experienced street harassment reported higher levels of fear of crime as all these experiences resulted in behavioral adaptations, such as avoiding places and carrying self-defense spray. This indicates that the effects of such experience are much larger than other social incivilities such as the presence of loitering people. Therefore, I argue to see street harassment as a social factor influencing individual safety perceptions in public space separately from social incivilities.

#### Relation with others

The relation a person has with the fellow residents also influences the feeling of safety. This concerns the relationship with friends and acquaintances, as well as with strangers. In Holendrecht there are large differences between the social network of the residents, of which the cultural differences appear to be an influential factor in this sense. A large part of the residents has a Surinam migration background, and a strong social network is deeply rooted in the Surinam culture. Yet, the results indicate that this only applies to the Creoles Surinam community, which most of the Surinam people in Holendrecht belong to. One of the respondents is Hindustan-Surinam and feels less at home in the neighborhood because she has a different code of conduct than Creoles-Surinam people (e.g., wearing a hijab). This could be explained by the fact that people tend to interact more with those they better understand and who are just like them, than with cultural others (Peters, 2011). In addition, the women in Holendrecht-Oost appear to have a stronger social network. This could be explained by the fact that most of the residents in that neighborhood are homeowners, and according to Drakulich (2015) are they more likely to be socially embedded in their neighborhoods.

In case of absence of a strong social network the notion of familiarity comes to play again. Blokland and van Eijk (2013) argue that creating a space that facilitates frequent encounters with the same people helps people feel "at home" in their neighbourhood, even if they do not develop additional social ties or speak to anyone. This results that people are better able to estimate a person's code of conduct, hence a person's "trustworthiness".

Holendrecht is a socially-diverse neighborhood, with people from different age groups, ethnicities, and levels of education. According to the results, it appears that the residents do not necessarily live with each other. For example, the students go to the city center of Amsterdam for social activities and others feel alone in Holendrecht. In the coming years, many new homes will be built, in different price ranges for different people. The social

diversity in the neighborhood will thus be maintained. On the one hand, this can be positive for those who currently do not have a (large) social network, because the arrival of the newcomers may change this. However, we must also be aware that this also cannot happen too. That is why it is important to enable the emergence of public familiarity in public space.

# The Personal Factors Influencing Feelings of Safety in Public Spaces

On the personal level, two factors played an important role: previous crime experiences and prior information about crime. Luckily, previous crime experiences were less often mentioned compared to the factor prior information about crime. Nonetheless, this does not mean that the previous crime experiences are of less influence in affecting feelings of safety. The women who experienced crime before, adapted their behavior accordingly, while this was not the case when someone received information about crime. The adaptation of behaviour implies higher feelings of unsafety (DuBow, McCabe, and Kaplan 1979; Ferraro 1995; Garofalo 1981). This implies the importance of not only considering factors which are mentioned the most, but also see what the effects are of other factors while analysing them.

# The Multiple Identities Shaping Safety Perceptions in Public Spaces

The results indicate that the women with a large social network report higher feelings of safety than those with a smaller social network. Women with a large social network often identify themselves as Surinam or Ghanese, have lived in the neighborhood for a long time (> 5 years) and are generally older (30+ years). The results indicate that this group has trust in the support of their social network which enhances their feelings of safety, . On the other hand, those with a smaller social network are characterized by identifying themselves as Dutch, living in the neighborhood for a shorter period (< 5 years) and are younger (between 18 and 30 years old). This last group more often mentions the importance of physical factors influencing their visibility in public spaces and familiarity to ensure their feelings of safety. These factors enable them to scan their environment for prospect and refuge, but also to estimate a person's trustworthiness. The women with a larger social network feel safe by the support of others, while the women with a smaller social network need their own estimation of potential dangers of people and places to ensure their safety. This relates to the notion of perceived efficacy. The women with a large social network experience a high collective efficacy, as they expect their families, friends and acquaintances to help them if needed (Sampson & Raudenbush, 1997). Contrary, the women with a smaller social network rely more on their own and therefore want factors which increase their perceived self-efficacy (familiarity and visibility). Increasing their perceived self-efficacy give them more confidence to cope with threatening situations, hence decreasing their feelings of unsafety (Gabriel & Greve, 2003). However, a supportive analysis is required to research the linkages between women's social networks and familiarity and visibility.

