"Stay at home", but which home?

Residential preference patterns of Dutch higher

education students during the coronavirus pandemic

by

Luuk Diepeveen

s2782766

University of Groningen / Faculty of Spatial Sciences
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Supervisor: Dr. Christian Lamker

"Stay at home" is one of the key phrases used to curb the effects of the coronavirus pandemic to public health within many countries including the Netherlands.

Abstract

This research is concerned with the residential preference of the student community, which is researched during the coronavirus pandemic in the northern Dutch city of Groningen. The qualitative empirical method of semi-structured interviews is used to uncover the residential preference and underlying mechanisms, focussing on soft location factors. Findings indicate that the three most important factors influencing residential preference of the student community are the importance of social networks, a sense of belonging to a home, and variation within daily activities. The results inform policy makers and researchers alike, striving for creating a competitive and student-friendly city.

Keywords: residential preference; student community; coronavirus pandemic; soft location factors; student-friendly city

Contents

1 Introduction

The early months of 2020 will go down in history as highly turbulent, and of unprecedented impact within the 21st Century. As the coronavirus pandemic spread throughout the world, individuals and institutions at each and every level had to adapt to a 'new normal', a situation including social distancing and limited travel possibilities. This has not in the least been the case for education. This research focuses on higher education, and the student community in particular. The student community is researched within the northern Dutch city of Groningen, which is widely known to be a student city. Within the city of Groningen, students form a substantial part of the population (about one in six residents is a student).

As education institutions in most cases had to make a full switch to online education, the main element attracting the student community to a student city vanished. However, not all students left the city of Groningen. Apparently, there are other factors drawing and attaching the student community to the city. This research is concerned with revealing those factors and the underlying mechanisms. The coronavirus pandemic is expected to provide an interesting research opportunity, as the new situation has forced individuals to rethink their daily structures and habits. Therefore, a higher awareness of the key values and preferences within the researched population is expected. The main research question that will be answered in this research is: "Which factors, apart from the presence of education facilities, influence the preferred place of residence of students of higher education institutions of Groningen?". This question aims to reveal which factors draw students to their student city, even if there is no need to be physically present at the education facility. Other questions that will be answered in this research include:

- What are the characteristics of student life (in Groningen)?
- What is the role of higher education facilities in a student city?
- Which factors caused students to leave Groningen during the first wave of the corona pandemic?
- Which factors caused students to remain in Groningen or return to Groningen in the months following the outbreak of the corona pandemic?
- What do the results of this research imply for local government?

The thesis structure starts with a theoretical section. This section outlines the background of the research, including the impact of the coronavirus pandemic on higher education and the student community. The theoretical section also discusses the important theoretical concepts used in this research, including soft and hard location factors and the sense of place concept. This is followed by a methodology section, explaining the research method of semi-structured interviews which is used in this research. Then the results section outlines the most important findings from the empirical research, to find out which factors are most influential on the residential preference of the student community. The final section puts these results into the context of the theoretical section, and shares the main conclusions of the research.

2 Theory

2.1 Background of coronavirus pandemic and measures

In the early months of 2020 the coronavirus disease, shortened to COVID-19, started spreading across Europe. The disease originated in China in 2019 (hence the addition of '-19' to 'COVID'). In a media briefing on the 11th of March 2020, Dr. Tedros Adhanom Gebreyesus (WHO Director-General) declared that the world was facing a pandemic (WHO, 2020; Ducharme, 2020). In this declaration, the WHO Director-General mentioned that not only the rapid spread of the disease was cause for concern, also the "alarming levels of inaction" (WHO 2020, p.1) were taken into consideration for the pandemic assessment.

Unsurprisingly, the declaration of the pandemic caused many countries to apply (additional) measures to curb the spread of the virus, including the Netherlands (Government of the Netherlands, 2020a). A day after the WHO media briefing, the Dutch government installed its first national measures to contain the disease from spreading. Up to that point, action had mainly consisted of regional advice and travel restrictions (Darroch, 2020). The measures applied by the Dutch government on the 12th of March included advice to avoid assembling in groups of over 100 people, to work from home if possible, to stay at home with cold symptoms, and some basic hygienic advice (Government of the Netherlands, 2020a).

The announcement of these measures led to general unrest in the Netherlands. This included unrest about schools remaining opened (Chaudron, 2020), hoarding in supermarkets (Hendrickx, 2020), and fears of the Dutch measures being too lenient (Ramdharie, 2020). The Dutch people were allegedly even taking more care in limiting social contacts than the government prescribed (Ramdharie, 2020).

A reaction to these signs of unrest soon followed, when the government installed additional measures on the 15th of March. The additional measures included the three-week closure of primary and secondary schools, as well as bars, cafés and restaurants, and all sports facilities (Government of the Netherlands, 2020b). Another major measure that was added was the advice to keep at least 1.5 metres distance from one another, which eventually became the central measure to the Dutch strategy, even being described as a 'doctrine' (Keulemans, 2020).

2.2 Implications for the student community

These measures obviously had profound effects on daily life and individual and collective behaviour, not in the least for students. Within a week of the additional measures of the 15th of March, Groningen local newspaper *Dagblad van het Noorden* discussed the effects of the measures on the student community. It reported income decrease as an effect of the closure of various branches of the economy in which students were working, as well as the practicalities of online education, and the potential mass outflow of students as a result of the new measures (Von Hebel & Marée, 2020). However, the predicted outflow was countered by the authors with the statement that networks within a student city are vital for students.

The predicted outflow did take place, at least for a substantial part. While it is hard to grasp the exact scale of the outflow, half-empty student houses were reported to be no uncommon sight halfway through the month of May (Decates, 2020). In the city of Groningen, 850 international students were reported to have left their shortstay-accommodation of housing organisation SSH (Posthumus, 2020). While the outflow of international students has been most frequently covered in the media, Decates (2020) writes that the largest rental organisation of student rooms in the city of Nijmegen has seen a 50% rise in room cancellations by native Dutch students compared to 2019. While these numbers show concrete evidence of an outflow of students from Groningen and other Dutch student cities, Decates (2020) also reports that presumably there have been many students who moved back to their parental homes on a temporary basis (without necessarily giving up their student home). Adding the temporary movers, the outflow might have even been larger than the numbers suggest.

The outflow of students in spring was heavily contrasted by the start of the new academic year in September. However, in the new academic year options for physical presence at higher education facilities were very limited. In the city of Groningen, a record number of new students was accompanied by renewed shortages on the housing market and rising rents (Von Hebel, 2020b). A rise in numbers was also seen in the number of cases of the coronavirus in student cities, which became hotspots of the virus in the Netherlands throughout the month of September (Veldhuis, 2020). In particular the student cities of Delft and Nijmegen showed alarming signs, as well as the three largest cities of the Netherlands: Amsterdam, Rotterdam and The Hague (Kroft, 2020). While student cities in the Netherlands saw a return of students and a large number of new students, education facilities have remained inaccessible or hardly accessible (Werkhoven, 2020). There were very few physical classes, primarily practical classes and examinations were held physically at the education facilities. This leaves open the question why many students left their student cities in the early stages of the coronavirus epidemic in the Netherlands, but have later returned without the necessity to live in proximity to their education facilities.

2.3 Mental health impact of coronavirus pandemic measures

Another effect that the coronavirus pandemic has had on the population of students concerns mental health issues. The increased numbers of students struggling with their mental health has been widely covered in the media and had already been covered in academia. As early as August 2020, Sundarasen et al. (2020). published a paper on the psychological impact of the coronavirus pandemic and its associated effects on Malaysian students. The researchers call upon both higher education and governmental bodies in Malaysia to recognise the concern for the mental health of students and provide assistance to those who need it.

In similar research, carried out by Husky et al. (2020) in France, the researchers argue that confinement policies, which are designed to curb the health risks of the pandemic, can be expected to counteract the alleviation of mental disorders based on existing research evidence. Drawing from their empirical research, Husky et al. (2020) conclude that those who remained in their student homes were more likely to have had increased mental health problems. These mainly concerned increased anxiety and stress levels.

These mental health issues were also seen in the Netherlands, and as previously mentioned they were covered in media. National broadcaster NOS reports that over half of young adults aged 18-24 (not exclusively students) claim to have a deteriorated mental health in comparison to before the coronavirus pandemic, based on research carried out by i&o research (NOS, 2020). The main reason for this decrease allegedly being isolation from social life and the associated feelings of loneliness.

