Bachelor Thesis
Female Safety Perception, the Built Environment, and Behaviour Choice
Case study in the city of Groningen

Source: Prins (2019)

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Table of content

Abstract

This paper examines how the safety perception of the built environment influences the behaviour choice of female students. A softGIS approach in the form of a Maptionnaire survey is used to collect spatial, qualitative data. In specific, unsafe areas according to the female survey respondents are mapped for the city of Groningen. The respondent's comments about the places and routes they marked as unsafe are scrutinized with regard to (1) socio-environmental factors triggering an unsafe feeling, and (2) the decision to avoid or not avoid that particular area. The findings reveal several themes that shape the student's safety perception and influence their behaviour. The main themes are the presence of lighting that consistently improves the safety of an area, the presence of people and their appearance and actions which has positive or negative impacts, the crowdedness of an area, and the story-telling related to a certain environment.

1. Introduction

Fear of crime can impose several limitations on people's daily lives, preventing social interaction, and access to facilities (Navarrete-Hernandez et al., 2021). On the one hand, this can create a burden on the individual level, with 'anxiety, stress, insecurity, incompatibility, alienation, and even psychological disorders' as a result of fear (Tandogan & Ilhan, 2016, p. 2012). On the other hand, the liveability of a city can be impaired. This can take the form of direct and indirect impacts, such as fewer people on the street, less usage of public space as well as reduced local economic activity. As a consequence, urban space can become deserted or even abandoned and city residents will be discontent (Tandogan & Ilhan, 2016; Navarrete-Hernandez et al., 2021). Thus, the perceived safety of the built environment is a crucial concept to study when analysing urban liveability and environmental quality (Kyttä et al., 2013). The concern for personal safety shapes our experience of a place and influences our behavioural choices (Gargiulo et al., 2020). Especially women are limited in their participation in urban public life due to a sense of insecurity and fear. In comparison to men, women tend to take more precautionary behaviour and constrain their lives to prevent the possible danger of crime (Gargiulo et al., 2020; Tandogan & Ilhan, 2016).

Previous literature focused on the socio-environmental conditions and past experiences that influence women's perception of safety. Studies by Gargiulo et al. (2020), Shach-Pinsly (2019), and Kyttä et al. (2013) centre around the physical characteristics of the built environment and related notions of unsafety. The social world and gender differences are central aspects in research by Tandogan and Ilhan (2016), and Navarrete-Hernandez et al. (2021). The importance of cultural upbringing and past experiences is discussed by Koskela and Pain (2000). However, few studies have investigated the relationship between the female safety perception of the built environment and subsequent behaviour choice.

Thus, the following main research question is proposed:
> ➢ *How does the safety perception of the built environment influence the behaviour choice of female students in the city of Groningen?*

This research aims to fill the academic research gap and add to a growing body of literature within the field of urban safety perception. Considering female safety perception and behaviour choice in city planning has the potential to increase female participation in urban life by alleviating notions of unsafety. Thus, this research can inform designers, planners, and politicians to make cities more liveable and just.

The research focuses on exploring and analysing how the safety perception of female students is influenced by the built environment and how this affects their behaviour choice to avoid or not avoid certain areas. A geographical map is created that reflects unsafe areas according to the participants. Afterward, a thorough analysis reveals why these places are considered unsafe and how this influences the respondent's behaviour. This research reflects a case study approach in the city of Groningen that takes into account the mode of transport, time of the day, and the presence of other people.

2. Theoretical Framework

The perception of safety and fear of crime are complex concepts that relate to a wider range of contextual factors. 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).

As discovered by Gargiulo et al. (2020), gender plays an important role when studying safety perception. Women often show greater levels of fear due to their cultural upbringings which are often influenced by a patriarchal vision. They tend to receive a different education than their male counterparts and are exposed to media that reinforces criminal stereotypes. Despite women having in general lower chances of being victimized than men, they often report higher levels of fear. Among women, fear of sexual violence is most prominent. Since 'women's rape and sexual assault rates are ten times higher [than] men's', they fear those forms of crime the most (Tandogan & Ilhan, 2016, p.2013). Similar to research by Gargiulo et al. (2020), Tandogan and Ilhan (2016) point out that a strong patriarchal mindset within society negatively influences fear of crime.

Tandogan and Ilhan's (2016) study among Turkish women uncovered that fear of crime sharply increases during night-time when it's dark outside and when they are alone. Other environmental conditions that negatively affected the women were, 'silent-isolated streets, dark subways, poorly-lit streets, empty parks and dense woodland' (Tandogan & Ilhan, 2016, p.2017). This is consistent with other research findings that highlight the undesirability of dark and densely vegetated areas, marked by many hiding spots for possible attackers, fewer people, and thus less chance of receiving assistance in case of need. Furthermore, industrial areas were seen as unsafe, since they are often characterised by abandoned buildings, low user density, and antisocial behaviour (Gargiulo et al., 2020). However, the presence of lighting facilities consistently improved the feeling of safety during the day and at night. In the literature, streetlights are identified as the most prominent element shaping safety perception. Light has a 'high impact on what we see in the surrounding environment and on how we feel in an urban setting' which ultimately influences our safety perception (Shach-Pinsly, 2019, p.4).

Another important finding is that recurrent use of an area that could be considered dangerous, according to environmental characteristics, can lower feelings of fear. This can be explained through place attachment that occurs when individuals repeatedly make use of an area and eventually develop a sense of familiarity with the surroundings (Gargiulo et al., 2020).

Gehl (2010) addresses the importance of mixed-use districts, 'an urban area with mixed functions [that promotes] activities in and near buildings around the clock' (p.99). He argues that a close proximity to other people and activity at all times improves perceived safety. Residents do not have to be in direct contact with each other to feel safe but know that other people are present, through for instance 'lights from windows in residential areas [that] send a comforting signal that people are nearby' (p.99). This links to Jane Jacob's concept of 'eyes on the street', which supports mixed-use districts and social interaction to form a community surveillance network that ensures the safety of the residents (Jacobs, 1961).

Koskela and Pain (1999) argue that the social world plays as much of a role as the environmental world when analysing fear of crime. Rather than physical designs reducing fear, it is mostly the social changes that result from the environmental alterations that improve feelings of safety. Those enhancements can be 'increased sense of ownership and informal surveillance of space, and the likelihood of greater social interaction' (Koskela & Pain, 1999, p.270). A higher sense of ownership encourages people to manage and maintain a space, which positively influences their safety perception. Besides this natural form of surveillance, closed-circuit television (CCTV) is a way to improve feelings of safety (Shach-Pinsly, 2019).

With a location-based approach, Kyttä et al. (2020) connect environmental qualities to specific places. Their research reveals the importance of studying the two-way person-environment relationship that sees neither party as isolated but as a 'dynamic, interactive system' (Kyttä et al., 2020, p.31). This approach is consistent

with research by Koskela and Pain (1999). The complexity of fear of crime is often underestimated, with crime prevention strategies and the notion of 'designing out fear' placing too much emphasis on the environmental context of crime. Whilst an attacker's decision-making process might be highly influenced by the physical surroundings, a victim's fear of crime is based on a web of social and personal experiences. Rather than women having a predefined association of fear towards certain environments, it is the life course events and their experiences of crime that influence their perception. Koskela and Pain's (1999) research discloses that 'there are wide contrasts in the environments feared [...], and that it is the social nature of these different places which provoke fear, including the reputation of places as dangerous or safe' (p.278).

Moreover, fear against crime is not only forged in public spaces but many incidents of violence also take place in the domestic sphere. Those incidents often remain unreported, and thus crime statistics do not tend to reflect the actual number of crimes against women. Furthermore, a differentiation can be made between the types of crime and the associated levels of fear. There is a clear correlation between violent crimes and high levels of fear. Nevertheless, other criminal behaviour such as verbal harassment can also contribute to an unsafe feeling (Koskela & Pain (1999).

Koskela and Pain (1999) argue that 'women's fear of crime is both a product of and reinforces their social position', leading to the normalisation of crime against women (p.278). The widespread social belief that women are the weaker sex, implies that they are more vulnerable and more likely to experience greater harm than men (Gargiulo et al. 2020). This thinking enhances women's fear of crime and leads to it being 'an accepted part of everyday life [for most women]' (Koskela & Pain, 1999, p.278).

Nonetheless, there is a rising awareness that 'the benefits of using the public realm are not equally shared among members of society' (Navarrete-Hernandez et al., 2021). The Italian map-based application (App) 'Wher' functions as an example that uses the female perspective to make urban space more accessible (Gargiulo, Valenzano & Marini, 2022). The application features a navigation service that recommends routes based on women's safety accounts. The users can base their behaviour choice on the suggestions made by others.

