

Cycling Experiences of Non-Western Female International Students in the City of Groningen



Summary

It is widely accepted that the use of the bicycle as a means of transport in the Netherlands is equally shared between both men and woman. Yet, evidence shows that this is not always true for non-Western societies where men by far surpass women's use of cycling. This study concentrates on the city of Groningen with the purpose of providing insight into the views and factors that affect non-Western female international students in using or not using the bicycle as a means of daily transport. The intention is to provide policy makers in the city as well as at the University of Groningen with information aimed at enhancing the use of cycling by non-Western female students. The in-depth interviews and collated data analysis show a clear connection to the cultural background of the participants where cycling is gender related and associated with poverty and recreational purposes. Individual factors such as the willingness to integrate in the new society by using the bicycle as a means of transport, personal safety, fear to engage in traffic and gender related matters also affect their choice of cycling.



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Table of content

1. Introduction	3
<i>1.1 Background</i>	3
<i>1.2 Research Problem</i>	4
2. Theoretical Framework	5
<i>2.1 Motility</i>	5
<i>2.2 Access, competence and appropriation</i>	5
<i>2.3 Motility: tacit knowledge and gender</i>	6
3. Methodology	7
<i>3.1 Research method</i>	7
<i>3.2 Selecting and recruiting participants</i>	7
<i>3.3 Data analysis</i>	8
<i>3.4 Ethical consideration</i>	8
<i>3.5 Data reflection</i>	8
4. Results	10
<i>4.1 Appropriation</i>	10
<i>4.1.1 Views on and associations with cycling</i>	10
<i>4.1.2 Social influence & social pressure</i>	11
<i>4.1.4 Gender and cycling</i>	11
<i>4.2 Competence</i>	12
<i>4.2.1 Lacking capabilities and skills</i>	12
<i>4.2.4 Interaction with other traffic</i>	13
<i>4.3 Access</i>	14
5. Conclusion	15
6. References	16
7. Appendix	18
<i>7.1 Interview guide user</i>	18
<i>7.2 Interview guide non-user</i>	21

1. Introduction

1.1 Background

In trying to model the choice of transport mode, in most cases travel time and costs are the most important variables (Fernández-Heredia et al., 2016). In many urban areas however, the bicycle is a noteworthy exception to this. Experiments have shown that the bicycle in comparison with other modes of transportation (car, bus, subway or tramway) has the lowest travel time and costs in urban areas (Petritsch et al., 2008 in Fernández-Heredia et al., 2016). The average speed in urban areas of cyclists can be comparable to or even faster than motorized modes, at a significant lower cost. But still there are many urban environments where the bicycle is far from the dominant mode of transportation. Possible reasons for not using the bicycle might look straight forward, for instance the physical effort or risk involved in cycling. However, evidence shows that choosing the bicycle as a mode of transportation is a special process and there is a need for understanding the motives behind this particular choice or its rejection (Landis et al., 1997; Pinjari et al., 2008; Fernández-Heredia et al., 2016).

An example of an urban environment in which the bicycle does dominate the available modes of transportation, is Groningen. Groningen is referred to as the ‘cycling capital’ of the Netherlands (The Guardian, 2015). Just under 40% of the trips made by the residents of Groningen are done by bicycle and therefore the city has been proclaimed to be the ‘Cycling City of the Year’ in 2009 (Fietsberaad, 2009). Furthermore, it is acknowledged in international articles, magazines, websites and literature that typically in the Netherlands many women use bicycles as a mode of transportation. In the Netherlands 55% of daily trips by bicycle are made by women, in comparison to 28% of the trips in the UK, 24% in the US and 21% in Australia (Pucher & Buehler, 2008). The authors state that because of this reason the Netherlands is ‘gender-neutral’ with regard to cycling. However, other authors question these statements of the Netherlands being so ‘gender-neutral’. Van der Kloof (2013) argues that by just looking at the average number of trips made by men and women is a very narrow view of looking at gender. By looking deeper into gender roles in combination with other factors that influence bicycle use, it is found that the Netherlands is not as gender-neutral in cycling as it might look like. The reason being, that significant variations in cycle minutes per day are found between men and women when looking at factors such as age, region, urban density, educational level and country of origin (Van der Kloof, 2013).