Specifically looking at the city of Groningen, the issue has been covered by local newspaper *Dagblad van het Noorden*. In a digital article the issue of mental health as well as the plans of the Hanzehogeschool (one of the two higher education institutions of Groningen) to start a research into mental health in an attempt to break the stigma surrounding mental health issues are addressed (von Hebel, 2020a). The author claims that the issue of loneliness is a socially accepted phenomenon regarding older generations, while loneliness among students is hardly researched and surrounded by a taboo. The taboo comes from the situation in which students do not dare to speak about their mental health problems, as these are not regarded as common among their generation. What becomes clear from this selection of academic and media coverage of mental health issues among students is that the measures to curb the spread of the coronavirus, while intended for public health, come with some negative effects on mental health of (among others) the student population.

2.4 Characteristics of the student community

Students are in this research defined as those receiving tertiary education. This implies they are enrolled in a higher education institution. Worldwide, this amounts to over 200 million people (World Bank, 2017), under 0,1% of the world's population. The number of students worldwide has been rising rapidly, as in 1998 only 89 million people were receiving higher education (World Bank, 2017). The number of students is also expected to keep rising in the current decade, particularly in countries with rapidly growing economies such as China and India (Maslen, 2012). In other words, the student population is rapidly globalising, as the world's upcoming economies are in the transition towards service economies.

The student population is slowly overcoming the gender gap between the male and female segments of the population. Throughout recent decades, male dominance has vanished in higher education. Globally, male dominance has decreased from 87% in 1992 to just over 58% in 2019 (World Bank, 2020). The ceasing of male dominance is particularly visible in the world's most developed economies: The average for OECD (Organisation for Economic Co-operation and Development) countries is a 45% male student population (Stoet & Geary, 2020), whereas in the EU-27 countries around 46% was male in 2018 (Eurostat, 2020). This shows that while the world population still has more higher educated men than women, this gap can be expected to keep shrinking over the coming decades as current and future student populations will incrementally take over the labour market.

In the Netherlands, 48% of the student population of the academic year 2019-2020 was male (CBS StatLine, 2020a). The Dutch student population comprises over 750,000 people, which represents around 4,5% of the total population of the Netherlands (CBS StatLine, 2020a; 2020b). Of the Dutch student population, 40% attends Universities (*WO*), while a majority of 60% attends higher professional education (*HBO*) (CBS StatLine, 2020a). Dutch Universities are located in 13 cities throughout the country, most of them offering a broad

variety of courses, some specialising in specific sciences or technologies. *HBO* institutions can be found in an extensive range of cities and small towns, some of these institutions focus on a specific profession or field of expertise. The population of students generally consists of people in young adult age groups, for first-time entrants the average age is 22 in OECD countries (OECD, 2020). In the Netherlands, the age of entry is substantially lower at 20 (OECD, 2020). A majority of Dutch students follow a 3-5 year programme, resulting in an average graduation age heading towards 25.

Studying in the Netherlands comes at a cost, as the average debt of Dutch indebted students is 13.700 euros, an average calculated over 1.4 million people (CBS, 2019). Upon graduation, the student debt is even higher at around 17,000 euros (OECD, 2020). Since the ceasing of the student grants provided by the Dutch Government in 2015, student debts have been steadily rising (CBS, 2019). Both the amount of the total debt and the number of indebted students have risen between 2015 and 2019, respectively by 52% and 38% (CBS, 2019). These debts have implications for the housing and income characteristics of students, which will be discussed below.

The income of students is generally considered to be far below average, in the Netherlands this is no different. Students often have no time for a full-time job, and they have often not yet developed a career. In the Netherlands, over 85% of students had a job in addition to their studies in 2019 (CBS, 2020). However, for a large part Dutch students rely on the governmental student loan. This dependence has increased in recent years as the student grants provided by the government have ceased.

As mentioned, not only the dependence is increasing, but also the amount that is taken up by students from this governmental loan, as has the income generated from jobs by students (CBS, 2020). These trends are not very surprising, given that students are no longer assigned a student grant by the government. More worrying however, is that the Dutch Central Bureau for Statistics (CBS) reports that over half of Dutch students with a job work in sectors that have been heavily struck by the coronavirus pandemic (CBS, 2020). What this will imply for student incomes and debts in the long run remains to be seen, but it is clear that the financial position of Dutch students is threatened by the coronavirus pandemic.

Student housing provides another interesting insight into the student community, particularly that of Groningen. The city of Groningen has in recent years seen an increase in students attending the higher education institutions, and a particularly rapid increase in the number of international students. With international students in almost all cases needing a place to live in the city, it is unsurprising that the city has seen a rapid increase of students living within the city boundaries. In 2018, this even culminated in a student housing crisis, particularly affecting international students (von Hebel, 2018). Temporary shelters and tents were used to provide accommodation for the unexpected high numbers of students entering the city. Contrary to the issue of income, where the coronavirus pandemic increased the problem, this problem was 'solved' by the pandemic, as particularly international students left the city in numbers (Posthumus, 2020).

The discussed numbers and statements about students inform, but do not define, the role of the student community in an urban area. Students are, while their economic status might suggest otherwise, very influential on local economies and geographies. Russo et al. argue

that students are "...the main consumers of cultural and recreational facilities. They have a distinct income pattern that in some cases is crucial to support the economy of whole cities or neighbourhoods" (2003, p.2). And not only do students consume cultural and recreational facilities, they are also often producers of these products (Russo et al., 2003). The student community is therefore highly influential on the vibrant nature of many university cities. Despite this, Russo et al. (2003) argue, their influence in policy making and their decision making power are very limited. This combination makes it a highly interesting population to research, specifically regarding their needs in an urban space.

As students have a high influence on expenditure in specific (typically urban) branches of the economy, but their influence in policy making is very limited. As Russo et al. (2003) argue, students represent a vast amount of human capital which has a nature of high mobility. Therefore the need to attract this population and thereby its human capital must be recognised by policy makers if the city wishes to increase its competitiveness. Interestingly, in some Dutch provinces there were benefits granted to students in order to attract them to the respective areas as early as the 16th century (Russo et al., 2003). The attraction of students provides a first interesting perspective of looking at the student population and their needs. However when looking at the role of the student community in a city, it is impossible to ignore the role of higher education facilities. This will be discussed in the next section.

2.5 Role of higher education facilities

The impact of the coronavirus pandemic on education has been profound and undeniable. Higher education in particular had to make an almost full switch to online education. Whereas primary and secondary education were in many countries only temporarily directed to the online realm, higher education often had to remain there for months to come. However, as Tesar (2020) argues, the change towards online education was already slowly and incrementally taking place, until the pandemic forced a full and rapid change. The impact of the pandemic on education infrastructures does not, however, limit itself to the switch from physical to online classes. It also has major implications for international student mobility and local student networks. While the process of moving to online education has seen an extreme acceleration because of the pandemic, the ongoing process of increased international student mobility has abruptly come to a halt (Tesar, 2020). As Tesar (2020) describes, both were seen as catalysts for making higher education and the sharing of knowledge more democratic, inclusive, and accessible. However, online education is also argued to take away generations of foundation in pedagogy, and it cuts opportunities for encounters and creativity (Peters et al., 2020; Soares et al. 2020; Tesar, 2020). It is not surprising, therefore, that the quality of online education has been heavily criticised (Peters et al., 2020; Tesar, 2020). While the uncertainty around the (immediate) future of higher education remains paramount, the situation does provide opportunities to rethink and reassess past, current, and future practices in higher education.

Relevance of higher education facilities for students

Higher education facilities first and foremost provide a student with tertiary education, developing their knowledge and skills and improving their opportunities in the labour market. However, higher education facilities also play a major role in the daily lives and behaviour of students. Bearing in mind that the corona pandemic made education at higher education

buildings virtually impossible, it is important to look into the meaning of physical higher education spaces for students.

One of the most important roles of a higher education facility apart from education itself, it can be argued, is the enabling of encounters and the creation of networks (Soares et al., 2020). Soares et al. (2020) deem public spaces of a higher education campus to be of vital importance for generating encounters, as well as its resulting creativity. A lively campus or higher education environment is therefore expected to foster social well-being, a sense of community, and a sense of place, concepts that will be further elaborated on in later sections. Trawalter et al. (2020) add an interesting perspective to the relationship of a student to a higher education facility, specifically regarding students from a low socioeconomic status. In a quantitative study across multiple higher education facilities, they found that students with a lower socioeconomic status use public spaces less than other students and this group also has a lower sense of belonging to the public spaces of the higher education facilities.