The conceptual model (Figure 1) depicts the interplay between the different concepts outlined in the theoretical framework. The interplay of the socio-cultural setting, environmental conditions as well as the past experiences constitute the basis of an individual's safety perception. The safety perception is in turn shaping the behaviour. In this research, the term behavioural choice refers to the participant's decision to avoid an area or not. An example of this is precautionary behaviour, where for instance an individual takes a detour to avoid having to walk along a dark street because of past experiences that make the person feel unsafe in this particular part of the city.
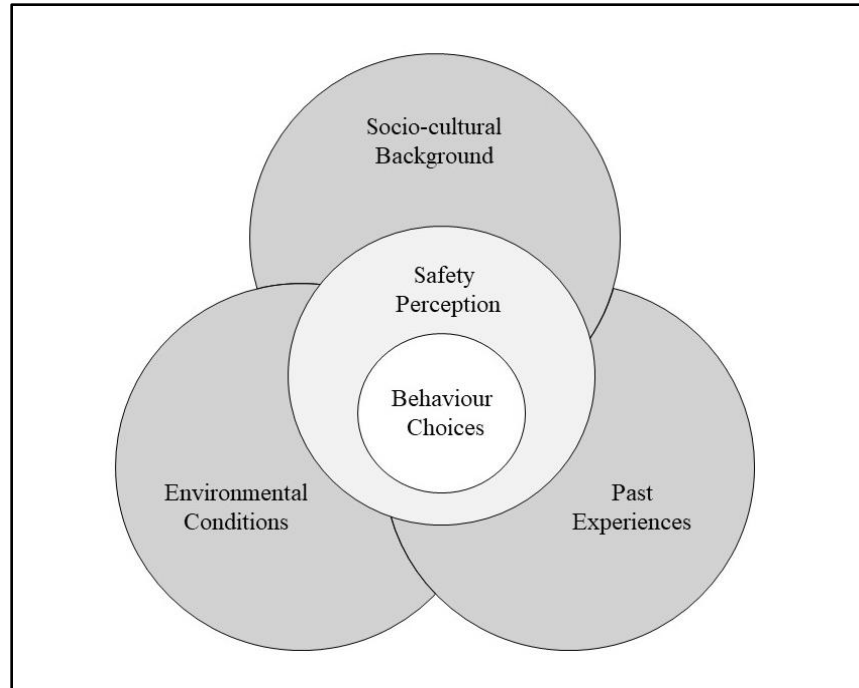
Figure 1. Conceptual model. (Own elaboration using *PowerPoint*, 2021)

3. Methodology

3.1 Study area

The spatial boundary set for this research is the city of Groningen. Around 25% of the 230.000 inhabitants are students and the city offers various social and cultural activities as well as a diverse nightlife (Groningen, 2021). Because of the large share of young residents, it is of interest to study the students' experiences of the city and their safety perception when participating in urban life. The whole administrative boundary of the city of Groningen is considered in this research. It is expected that most data will be collected in the inner-city because the area forms an activity hub. Here, many relevant university buildings are located, which many students attend on a daily basis. Furthermore, the inner city also includes the main shopping streets and a number of bars and restaurants that attract visitors. This provides a rich spatial setting to analyse the perception of safety.

3.2 Operationalisation

The following methodological model (Figure 2), illustrates the different steps used to reach the aim of this research. Inspired by previous studies (Koskela and Pain, 1999; Gargiulo et al. 2020; Tandogan and Ilhan, 2016), the research is based on a softGIS approach that combines spatial and qualitative data. This decision is made, since the purpose of this research is to analyse the experiences and perceptions of participants which is best captured through qualitative methods. In research concerning safety perception, it is crucial to study the individual experience in detail. For the data to be a true representation of the lived experiences, it is most effective if the participants can locate the places, they describe on a map rather than only think of the places in their head. Therefore, a survey is created with the software 'Maptionnaire' to collect spatial, qualitative data in a time period of three weeks (see Appendix 7.1).

Firstly, to identify the environmental factors of the built environment that impact feelings of safety, the research participants are asked to select unsafe places and routes on a city map of Groningen. Secondly, after each selection on the map, a list of questions appeared that the respondents are asked to fill out. The questions are aimed at documenting the participants' descriptions, perceptions, and choices of places, to gain a deeper understanding of their experiences of safety. Thirdly, two questions are asked to identify why they avoid/not avoid that particular place or route and what they think could be improved in the area. Fourthly, the questions: *What is your age? Where do you come from? Since when do you live in Groningen? How safe do you feel in Groningen with regard to the build environment?* are asked to gain a description of the respondents. Lastly, the respondents are able to add any information they deem relevant to the research and can provide contact information if they wish to receive the final research results.

The selection of participants is based on convenience sampling (McLafferty 2016; Longhurst 2016).[1] Since the sampling population is largely represented on social media, the Maptionnaire survey was uploaded to Instagram and Facebook. Besides that, the survey is also distributed among fellow student colleagues of the researcher. Additional snowball sampling helps to recruit more participants. The two survey questions: *Are you a student? Do you identify as female?*, ensures that the participants meet the sampling criteria of the research.

Using ATLAS.ti 8 and Excel, the data is analysed and interpreted with regard to safety perception, environmental factors, and behavioural patterns. The data is coded, organised in categories, and merged to represent themes in ATLAS.ti 8. Descriptive statistics are generated in Excel. The spatial data is transferred to ArcGIS Pro to create a visual representation of the unsafe places. Similar to the studies by Kyttä et al. (2013) and Gargiulo et al. (2020), previous research findings are utilized to compare established indicators of perceived safety and quality of the built environment with the collected data. To explore the relationships (1) different factors are identified that contribute to an unsafe perception, (2) the behavioural patterns are analysed, and (3) points of improvement of the unsafe areas are listed. The relationship between factors and behaviour choice is analysed with the help of the theoretical framework. This leads to the research result that explains how the safety perception of the built environment influences the behaviour choice of female students in the city of Groningen.

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[1] Despite convenience sampling being prone to volunteer bias, it is the best method to reach a wide audience. The previous decision to conduct walking interviews was abandoned due to constraints as a result of the COVID-19 pandemic.
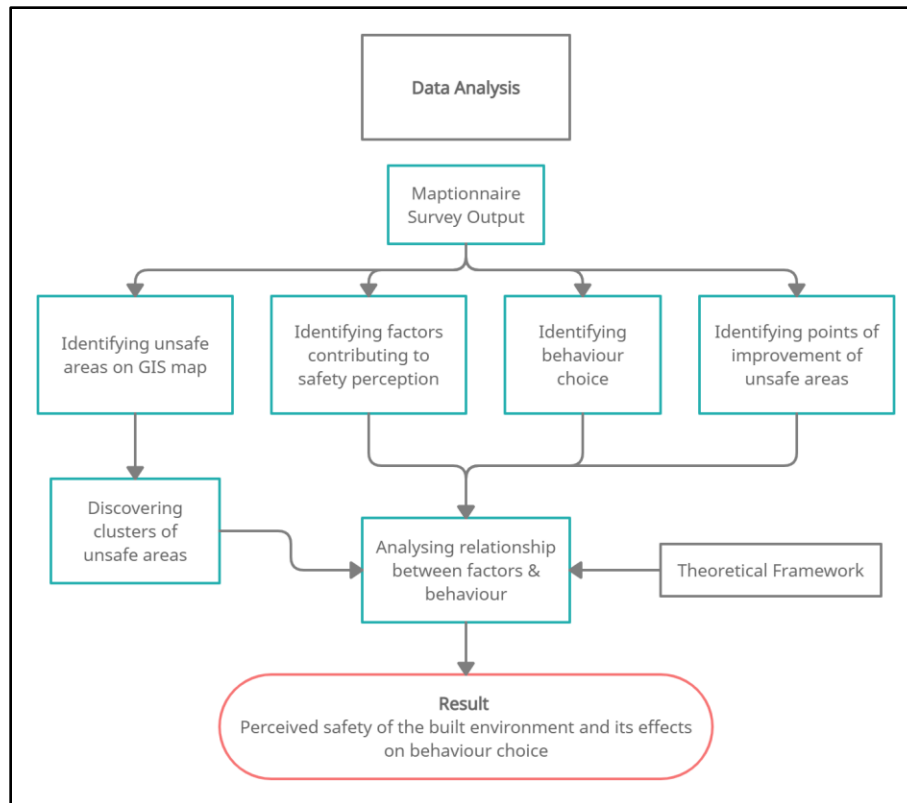
Figure 2. Methodological Model. (Own elaboration using *Creately*, 2021)

3.3 Ethical considerations

The research is guided by the principles of ethical behaviour (Hay, 2016). The concepts of justice, beneficence, and respect are considered in every step of the research.

Before the data collection, every research participant is asked to sign a letter of consent. The consent form outlines the content of the research, what data is used, how the data is stored, and the right of the participant to withdraw from the survey at any moment. Taking part in the research is voluntary and the questions in the survey are carefully formulated to not cause harm to the participants involved.

Once data is collected through the Maptionnaire survey, it is anonymized and cannot be traced back to the individual. This ensures that the identity and confidential information of the participant is protected.

The collected data is stored on an electronic device only accessible by the researcher. At the end of the research, all data provided by the respondents is deleted.

The research results are disseminated by submitting the research to the professors of the Faculty of Spatial Sciences at the University of Groningen. In the survey, the research participants are asked if they would like to receive the final results of the research. In that case, the results are sent to the contact information provided by the participant.

4. Results

4.1 Descriptive statistics

After three weeks of data collection, 84 people successfully filled in the Maptionnaire survey. Out of these 84 participants, 59 respondents fulfil the sampling criteria 'student' and 'female' in the city of Groningen and thus represent the sample population.
The average age of the students is 23 years old. With 79,7 % the majority of students are from abroad and only 15,3 % indicate that they come from the Netherlands, and 5 % from the city of Groningen. More than half of the students specify that they have lived/ are living in Groningen for longer than a year (66,1 %). Followed by 32,2 % having lived/ living in the city for up to 1 year.