Especially this last factor, country of origin, has a significant influence on bicycle use. Figures show that women originating from non-Western countries cycle significantly little compared to their national males. Statistics from CBS (2012) show that the average bicycle travel time per person, per day in the Netherlands is 12.96 min. A notable difference is found in the bicycle use of non-Western males (18.97 min) compared to non-Western females (9.10 min) in urban areas in the Netherlands. This shows a difference of almost 10 minutes. There is not enough clarity to explain why non-Western females are at the low end of this. This research aims to gain insight in the underlying reasons that can help to explain these statistics. The focus lies on how non-Western female international students view the use of bicycles on a daily basis. Through investigating this, I am probing to understand their cycling experience and subsequently proposing arguments why there appears to be a gap in bicycle usage between men and women from non-Western origin. It is necessary to gain this insight because as van der Kloof (2013) stresses that cycling itself is not the main goal but cycling can also be seen as a means of integration and emancipation. She argues that cycling is a tool for more equal participation in Dutch society, because it enables to: adapt to the local usages and modes of transportation; broaden mobility; enhance sense of equality; enhance sense of freedom. Especially for international students this is important as there is a positive correlation found between integration into the host culture and academic performances (Harrison & Peacock, 2010; Trice, 2010; Ward et al. 2001). Additionally, more bicycle trips will positively influence people’s health, the environment, transportation efficiency and community livability (Forsyth et al. 2009; Giles-Corti et al. 2010).

1.2 Research Problem

In trying to find out why non-Western female international students cycle relatively little, the aim of this research is to get more insight into the view and experience which they have towards cycling. Therefore the central question in this research states:

‘How do non-Western female international students view and experience cycling in the city of Groningen?’

Secondary Questions:

- How do non-Western female international students overall experience cycling in the city of Groningen?
- How do non-Western female international students view cycling as a daily mode of transportation?
- To what extent do non-Western female international students possess the ability and skills required to cycle?
- How do non-Western female international students experience the process of acquiring a suitable bicycle?

2. Theoretical Framework

2.1 Motility

The concept 'motility' is defined as the capacity of persons, goods and information to be mobile in social and geographical space (Kaufmann et al., 2004). Van der Kloof (2013) puts it as the potential of a person's mobility, given who they are and where they are. Motility in this research is useful because it helps to categorize and understand what possible constraints and learning aspects could be gained with regard to using the bicycle as a mode of transportation. What is also recognized in the concept motility is that actual or potential mobility of a person can be different or have different consequences across varying social-cultural contexts. This could for example be the case for non-Western international students, who move from one socio-cultural context to another.

2.2 Access, competence and appropriation

Motility consists of three parts: appropriation, competence and access (Kaufmann et al., 2004; van der Kloof, 2013, see Figure 1). *Appropriation* is how individuals, groups, network or institutions interpret and act upon perceived or real access and skills. It is related to values and motives and it tells how specific transport options are seen as appropriate and selected or not. When it comes down to women and cycling, appropriation is the dominating dimension therefore this will be addressed first. In this dimension she argues that values, motives and actual behaviour has a strong link with gender roles, age, ethnicity and regional differences. Habits, views and values given towards the use of bicycles can be very different across countries. What foreigners see in the Netherlands is that cycling is something that is safe and convenient and is done on a daily basis by all segments of society (young, old, men and women). This can be very different from other countries where cycling is not considered as a proper activity for women. In line with this are certain myths that exist in some social groups around the use of bicycles, which are also part of (non-)appropriation. Examples of these myths are: "cycling is improper for girls and women", "it is too difficult for women to learn", "it is only for sporty and very healthy people" (van der Kloof, 2013, p.95). Consequently, it is not easy for foreigners to overcome cultural barriers regarding cycling, but it takes time, support, practice and perseverance for some to get used to cycling.

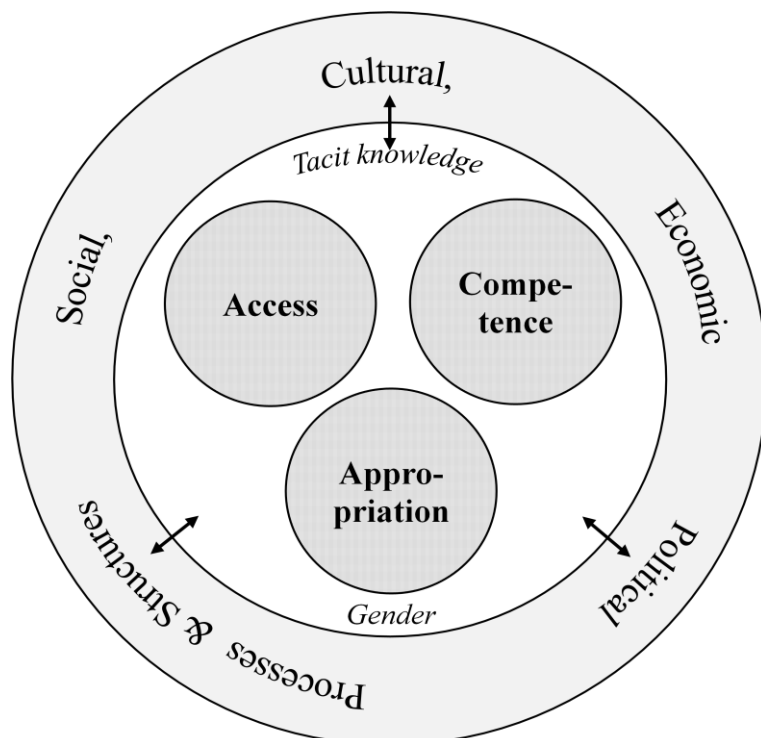


Figure 1 Conceptual model of Motility (partly adopted from van der Kloof, 2013).