Relationship between higher education institutions and host city

Higher education facilities are also a determinant of local and regional growth (Perry et al., 2009; Phelps, 1998; Russo et al., 2003). As Russo et al. (2003) point out, higher education institutions create a direct impact in the form of jobs and revenue, as well as an indirect impact in the form of the generation of knowledge or human capital. In smaller towns, higher education institutions can even be the most significant employer, or attract such a high number of students that they will form a substantial percentage of the local population. This is the case in the city of Groningen, where roughly one in six of the 200,000 person population attends one of the two higher education institutions.

The relationship between students and their higher education facilities is, according to French researcher Dubet, highly influenced by the environmental context and therefore particularly temporary (Russo et al., 2003). Upon graduation, students are mainly driven by job opportunities in their choice of a place of residence. However, Russo et al. importantly argue, "...the quality of life in the period of their studies, as well as the sense of integration in the community, are also crucial elements in this decision" (2003, p.6-7). This reinforces the statement that policies intended on attracting students can be a crucial element in increasing the competitiveness of a city that hosts higher education facilities. Therefore it is necessary to look more specifically into elements determining the quality of life, sense of community, and residential satisfaction, as will be done in the next section.

2.6 Residential preference

In this section, residential preference will be addressed. Firstly, soft and hard location factors are discussed. This is followed by the concept of sense of place, a concept that touches upon the values and meanings attached to (residential) places. The concept of sense of place is then applied to the context of higher education institutions. This is followed by theories on residential preference and quality of life. In the next section, these various theories are linked and applied to the aims of this research.

Soft and hard location factors

When looking at location preferences, it is impossible to ignore the concepts of soft and hard location factors. Hard location factors can be seen as the tangible and classical factors in location choice research, both applicable to businesses or individuals, such as job opportunities or physical environment characteristics (Kauko, 2006; Lawton et al., 2013). Following the influential work of Richard Florida on the creative class, soft location factors have gained increased attention by researchers and policy makers alike (Lawton et al., 2013). Soft location factors can be defined as the intangible and contemporary factors in location choice research, consisting of elements such as a pleasant living environment and accessibility of amenities (Kauko, 2006; Lawton et al., 2013). The focus on soft location factors rules out hard location factors which, applied to Dutch students, might include income, rent, other living costs (e.g. food and energy), and the accessibility of public transport.

The distinction between soft and hard location factors could be seen as a distinction between qualitative and quantitative factors (Fischer et al., 2018). Fischer et al. (2018) identified the hard location factors such as labour, capital and infrastructure, opposed by soft location factors such as living conditions, leisure, and cultural facilities. The soft location factors are often overlapping with factors constituting or increasing a sense of place or residential preference. These concepts will be further elaborated on in the following sections, and will form a basis for the focus of this research.

Sense of place

An important concept to consider when looking into local preferences is sense of place. Although the term has many conceptions and implications, it can in general be seen as a reaction to the rapidly globalising world in which distances become shorter and the concept of space may seem to lose its relevance (Massey, 1991). Sense of place emphasises local characteristics in a time of fragmentation of places. Sense of place is often seen as a very personal concept, as a social construct (Stokowski, 2002). Despite that the concept of sense of place is often seen as a social construct, Stedman (2003) argues sense of place and associated place meanings are embedded in its physical environment. This is an interesting perspective for planners and policy makers, as it leaves room for influencing sense of place through physical intervention. However, policy makers are of course also able to intervene in the social elements of a place in order to influence the sense of place of residents.

Added to the social and physical meanings of sense of place, it is important to note the cultural or demographic elements of the concept. Sense of place can differ depending on attributes such as gender, individual preferences, or age (Dazkir, 2018). Sense of place is therefore highly variable between parts of a society; an attribute of a place can increase someone's sense of place while the same attribute decreases the sense of place of another (Scannell & Gifford, 2010). While sense of place is a concept of meanings which is regularly studied qualitatively, there have been attempts to quantify the concept. Shamai (1991) made one of these attempts, developing a scale of sense of place from 'not having any sense of place' to 'sacrifice for a place'. However, he concludes by addressing the highly individual nature of the concept and the value of the meanings behind a specific level of sense of place.

Sense of place is closely linked to concepts such as place attachment, as well as identification or personalisation, and sense of belonging or sense of community (Rollero & De Piccoli, 2010; Dazkir, 2018; Gattino et al., 2013). Distinguishing between these various concepts, place attachment can be seen as the affective dimension of sense of place, whereas identification belongs to the cognitive dimension of sense of place (Rollero & De Piccoli, 2010). A sense of belonging refers to the extent to which an individual feels at home in a specific place, which opposes place attachment, as that concept can refer to any form of spatial preference (Dazkir, 2018). Sense of community is closely related to sense of belonging, however this concept focuses on ties as well as experiences within a community, whereas a sense of belonging might also be established in absence of any community (Gattino et al., 2013).

Sense of place within higher education

Dazkir (2018) researched place meanings and sense of belonging at a Turkish private university. Her interview data shows that about as many students felt a sense of belonging to their original homes as to their residence hall rooms, both 61% (N=33). Interestingly, a sense of belonging to the residence hall room was more reported by females (67%, opposed to 56% for males) (Dazkir, 2018). Despite the sense of belonging at the Turkish private university being as high as the sense of belonging at their original homes, 76% of the respondents reported that they had felt homesick at the start of their time at the university (Dazkir, 2018). This feeling was driven by elements such as being parted from their family, the unfamiliarity of the environment, and a lack of friendships (Dazkir, 2018).

Furthermore, Dazkir investigated the element of personalisation, in her research defined as a process of giving a place your own identity by adding objects or elements that bear personal meaning (2018). Interestingly, personalisation was carried out more often in the residence hall rooms (by 76% of respondents as opposed to 33% in original homes) (Dazkir, 2018). And again, a gender difference was observed: 61% of men personalised their student room while only 11% did the same in their original home, for women these numbers were respectively 87% and 60% (Dazkir, 2018). These findings are however potentially very specific to the study and the region, illustrated by the fact that Dazkir was able to explain some of the gender differences through cultural elements.

The elements Dazkir applied to a Turkish private university were also central to the work of McKelfresh et al. (2006). In a mixed-methods research at Colorado State University in the United States, McKelfresh et al. (2006) identified factors that increase sense of belonging, sense of identity and sense of security. The main factors they identified are the importance of social spaces as well as the possibility of personalisation (McKelfresh et al., 2006).

Residential choice factors

Studying residential preference patterns in Japan, Ge and Hokao (2006) concluded with the four most influential residential choice factors they discovered: housing, safety and comfort, convenience, and leisure and entertainment. The convenience factor refers to the availability and proximity of certain amenities such as transport options or shops. Following Dieleman and Mulder (2002), Ge and Hokao also distinguish between site and situation. In this dichotomy, site refers to place characteristics, whereas situation refers to place relationships (the embedded relations of a place with other places). Applying the dichotomy to the four

factors, only the housing component falls within the boundaries of the site of a place, whereas convenience as well as leisure and entertainment refer to the situation of a place. Safety and comfort can be explained both as a site and as a situation factor (Ge & Hokao, 2006).

Quality of life

Another perspective to look at residential preference is that of quality of life. Quality of life is defined by the World Health Organisation Quality Of Life Group (WHOQOL) as well-being, not only from a medical perspective, but also mental and social well-being (Gattino et al., 2013). In a quantitative study, Gattino et al. (2013) found out that quality of life is positively influenced by a sense of community, but not by place attachment. In other words, the social dimension of one's surroundings are more influential on well-being than the affective dimension (as previously defined using Dazkir, 2018; Gattino et al., 2013; Rollero & De Piccoli, 2010).

2.7 Linking theories and application to research aims

In the previous sections student behaviour, roles of higher education institutions, place belonging, and residential preference, have come to pass. It has become clear that students and a student community play a very important role in the urban landscape of a host city of a higher education institution. Therefore, it is in the interests of policy makers to accommodate for their wishes and needs. However, the physical infrastructures around higher education institutions as well as student communities have collapsed during the first wave of the coronavirus pandemic. Peters et al. (2020) argue that these major disruptions of long-standing patterns and current practices have led to a moment in time where it is possible to look back as well as forwards and rethink some of these structures.