4.2. Unsafe areas

Regarding the question of how safe the participants feel in Groningen, 83,6 % chose 7 or higher in a range from 0 to 10 (with 10 feeling very safe). This reflects that female students perceive the city as very safe in general. Nevertheless, the visualization of the Maptionnaire results in ArcGIS Pro (Figure 3) reveals that the participants selected 66 places and 33 routes in Groningen which they considered unsafe.
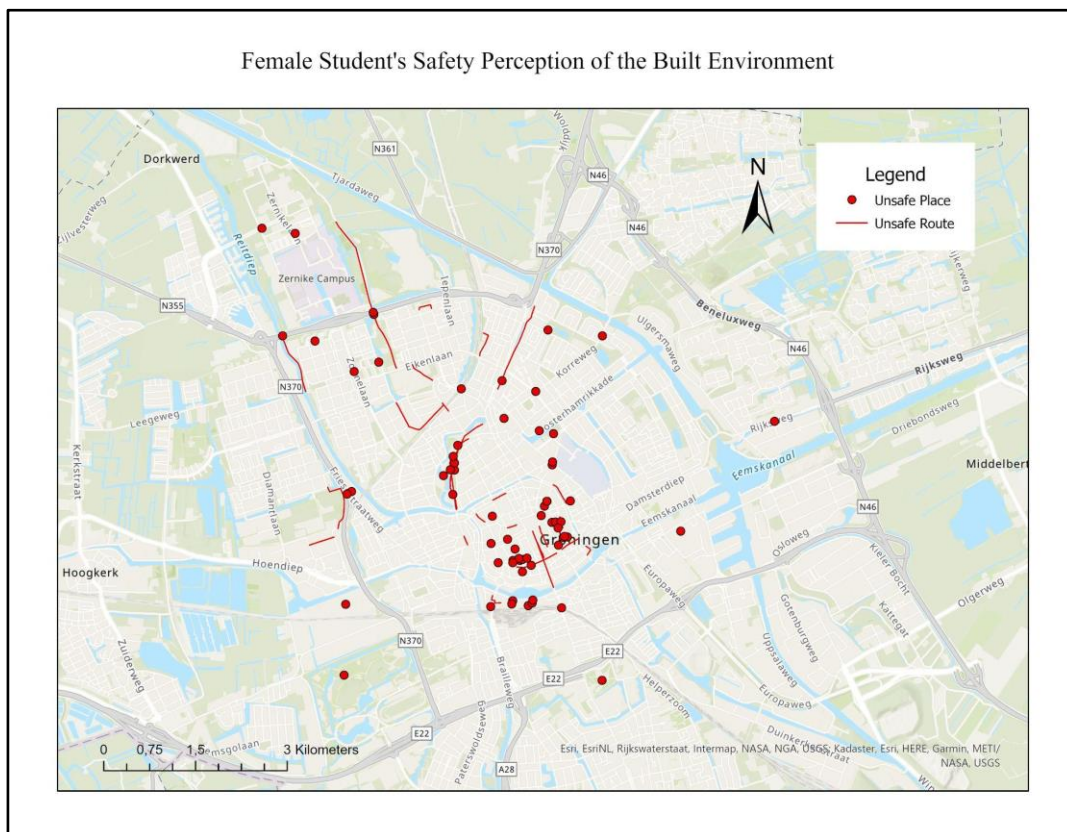

Figure 3. Selected unsafe places and routes (Own elaboration using *ArcGIS Pro*, 2021)
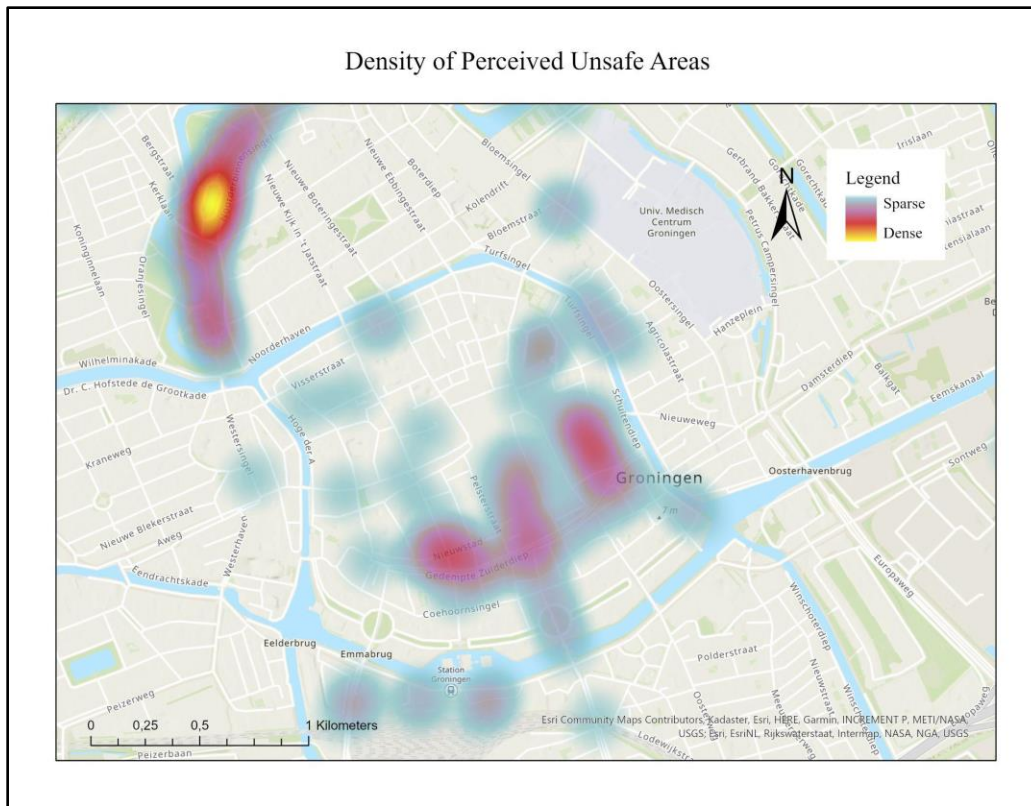
Figure 4. Density of perceived unsafe areas (Own elaboration using *ArcGIS Pro*, 2021)

Scrutinizing the map, one can identify several hotspots of unsafe places and routes (Figure 4) throughout the city of Groningen. The analysis of the participant's statements regarding each place and route showcases their concerns, behavioural choices and points of improvement (see Appendix 7.2).

The most prominent hotspot is located north-west of the city centre overlaying an urban public park, called Noorderplantsoen. All participants pointed out that they feel unsafe in this area especially during night-time as a result of the '*poor (or absent) public lighting*' (Response Place 57), as well as the '*dense vegetation*' (Response Route 28). These responses are consistent with the literature findings that highlight that dark, isolated, and dense woodland are factors that contribute to the development of fear. Moreover, several respondents mentioned the undesirability of the area due to the presence of '*[...] a lot of sketchy people [that] drink or do drugs*' (Response Place 54, Response Route 28). This links to findings by Gargiulo et al. (2020) and Koskela and Pain (1999) that reveal that certain physical environments are linked to specific social behaviour. In the case of the Noorderplantsoen, participants expected and observed anti-social behaviour from the people located there during night-time, triggering them to '*watch over [their] shoulder*' (Response Route 33) or '*not walk there by [themselves] at night and drive very fast on the bike when [they] pass this area [...]*' (Response Route 28). This shows how the perceived safety of an area has direct implications on the respondent's behaviour, prompting them to change their route or way of travelling to avoid possible danger. Other participants mentioned that *'[...] it is common for parks to feel unsafe especially because of the news that are related to them[...]'* (Response Place 56) '*[...] and because of stories that [the Noorderplantsoen] is not the most safe place at night'* (Response Place 54), which discloses that the students seem to fear the area not because of personally experienced violence but due to the communication via the news. The students adopt the perception displayed in the news and alter their

behaviour accordingly. This links to results by Gargiulo et al. (2020), which highlight that the levels of fear someone experiences are often related to the levels of exposure to news, stories, and experiences told by others.

The park is also associated with being '*empty [at night]*' (Response Place 56) and '*often quiet*' (Response Route 65), causing students to '*feel like [they] should be alert.*' (Response Route 33). These accounts link to research by Tandogan & Ilhan (2016), who uncovered that 'being alone' is a crucial factor in feeling unsafe. One student indicated that '*[she] would not walk there by [herself] at night. [...] because [she] feels helpless if something would happen [to her]*' (Response Route 28). This is an important result, showing that the presence of other people is in general desired over an empty space because it increases the likelihood of receiving assistance in case of need (Tandogan & Ilhgan, 2016). A striking comment was made by a respondent, stating that '*[she] would not walk through the park at night alone as a female.*' (Response Route 26). This unveils that the student makes a distinction between gender in terms of vulnerability and safety. The fact that she is female, seems to affect the participant in her decision-making process on how to use the urban space. As previously mentioned, women are often portrayed as the weaker sex and consequently considered more vulnerable to potential harm (Gargiulo et al. 2020). This also links to the phenomenon described above where high media exposure reproduces these stereotypes, influencing females in their own perception of safety and subsequently in their actions.