Motility consists of three dimensions (appropriation, competence and access) which are represented in the inner circle in Figure 1. This is in connection with the outer circle since a person's motility can be different across varying socio-cultural contexts.

The second dimension, *competence* refers to the abilities and skills needed to enable someone to make use of a particular mode of transportation (van der Kloof, 2013). For most native Dutch people cycling is a natural basic act because learning how to cycle is part of the upbringing in many Dutch households and it is embedded in institutions and standards (Pelzer, 2010). However cycling can be very hard for people who are not accustomed to it. There are several stages in learning, from the very basics like comfortably walking with the bike, skills needed in handling the bicycle and experience in traffic. What is also part of competence is the understanding of traffic rules for cyclist. This is important because various countries can have very different rules. Even harder to learn are the unwritten rules in traffic. Moreover, the competence of wayfinding is important in the use of the bicycle in daily life. Also the mechanisms of the bicycle are part of competence as for instance a flat tire or other technical issues can arise when using the bicycle.

Thirdly, *access* in short is a person's options of mobility in time and place. The specific socio-cultural context determines the options and conditions to the access of different means of transportations, like public transport, car or bicycle. With regard to the availability of suitable bicycles this could be a problem for non-Western females because standard-size bikes are often too large (van der Kloof, 2013). The average length of Dutch women is 1.68 m which is significantly taller than other non-Western females, like Brazil (1.59 m), India (1.52 m) and Philippines (1.50 m). Smaller frame sizes or children bikes are rarely offered second hand which could be a potential financial problem for students.

2.3 Motility: tacit knowledge and gender

When thinking about motility and the act of cycling, a relevant concept is 'tacit knowledge' (see Figure 1). The term refers to knowledge that is subconscious and is therefore hard to explain to other people (in contrast to explicit knowledge). Polanyi (1966) illustrated the concept of tacit knowledge by using the example of people's ability to ride a bicycle. According to Polanyi, people who know how to ride a bicycle do not consciously think about it at all but just do it and therefore they have no idea of how it is actually done (how to keep a balance and what complex pattern of muscular acts to use). People take knowledge of cycling for granted and is therefore hard to teach to others, but Schmidt & Hunter (1993) point out that this form of tacit knowledge can be transferred through practice in a particular context and can be transmitted through the right social networks

What is pointed in the background section is that on the one hand authors state that the Netherlands is gender-neutral because there are about the same amount of men as women cycling (Pucher & Buehler, 2008). On the other hand, authors like van der Kloof (2013) argue that the Netherlands is not gender-neutral because bicycles' use varies significantly when looking deeper into gender roles and related factors that influence bicycle use. When discussing gender and mobility, the specific context of place, time and people are essential. Hanson (2010) stresses that mobility cannot be seen solely as an individual act but it is about the individual embedded in, and interacting with, a wider context (household, family, community and larger society). This perspective is also of importance in her definition of gender: "the processes that define gender are always inflected by other dimensions of perceived difference (e.g., age, ethnicity, physical ability) and develop through every day practices in place, including of course practices relating to daily mobility" (Hanson 2010, p.8). Factors like age and ethnicity in relation to gender roles in society are helpful in understanding travel patterns and mode choice (Greico, 2006; Lehner-Lierz, 2003). Especially in this research it is relevant to take into account the concept gender, because the focus lies on only non-Western *female* international students and because – as described above – gender is related to a person's motility. Furthermore as Hanson points out, the concept gender (same as motility) is linked to a person's socio-cultural context and therefore the concept is a relevant addition to Figure 1.

3. Methodology

3.1 Research method

This research employs qualitative data collection through in-depth semi-structured interviews. First of all by adopting a qualitative approach, the researcher can obtain richer and more in-depth data in contrast to quantitative research methods. In-depth interviews are used to capture different underlying reasons related to a person's individual cycling experience. It also enables to thoroughly examine how participants view cycling and why they choose to use or not use bicycles as a mode of transportation. Furthermore, semi-structured interviews are regarded as the most fitting method of data collection because this creates an informal and conversational atmosphere in which the participant gets the chance to explore issues that they feel are important (Longhurst, 2010). Finally, in-depth interviews were chosen to fully understand the way individuals experience and make sense of their own lives (Valentine, 2005). On the contrary, alternative methods such as questionnaires, only superficial information about the topic will rise to the surface which does not give a clear picture of the key concepts that are aimed to be researched here.