This research focuses on the aspect of student life, a concept involving the daily practices of a student community beside the time spent in education. As mentioned above, students and their potential behaviour and preferences have been looked at from several angles. First of all, the educational realm was regarded, for it has a major social function besides its educational function. It can therefore be expected that with the diminishing of physical contact in the educational environment, these networks and encounters will have evaporated likewise. It was however argued, that besides the contacts and networks at a higher education institution, the quality of life and community integration of students is crucial in the decision of a place of residence (particularly after graduation) (Russo et al., 2003). Therefore, more understanding of factors influencing this decision is needed.

This research focuses on the soft location factors, which are often less obvious or less tangible than its hard opposites. The latter statement being of high influence on the selection of scope within this research. The hard factors influencing the choice of residential location of students are widely being covered in the media (Decates, 2020; von Hebel & Marée, 2020; von Hebel, 2020b; Posthumus, 2020), leaving the soft factors out of sight. Furthermore, hard location factors are often of a very practical nature, leaving out of sight the more subtle and often more meaningful reasons for residential choice. The factors can be divided into several categories influencing the residential preference of students, which are central to the qualitative empirical part of this research. This will provide the necessary information to answer the main research question central to this research: Which factors,

apart from the presence of education facilities, influence the preferred place of residence of students in higher education institutions of Groningen?

2.8 Expected factors influencing residential preference of students

In this section, the factors that might influence the residential preference of students will be lined out, based on the literature discussed in the previous sections. The soft location factors which are central to this research and have been discussed in the previous sections, are categorised into four major categories: factors related to higher education institutions, social factors, cultural and recreational factors, and home attributes.

Factors related to higher education institutions

Higher education institutions do not only have an educational role, they also foster encounters, networks, and contacts (Tesar, 2020; Soares et al. 2020; Peters et al., 2020). While the obligation to attend a lecture might qualify as a hard location factor, the mentioned functions of a higher education institution highlight some soft location factors provided through the institutions. The first of these factors consists of the liveliness and the social spaces of a campus or education facility (Soares et al., 2020; McKelfresh et al., 2006; Dazkir, 2018). The second factor is that of personalisation, which is expected to enhance the connectivity of an individual to a higher education environment (Dazkir, 2018; McKelfresh, 2006). However, this factor mainly applies to on-campus living which does not fully apply to the case of this research. Still, as for many students their time as a student in Groningen is the first time out of home, and given that Groningen hosts a dense student community, the element of personalisation might be partly applicable. The last factor that was brought up in literature, relating to higher education institutions, is that being in an early phase of studying is expected to increase the sense of belonging to a parental home (Dazkir, 2018).

Social factors

An apparent category that influences residential preference throughout literature is the social dimension, which manifests itself in various forms in different research papers. First of all, the sense of community and social cohesion within a place are considered important factors by various academics (Gattino et al., 2013; Heaton et al. 1979; Pellenbarg & van Steen, 2013). According to the quantitative research of Gattino et al. (2013), sense of community is even more influential than place attachment. Researching students in particular, Dazkir (2018) stresses the importance of other social factors including the presence of friends, social networks, as well as unfamiliar others. Her research also brought forward the positive influence of having a roommate, however the negative influence of roommates was also listed.

Cultural and recreational factors

Another category of influence on residential preference that was regularly mentioned throughout literature, particularly in relation to students, was the cultural or recreational dimension. Stressing the importance of cultural and recreational products and facilities to students, Russo et al. (2003) specified three factors: food, sports, and culture facilities. Food was also mentioned as one of the most important factors by Dazkir (2018), along with service. The service element referring specifically to the service of personnel at cultural or recreational facilities. In their research of residential choice factors, Ge and Hokao (2006)

highlight leisure and entertainment as a major determinant. To conclude, Russo et al. (2003) highlight an interesting cultural and recreational element that influences residential preference of students in particular, their 24-hour lifestyle.

Home attributes

One of the important categories determining residential preference is that of *home attributes*. First of all the quality of housing is named as an important factor (Pellenbarg & van Steen, 2013; Ge & Hokao, 2006; Dazkir, 2018). However, this can be considered to be a hard location factor. Adding to this, Dazkir (2018) identifies some specific attributes at or within a parental home including family, personal belongings, and memories. Furthermore, Dazkir (2018) names comfort and sense of belonging, whereas Ge and Hokao (2006) add safety and comfort as well as convenience. The comfort element Dazkir uses and the safety and comfort element Ge and Hokao use are very comparable and can therefore be joined as safety and comfort.

Hypothesising factors influencing residential preference for students

In order to add value to the results, and to be able to interpret the data more meaningfully, this paragraph consists of a hypothesis of the results. The hypothesis is made drawing from the literature, the media coverage, and the expected factors of influence on residential preference of students listed above. Mainly based on the changes that the first wave of the coronavirus pandemic brought about for student life, it is expected that the results will show that social networks, cultural and recreational facilities, and family (in combination to social networks) are of most influence on residential preference of students in Groningen. More specifically the disrupted access to social networks, the closure of cultural and recreational facilities, and the increased importance of family at the parental home combined with the decrease in social networks at the student home are expected to have most heavily influenced the residential preference of students.

While the discussed literature has provided a range of potential factors influencing residential preference, it is important not to overlook factors that have not or only indirectly been listed. As French researcher Lipsky suggests, the extent to which students feel comfortable in a place can be influenced by the most detailed and small-scale factors (Russo et al., 2003). This research does, therefore, not limit itself to the expected factors discussed in the section above.

Conceptual model

The conceptual model below focuses on the change in residential preference of students as a result of the coronavirus pandemic and its associated effects, following the hypothesis made above. The elements of cultural and recreational facilities, as well as social networks, are expected to be of most influence on this assumed change in residential preference. The element of social networks being interlinked with the element of family. Because, as described previously, the absence of social networks within the student city, combined with the presence of family at the parental home, is expected to bring about a change in the residential preference of students in higher education. Social networks are expected to be a main factor causing change in the residential preference, whereas family at the parental home is expected to be a supporting factor. Therefore social networks in the student city are

represented in the same colour as cultural and recreational facilities in the student city, while family at the parental home is coloured differently.
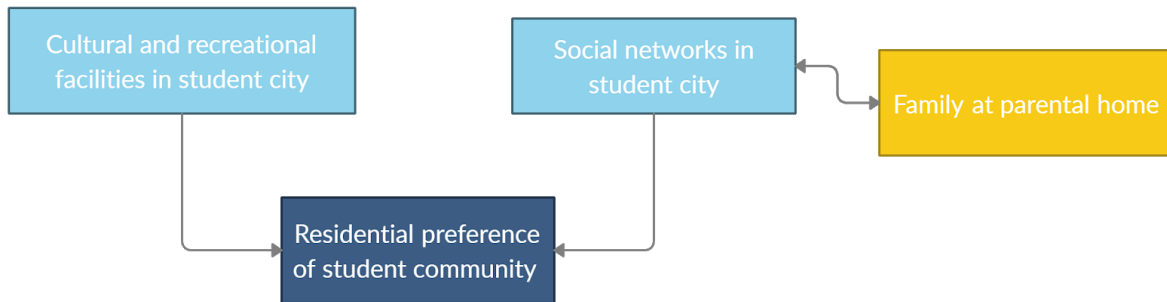

Figure 1: Conceptual model

3 Methods

In order to produce results that will be able to answer the research question(s), semi-structured interviews are carried out in this research with students that live in the city of Groningen. The precise limits of the research population are later defined. This chapter will reflect on the reasons for choosing this particular interview method, it will also discuss the process of finding respondents, specifications to the interview meetings, and ethical considerations that are to be taken into account.

3.1 Semi-structured interview

The semi-structured interview is a commonly used method in human geographical research, probably even the main means of qualitative research (Longhurst, 2010). A semi-structured interview can be characterised by having a set of predefined questions, but also allowing for open conversation and unexpected thoughts. It holds the middle ground between structured and unstructured interviews (Longhurst, 2010). There are several reasons why this research method was chosen for the present research, these reasons will be discussed below.

First of all, the topic of this research is inherently personal, full of values and meanings, and a qualitative research method is best suited to deal with these sensitive and subjective ideas. Whereas research into hard location factors might be best served by a quantitative method, as that would enable large sample sizes and generalised conclusions, research into soft location factors deserves another approach. The soft location factors are characterised by their qualitative nature, with values and meanings at its basis (Fischer et al., 2018; Lawton et al., 2013; Kauko, 2006).