The three other noticeable hotspots are all located in the inner-city of Groningen. This spatial concentration was anticipated in the methodological framework of this research and is most likely due to the presence of relevant services and amenities in the centre.

The outermost right hotspot is surrounding the Peperstraat, a prominent nightlife street in Groningen. Environmental factors are frequently mentioned, with respondent's depreciation of the area because of '*buildings looking dark with closed windows*' (Response Route 11), '*the unmaintained feeling of the street*' (Response Route 11), and the inability to '*see the whole street*' (Response Place 17). This indicates that the participants are well aware of the built environment and judge the area based on its attractiveness and spatial layout. This confirms Shach-Pinsley's (2019) argument that the way a place is maintained has direct effects on the feeling of safety. A well-maintained place implies that people are involved in the area, are more careful in their actions, and want to contribute to a safe environment rather than a place that looks dirty and run-down. Interestingly, two participants point out that '*[...] during the day [the area] looks unwelcoming and the street is very closed off*' (Response Place 17) and '*during the night it is a very lively place, however during the day, it feels very abandoned*' (Response Route 9), these are unlike most statements made in other areas of the city. Rather than feeling unpleasant during the day, it is mostly the darkness during night-time that makes respondents feel unsafe in an area. However, this situation highlights that not only the time of the day but also the function of a place plays a role in assessing safety. This discovery can be linked to Jane Jacob's theory of 'eyes on the street', that promotes mixed-use of an area to increase social surveillance at all times. Instead of mixed-use, the Peperstraat mainly features bars and nightclubs that open in the evening, making it isolated and empty during the day and thus contributing to an unsafe perception.

Another frequently mentioned aspect is the narrow street design, making it '*a very crowded street*' (Response Place 8). Especially during night-time with the presence of '*many drunk people*' (Response Place 9), students state that they feel unpleasantly on edge. Unlike the example presented above, where students would prefer the presence of others over the emptiness of the park, the Peperstraat case reveals that not only the presence of people plays a role but also their state of being. The students feel overwhelmed by the amount of people and their often inappropriate behaviour, making this area uncomfortable for them.

Interestingly, the Peperstraat is under heavy surveillance with CCTV cameras which do not seem to improve the feeling of safety in the area. Possibly the cameras themselves evoke an unsafe feeling because they imply that the area is unsafe and needs to be video recorded.

The second hotspot is located to the west of the Peperstraat, overlaying the Herestraat. This street predominantly features commercial stores. The cluster is less dense than the previous ones, nevertheless the area demonstrates unsafe characteristics. Notably, a student mentions how '*walking late on the Herestraat after the shops close is uncanny- it's dead quiet and empty, so every other person makes me nervous*' (Response Route 17). This relates to the previously discovered concept of the function of a place. Opposite to the Peperstraat, which feels deserted during the day and lively at night, the Herestraat caters towards people during the day, but is isolated after shops close. In this case, the absence of people is considered eerie. The lack of social interaction and thus informal social surveillance adds to a growing feeling of unsafety in the area, making participants '*[...] take another route which makes [them] feel much more comfortable*' (Response Route 13) and '*[...] rarely walk alone [there] anymore [...]*' (Response Route 17).

The third hotspot in the inner-city is to the west of the Herestraat, overlapping the Nieuwstad Street. The area is known as the red-light district in Groningen (Red Light District Groningen, 2013). Participants' statements regarding this area focus in particular on social aspects. Students commented on the '*presence of shady people*' (Response Place 34), '*strange men standing around*' (Response Route 16), '*guys looking at you*' (Response Place 31), and '*the women behind the windows [that] seem very aggressive and don't want you to walk through this street*' (Response Route 16). This shows the relevance of studying the environment as an interactive system that sees neither the social nor the physical world as isolated from each other. As discovered by Kyttä et al. (2020), it is often the social nature of an area evoked by physical features that creates feelings of unsafety. In this case, the brothels of the Nieuwstad Street attract a certain predominately male group of customers. The social behaviour connected to the area is also reflected in '*slow car traffic that goes through this street*' (Response Route 16) to observe the women behind the windows. The participants perceive this social action as unpleasant and '*always have it in mind*' (Response Place 31). Whereas the customer group makes the students feel on edge, the presence of other people during the day, who did not seem to be customers made them feel at ease. This is an interesting result that relates to the previously identified concepts of eyes on the street. However, in addition this case reveals that not the sole presence of people is important but also their motive and interaction with the place.

Additionally, one can identify several smaller hotspots clustered throughout the city. One smaller hotspot is located further north above the Peperstraat (Figure 4) at the Martinikerkhof, a small urban park adjacent to a church building. The student's experiences at this location reinforce the concepts identified above. The statement '*there are no lights so it's very dark [and] most of the time there are shady people*' (Response Place 23) refers to the argument of perceived unsafety arising during night-time and the unpleasantness of certain types of people. At the same time, the notion of helplessness and vulnerability is touched upon, since '*the park is kind of hidden away from the Grote Markt, so if something would happen to you no one would really see it*' (Response Place 25).

Another area marked by participants is the main train station in Groningen located to the south of the inner-city, where three hotspots are clustered together (Figure 4). The area is considered especially frightful due to '*little light during day and nighttime*' (Response Route 14), '*weird people*' (Response Place 38), and '*because it's often quiet over there at night*' (Response Place 37). Quietness is a recurring factor that plays an essential role in the safety assessment of the participants. The quietness of an area suggests that less

people are present and makes one student feel that '*if [she is] in trouble it's up to [her] to handle it [...]'* (Response Place 40). The physical design of the station area underlines the unfavourable social setting with '*[...] graffiti on the wall [and] the path [being] kind of shielded away from the windows of the other building due to the highway that runs above the path. So if something would happen, no one would see it'* (Response Route 14). The theme of stories also appears again, highlighted by a student that '*[...] feels unsafe over there because [...] [she] heard a couple of bad stories.'* (Response Place 37) and '*due to a stereotype that it is unsafe in stations*' (Response Place 39). But not all participants base their judgement of the area on stories told by others. One student describes that '*[she's] been catcalled and shouted at, [and] followed out of [her] train.'* (Response Place 36). This first-hand experience has direct implications regarding her behavioural choices, prompting her to '*don't ever go past there if [she doesn't] have to take a train and [she] always [tries] to catch daylight trains with more people on them*' (Response Place 36).

4.3 Behaviour choice

After participants identified and described the areas they felt unsafe at, they were asked to specify whether they avoid or do not avoid that particular place or route. Figure 5 illustrates that with 45 % the majority of students only 'sometimes' avoid an area. This is followed by 25 % indicating 'rarely' and 22 % that 'never' circumvent an unsafe area. Only 8 % mention 'always' and none say 'often'.

The main aspects that influence the participant's behaviour choice were the time of the day, the presence of people, the mode of transport, stories told by others, as well as the need to pass through an area to reach a certain destination.

The behaviour choice of the participants whether to avoid an area or not strongly fluctuated between the times of the day. Statements such as '*I am only avoiding this place when it's dark*' (Response Place 23) or '*during nighttime, I try not to walk there all by myself*' (Response Place 29) reflect that especially at nighttime students strongly avoid an area that they would not necessarily circumvent during daytime. This verifies the argument by Tandogan and Ilhan (2016) that fear of crime sharply increases when it is dark.

Interestingly, the participants often point out the presence of other people, both in a positive and negative context. The participants see them either as helpful citizens that could give assistance in case of need, or the source of fear itself due to the people behaving anti-social. The students seem to judge the surrounding people depending on their appearance and the activity they are engaged in. This finding suggests that the participants try to read the situation despite them actually knowing the intentions and motives of the other people present. Confirming the findings by Gargiulo et al. (2020) and Tandogan & Ilhan (2016), the students translate the situation into an action that ensures their safety, reflecting an act of precautionary behaviour.

The mode of transport itself, as well as the speed of movement, also shapes the safety perception of the respondents. Cycling is considered safer than walking, with one student stating that '*[she] would cycle through [the park] but not walk through it at night alone*' (Response Route 26). Additionally, another student says '*on my bike I drive very fast when I pass this area [...]*' (Response Route 28), suggesting that she wants to spend as little time as possible in the area if it cannot be avoided.

A recurring aspect is also the concept of stories, news, and experiences about an area that are mediated by others. Instead of participants having unpleasant experiences themselves, they often rely on the accounts of others and base their behaviour on those stories. This becomes unambiguous by one student mentioning that '*[she] feels unsafe over there because [...] [she] heard a couple of bad stories.*' (Response Place 37).

Finally, an important factor is that participants cannot avoid an area because they have to pass through it to reach a certain destination. This can either be because there is no possibility to circumvent the area or a detour would take up more time. A common reason mentioned by participants was that they '*live nearby*' (Response Place 32).