3.2 Selecting and recruiting participants

Purposive (or selective) sampling is used in the process of recruiting participants (Rice, 2010). The target group is specified down to non-Western female international students in the city of Groningen. Several ways of recruiting participants were applied to find enough people that meet the specific target group in the limited amount of time we had. On the one hand, a location-based social search service application called Tinder was used to find participants. Despite the fact that most people use Tinder as a dating application, some people use it to meet people as they feel more comfortable to connect with people online (Sumter et al., 2016). Also because of its international user base it was a helpful method in finding participants resulting in three participants in total (see Table 1&2). Furthermore, two lecturers of the University of Groningen helped finding more participants. Firstly, I reached out to a lecturer who coordinates international student exchange programmes, who brought me in touch with one participant. Secondly, another lecturer in population studies offered to reach out to her international students which resulted in three participants (see Table 1&2). Another effective way to recruit participants was used through 'snowballing'. This is when one contact is used to help you recruit another contact who in turn can help you get in touch with another contact (Valentine, 2005).

	Bicycle users (pseudonym)	Recruited via	Age	In Groningen since	Planned stay in Groningen
1	Brazil-24	Lecturers	24	3 months	1 year
2	China-24	Lecturers	24	2 years	not sure
3	Indonesia-34	Lecturers	34	3 months	1 year
4	India-19	Tinder	19	2 months	4 years
5	South-Korea-22	Tinder	22	3 months	1 year
6	Curacao-21	Snowballing	21	3 years	3 years
7	Indonesia-24	Snowballing	24	3 months	1 year

Table 1 Overview of participants bicycle users, how they are recruited and additional information

	Bicycle non-users (pseudonym)	Recruited via	Age	In Groningen since	Planned stay in Groningen
1	Nicaragua-26	Lecturers	26	3 months	1 year
2	Peru-25	Tinder	25	4 years	not sure
3	Peru-37	Snowballing	37	4 months	1,5 year
4	China-21	Snowballing	21	3 months	1 year

Table 2 Overview of the non-bicycle participants, the way they are recruited and additional information

In order to obtain a complete picture, a conscious decision was made about also letting non-bicycles users participate as opposed to only bicycle users. This is because in looking at use-patterns, people who use a certain product are important but also people who do not use it (Wyatt, 2003). For the reason that this latter group can be people who might become bicycle users in the future or have used it in the past and chose to abandon it (Cox, 2015). The reasons why non-users choose not to cycle or to abandon cycling are useful insight and therefore this group will also be taken into account in this research. The aim was to get the same amount of users as non-users. However in searching for participants it was soon found out that non-bicycle users were significantly more difficult to find than the actual users. Nevertheless it was pleasing to find four definite non-users from a total of eleven participants. Additionally, the amount of bicycle users and non-users is in practice further balanced out since two users (India and Curacao, indicated in grey in Table 1) would preferably be non-users because they do not like cycling at all but find themselves in a situation in which they are obliged to do so.

3.3 Data analysis

After conducting and transcribing all the interviews, the process of analyzing the primary data began. Coding was used to organize the data which made it easier to find categories and patterns (Cope, 2010). To further organize the data, these codes and categories were placed within the three dimensions from the literature (appropriation, competence and access). The most prominent codes were descriptive (or in vivo) codes – codes that appear in the transcripts – since overlap of the same answers was found in many interviews. These were mainly key words such as, scary, dangerous, hectic, cycling as sport or exercise, convenient. Also analytical coding was used after reflection on descriptive codes in combination with literature.

3.4 Ethical consideration

In the context of this research several ethical considerations were made. Verbal informed consent was given on participants voluntarily taking part in this research and on recording the interview. The personal data in this research is anonymized by using pseudonyms based on the participants' age and country of origin (see Table 1&2). Further, personal information is treated confidentially by only using it for the purpose of this research and by not distributing it to other parties (Crow et al., 2008). When conducting these interviews it is important to recognize your own positionality by reflecting on who you are and how you can shape the interaction with the participants (Valentine, 2005). Since participants in this research originate from different cultural backgrounds, they can have substantially different views or experiences with cycling than me. Bearing this in mind, I tried to react as neutral as possible by being open-minded and by not making any judgmental remarks, regardless of the answers that were given. Finally, a few notes have to be made with regard to the three participants recruited via tinder. My profile contained a biography in which I emphasized on solely looking participants (non-Western female international students) to take part in my research. Consequently before any conversation started my intentions were clear. Further communication went in a professional manner.