#### Limitations

This study found some limitations. First, the inconsistency in methodology. The initial idea of this research was to conduct walk-along interviews. However, due to limited number of responses the interviews were also conducted online. This might be a reason why the respondents more frequently reported social factors as indicators for feeling unsafe. The online interview took the opportunity away to yield place-specific data because interacting with the place could have allowed the interviewees to detail their experiences, emotions, and

thoughts. The mental maps became a starting point to talk about places again, but this method was added when half of the interview were already conducted. Therefore, it is hard to conclude whether the social factors, which were more frequently mentioned, play a more important role than the physical factors. Future research should elaborate on this.

Furthermore, a lot of effort has gone into creating a representative sample for the neighborhood. The respondents who live in Amstel-III do not represent the complete population of that neighborhood, as all the respondents are Dutch, and a lot of people in Holendrecht have a migration background. Perhaps, I should have been more aware of my positionality as a white student in my search for respondents and should have looked further than my own network.

Finally, the patterns and relationships explored in this research are based on a limited number of interviews with the residents of Holendrecht. It is suggested to further explore these linkages by both quantitative and qualitative analysis to be better able to understand the individual perceptions of safety in public spaces of women in Holendrecht.

# Conclusion

This study sought to examine the different identities of women's safety perceptions in public spaces in Holendrecht. Findings show that the social networks distinguish two groups of women. The women who have a small social network share a number of similarities: they have a small social network, they live in Holendrecht for less than five years, are younger than 30 years and have a Dutch ethnicity. To secure their sense of safety, these women highlight the importance of physical factors in public space which enhance their visibility, and familiarity with people and places. On the contrary, women with a larger social network, who tend to report higher levels of feeling safe, also show similarities: they live in Holendrecht longer than 5 years, are older than 30 years and have a Surinam or Ghanese ethnicity. Future research could consider intersections between age, years in the neighbourhood, ethnicity, and an individual's social network, to compare how feelings of unsafety operate differently among women.

The findings also illustrate the importance of an intersectional approach when analysing feelings of unsafety in public spaces. The factors influencing a person's perception of safety most often mentioned are social incivilities, cultural differences, and social networks. Followed by lighting, maintenance and surveillance, and familiarity. These factors would have come forwards if this study looked to feelings of safety of women in public spaces "in general" or "on average", as more traditional/conventional types of research did (Cele, 2009; Navarrete\_Hernandez, Vetro & Concha, 2021; Fox, Nobles & Piquero, 2009). The physical factors which enhance a person's visibility, except for lighting, would have been less likely to be recommended as these were mentioned less often, even though these are determining factors to ensure feelings of safety for women with a small social network. This emphasizes the urgency to take a holistic perspective that incorporates an understanding of the intersectionality of fear of crime in a context that goes beyond gender and explore the intersections between an individual's characteristics and environmental contexts. Due to the scope of this study, this research is based on social categorizations such as gender, age, and ethnicity. However, future research could consider other characteristics such as sexuality, ability, education, language, race, and class.

Another important theoretical implication is the fact that this are the results from women who live in a multi-ethnic neighbourhood. The cultural differences in the neighbourhood seem to be related to the perceptions of safety. The results show how cultural differences decrease an individual's ability to estimate another person's "trustworthiness", which is an important aspect influencing a person's sense of safety. If these cultural differences are present, the notion of public familiarity is crucial to be able to predict someone's code of conduct and recognize potential threats. The effects of these factors in relation to ethnic diverse neighbourhoods on individual perceptions of fear of crime, is something to be further explored in future research. Also in relation to less diverse neighbourhoods.

A final limitation of this study is that the degree of fear of crime is indicated by the extent to which an individual adapted their behaviour to ensure feelings of safety. There are others, more quantitative measures, to indicate this degree which could be combined with the methods used in this research to better uncover and identify explanations for perceptions of safety.

# Recommendations

As presented by the Municipality of Amsterdam in the beginning of 2022, Holendrecht will be redeveloped in the coming years. To incorporate the findings of this research into the future development plans, a couple of recommendations are suggested.