However, as one respondent phrased it '*[the area] does not make me feel unsafe to the extent that I would actively avoid it*' (Response Place 34) which shows that there are differences in the level of experienced fear and subsequent behaviour choice.
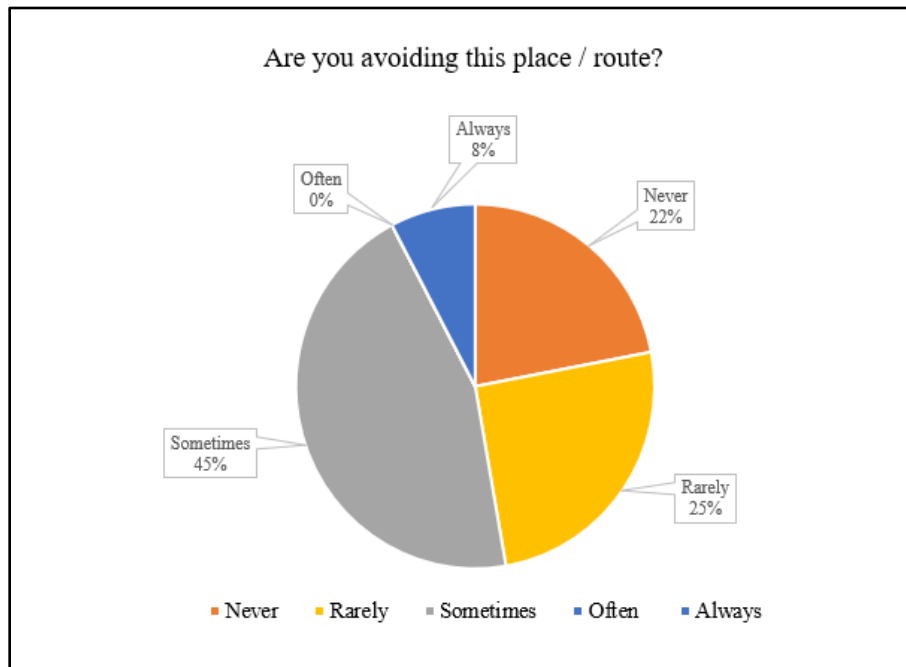

Figure 5. Maptionnaire Survey: Are you avoiding this place/ route? (Own elaboration using *Excel*, 2021)

4.4 Improving unsafe areas

After selecting and describing an area in the Maptionnaire survey, the participants were asked to suggest points of improvement that would enhance their feeling of safety at that location.

Some consistency could be identified in the responses. The main improvement mentioned by the students, for almost all areas, is the installation of more street lamps. Lighting facilities play an essential role in enhancing perceived safety and can function as a substitute for daylight (Gargiulo et al., 2020).

Another frequently expressed desire is to have '*[...] more people around in general*' (Response Route 26). This highlights the importance of social changes that can have greater influence on the safety perception than physical alterations alone, as argued by Koskela and Pain (1999). Linking to Jane Jacob's concept of 'eyes on the street', the presence of more people can create an informal surveillance network. In the case of the Peperstraat, allowing for a '*mixed function approach*' (Response Route 9) by introducing stores, restaurants, or cafes that open at various times, the street would never be completely empty, making it '*nicer to walk through*' (Response Route 9), and thus increase perceived safety.

Next to that, students are also in favour of direct control and surveillance through '*more police presence*' (Response Route 26) and '*police patrols*' (Response Route 28). Additionally, the installation of '*cameras*'

(Response Place 40) is considered favourable. This suggestion underlines the argument by Shach-Pinsly (2016) that CCTV services are beneficial in increasing the sense of safety. Furthermore, students also suggest changes to the built environment by removing '*[...] a lot of corners and walls for people to hide*' (Response Route 14) or '*less cars parking*' (Response Place 17) to ensure greater visibility.

5. Conclusion

The papers guiding research question was, how the safety perception of the built environment influences the behaviour choice of female students in the city of Groningen. Following the data collection, using a Maptionnaire survey, the respondent's answers were examined which revealed a pattern of unsafe areas. Interestingly, the majority of the participants agreed on factors that influence their safety perception. Several themes could be identified that contribute to a decision-making process of whether to avoid an area or not.

The most prominent theme was the presence of lighting facilities that positively influenced the feeling of safety in any area and was often mentioned as a point of improvement. This was followed by the presence of other people, under consideration of their appearance and behaviour, which can have either a negative or positive effect. In general, other people were viewed as helpful in case a dangerous situation arises. However, other people can be the source of danger itself, which is why the participants carefully observed the activities other people were engaged in. Another frequently mentioned theme was the function of an area and the subsequent usage. Differentiations could be made between areas that serve customers only at a certain time of the day or that cater towards people throughout the whole day. An example of a single-use area is a party district where bars and clubs only open at night, in comparison to a mixed-use area where stores and offices provide services throughout different times of the day. This research revealed that participants felt uneasy in single-use areas because at certain times they are quiet and deserted, whereas mixed-use areas promote the presence of people in the area at all times. The last theme consisted of the importance of stories and news broadcasted by others that shaped the participants' safety perception and their behaviour choice. This form of predefined association with the built environment, prompts the participants to circumvent the area, as a form of precautionary behaviour, without them having had any first-hand experience.

However, there are also differences in the individual perceptions and not all participants pointed out the same aspects in a certain location. This implies that the feeling of safety is subjective and relates to past experiences and personal background of the individual, which confirms the literature findings. Beside that, the majority of students indicated that they came from abroad, meaning that the data could be affected by unobserved cultural influences. Nonetheless, this research has proven that it is mostly the social aspects arising from certain built environments that make respondents feel uneasy and alter their behaviour, rather than the physical layout alone.

The themes presented above played a role in the decision-making process, however each theme had a different impact on the participant with regard to their behaviour choice. The subjective nature of safety perception highlights the difficulty to make general claims about the behaviour choice that arises from a certain environment. This also underlines the challenge for urban planners to adjust the urban landscape. The Wher App is a good example of an emerging project that accounts for the female perspective in urban planning. However, the App is based on female safety accounts, promoting the adoption of the perception and behaviour of others. This can create a safety paradox but also prevent participants to develop their own perception.

All in all, the research results support the findings of previously established literature and provide new information to better understand safety perception, the built environment, and behaviour choice. Furthermore, it would be intriguing to conduct the same research on female safety perception in Groningen after one year, to analyse possible changes in the factors contributing to an unsafe feeling. Next to that, it would be of interest to observe the changes in perceived safety, if the respondent's suggestions for improving the unsafe areas would be realized.

Moreover, this research provides the basis for further investigation of safety perception and the built environment. For future academic research, it would relevant to analyse how the perceived unsafe places correspond with actual crime data. Furthermore, it would be intriguing to examine whether a perceived safe public area also contributes to a safer domestic setting within households or if public and private feelings of safety are untwined.

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7. Appendix
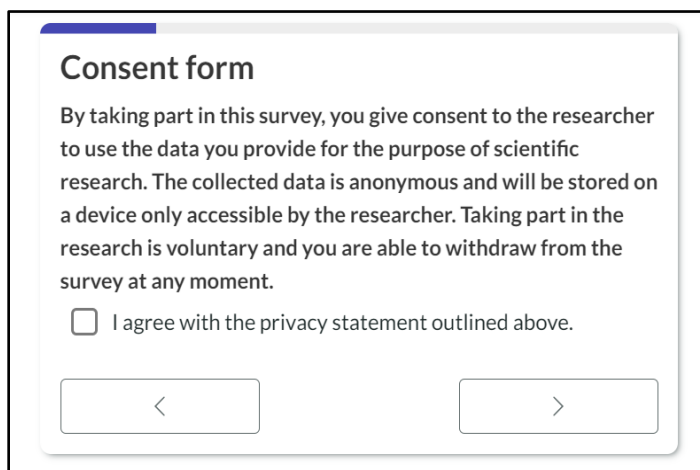
7.1 Maptionnaire Survey

7.1.1 Introduction

7.1.2 Consent Form

7.1.3. Safety

7.1.4. Safety Perception, placing a pin and/or drawing a route

7.1.5 Follow-up questions about place/ route

7.1.6 Residence

7.1.7 Origin

Origin

Where do you originally come from?

○ The city of Groningen

○ The Netherlands

○ Abroad

7.1.8 Age

Age

How old are you?

− | 0 | +

7.1.9 Occupation

Student

Are you a student (at a university/ university of applied sciences)?

○ Yes

○ No

7.1.10 Gender

Gender

Do you identify as female?

○ Yes

○ No

< >

7.1.11 Additional information

Additional information

Do you have anything you wish to mention that you think is relevant for this research?

If so, please write it down here...

< >

7.1.12 Contact Information

Contact details

If you wish to be informed about the final outcome of this research, you can provide your contact details.

Please indicate your email address here...

Share on Facebook   Share on Twitter

Share on LinkedIn

< Done!