3.5 Data reflection

As mentioned earlier, this qualitative research is not aiming to make generalizing hypothetical statements but instead, this research is about individual meaning and experiences. In order to gain 'enough' data, the goal was to reach a point of saturation which is reached when more data does not necessarily lead to more information (Mason, 2010). As in most qualitative researches, almost each interview in this research gained its own unique finding and therefore it was hard to determine the point of saturation. But above all the time available was the biggest constrain on the data collection. Nevertheless after conducting eleven interviews, enough data was collated to elaborately answer the research questions from different angles.

What is found in Figure 2 (below) is a geographical representation of the participants' country of origin. To obtain a representative picture of the target group the ideal aim was to get an even distribution of participants of non-Western origins. Yet, all participants originate from South-America

and Asia as illustrated. The reason being that in the limited time available, it was hard to find participants from other non-Western origins (e.g. Middle-East and Africa).

Participants' country of origin



Figure 3 Map of participants' country of origin.

4. Results

4.1 Appropriation

4.1.1 Views on and associations with cycling

One of the most significant findings that became evident is that the practice of cycling in the Netherlands is something of great difference than in the participants' country of origin. Participants view cycling here as something that is convenient, safe and well organized in contrast to their own country in which it is unsafe and often seen as very dangerous. Consequently, the majority of participants, bicycle users and non-users, mentioned that cycling is not seen as a mode of transportation in their country of origin in contrast to the Netherlands. Several associations with cycling came to light. To begin with China-21, a non-bicycle user who has been in Groningen for three months says the following:

"I think they [Chinese society] see it as an exercise, not really as a transportation mode. Like in the weekend they will cycle just to have fun or for exercise."

China-21 clearly points out that cycling is used for fun or for sport. What this quote illustrates is that cycling is associated with a recreational activity rather than a mode of transportation. This association is shared among many other participants as well, as key words such as 'fun', 'sports', 'recreational activity' were frequently mentioned by the participants.

Secondly, bicycle users as well as non-users pointed out that cycling can be associated with poverty in their country of origin. For example, Indonesia-24 is a bicycle user from the moment she came to Groningen, three months ago. She says she is happy to cycle and uses the bicycle on daily basis. When asking about the way she is used to view cycling as a daily mode of transportation in her home country, she said the following:

"But they [Indonesian society] see the person with bicycle as a poor person! Like a person that doesn't have money. Because they don't have money to buy gasoline and they don't have money to buy a car or motorcycle. The reason for us not to cycle there is more like social branding. It is not very cool for us to use bicycle there because they will see us as poor person! So that's why we keep using cars and motorcycles."

This clearly illustrates that cycling is seen as an activity that is exclusively associated with poor people that cannot afford motorized transportation. This association of cycling with poverty has also been clearly pointed out by other participants. India-19 for example makes a clear distinction between upper-class and lower-class people in which she comments that only the latter group makes use of bicycles as a daily mode of transportation. Furthermore, because of this judgmental and demeaning view, participants point out that they do not want to be associated with cycling in their country of origin. Indonesia-24 expresses this with 'social branding' and that it is 'not cool' to cycle. Nevertheless, these same participants are daily users of the bicycle, they being 'liberated' from the constraints of their home societies.

In addition, participants expressed their surprise and admiration when they found out that all segments of society use bicycles as daily mode of transportation in Groningen as stated by Indonesia-24:

"When I was here at first I find it shocking to know that everyone cycles here! It's like a culture shock for me. Also older people, like grandmother and grandfather cycle here!"

Indonesia-24 speaks of a 'cultural shock' seeing grandmothers and grandfathers on bicycle. When asked about this, she explained she was referring to the elderly. From her cultural point of reference cycling is confined to young people in Indonesia. Consequently, she perceives her new experience

with both surprise and admiration and has taken her time to adapt to the idea. Furthermore, Nicaragua-26 and China-21 both experienced the same ‘cultural shock’ as one pointed out to be surprised to see toddlers cycling and the other seeing one of her professors on a bicycle.

Finally, some participants see cycling from a pure practical perspective. Brazil-24 is a bicycle user who says that she uses a bicycle *“because it’s practical and I feel more mobile”*. She explains this, that the bicycle gives her the flexibility to stop at any place at any time convenient to her.

Some non-bicycle users stressed that they felt restricted by not being able to make use of the bicycle as captured by Peru-37:

“I feel restricted (...) if I go for drinks with my friends I just need to come back at mid-night ... the timetable of the bus is just at midnight so I cannot go farther [later] than that.”

Both Brazil-24 and Peru-37 state that they are less flexible in their mobility, it being limited restricted to public transportation.

4.1.2 Social influence & social pressure

Nicaragua-26 is a non-bicycle user because she does not know how to cycle. One of the things that came forward in the interview with her is the following:

“I’m a student here, it’s such a cycling city, it would be cool to learn how to cycle and actually cycle here!”