The personal nature of the topic also leads to choice to do interviews with individuals rather than methods such as focus groups. Interviews are the most straightforward way to question a respondent individually. This method is expected to allow for possibly sensitive subjects to surface, which will improve the overall depth or quality of the data. The choice for doing semi-structured interviewing is based on the importance to the research aim of topics (in this context: factors) that the respondents could come up with during the interviews. While this research defines a range of factors that are expected to influence the preferred place of residence of students, this range is not exclusive of other potentially important factors. The semi-structured interview method allows room for such other thoughts, brought up by the respondent (Longhurst, 2010).

Participation

As opposed to quantitative research techniques, where the aim is to be objective, qualitative research techniques are about individual and personal experiences (Longhurst, 2010). Therefore, the respondents can be chosen according to their experiences or personal characteristics, rather than random sampling. Potential respondents approached for this research were chosen to ensure a representation of both male and female students, as well as students within their Bachelor or Master, and students of both Dutch levels of higher education. Each of these groups are represented by at least a quarter of the respondents.

The eligibility for the interview was based on the following three criteria:

1 The respondent had to be a student in higher education. This criterion was used to ensure that they fit within the researched population.

2 The respondent had to have been living in Groningen at the start of the coronavirus pandemic. This criterion was needed to be able to make a comparison between the student home and the parental home in the interviews.

3 The respondent had to have a parental home in the Netherlands. This criterion was necessary to marginalise the influence of hard location factors on the reasons behind residential preference patterns.

In total thirteen respondents were found willing to participate. They were approached looking for variety in the above mentioned basic characteristics such as gender or education level. However, one of the respondents turned out not to match the listed criteria. Therefore the number of respondents in this research comes down to twelve (N=12).

Interview meetings

The potential locations interview meetings for this research were of course limited by measures on the coronavirus. The most common neutral ground to meet for an interview in a normal situation would be at the University. However, respondents eventually still had two options to choose from. In the one option the interview would be held at their home, in person. In the other option the interview would be held through an online environment. In both options the respondent would (most probably) be in their student home, which is expected to help surface thoughts and values associated with that place. Which in turn is expected to increase the data quality. All respondents chose to do the interview in person. The measures on the coronavirus were discussed beforehand and taken into account during the meetings. The choice to let the respondents be interviewed in their homes was, beside practical considerations in light of the pandemic, informed by the notion of Bullard (2010) that respondents should feel comfortable within the space where the interviews are carried out.

Interview questions

This paragraph will highlight some of the issues encountered in composing the interview guide used in this research (Appendix 15). To start off, it is important to address the personal and sensitive nature of this research. In social science research, and in qualitative research in particular, it is important to account for certain sensitivities that questions may provoke. Longhurst (2010) distinguishes between factual, descriptive, thoughtful, and emotional questions. This distinction is taken into account in the structure of the interview guide, as will be explained below.

The interview consists of two parts. Part 1 consists of a set of factual and descriptive questions, which only need short answers. Part 2 is the more in-depth section of the interview, including a range of question types including emotional questions. The main structure of the interview is informed by Longhurst (2010), who states that it is advisable to start with questions that respondents will be easily able to answer, the more sensitive subjects can then be dealt with in the second part of the interview. This is expected to increase the level of depth that is reached during the interview, which should improve the data quality.

The particular nature and character of the questions of part 2 of the interview were based on the interview used in the previously discussed comparable research of Dazkir (2018). Researching place meanings at a private university in Turkey, she used semi-structured interviews to gather data on the meanings and values attributed to place within the researched context. The questions in her research first allow for the respondent to explore the subject and feel comfortable with it, then follow-up questions allow for the interviewer to gain a deeper understanding of the underlying mechanisms, values, and meanings. Because of the broad nature of some of these factors the social factors as well as the home attributes have been split into two within the interview guide (Appendix 15). The category of social factors is split into neighbourhood and local community, and social networks. The category of home attributes is split into feeling at home, and safety, comfort, and convenience of a home.

The topics addressed in the interview are informed by the theoretical section of this research. The expected factors influencing the preferred place of residence of students, as discussed in section 2.8, are central to the questions. However, during the interview as well as at the end of the interview, there is room for other factors to surface. During the interview this is possible through the semi-structured nature of the interview, and at the end of the interview a question is incorporated to stimulate the respondent to think about potential other factors influencing their residential preference.

3.2 Data analysis

The interviews are recorded, given that this is consented to by the respondent. The recordings are saved and processed anonymously. This is done both to protect the privacy of the respondent, as well as to stimulate the respondent to speak as freely as possible, which is expected to increase the data quality. The interviews are transcribed using oTranscribe, an online transcribing programme. The transcripts can be found in the Appendices (Appendix 3-14).

After transcribing the interview, the transcripts are subjected to coding. Coding is carried out following the theory of Cope (2010). This theory understands coding as looking for categories and patterns. The first of which can be referred to within this research as factors (of influence on residential preference), while the latter enables the researcher to find certain similarities or processes. Various codes are pre-listed, based on the theoretical section of this research as well as the interview guide. However, there is room for other themes and topics to arise from the interviews. Drawing from Talja (1999), this research uses some ideas from the discourse analytic method to analyse the interview data. Rather than drawing definite conclusions from the answers a respondent provides, this method recognises the importance of context and attempts to see regularities between the responses in order to see the bigger picture. In this research, the interview responses are considered to be embedded in the broader context of the respondents' surroundings.

An effect of this theoretical approach as well as the researched subject could be that responses are highly subjective and heavily influenced by context, and therefore are analysed accordingly. Rather than pointing out the common practices and regularities as objective observations, they are attempted to be explained within their context. In this way,

the analysis should be able to reveal important elements of the culture in which the respondents act and behave, in order to be able to answer the research questions.

3.3 Ethical considerations

Longhurst (2010) identifies two major factors concerning ethics in conducting semi-structured interviews, these are confidentiality and anonymity. The first of which applies to the spread and use of the contents of the interview. It is crucial for both the integrity of the researcher as well as the level of trust of the respondent that the information shared by a respondent within the conducted interview is safely stored and guarded, and is only used for the academic purposes pursued by the project that the interview is part of. The other element Longhurst defines is anonymity, which applies to the manner in which the data is stored and processed. As mentioned before, the data in this research is anonymously saved and processed. There are no means for anyone but the researcher to find any information on or contact details of the respondents.

Another important ethical consideration to be made is that of scientific integrity. As Hay (2010) points out, honesty in both the intentions of the research and the communication towards the respondent are vital elements to safeguarding scientific integrity. Safeguarding integrity serves multiple purposes. First of all, a respondent is more likely to speak freely if the integrity of the research is clear and clearly communicated. Furthermore, there is less risk of doing harm to the respondent and their surroundings if they and their ideas are treated respectfully. And to conclude, it is the obligation of a scientist to the scientific community to handle with scientific integrity at all times when conducting research.

Power relations

Apart from considering privacy and integrity issues it is important to look at power relations within research. In a framework summarising the power relations within different forms of social science research, Karnieli-Miller et al. (2009) categorise interviews as 'hierarchical'. This implies that the researcher is disattached from the researched subject and the respondents. By decreasing this hierarchy however, a researcher can strengthen the relationship with the respondents which will increase the likelihood that the respondent will speak freely (Karnieli-Miller et al., 2009). This in turn might increase the data quality.

As implied above, the researcher can strive to curb the hierarchical element of the interviewer-respondent relationship. One way of doing this is by creating an interview environment in which the respondent feels comfortable (Karnieli-Miller et al., 2009). As mentioned before, in this research the home of the respondent is chosen. This decision is partly based on the positive influence that that place would have on their reasoning process as respondents answer the interview questions, but the choice of location is also regarded to decrease the hierarchical nature of the interview. However, the home of a respondent could also inspire a sense of vulnerability which could be detrimental to the safeguarding of ethics and the data quality.

Other ways in which the relationship between the researcher and the respondent is being strengthened in this research include the structure of the interview, the briefing, and the attitude of the researcher. The structure of the interview, as mentioned before, is designed to allow the respondent to gain confidence in speaking on the subject of the research, which is

expected to increase the data quality on the more sensitive subjects (Longhurst, 2010). The briefing of the interview, which can be found in the interview guide (Appendix 15), emphasises that the respondent is free to withhold any information or answers if they deem it too sensitive to share. Finally, the researcher's role is to be non-judgemental and accept any kind of value or meaning expressed by the respondent (Hay, 2010).