#### Attendance

Lack of social control appears to be a crucial factor influencing feelings of safety of women in Holendrecht. It is recommended to stimulate the usage of public spaces at different times of the day. The presence of other people at different times of the day will reinforce social control and strongly impact the user's safety perception. A multifunctional space, for example by creating houses above the shopping centre, will offers back and forth movement during the day and at night. Besides, a more proactive role from the Municipality, police and housing associations is recommended to give the residents the impression that people take care of the neighbourhood and its residents. This could be achieved by investing in well-maintained public spaces, and pro-active follow-up from the police after reported incidences.

#### Visibility

Clear visibility is important to an individual's perception of 'seeing and being seen'. In this respect, lighting, vegetation density, and open views are of importance for the women in Holendrecht. The lighting design should ensure that people can easily navigate themselves at night, especially the connections between spaces such as sport and play facilities, parking lots, public transport, and houses. Besides, the landscape design should offer clear lurk lines for all users which considers different heights and viewing angles. For example, the elevated car lanes and meandering buildings blocks obstruct sightlines. Also, maintenance of the vegetation in the area is important to find a proper balance for concealment.

# Familiarity

The public space should stimulate short encounters with other users to create a sense of public familiarity. This could be achieved by for example creating and maintaining meeting places in public spaces. In Holendrecht there are several facilities which could serve as a meeting place, such as playground for children, but because these places are ill-maintained the usage of it is not stimulated. Besides, more communal activities could be organized such as a weekly-market or public sport lessons.

#### Participation fatigue

Finally, it is important to mention the participation fatigue in Holendrecht. Over the last years the residents participated in several projects but due to limited "action" from the Municipality it feels like their input did not lead to structural changes. For the future development of Holendrecht input from the residents is of great importance again. Therefore, it is crucial to determine how the Municipality will engage the residents and prevent further stimulation of this fatigue. Helleman, Majoor, Peek & van der Veen (2021) mention that this fatigue can be prevented by three core principles. First, think of different forms of participation instead of using the common techniques during participation sessions. Besides, try to find a diverse group of participants instead of those who always participate. Finally, think of the effects of the sessions and how this is communicated to the participants.

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# **Appendices**

# Appendix A: Interview Guide

These questions provided a foundation to guide the semi-structured interviews

#### Introduction

- Introduce yourself
- Introduce research
- Explain privacy and ask permission to record

# **Living in Holendrecht**

- How long have you been living in Holendrecht?
- How do you experience living in Holendrecht
- How is your relationship with the neighbors?
- Do you feel at home in Holendrecht? Why?

# Safety in Holendrecht

- How safe do you feel in Holendrecht? Why?
- At which places do you feel safe? Why?

# **Unsafe places**

- At which places do you feel safe? Why?
- Which factors mostly influence your perception of safety?
  - Ask about themes such as social networks, social contral, familiarity, presence of
  - Ask about physical themes such as street lighting, blind walls, sight lines, boundaries of public and private space, escape routes, degradation, enforcement and cameras
- What influences this image of you in this place? (Your own experience, someone else's story, social media or the news)
- What measures do you take to make you feel safer here? (Calling someone, something for protection, or avoiding places). Do you think you react the same in every situation? (Quiet vs. busy Places)
- The moment something happens, do you feel that you can easily ask for help? Who would you ask for help then?
- How do you think your sense of security can be improved here? (Different policies, different design, different services, different behavior of people etc.)

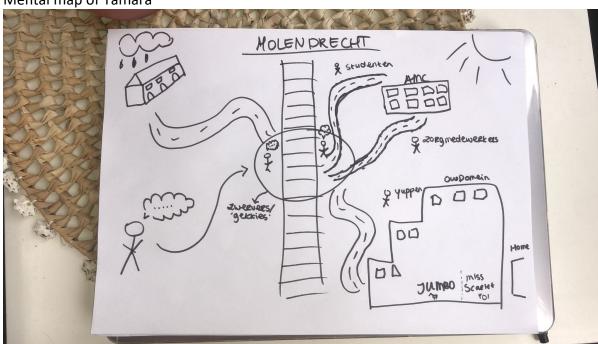
# Closing

- Ask if there are any last thoughts or questions
- Thank the interviewee for time and input