7.2 Response Table

7.2.1 Unsafe Place

Response Number	Response
1	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and the mode of transport influence your safety perception)","response":"Really dark"},{"question":"Are you avoiding this location?","response":"Never"},{"question":"Why do you avoid/ not avoid this location? ","response":"Its my quickest route home so I can't really avoid it."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
2	[{"question":"Why do you feel unsafe on this location? (include how the time of the day and the mode of transport influence your safety perception)","response":"There are a lot of strange people lurking in the area, there are a lot of fields, deposits and strange buildings which are not well maintained and make me feel unsafe when I pass by. There is also the highway nearby which makes it even less appealing to walk around."},{"question":"Are you avoiding this location?","response":"Always"},{"question":"Why do you avoid/ not avoid this location?","response":"I feel generaly unsafe with both the people and the place. It hurts me to know that I cannot avoid this area anymore (as I work and live near IKEA). I'm scared and have to call somebody to pick me up or I'm calling my parents on videoclipul whenever I'm in the are just to make sure that the dubious people that are spending their time there won't attack/rape/cat call me."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
3	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and the mode of transport influence your safety perception)","response":"evening"},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location?","response":"When I would avoid this location I would cycle longer distance"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"lamps"}]
4	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Long silent road"},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"It's a main road"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
5	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I was walking with my bike at 1am and was approached by a man who wanted to follow me home. I realised then how rarely people actually use this street. "},{"question":"Are you avoiding this location?","response":"Never"},{"question":"Why do you avoid/ not avoid this location? ","response":"Its my quickest route home so I can't really avoid it."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]

6	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I always hear bad news about thsi area. For example: people are getting stabbed, robbed etc"},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"The place is very dark and there are less people walking around it at night. Sometimes, there are group of men, who seem to be using drugs together, walk around and make such loud noises. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Probably put more lamps and have more patrol officers."}]
7	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Alleen naar huis lopen snachts vanaf het stappen, wanneer het erg rustig is en er alleen maar daklozen lopen. "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"Als ik zie dat er weinig mensen zijn/ alleen daklozen dan loop ik liever om. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
8	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Very crowded street no space"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"Agoraohoabia"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
9	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Too many drunk people at night, so hard to pass the road and to feel safe they are ok.."},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"Drunk people"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Less people, more safety from the club owners outside their clubs.. but also more police cars to pass by"}]
10	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I've been threatened by a group of 10 teenagers in the past on this location. This was around 10 years ago"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"It's dark at night, and drunk people can do things unnoticed"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More street lamps or more social control"}]
11	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Night-time, poor lighting and poor circulation "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"Above reasons "},{"question":"What would improve

	your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More street lamps"}]
12	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"scary young men who bother you and taunt you at night/late evening time when walking"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"Men"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More light and police "}]
13	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Night cycling by bike"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
14	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Based on a rather harmless encounter one night. It was really not dramatic and nothing happened but I recurrently see the people I have encountered that night and just try to avoid them. They were not dangerous, they just made me feel uncomfortable via some things they shouted after me and following me for a bit. Another time, someone shouted racial slurs at me, so I just am more cautious."},{"question":"Are you avoiding this location?","response":"Never"},{"question":"Why do you avoid/ not avoid this location? ","response":"I used to live in the Korrewegburt and overall feel very safe in the area. So I do not avoid it, I am just more cautious walking down that street."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Nothing over there. I do think overall that there could be more/more luminous streetlights in some areas in GRO"}]
15	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"One day I was sitting at the stairs to Jumbo and I saw a guy masturbating there. I went to the police etc but apparently, there are no cameras there=no proof. I also spoke to the shop assistant in Jumbo and she said that it happens PRETTY OFTEN in this location, but no one really does anything about that."},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"It is the only Jumbo that accepts visa cards and it's the closest one to my house. Also, I don't really feel attacked, just disgusted."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"maybe security cameras there?"}]

16	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"It is dark without oversight for a pedestrian"},{"question":"Are you avoiding this location?"},{"question":"Why do you avoid/ not avoid this location? "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
17	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"A lot of drunk guys go there to relief themselves at night. Also during the day it looks unwelcoming and the street is very closed of."},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"drunk people, cannot see the whole street"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"more police at night, less cars parking there so I can see the whole street"}]
18	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"There's a mental institution next to this park. Often junkies and other weird people can be found in the forest. Also a cop was heavily assaulted in this area "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"I don't ever come here alone at night."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"I don't think anything can be changed when it comes to street lamps of changing vegetation bc of the bats that also live in the forest. They are an endangered species."}]
19	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Dark, empty."},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
20	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Building design"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"Dark"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Street lamps"}]
21	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Need I say anything about the Peperstraat, just poorly organized, crammed, people behave like animals, got dragged into a fight once and the police just stared as nothing was happening"},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"Because it ruins my night out and makes me feel like I would end up hurt"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"The police just has to do their job more than just stare up from their horses"}]

22	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Vindicat building. I used to pass it on the way home and witness inebriated groups spill out, horsing around rather violently on occasion. Now I live within hearing distance of it and sometimes hear screaming and chanting (hazing rituals? Was that time of year) and regular loud party sounds."},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"At night you never know if that building will spew out a portion of drunk frat bros."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Vindicat's practices are the issue, not the place. Aside from that, Grote markt is generally fine: well-trafficked and well-lit."}]
23	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"There are no lights so it's very dark. Most of time there are sitting shady people. It's kind of hidden so if something happens, people wouldn't notice. "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"I'm only avoiding this place when it's dark"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
24	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"(During the night only) \n(Walking only)\nNot many people are often there as not many houses are built in this street. Plus, one time a guy started screaming at me in the night and verbally harassing me. "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"To avoid being harassed again. To avoid weird people."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More street lamps, more houses. Creating a nice walking path like the one on the other side of the canal which has become more trafficked by locals during the night for night walks. "}]
25	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I don't go to this area during day or night time because a lot of shady people meet here. They drink alcohol or use drugs. That is why I do not go to this park to rest or cross it. Also the park is kind of hidden away from the Grote Markt, so if something would happen to you no one would really see it. That's why I think this park is scary."},{"question":"Are you avoiding this location?","response":"Always"},{"question":"Why do you avoid/ not avoid this location? ","response":"Shady people and also little light during night time. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Less shady people. More police patrols. "}]

26	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I hear on the news that things always happen in Korreweg and the truth is that I'm afraid of being in the dark in that area.\nI am always in my bike"},{"question":"Are you avoiding this location?","response":"Never"},{"question":"Why do you avoid/ not avoid this location? ","response":"I study dutch in that area"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"It is very dark in the evening. Maybe more lights"}]
27	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"When I lived there two people got killed near my house during the night so I would never come home late at night after that"},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"I don't go there much anymore, but I don't mind it during the day"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"I think there should be more light all along the Korreweg and around the public spaces there (around Floresplein) "}]
28	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"At night/ in the evening I feel unsafe biking there "},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"because of the number of young boys that hang out there "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Im not sure - I mostly feel unsafe because it's secluded from the city center"}]
29	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I felt unsafe at night when I arrived by train back in Groningen. I never felt unsafe on my bike but when I was walking I felt unsafe. Since I always arrived with luggage I didn't bring my bike to the train station so I always had to walk when I came back to Groningen. "},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"In the daylight I don't avoid this location as there are many other people around and it's not that scary. During nighttime I try not the walk by there all by myself."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More street lights"}]
30	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Lots of drunks and junkies throughout the night"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"There are alternative, more comfortable routes"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]

31	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I've been a couple times in this area when it's dark but don't like te come here again. It's the street where the women are behind glasses en shady guys looking at you. During the day it's fine but you alway have It in mind."},{"question":"Are you avoiding this location?","response":"Always"},{"question":"Why do you avoid/ not avoid this location? ","response":"I feel really uncomfortable in this street"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
32	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"There are sometimes sketchy people, who say things to me like: hi/goodmorning/oid"},{"question":"Are you avoiding this location?","response":"Never"},{"question":"Why do you avoid/ not avoid this location? ","response":"I live nearby"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"I don't really know.. maybe more police control?"}]
33	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"There's many problems with drug dealers and junkies in this street. I've been threatened with my life serval occasions, was beaten by a dealer, and others in this street have had their windows thrown in or even have had a gun to their head."},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"Only in the evening bc police won't come in time and I don't feel like getting my ass kicked again. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Permanent camera supervision, more police in the street."}]
34	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Presence of \"shady\" people. This is an issue when walking or cycling."},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"It does not make me feel unsafe to the extent that I would actively avoid it."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"As the unsafe feeling is primarily related to people, I think there is no spatial solution."}]
35	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Safety. Lots of drunk people. "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"If I'm alone I would avoid walking through it. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]

36	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I've been catcalled and shouted at, followed out of my train"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"I don't ever go p[ast there if I don't have to take a train and I always try to catch daylight trains and with more people on them (I check the NS app)"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More surveillance and light for sure"}]
37	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"At night I feel unsafe over here because it's often quiet over there at night, and I heard a couple of bad stories "},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"Because sometime it's necessary for me to go by "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"I think more street lamps will already feel more safe "}]
38	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"This is a quite area around night time. "},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"Because a lot of weird people are sometimes locating at this area. People speak to you or approche you. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"more police that check this area maybe "}]
39	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Due to a stereotype that it is unsafe in stations"},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"Not avoid because I need to travel"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More personnel early in the mornings"}]
40	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Any time a day I feel unsafe at the translation due to the huge amount of people there. Also I have noticed some suspicious individuals who tend to be aggressive, not respect personal space and are offensive."},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"I avoid passing through there at night especially, because there are less people and I didn't notice any cameras or guards there, so if I am in trouble it's up to me to handle it, and can't ask for help."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Maybe more cameras and a guard. Also the guards should be allowed to ask suspicious people what they are doing at this location (politely). "}]