This illustrates her strong desire to learn cycling in order to engage and become part of the cycling culture of Groningen. This motivation has also been found among the bicycle-users. It can be safely concluded that cycling is not only used for transport but is perceived as a means of integrating in the social infrastructure of their host city.

This goes even further, as some participants pointed out to feel a certain social pressure to cycle. For example, Peru-37 and India-19 respectively said the following:

“I think it’s also about the logic of the community that you developed here. That the social pressure that you feel here to use a bicycle. A lot of friends of me are like, ‘you have a bike?’ ‘Yeah, I have a bike.’ ‘OK, why don’t you use it?!’ And it’s like I need to explain myself!”

“When I go to the centre for a night out and stuff I bike because I mean like everyone bikes and if I am the only one walking... so I just have to take my bike!”

Participants’ reactions range from a personal desire to cycle to the other extreme of being forced into it as an effect of social pressure. Whereas some see it as wishful reason to integrate, others see it as forced upon them.

4.1.4 Gender and cycling

At the start of my interviews, when asked about their general view about women cycling, their initial reaction was neutral although they added that men were more likely to cycle than women. As the interviews developed some interesting issues unfolded explaining why women cycled less than men.

To start with two participants talked about cycling in relation to the women’s virginity. One of them (Indonesia-34) said the following about this:

| *“Maybe men cycle more than women because uhhh... because ... I think people in Indonesia think that for women who are biking a lot, it will have a ... influence on their reproductive organ [vagina/uterus].”*

With this quote, Indonesia-34 gives a possible reason why men are more likely to cycle than women. She further explains that there is a traditional view in Indonesia about women’s ‘reproductive organ’ it being affected when women often sit on a bicycle seat. However, since Indonesia-34 is a bicycle user herself, she states that she does not share this view.

Secondly, another reason is given by non-bicycle user (Peru-25), who says:

| *“the feeling of safety is more living in women (...) men have more courage to go against the cars.”*

In saying so she implicitly comes up with two connections. The first connection is about the need of having courage to cycle. This is easily explained because this participant is from Peru, a country in which cycling can be dangerous as she explains earlier in the interview. The second connection is about the association with men having more courage and being less anxious than women and therefore they make more use of bicycles.

Lastly, China-24, a bicycle user pointed out that men are likely to cycle more than women because of the way women are dressed. She says the following:

| *“males ride the bikes more than females because the female, every time we go outside we dress well ... and then it’s not good to ride a bicycle.”*

With this quote she implicated that women dress in such a way that it is less suitable to ride a bicycle compared to the way men are dressed. She further comments on this that women wear dresses which can be less practical for cycling in contrast to trousers worn by men.

4.2 Competence

4.2.1 Lacking capabilities and skills

This sub-section sheds light on the challenges and difficulties that bicycle users experience mainly, the lack of cycling skills and capabilities. It includes also non-users who due to these difficulties have remained the non-cyclists as Peru-37 declares:

| *“If you want to go to one side or the other and you need to signal with your hand! And for me it was difficult to do this because I feel like if I put my hand ... I will fall down.”*

Some participants point out that they experience problems with taking their hands of the handlebar. This becomes a problem when they need to use their arm to indicate going in a certain direction. One of the bicycle-users (Curacao-21) said that she was not able to take her hand of the handlebar in the beginning and therefore came into awkward situations in traffic. Another bicycle-user says she also could not take her hands of the handle bar in the beginning and she still is struggling with it (South-Korea-22). Both mention feelings of being afraid to fall.

Furthermore, the fear of cycling to the extent of abandoning cycling altogether is caused by not being able to keep in balance as a non-bicycle user, China-21 relates:

| *“I can only lift one hand of the bike but it’s hard to keep the balance, so normally I will hold both hands on the bike.”*

However it goes further than just keeping a balance with cycling. Peru-25, one of the non-bicycle users says the following about her experience with ‘cycling’:

“But it’s not that I cycle, cycle ... it’s like how to just carry it and just walking with the bike you know (...) it was so uncomfortable, I don’t know how you do that.”

What the quote from Peru-25 exemplifies is that for her learning how to cycle starts from the very basics of comfortably walking next to the bike. She points out in having a lot of struggles with this as she is not able to handle and control the bike when walking. Consequently, feelings of being uncomfortable prevail.

Furthermore, five out of seven bicycle users point out that the physical effort of cycling is very tiring. Indonesia-24 is a bicycle user who mentioned that in general the bicycle is the only mode of transportation for her. Despite this, she said the following:

“When I cycle more than ten minutes, then I’m usually pretty tired and I have to stop.”

This quote illustrates that Indonesia-24 encounters troubles with cycling more than ten minutes which influences the consecutive distance she can cover.