# Appendix B: Mental maps

These are all the mental maps of Holendrecht created by the respondents

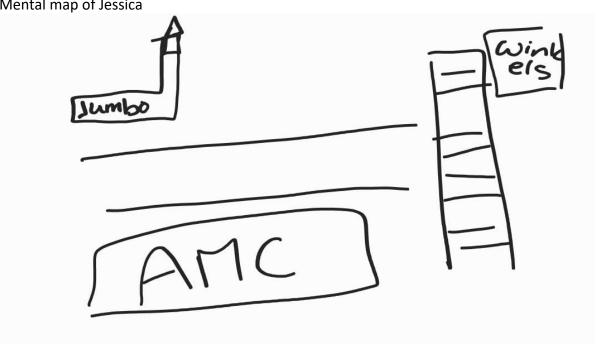
Mental map of Tamara



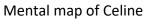
Mental map of Mila

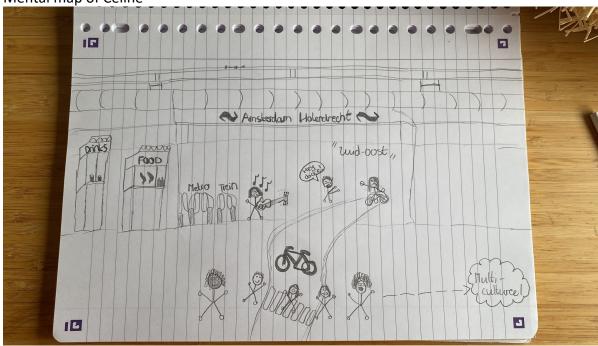


Mental map of Jessica

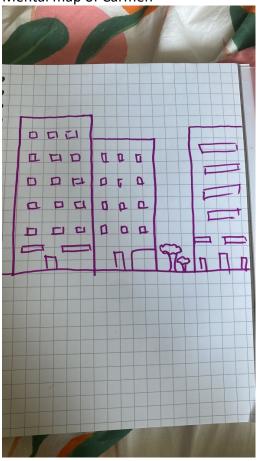