41	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"When it's dark there are always boys hanging around and calling at you. During the day it's fine. I only go through this street with my bike."},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"I feel unsafe as a girl bc I don't know What the boys will do"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
42	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Zuiderdiep is a quite and weird location at night. A lot of drugdeals happen in this area. I only go there when im biking, not when im walking. "},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"See the question above."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Again more checking of the police in this area. "}]
43	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Weird people doing weird things "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"M'en look at me funny"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
44	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Man met een mes voor mij op de fiets rond 22;00."},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"Ik vermijd de plek niet "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Die man van de straat halen. "}]
45	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Cycling back home i the night from city through Noorderplantsoen to Paddepole is very dark and full of strangers in bush on benches"},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"It is the shortest route, hence, to save time "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More lamps "}]
46	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I have encountered racism in this neighborhood when I rode a bicycle through it."},{"question":"Are you avoiding this location?","response":"Always"},{"question":"Why do you avoid/ not avoid this location? ","response":"To avoid potential assaults "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Less vegetation, more video cameras "}]

47	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"During daylight I feel a bit unsafe under this bridge because it is quite dark and there are no street lights. In the evening I have seen strange people meeting there. Also there have been news articles about stabbing happening there. "},{"question":"Are you avoiding this location?","response":"Never"},{"question":"Why do you avoid/ not avoid this location? ","response":"It is the quickest way to and from university. Other routes would take way longer. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Brighter lights under the bridge. "}]
48	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I felt unsafe here when there was this incident that the jogger was killed by a man that was on the run. I was never here during nighttime and always on my bike, but still felt unsafe."},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"I avoided it at the time of the incident and the time period afterwards but after a year or so I didn't avoid it anymore."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More street lights, more buildings, more people"}]
49	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Poor light in tunnel"},{"question":"Are you avoiding this location?","response":"Never"},{"question":"Why do you avoid/ not avoid this location? ","response":"Important road to zernike"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
50	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"There is no lighting in this tunnel, so it is very dark. At night I avoid cycling through this tunnel. Also the cemetery next to the tunnel gives it an unsafe feeling. I would not want want to walk there by myself. During daylight this area feels safe because a lot of other people use this route to get to Zernike, but at night it is pretty deserted. "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"At night when there are only few people around."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Lights in the tunnel."}]
51	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I live there and a lot of people's car's windows got smashed in the past few months, also men setting our bins on fire or putting firecrackers in the bike tunnel"},{"question":"Are you avoiding this location?","response":"Never"},{"question":"Why do you avoid/ not avoid this location? ","response":"Can't avoid it, I live there"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less

	vegetation, etc.)","response":"We definitely need more light and maybe more surveilance"}]
52	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"A man harrassed me, I was cycling back home on a saturday night. He followed me from Noorderplantsoen all the way to Ebbingestraat "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"At night after the bad experience "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Maybe more police"}]
53	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"At night, the park feels really scary with a few suspicious people"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"I avoid going to the park alone at night"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
54	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"At night, sometimes there are sketchy people"},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"At night lighting is not the most clear and because of stories that it's not the most safe place at night"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More street lamps also in the smaller paths "}]
55	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Noorderplantsoen isn't a nice place at night. I don't feel really safe in this area at night."},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"Because there are a lot of shady people in this area at night. Sometimes people will literally hide in the bushes or approche you when you are alone. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Checking this area more often by the police. "}]
56	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I think it is common for parks to feel unsafe especially because of the news that are related to them. The higher density of vegetation and dim lighting add to that. "},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"When it is late and it's empty it feels unsafe"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]

57	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Poor (or absent) public lighting"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"I avoid it when it's dark outside and in the night because there is no lighting"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
58	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"The Noord station of Groningen feels isolated. Walking home from there when it's dark doesn't feel safe."},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"It's isolated"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"enabling more trains connections there; building more lamps; creating a proper station square (for trains - not just for trams), giving it the right space, and making it become more \"official\", so that more people, more taxis, more cars can be around"}]
59	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"When I'm coming back to Groningen and it's dark this is always a dark and shady place. The parkinglots are all dark so I always feel I should bike very fast"},{"question":"Are you avoiding this location?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this location? ","response":"I'm avoiding this location when it's dark"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
60	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"I used to live there in my first year. Poor lighting, bad road and no other civilization in sight "},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"I don't live there anymore but when I did, I couldn't avoid it. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"Better lamps for the start. "}]
61	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Stadspark doesn't make me safe by night. Only by night. \nBoth walking and cycling. \n"},{"question":"Are you avoiding this route?","response":"Often"},{"question":"Why do you avoid/ not avoid this route?","response":"From what I've heard it's not a safe place to be, it's often dark, so I always avoid it by night."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More lamps, more cops around"}]

62	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Usually early evening, walking by\nFelt unsafe because men would shout at me and my girlfriend or just shout while crossing the street by myself"},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"I got hatecrimed there a few times"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"I think it's just the people in the area"}]
63	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"At night, sometimes the fraternity house members hang around there very drunk. I don't like to walk past them alone"},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"The fraternity guys hang out around there when they have big parties and events and they're always quite drunk and in large numbers. It's a main street I use often though, and the guys are not always there so I don't often avoid it."},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"If the fraternity guys would not hang around in a huge group all drunk"}]
64	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"i have been aggressively called out for kissing"},{"question":"Are you avoiding this location?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this location? ","response":"feel like it could happen again"},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
65	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"Because of the bad lighting "},{"question":"Are you avoiding this location?","response":"Often"},{"question":"Why do you avoid/ not avoid this location? ","response":"Because at night it's often quiet at this place and because of the bad lighting "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)"}]
66	[{"question":"Why do you feel unsafe at this location? (include how the time of the day and mode of transport influence your safety perception)","response":"There are often sketchy people meeting under this bridge. Also often teenagers that spray graffiti on the wall. I feel unsafe cycling through the tunnel especially when it is dark outside. Also people cycle really quickly through this intersection, so I almost had a few bike accidents at this location. "},{"question":"Are you avoiding this location?","response":"Never"},{"question":"Why do you avoid/ not avoid this location? ","response":"It is the quickest way to my gym. "},{"question":"What would improve your feeling of safety at this location? (e.g. more street lamps, less vegetation, etc.)","response":"More light at both sides of the tunnel. The tunnel itself has lighting but when you enter/ excess the tunnel there is a lot of vegetation and it is also quite dark at night. "}]

7.2.2 Unsafe Route

Response Number	Response
1	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"It's often empty and I've heard bad stories about the Paddepoel area. \nI never avoid it by day, I just don't fancy going there by night. \nCycling feels safer than walking."},{"question":"Are you avoiding this route?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this route?","response":"The area close to the train ways is not trafficked and there are no \"side escape routs\""},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)"}]
2	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"unsafe at night"},{"question":"Are you avoiding this route?","response":"Often"},{"question":"Why do you avoid/ not avoid this route?","response":"Scared of getting jumped at / attacked"},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"more street lights "}]
3	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Not much lighting at night and many corners where you can't see what's coming"},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"I used to run there but when it got dark I stopped"},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More lights and better visibility around corners"}]
4	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"This street feels unsafe because it looks not well-maintained. The houses look a bit run-down and guys have been cat-calling me. There are also some dark corner where people could hide. "},{"question":"Are you avoiding this route?","response":"Often"},{"question":"Why do you avoid/ not avoid this route?","response":"A friend used to live there so I could not avoid this street when I visited her. But now I do not go there anymore."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"If the street would be more well-maintained. Place light in dark corners of the street. "}]

5	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"It's a quite neighborhood on the edge of the city with dim light. I normally feel safe but late at night it can feel creepy because there is no night life and sometimes I would see a man or two on the street, which makes me feel unsafe. "},{"question":"Are you avoiding this route?","response":"Never"},{"question":"Why do you avoid/ not avoid this route?","response":"It was the street going to my apartment so I couldn't really avoid it, but I would walk/cycle fast past it. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More lamps "}]
6	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Drunk people from the clubs. Nothing happened to me personally, but I'm aware of other women being harassed there. Also, it's narrow with little room to maneuver, especially when transport passes by."},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"Have no desire to be catcalled or worse. That said, I rarely go out at night these days "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Wider pedestrian sidewalks, so I can steer clear of rowdy groups without being hit by a bus"}]
7	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"I feel unsafe in this route when I'm walking at night because the street is narrow, with poor lighting. During the day it can get unsafe when you cross with someone who is riding a bicycle, as there is no space for both to follow a course."},{"question":"Are you avoiding this route?","response":"Always"},{"question":"Why do you avoid/ not avoid this route?","response":"Because it makes me feel unsafe. I used to live near this route and back then I couldn't always avoid it. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Better lighting"}]
8	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"At night it can be very busy there and it's a small street and sometimes feels a bit sketchy at night."},{"question":"Are you avoiding this route?","response":"Never"},{"question":"Why do you avoid/ not avoid this route?","response":"I rarely have to go through there so I don't have to consiously avoid it."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Clean up the buildings to make them a bit nicer, and more street lamps."}]