4.2.4 Interaction with other traffic

Another aspect that participants emphasize is that they encounter problems when engaging with other traffic. Especially in the city centre where there is a lot of traffic, problems arise. For several reasons participant do not feel competent enough to comfortably cycle in busy places or at busy times. Because of this, two bicycle users (Brazil-24 and India-19) mentioned that they often park their bicycles away from busy places (such as the Vismarkt) and continue their journey on foot. Peru-37, a non-bicycle user said the following about her experience with engaging in traffic:

“It’s kind of difficult to predict the environment... when the bus is coming... and if the car is coming... and I need to stop... and when other bikes come across ... and around you ... so there are a lot of things that you need to think about when you are riding here for the first time because you’re not used to that. (...) honestly, I feel afraid of busses when they are coming ... you need to wait and then go again, so it’s kind of hectic.”

She experiences traffic as being too hectic as she explains that lots of things happen simultaneously which makes her anxious and gives her the feeling of fear.

Almost all bicycle users (five out of seven) point out that they cycle too slowly to keep up with the average cycle pace in Groningen. South-Korea-22 and Peru-37 respectively said the following:

“I don’t like to cycle when everyone is going to school. I avoid peak time (...) they are really fast! It’s quite scary!”

“Everybody goes really fast here in Groningen (...) I felt like people were pressing me to go faster”

Some participants point out that local people cycle relatively fast which adds to their fear of cycling and complicates their engagement in traffic. For example South-Korea-22 tries to avoid peak hours when there are a lot of cyclists on the road. A reason for non-bicycle user, Peru-37 not to cycle is because she feels being pressured by other cyclists who cycle at a high speed.

4.3 Access

Access refers to the availability of bicycles that are suitable for the concerned participant. The findings about this were divided. Indonesia-24 who is a bicycle user said the following when asking about her experience with the process of getting a bicycle:

“I felt kind of desperate because I couldn’t find any bike that is suitable for me.”

The reason for Indonesia-24 to experience troubles is because she is 1.60 m tall which is too short for the average bike sizes that are on offer. Three other bicycle users (China-24, South-Korea-22, and Indonesia-34) pointed out experiencing the same problems because of their length. Besides the right size, price plays a significant role. All participants stressed that they have looked at many different places, differing from a lot of second hand stores as well as official bicycle shops. Second hand stores have little on offer, especially for small bikes and often the price being too high at official bicycle shops. However the most successful platform seems to be a Facebook-page on which second hand bicycles can be bought and sold.

The need to use a small bicycle is not only due to their length but also in order to get the feeling of better control of the bike as Peru-37 mentions:

“I needed another smaller bike (...) Basically I wanted to feel that I had control of the bicycle, so I can just if I want to put my feet on the ground”

This quote illustrates that Peru-37 wanted a smaller bicycle because she feels to be more in control on a smaller bicycle since she can more easily reach the ground. This is shared among other participants as well. However, on the long run, they discover that their bicycles are too small causing them negative effects such physical pains and getting them easily tired.

5. Conclusion

This undergraduate thesis aimed to gain more insight into how non-Western female international students view and experience cycling in the city of Groningen. In doing so, a qualitative approach was applied in which eleven in-depth interviews were conducted. I can safely conclude that past-experience adopted by non-Western female international students in their country of origin plays an important role in their cycling behaviour in their new environment. Having said that, this does not automatically mean 'replica' behaviour as it has been in their own country.

Both cyclists as well as non-cyclists show signs of adaptation (appropriation) to the cycling behaviour of their host country. To some participants, being in a new environment far from 'home-made' social control, cycling has proved to have an 'emancipatory' effect on them. Freeing them from social views and control they were accustomed to, consequently feeling free in using the bicycle to travel about in the city of Groningen. The associations with poverty, gender issues and social class division originating in their homeland, does not play a role anymore in their new environment. To others, cycling has become a need to integrate and participate in the social network and social activities, thus cycling have become a necessary need rather than a virtue of choice. Others see cycling as a practical way of transport that gives them the flexibility to move about in the city at their choice of time and place, giving them the feeling of independence and freedom. Not to mention their choice of cycling as a cheap way of mobility making it even more popular. To the non-cyclists, the fear to engage in the hazardous traffic as they perceive it and their incompetence to have proper control on the bicycle has served as a hindrance in their using the bicycle as a means of transport. Some have been reluctant to endeavour on the journey of learning the art of cycling as they see themselves lacking in capabilities and skills (competence). As to the accessibility of acquiring a bicycle, finding the appropriate size within an acceptable price range proved to be an unexpected challenge, in a country where bicycles surpass the number of its inhabitants. The average length of the participants proved to be incompatible with the average bicycle size on offer. This limits their choice, forcing them to look at special sized bicycles thus raising the affordable price (access).