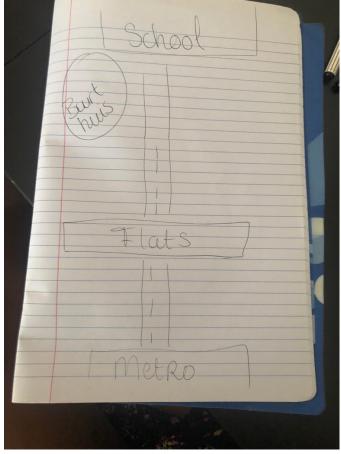




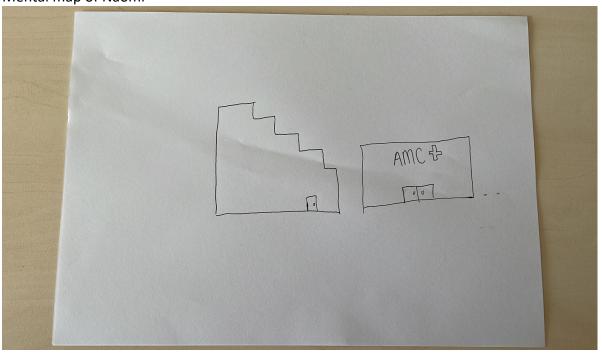
Mental map of Carmen

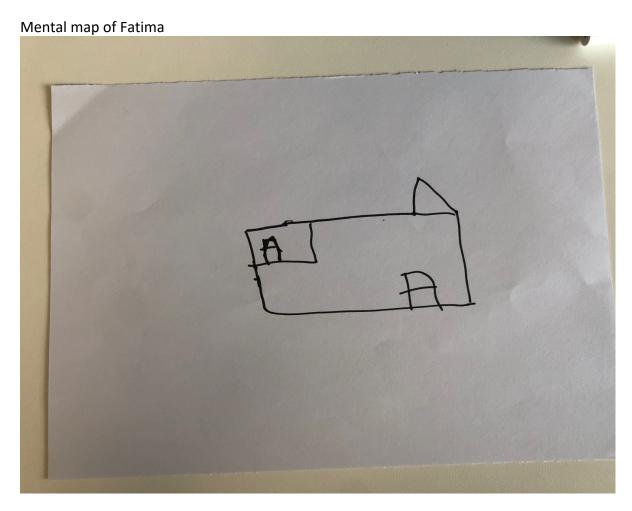


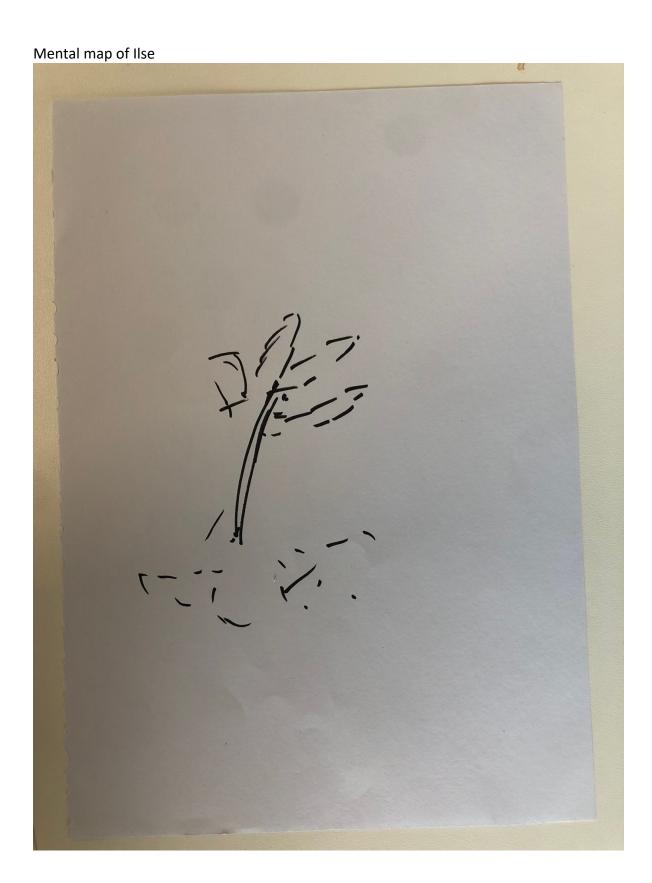
Mental map of Bo



Mental map of Naomi







Appendix C: Matrix to explore differences between individual safety perceptions of the respondents