Positionality and gender

A final issue is that of positionality. As the interviewer and respondents of this research both fall within the population group that is the subject of this research (that of students in higher education in Groningen), it is of extra importance to consider the positionality of the researcher. Latai-Niusulu et al. (2020) identify the difference between being an outsider to or part of the researched community. In general, being positioned within a community increases the level of understanding between the researcher and respondent, which will increase the quality of both the information shared as well as the analysis (through deeper understanding) of this information. However, as respondents are dealing with a peer within the boundaries of the interview, they might be influenced to give answers that are socially accepted within the norms of that particular community.

With positionality comes the issue of gender, in particular that of the gender of the researcher in relation to that of the respondents. As Thien (2009) highlights, research can be strengthened by encompassing awareness of gender differences, social relations between women and men, and social realities. These elements can be of influence in both acquiring and analysing empirical data. It is acknowledged in this research that the answers and the analysis of the responses of both male and female respondents might be influenced by the male gender of the researcher. This can be compared to the dichotomy between being part of or guest of a host community, which was mentioned before.

4 Results

In this results section, the data gathered from interviews is presented. This is structured along the expected six factors or grouped factors influencing residential preference of students that are presented in the theory section. After that, some other factors that entered the interviews are discussed. But first of all, a data overview is presented providing some key characteristics on the respondents of this research. The interview transcripts can be found in Appendices 3-14, respectively covering respondents 1-12.

4.1 Data overview

number	age	gender	course	higher education institution	level of education	parental home	returned to parental home	2 factors
1	20	f	Psychology	RUG	Bachelor	Groningen / Anloo	yes	social / cultural
2	23	f	Biomedical Engineering	RUG	Master	Amersfoort	no	home / safety
3	23	f	European Languages and Cultures	RUG	Bachelor	Haarlem	no	social / home
4	22	m	International Business & Management	RUG	pre-Master	Heerenveen / Warga	no	campus / social
5	22	f	Communication Studies	RUG	pre-Master	Assen	yes	social / home
6	25	m	Economic Geography	RUG	Master	Hoogezand-Sappemeer	no	home / safety
7	26	m	Nursing	Hanze	Bachelor	Akkrum	yes	social / home
8	20	f	Industrial Product Design	Hanze	Bachelor	Burgwerd	yes	campus / home
9	22	m	Communication	Hanze	Bachelor	Heerenveen	no	social / home
10	22	f	Business Administration	RUG	Bachelor	Langweer	yes	social / home
11	21	f	Biomedical Engineering	RUG	Bachelor	Makkum	yes	social / home
12	24	m	Mathematics	RUG	Bachelor	Nijmegen	no	cultural / home

Table 1: Overview of key characteristics of the respondents

Table 1 presents an overview of the twelve students interviewed in this research. Their ages range between 20 and 26, with an average age of 22.5. This is slightly higher than the average age of Dutch students, but given that the population subject to this research needed to be studying in the academic year in which the coronavirus pandemic struck, they had to

be at least in their second year. The gender balance is slightly weighing to the female side, with 58% female and 42% male. These percentages are fairly comparable to the national average where 52% is female and 48% is male (CBS StatLine, 2020a).

Of the respondents 75% attended the Rijksuniversiteit Groningen (RUG) (University level), as opposed to 25% attending the Hanzehogeschool (Hanze) (HBO level). However it must be noted that two of the RUG students were previously Hanze students and are now following a pre-Master at the University. Still, the RUG is slightly overrepresented when comparing the percentages to the national averages, where a mere 40% of students in higher education attend a University. However, in the city of Groningen over 50% of students in higher education study at the RUG (Rijksuniversiteit Groningen, 2020; Hanzehogeschool Groningen, 2020). Eight of the respondents are following a Bachelor course, two follow a pre-Master, and two are in their Master degree. The courses that the respondents follow are distributed across a wide range of fields, with a fairly even distribution over alpha, beta, and gamma disciplines. When looking at the geographic dimension of the data overview, it is interesting to note that a 75% majority of respondents has a parental home in the northern provinces of the Netherlands, opposed to a 25% minority in regions further from Groningen. Interestingly, 50% of respondents who temporarily returned to their parental home all have their parental home in the northern provinces of the Netherlands.

The last column in Table 1 shows the two factors that the respondents considered to be most influential to their residential preference. Feeling at home (represented as 'home' in the table) and social networks ('social') are the most mentioned factors, chosen by respectively 83% and 67% of respondents (N=10 and N=8 respectively). Liveliness and social interaction at the campus/education facility ('campus'), cultural and recreational facilities ('cultural'), and safety, comfort, and convenience of a home ('safety') all received two mentions (16%). Neighbourhood and local community is the only factor not to have been mentioned. More detailed analyses of the factors are found in the following sections.

4.2 Liveliness and social interaction at the campus or education facility

As mentioned above, two of the twelve respondents considered liveliness and social interaction at the campus/education facility to be one of the two factors most influential to their residential preference. In this section, the views of the respondents of the importance of and meanings of liveliness and social interaction at the campus/education facility will be analysed. A vast majority of respondents do express the positive value they attach to the liveliness and social interaction at their education facilities. What is most interesting however, is how do students interact with these places and what constitutes the values and meanings they attach to their education facilities?

A first distinction is that between viewing the education facility as a place to interact and behave socially or as a place to study. One half of the respondents express that they primarily use their education facility to be able to study effectively, and in some cases to have a clear distinction between studying and their private lives. The other half however, mainly express their appreciation of the social interaction at their education facility. While these two are closely linked (they reinforce each other), as some respondents implied or mentioned, they provide interesting perspectives to the role that an education facility can

play within student life, particularly in light of the coronavirus pandemic and the search for appropriate measures.

Another distinction within the provided responses is that of the amount of contact hours and its relation to the use of an education facility. The difference in amount of contact hours can also be caused by the difference between Bachelor and Master degrees, as Bachelor degrees tend to require more presence at the education facility than Master degrees. After describing the intensive contact during the Bachelor degree, respondent 2 describes this change as "...and now I might have to go to Zernike (Campus, red.) once or twice a week so that's a lot less often." (own translation). A female Bachelor student describes her course as requiring a lot of independent studying, which negatively influences her amount of interaction with education spaces, as she mostly studies at home. From these examples we can learn that both the characteristics of a course and the phase of studying can be influential to the level of interaction with education spaces, which may influence the value one attributes to the factor of liveliness and social interaction at the education facility.

As mentioned before, the respondents provide interesting perspectives to the role that an education facility can play within student life, and during the coronavirus pandemic. When asked whether they still consider their education facilities attractive places to visit now the liveliness and social interaction has been negatively influenced by the coronavirus pandemic, the answers are again divided. While most respondents now regard their education spaces to be mainly useful for the goal of studying, one would expect those that previously expressed that they used their education facility mainly for studying to still appreciate and visit them. However, half of these now emphasise the unattractiveness of the education facilities as a study place, and most of those who appreciate their education facilities mainly for the social interaction now express appreciation for their education facility as a place to study. It is hard to point out what causes this slight contradiction. However, it could be that those who previous to the coronavirus pandemic mainly appreciated the social element of the education facilities are more dependent on a place other than their homes to study, as some of the responses suggest.

Most of the respondents that claimed to still appreciate visiting their education spaces express that this is because it enables them to visit studying and private spaces. As respondent 4 puts it: "...I find it worthwhile to still visit that place because for me it means that I'm in a different place, that I'm going somewhere with a goal, for example to study. And at home I get more easily distracted, because this is also a place where I relax." (own translation). This quote shows the importance to some respondents of the distinction between home and education. However, those that mainly saw their education facility as a place to study but now no longer use or appreciate the place, state that they now prefer doing their studying from home. Respondent 7 illustrates this by saying "I live across the road from my education facility [...] but during the coronavirus pandemic I have not visited it once. So I think that tells me that I'm not really drawn there." (own translation). This striking difference could be explained as a difference between the convenience or the necessity of the education facility as a place to study. Apparently, those who during the coronavirus pandemic rely on the campus as a place to study were previous to the coronavirus pandemic drawn to the place for both studying and social interaction purposes. The discussed distinctions can be seen as examples of the highly individual nature of the way in which students interact with their education environments. However, by about half of the

respondents, the importance of a place to study during the coronavirus pandemic is also stressed.