This study contains both theoretical and practical implications. First, this research broadens the academic research into the experience and behaviour of cyclists. It creates an in-depth understanding of 'lived experience' in bicycle usage. Second, this study serves as an impetus for future research in policy making concerning the integration of non-Western female international students in the city of Groningen. Institutions like the University of Groningen and the local municipality could use this research to better facilitate their students. For example, students' educational performances and the cities' liveability and transportation facilities can be improved. As such, the University of Groningen and the city of Groningen can enhance their educational position, both nationally as internationally.

6. References

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7. Appendix

7.1 Interview guide user

Introduction

- Start of by introducing myself (I am Karim Sahhar ... student Human Geography and Planning ...)
- Explaining what my bachelor thesis is about (theme, central question and aim etc.)

Starting questions

- Could you shortly introduce yourself? What is your name? Where are you from? What do you study? How old are you? Etc.
- How long have you already been in Groningen? For how long are you going to be in Groningen?

Key questions

User/non-user:

- What modes of transportation do you use to commute in Groningen?
- Do you own and make use of a bicycle?
- On a weekly basis how often do you use your bicycle?
- Can you tell me something about why you make use of a bicycle as a mode of transportation?

Appropriation

- Can you tell me something about bicycle use in your home town/country?
- Please tell me something about your bicycle use before you came to Groningen.
- Can you tell me something about how people view the bicycle as a daily mode of transportation in your home town/country?
- How do you think people view the use of bicycles in your home town/country?
- What do you think of the following statements? “Cycling is improper for girls and women”, “it is too difficult for women to learn” or “it is only for sporty and very healthy people” (van der Kloof, 2013).
- In what way do you think bicycle use is the same or different in your country of origin compared to Groningen?

- A lot of people in the Netherlands use bicycles on a daily basis as a means of transport. Can you tell me something about your view towards this?
- Can you tell me something about your first impression/experience when you first came in touch with the Dutch bicycle culture?
- Can you tell me something about how your view towards cycling as a daily mode of transportation has changed or influenced in order for you to cycle?

Competence

- Can you tell me something about your experience with cycling in Groningen?
- How comfortable do you feel when cycling in Groningen?
 - Refer to interaction with other traffic
 - Refer to mechanism of the bicycle itself
 - Refer to local traffic rules
- What is your experience with Dutch traffic rules? To what extent is this different to your home country?
- Can you tell me something about your experience with finding your way around in Groningen?
- To what extent do you think that your competence of cycling influences you choosing to cycle?

Access

- What other modes of transportation are available for you instead of using the bicycle?
 - What are the pro's and con's of using these modes in comparison with the bicycle?
- Can you tell me something about how you got your bicycle?
- To what extent are you satisfied with the bike you have?
- To what extent do you think that easy access of getting a proper bike has an influence on you to choose to cycle?

Final questions

- Was everything clear to you?
- Do you want to add anything?

Thank participant

7.2 Interview guide non-user

Introduction

- Start of by introducing myself (I am Karim Sahhar ... student Human Geography and Planning ...)
- Explaining what my bachelor thesis is about (theme, central question and aim etc.)

Starting questions

- Could you shortly introduce yourself? What is your name? Where are you from? What do you study? How old are you? Etc.
- How long have you already been in Groningen? For how long are you going to be in Groningen?

Key questions

- How do you transport yourself in Groningen?
- Do you own and make use of a bicycle?
- On a weekly basis how often do you use your bicycle?
- Can you tell me something about why you don't make use of a bicycle as a mode of transportation?

Appropriation

- Can you tell me something about bicycle use in your home town/country?
- Please tell me something about your bicycle use before you came to Groningen.
- Can you tell me something about how people view the bicycle as a daily mode of transportation in your home town/country?
- How do you think people view the use of bicycles in your home town/country?
- What do you think of the following statements? "Cycling is improper for girls and women", "it is too difficult for women to learn" or "it is only for sporty and very healthy people" (van der Kloof, 2013).
- In what way do you think bicycle use is the same or different in your country of origin compared to Groningen?

Competence

- Can you tell me something about your experience with cycling? (In general/in Groningen)
- Can you tell me something about how comfortable you feel when interacting with other traffic / local traffic rules?
- What are your reasons for not using the bicycle on daily basis?
 - To what extent does this have anything to do with other traffic; mechanism of the bicycle; local traffic rules; wayfinding?
- To what extent do you think that your competence of cycling influences you choosing not to cycle?

Access

- What other modes of transportation do you use instead of using the bicycle?

- Do you think these are more convenient ways of getting around or would you preferably use a bicycle? If so, why?
- Have you tried to buy a bicycle? If so, can you tell me something about your experience with trying to get a suitable bike?
- To what extent do you think that easy access of getting a proper bike has an influence on people choosing to cycle?

Final questions

- Was everything clear to you?
- Do you want to add anything?

Thank participant