Age: 18-30	0 1 0 0 0 0 1
Age: 30-40 Age: 40-50 Age: 40-50 Age: 50-60 O O O O O O O O O O O O O O O O O O O	1 0 0 0 0 0 1
Age: 40-50         1         0	0 0 0 0 0 1
Age: 50-60         0 <th< td=""><td>0 0 0 1 1</td></th<>	0 0 0 1 1
Age: 60-70  Ethnicity:  Ethnicity: Dutch  O 1 1 1 1 1 0 0 1 1 1 1 1 1 0 0 0 0 0 0	0 0 0 1
Ethnicity: Dutch	0 0 1
© Ethnicity: Dutch © Ethnicity: Dutch © Ethnicity: Ohanese © 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 1
© Ethnicity: Ghanese    O   O   O   O   O   O   O   O   O	0 1 1
© Ethnicity: Surinam  1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 1 1 0 0  Resident vs. Student  © Resident / Student: Resident  © Resident / Student: Student: Student: Neighborhood  © Neighborhood: Amstellill  © Neighborhood: Oost  1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0	1
Resident vs. Student:	1
O Resident / Student: Resident O Resident / Student: Student Neighborhood  Neighborhood: Amstel- III O D D D D D D D D D D D D D D D D D D D	
Resident   Student: Student   Studen	
• Resident / Student: Student Neighborhood         0         0         0         1         1         1         1         0         1         2         0	0
O Neighborhood: Amstelly on the Neighborhood: Amstelly on the Neighborhood: Oost on the Neighborhood: Oost on the Neighborhood: West on the Neighbor	
III	0
Neighborhood: West         0	0
Years in Holendrecht           0-5 years         0         1         1         0         1         1         1         1         1         1         1         1         1         0	
0-5 years       0       1       1       0       1       1       1       1       1       1       1       1       1       1       0	1
5-10 years  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
10-15 years 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
15+ years 1 0 0 1 0 0 0 0 0 0 0 0 1 0 1 0 0	0
	1
	0
Personal Attributes	
o Previous crime 3 0 1 0 0 0 0 0 1 0 0 0 0 0 0 0 1 experience	1
o Prior information about crime Social Attributes  6 0 2 1 2 0 0 2 4 0 1 1 1 0 0 0 1 0	1
o Alone/with others 2 1 1 0 0 2 1 0 0 2 1 2 3 0 0 0 0	2
o Cultural differences 4 1 0 5 0 0 2 0 1 2 2 3 4 4 0 1 0 0	1
o Familiarity: People 0 3 0 0 4 1 0 0 0 0 2 1 0 0 0 0 0	0
o Familiarity: Places 0 0 2 0 1 1 0 1 0 0 0 1 2 0 0 1 0 0	1
• Frequence of contact: 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 1 1	1
High  o Frequence of contact:  0  1  0  0  0  1  0  0  0  0  0  0  0  0	1
Low       5       6       2       3       3       0       1       2       2       6       6       2       -2       0       1       0       0	4
o Social network: Strong 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 0 2 2 1	2
o Social network: Weak 2 1 1 0 0 0 0 1 0 0 5 2 -1 0 0 1 0 0	1
Physical Attributes	
o CCV 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2
o Dark areas 1 1 1 0 1 1 0 0 0 2 0 0 0 0 0 1 0	1
○ Lighting 3 0 2 0 2 2 1 0 0 0 1 1 1 0 0 1 1 0	0
0 1 2 1 0 5 0 0 1 1 1 1 1 0 0 0 1	1
Maintenance/Surveillance         0         1         0         3         1         0         2         1         0         1         2         3         0         0         0         0         0         0	0
o Physical Incivilities 0 0 1 1 0 0 1 0 4 0 0 0 1 1 0 0 0	0
o Vegetation density 0 0 1 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0	1
Unsafe Places	'

o Amstel II: At AMC	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
o Amstel II: Our Domain	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
o Amstel II: Path to station	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Holendrecht-West: At	1	0	0	0	0	0	0	0	0	0	1	0	-1	0	0	0	0	0	0
home ○ Holendrecht-West: Bike	3	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
path ○ Holendrecht-West:	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Metro ○ Holendrecht-West:	0	0	0	1	0	0	0	0	1	0	1	0	-1	1	0	0	0	0	1
Neighborhood	_	-	-				•			-	·			·	•		-	-	·
<ul> <li>Holendrecht-West:</li> <li>Parking lot</li> </ul>	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
<ul> <li>Holendrecht-West:</li> <li>Playaround</li> </ul>	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Holendrecht-West: Shopping centre	0	0	0	0	0	0	0	0	3	0	1	0	-1	0	0	0	0	0	0
<ul> <li>Holendrecht-West:</li> </ul>	2	0	1	2	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0
Square ○ Holendrecht-West:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Station Bullewijck    Holendrecht-West:	0	4	0	0	2	0	0	4	0	3	1	2	3	0	0	0	0	0	0
Station Holendrecht	0	0	1	1	0	0	0	0	2	0	1	0	-1	0	0	0	1	0	0
<ul><li>Holendrecht-West: Viaduct</li></ul>	U	U	'	'	U	U	U	U	2	U	'	U	-1	U	U	U	'	U	U
Safe Places																			
Safe places: Amstel-III	0	0	0	0	1	1	0	1	0	1	0	3	6	0	0	0	0	0	0
o Safe places: At home	0	0	0	0	0	0	0	0	0	0	1	0	-1	0	0	0	0	0	1
<ul> <li>Safe places:</li> <li>Holendrecht-Oost</li> </ul>	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Safe places: Park	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
o Safe places: Station	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
○ Safe places: Train	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0