4.3 Neighbourhood and local community

Neighbourhood and local community was the only one of the six categories not to be chosen by any of the respondents as one of the two factors most influential to their residential preference. In this section, the responses will be analysed in order to find out what meanings neighbourhoods bear to students and what these meanings imply. First of all, the responses unveil that very few respondents have contacts in their neighbourhood. Only a few are in contact with people in their neighbourhood, usually their direct neighbours. As will become clear in later sections, most students rely on housemates and other students (within their social networks) for social interaction. However, many respondents do express their value of the neighbourhood as a place and its residential profile. Respondent 3 explains this by saying "I do really attribute value to living in this neighbourhood because I appreciate the people in this neighbourhood, but it's not like I really know them. It's just a good mix." (own translation).

As mentioned above, some of the respondents do have some contact with direct neighbours. However all of them mention not having either very valuable contact or other neighbourhood contacts. Respondent 12 illustrates this by admitting "...well I have contact with the direct neighbours [...] but apart from that I don't really have contact with any other people in the neighbourhood [...] I'm not very integrated." (own translation). These findings have clear spatial implications for the way in which students interact with their direct surroundings, which might become even clearer when looking at social networks in the next section.

Positive attributes that are frequently mentioned in relation to the neighbourhood include liveliness, proximity of shops, residential profile, and general location within the city. The only apparent negative aspect (mentioned by respondents 1 and 5), apart from not being integrated in the neighbourhood socially, is that of noise (either through walls or on the street). Interestingly however, this is also mentioned as a positive aspect, by a student who appreciates that other students live in the neighbourhood which means there is no real scrutiny for making noise (respondent 7).

When asked for the value they attributed to the neighbourhood and local community of their parental home many respondents emphasised the difference between the types of neighbourhoods of their respective student and parental homes. Many mention the social control element which is much stronger at their parental home. With most respondents coming from a rural or suburban area this can be explained as a difference in the level of urbanity. However many respondents also express having been or still being more socially integrated in the neighbourhood at their parental home. And while this might also be explained by the difference between the urban and the suburban or rural natures of the neighbourhoods, another explanation could be the life phase in which students situate themselves and the associated behaviour and needs.

Regarding the changes to the value attributed to the neighbourhood and the local community due to the coronavirus pandemic, a few respondents note to appreciate their local community slightly more. Respondent 1 emphasises that she appreciates living in a lively

area even more, "At first I took that for granted, but because of corona I have started to value that some more, I think." (own translation).

4.4 Social networks

As mentioned previously, two thirds of the respondents deemed social networks to be one of the two most influential factors for their residential preference. It might not be surprising therefore, that all respondents explicitly expressed attributing a high value to the social networks within their student city. More detailed explanations by the respondents of this value include providing a safety net, being able to discuss personal issues, safeguarding mental health, increasing personal or social development, providing motivation and energy, and providing a diversion from studying. The most prevalent of these elements will be discussed in further detail below.

First of all, the mental health aspects that are mentioned. Apparently the need for strong social networks is very relevant among students, for as respondent 10 puts it "otherwise I think you will become quite unhappy in your student city." (own translation). Various respondents put the mental health aspect they have encountered in relation to social networks in direct contact with the coronavirus pandemic. One of these is respondent 4: "What I obviously noticed during the start of the coronavirus pandemic and now again slightly more, is that you do get a bit down, a bit depressed from those four walls here. So I find social networks very important to keep each other a little more 'sane'." (own translation). These quotes are illustrative for the way in which many respondents place a link between their mental health, social networks, and, in fact, their residential preference.

Beside the healing or reassuring nature of the mental health element, many respondents also mention the boosting or motivating effect that their social networks have on them. Respondent 5 thinks that it "...contributes to your personal development and how you see the world yourself..." (own translation). The more practical element of this motivating effect shines through in the following contribution of respondent 7: "I find it easier to look to my surroundings and to help each other, to achieve something jointly." (own translation). What is clear from these quotes and other contributions, is that social networks add value on a daily basis to the personal lives of students. This obviously has strong implications for the disruptions of their daily lives in a time when social contact is minimised.

These implications are recognised by the respondents. Many respondents express how they have become more aware of the value of social networks or attribute more value to social networks because of the coronavirus pandemic. This is also expressed as a concern, by respondent 3: "I do find it much more difficult to guard that value [..] previously it was much more self-evident to meet up with friends." (own translation). Multiple respondents however emphasise that while their wider social network has been heavily disrupted by the coronavirus pandemic, they still rely on a basis of a core group of social contacts. "...you try to keep seeing the good social contacts through continuous deliberation, to organise things in ways possible within the measures, to manoeuvre to sustain the contacts. That also gets you through such a thing mentally." (respondent 6, own translation).

In the theoretical framework of this research, links have been made between mental health, social networks and residential preference. With the latter being at the core interest of this

research, the responses regarding residential preference and social networks will be more closely examined. The effect of the coronavirus pandemic on residential preference and social networks becomes clear from the following comment: "...once school is eliminated I also leave here. Because a lot of people then also leave [...] And for me that has to do with feeling at home, because that is precisely the interaction with people." respondent 8, own translation). This was also the reason for respondent 5 to move to her parental home temporarily: "...I went on to live with my parents because my social networks here all did the same. It made me think like, what's left for me here." (own translation). So rather than peer pressure demanding the presence within a student community, these temporary moves were caused by a total absence of any kind of student community or network.

An important, and in most cases easily accessible, form of social contact for students is that with housemates. Nine of the twelve respondents have one or more housemate(s), varying from living with a partner or a friend to living in a student house with eighteen others. Most of the respondents with housemates express the accessible nature of their relationship with their housemates. Some however also describe having deeper personal relationships with housemates, sometimes also strengthened by the coronavirus pandemic. Describing a period of quarantine, respondent 4 illustrates this: "So we all couldn't go outside, we couldn't leave. The nice thing about that was that we did grow closer together as a house." (own translation). Respondent 3 even describes that living with housemates feels like living with brothers and sisters. While those living without housemates generally describe appreciating having their own spaces, the effect of the coronavirus pandemic is also clearly notable: "I used to have housemates and I went on to live here to be able to escape my busy social life, but because of corona that has really taken another turn." (respondent 8, own translation). From all responses it is clear that housemates play an important role in the social lives of students in Groningen, with predominantly positive attributes assigned to them.

To conclude, it is important to note the depth within the social relationships described. The elements that constitute the high value attributed to social networks as listed above are for the large part much more emotional than practical, and address very personal issues such as mental health or personal development. This deep level of descriptions might be explained by the effects that the coronavirus pandemic has had on these relationships, causing respondents to be aware of their significance.

4.5 Cultural and recreational facilities

As outlined previously, cultural and recreational facilities include a group of factors which could be of influence on the residential preference of students. This grouped category was deemed one of two most influential factors by two out of the twelve respondents. As can be seen in the interview guide (Appendix 15), the category consists of food facilities, sports facilities, cultural facilities, and nightlife/24-hour lifestyle. Each will be reflected upon within this section.

Food facilities
First of all, food facilities. This concept addresses bars, restaurants, lunchrooms, etc. (described in Dutch as 'horeca'). The respondents predominantly assign positive attributes to the presence of food facilities within their reach, to respondent 1 it is even "...a reason that I live in the city." (own translation). While most respondents frequently use these facilities

themselves, it is notable how often the positive influence of food facilities on the vibrance of the city and the streetscape is praised (without necessarily visiting them). Respondent 12 illustrates this: "I do not use these facilities a lot, I rather find it nice for the streetscape. I just like it because it means there are more people on the streets as pedestrians."(own translation).

The coronavirus pandemic has had a profound impact on public life, and this is notable in the answers regarding the value attributed to food facilities. About half the respondents specifically express to have started valuing these facilities more as a result of the pandemic. Also referring to social networks, respondent 10 exemplifies this: "When you would sit down on a terrace here in Groningen you would always run into other people, I've started to appreciate that." (own translation). Respondent 8 even goes on to the implications of the closure of food facilities on the city: "Food facilities are a real pity, also because I see what it does to the dynamics of the city when they are gone." (own translation). From the responses it is clear that food facilities play an important role in the vibrant nature of a student city as well as an important social role for students.