9	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"This is the party street in Groningen. During the night it is a very lively place, however during the day, it feels very abandoned. "},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"I don't necessarily avoid this street, but it does feel eerie to walk through it, so I often take another route. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"I think if there were restaurants or shops on this street that would be open during the day, it could be nicer to walk through. So a mixed function approach. "}]
10	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"A very strange dead-end street that looks very run-down. I have seen it cluttered with trash and bins. I don't go into the street but I regularly pass it and it doesn't feel nice. It seems like a dirty place and there could also be people hiding there. "},{"question":"Are you avoiding this route?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this route?","response":"During day time I feel safer there because there are a lot of other people using the adjacent street. But during night time I try to walk not too close to the entrance of that dead-end street."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More lighting in that dead-end street and also a more well-maintained environment by e.g. cleaning the trash"}]
11	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Very unpleasant street. The buildings look dark with closed windows. Especially at night time I don't like being there because it is dark and people use this street to take drugs."},{"question":"Are you avoiding this route?","response":"Often"},{"question":"Why do you avoid/ not avoid this route?","response":"Especially at night due to the shady people and the unmaintained-feeling this street has."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"If the houses would look less dark and sketchy. Less people taking drugs there. "}]

12	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"This route leads to the forum, which is a popular destination I often visit. I feel a bit unsafe because of the people that hang around this area. However, I recently discovered that one of the buildings is a place where homeless people can find a place to sleep, so I have more compassionate for these people. It's also not the nicest street to walk through because it's pretty dark in comparison to other streets in Groningen. "},{"question":"Are you avoiding this route?","response":"Often"},{"question":"Why do you avoid/ not avoid this route?","response":"I tend to avoid this street because the people that hang around this area make me feel a bit on edge. I sometimes get the impression they want to interact with me, and I would rather not get into some kind of confrontation when I'm just walking to the forum."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"I think if more people e.g.students would walk through this street, I would feel less unsafe. "}]
13	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"The people that are hanging around there "},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"Because I also can take another route which makes me feel much more comfortable "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More street lamps"}]
14	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"This area feels very unsafe because there is little light during day and night time. Also there is graffiti on the wall and few other people around. The path is kind of shielded away from the windows of the other buildings due to the highway that runs above the path. So if something would happen, no one would see it."},{"question":"Are you avoiding this route?","response":"Always"},{"question":"Why do you avoid/ not avoid this route?","response":"I am always avoiding this route because I am afraid I might run into unpleasant people. Also if something would happen to me there, I feel like no one would be there to help me."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Better lighting and more eyes-on-the-street. Greater visibility because at the moment there are a lot of corner and walls for people to hide."}]
15	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"cycling late at night"},{"question":"Are you avoiding this route?","response":"Never"},{"question":"Why do you avoid/ not avoid this route?","response":"way home"},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)"}]

16	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"I never use this street because there are strange men standing around there. Also the women behind the windows seem very aggressive and don't want you to walk through this street. "},{"question":"Are you avoiding this route?","response":"Always"},{"question":"Why do you avoid/ not avoid this route?","response":"Because of the strange men. And also the slow car traffic that goes through this street. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Less strange men standing around and looking at the women. "}]
17	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Walking late on Herestraat after the shops close is uncanny - it's dead quiet and empty, so every other person makes me nervous."},{"question":"Are you avoiding this route?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this route?","response":"I rarely walk alone anymore and don't need to go back home via this street."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"I don't think anything can change as long as it remains a shopping enclave."}]
18	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Have gotten catcalled on it and find the businesses very sketchy on this street. Mostly feel unsafe during the daytime and never walk on the street. "},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"I think there are nicer feeling streets nearby to get to where I am going"},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Less bars?"}]
19	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"This is a very empty and quite part of the city. Especially at night time I don't like to cycle here because I feel very alone. I would not walk here on foot."},{"question":"Are you avoiding this route?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this route?","response":"I cycled there a lot because it was my way home and there was no other way around it. But now that I moved somewhere else I don't go there anymore. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Presence of other people"}]

20	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"It is covered because the rail route is above it. There is enough lighting tho, but sometimes there are graffiti and nobody around and if you are going there from the streets from the right and left (so not straight on from the park) you cannot see if somebody is standing in the tunnel (so the person would be right behind the wall and can attack immediately as you turn)"},{"question":"Are you avoiding this route?","response":"Never"},{"question":"Why do you avoid/ not avoid this route?","response":"I have to cross the rails and there is a tunnel on every crossing so I would not avoid it anyhow."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Cleaner walls on the tunnel, but honestly, I do not think there is much to be done about it. "}]
21	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"During the night when you cycle there then there can be some weird gangs hanging around in the dark. "},{"question":"Are you avoiding this route?","response":"Often"},{"question":"Why do you avoid/ not avoid this route?","response":"Once the gangs were even blocking the way and it sounded like shooting sounds coming from them so I turned around to take a safer route. After that incident I have not dared to take that route again. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More lighting. More \"eyes on the street\"."}]
22	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"It is missing proper lights.... I think there might be some in the beginning of the street but further on not. I do not go there often, especially in the night so I am not sure."},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"It is just dark in the middle of nowhere. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Surely more lamps. "}]
23	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"When it's dark, especially in the evening or night, it does not feel safe at all due to a very poor lighting and absence of people. I feel very unsafe while cycling and I would never decide to walk on this root when it's darker. "},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"I don't avoid it often because it is the shortest way to get to the university and also because most of the time I cycle on this root when it's not dark and when a lot of other students cycle there too."},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Definitely more street lamps. I don't think there is really other way to make it feel more safe. "}]

24	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"I feel unsafe on this root only when it gets darker because It is pretty isolated from homes, streets, and other people, so most of the time when you cycle or walk there, you are probably the only one. The lighting is there, but because of the bis amount of vegetation around and the feeling of "isolation", it does not really make it feel more safe. "},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"I don't avoid it when it's light because it's a shortcut. But I try to avoid it when it's darker and when I walk. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Maybe stronger lamps, but I don't think it will improve the feeling of safety. "}]
25	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Walking alone during the night "},{"question":"Are you avoiding this route?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this route?","response":"I do not avoid it because it's the closest bus stop from home"},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More street lamps"}]
26	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"During the daytime it's fine, but I would not walk through the park at night alone as a female. I would cycle through it, but not walk through at night alone."},{"question":"Are you avoiding this route?","response":"Rarely"},{"question":"Why do you avoid/ not avoid this route?","response":"Some people hang out there and drink/get drunk. I've also heard drug dealers go there at night. There are lights along the main path, but other paths are very dark at night and the park is pretty empty at night so makes me feel vulnerable"},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More police presence, banning alcohol there after a certain time, better lighting, more people around in general"}]
27	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"very dark at night"},{"question":"Are you avoiding this route?","response":"Never"},{"question":"Why do you avoid/ not avoid this route?","response":"I have to bike there, cannot avoid it"},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"brighter lightd"}]

28	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Especially at night this area feels unsafe. There are a lot of sketchy people meeting there. They drink or do drugs. I would not walk there by myself at night and on my bike I drive very fast when I pass this area, but if I can I try to avoid it. "},{"question":"Are you avoiding this route?","response":"Often"},{"question":"Why do you avoid/ not avoid this route?","response":"Especially at night I am avoiding this area because I don't want to run into weird people. The lighting is not very good and the dense vegetation make this area unpleasant. Also at night there are few other people, or eyes-on-the-street, so I feel helpless if something would happen to me. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"Better lighting, more police patrols. "}]
29	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Feels deserted. There are not many people around during day or night time because it is mainly industrial buildings. I would not want to walk there but cycling is fine. "},{"question":"Are you avoiding this route?","response":"Never"},{"question":"Why do you avoid/ not avoid this route?","response":"Its is the quickest way to my gym. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More people but that seems difficult considering that this is an industrial area. There is street lighting but it is just very silent."}]
30	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"I feel unsafe on this route especially when it's dark because the street lights are broken. Also the route is right next to the highway without any fence in-between which creates an unpleasant environment. However, at least people can see you from the highway, so you are not completely shielded away when cycling there. Only few people use this cycling path, so I feel lonely there. Sometimes I see sketchy people walking around there. I would never walk there alone but cycling is okay."},{"question":"Are you avoiding this route?","response":"Never"},{"question":"Why do you avoid/ not avoid this route?","response":"It is the quickest way to my gym. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"If the street lamps would be fixed and provide sufficient light. "}]
31	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"Only after dawn, there are many sketchy people using N2O. "},{"question":"Are you avoiding this route?","response":"Never"},{"question":"Why do you avoid/ not avoid this route?","response":"Cause I don't expect to get murdered. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)","response":"More streetlamps, creating a specific ban in that street to park a car and use N2O. "}]

32	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"At nigh time this street feels a bit unsafe because it is very quiet. A parking garage near-by also makes this part unpleasant. "},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"I only avoid it sometimes when I prefer to cycle through busier, livelier streets. "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)"}]
33	[{"question":"Why do you feel unsafe on this route? (include how the time of the day and the mode of transport influence your safety perception)","response":"When it's dark or after A party i don't Like to bike alone through the noorderplantsoen. I always feel like I have to watch over my shoulders"},{"question":"Are you avoiding this route?","response":"Sometimes"},{"question":"Why do you avoid/ not avoid this route?","response":"I feel like I should be to alert "},{"question":"What would improve your feeling of safety on this route? (e.g. more street lamps, less vegetation, etc.)"}]