Sports facilities

The second category constituting cultural and recreational facilities is that of sports facilities. Contrary to food facilities, sports facilities are experienced or used more at an individual level. Most respondents explain either attributing a lot or very little value to sports facilities in their vicinity. Beside describing the positive influence sports have on their physical wellbeing, respondents describe the social element of sports and its capacity to offer a change of scene. Describing the follow-up of the ban on team sports during the coronavirus pandemic, respondent 6 explains: "When that is also all of a sudden not allowed anymore it is a shame because it means that you enter other groups. [...] and that is an accessible form that does encourage you to do something, it is an important motivator." (own translation).

Again, a heavy disruption is notable as a result of the coronavirus pandemic. While individual exercise such as jogging was still allowed, various respondents express having motivation issues with their standard structures having fallen away. "...I used to see it as an extra 'bonus option' but now I'm starting to see the mental necessity of it. I knew that I disliked not doing sports, but I always had jogging left to do. But now I notice that I don't persist with only jogging." (respondent 8, own translation). What becomes clear from the responses is that for some sports facilities are a necessity, sometimes also increased by the coronavirus pandemic. For others these facilities either play a little role or offer a nice variation or change of scene.

Cultural facilities

Cultural facilities include the whole range of cultural facilities including theatres, museums, libraries, cinemas, etc. On the whole, eleven out of twelve respondents express some degree of appreciation for cultural facilities. Most of these eleven also regularly visit various cultural facilities, and to some they are of very high importance: "I think that is one of the first things that I would spend money on apart from my basic needs so to say." (respondent 9, own translation). Interestingly a similar response to one that was noted regarding food facilities is to be noted twice regarding cultural facilities, specifically that some respondents appreciate the presence of cultural facilities without necessarily using them: "I think I do

appreciate that they are present. But how many there are, or how and what they exactly do doesn't matter that much to me." (respondent 2, own translation).

When looking at the effect of the coronavirus pandemic on cultural facilities, there is again a heavy disruption in the possibilities. However, not many respondents note their appreciation of cultural facilities to have changed. This can be partly explained by the fact that those to which it was a very important factor were already aware of this: "And culture, look I do notice it because a part of my income has dried out and I miss a lot of things [...] I already knew the value of it in my life I think." (respondent 9, own translation). The lack of changed appreciations can also be partly explained by the fact that cultural nights and events are a slightly more exclusive activity, which some respondents note. Therefore the disruption does not directly affect the daily life of the students.

Still, there are some respondents to whom either the appreciation or the role of cultural facilities has changed. After explaining about missing festivals or having experiences with friends, respondent 3 concludes: "So because of corona I just attribute more value to that because before I kind of took it 'for granted'." (own translation). Interestingly, the measures on the coronavirus pandemic have also changed the way in which they use cultural facilities for some respondents. As respondent 1 explains regarding visiting the cinema: "...at some point you start to pay attention to what is possible and what isn't, and then you find things that you'd normally deem a bit boring [...] But now I suddenly really like that." (own translation). So on the whole, cultural facilities, despite being slightly more exclusive, provide an addition to the possibilities within student life.

Nightlife or 24-hour lifestyle
Nightlife is a factor that is often associated with student life, and this association is confirmed by the respondents of this research. Unanimously they attribute value to the nightlife possibilities within their student city. Respondent 3 explains the intricate relationship between nightlife and student life: "Here in Groningen I found it very important and exciting, particularly in the early years of being a student, to discover what was possible." (own translation). However, she goes on to explain how this value has decreased over time as she got older, this view is shared by respondent 6: "...in a natural way that has just become a bit less, because well, you're reaching the end of your time as a student so it has less of a function than it used to have." (own translation).

Regarding the more detailed function that nightlife fulfills there are two main reasonings to be noted. The first of which is the social function, illustrated by respondent 9: "I do not need it, it's really about the people that I'm with. It is rather that it is at that time of night that you start dancing, but if it would be something else at another time that would be it." (own translation). The second main reasoning regarding the function of nightlife is that of providing a distraction or a variation within daily life. While explaining things that might happen on a night out, respondent 4 illustrates this reasoning: "...or just suddenly bumping into some random guys at the bar and suddenly you have friends, you know. It just goes against the standardness of life. Variation." (own translation).

The influence of the coronavirus pandemic on nightlife has obviously been profound, and this can be noted in the responses. Many respondents express missing nightlife as a part of

their daily lives, and some also note that their appreciation for nightlife possibilities has increased as a result of the coronavirus pandemic. The most illustrative response was given by respondent 2, who even regretted not going out more often previous to the coronavirus pandemic: "But well I have certainly reflected upon that already, that I should more often just do something instead of thinking 'oh no I can't go because I need to whatever'." (own translation). What becomes clear from these answers is that nightlife is the most prominently used and the most sorely missed of the four cultural and recreational facilities by the respondents.

4.6 Feeling at home

Feeling at home is the most frequently chosen factor influencing the residential preference of students by the respondents. With ten out of twelve respondents choosing this factor, its relevance is obvious. There are some interesting observations to be made and patterns to be found within the responses, these will be discussed below.

First of all, there are several elements to be noted that make the respondents feel at home. These include personalisation (of a house/room), freedom of expression, and other people within the house. The first two of these elements apply specifically to student houses, whereas the latter applies both to student houses (housemates) and parental homes (family). The freedom of expression element, particularly in relation to the parental home, is voiced by respondent 7: "You don't have to think twice about saying something. [...] And if I compare it to my parental home, I do have to hold my tongue every now and then." (own translation).

When comparing feeling at home in the student home and the parental home, there is an interesting trend to be noticed. As students get older, and get to later stages of their studies, they start feeling less at home in the parental home. Various respondents explicitly mention a decreasing sense of home at their parental home: "Less and less, it increasingly feels as if I'm actually visiting them. [...] partly because my mother is turning my room into a guest room." (respondent 9, own translation). The last statement also refers to both personalisation and the importance of memories in the parental home.

Another interesting pattern within the responses can be found in the effect of the coronavirus pandemic on feeling at home. Some respondents note having temporarily felt more at home at their parental home: "I think during corona times at theirs, at my parents. Outside of that this just is my home, Groningen." (respondent 8, own translation). However, as can be seen in Table 1, by one half of the respondents the choice was still made to remain in Groningen.

When looking more closely at the relationship between feeling at home and residential preference, it becomes clear that some respondents link feeling at home to one of the other factors of the research. To some respondents there is an overlap between feeling at home and safety, comfort, and convenience of a home, respondent 11 acknowledges this while explaining the decision to temporarily move to the parental home: "Yes, I think that has been the largest factor." (own translation). While other respondents describe a close link between feeling at home and social networks: "I think I feel more at home here in the sense that I have more social contacts here [...] that makes this more like home." (respondent 10, own translation). What is clear from the responses regarding feeling at home, is that it is an

important determinant of residential preference for the respondents, while noting that it is closely interlinked with and sometimes constituted by other factors.

4.7 Safety, comfort, and convenience of a home

The factor of safety, comfort, and convenience of a home is chosen as one of two most influential factors on their residential preference by two out of twelve respondents. In both cases in combination with the factor of feeling at home. First of all, a closer inspection of the linkage between the factor of safety, comfort, and convenience and that of feeling at home. As mentioned above, both respondents that chose the former factor did so in combination with the latter. Respondent 6 voices this linkage: "It is in the end where you'll keep living [...] it is an important thing that you feel at home there, that you feel safe, that you feel comfortable in your own house." (own translation). Apparently, for some it is a crucial element for being able to feel at home, while for others it might just need to pass a certain standard.

More on this standard becomes clear when looking at the safety element specifically. Many respondents mention feeling perfectly safe within their student home, while they do mention safety hazards within reach. "Yes I actually do feel safe, but that is a bit of a false security, because when you start to think about it.." (respondent 4, own translation). This is a clear example of the difference between objective and subjective safety; while the respondent was able to address clear safety issues such as fire hazards, it is still possible to feel perfectly safe. For many of the respondents the objective safety level is not very high, whereas the subjective safety level is satisfactory at least.

Concerning comfort a similar pattern is to be observed. Many respondents argue that the levels of comfort at their parental homes are much higher, but they are satisfied with the basic level of comfort that their student home provides. This is illustrated by respondent 3: "Yes I find that just fine, it still is a student house, so the amenities aren't very amazing but everything just works like it should. [...] My standard is just that of a student house" (own translation). Again, respondents are aware of the relatively low level of the element, but they are satisfied nevertheless.

Convenience of a home, in relation to its surroundings such as distance to shops or the city centre, is often more highly valued at the student home than at the parental home. This is not very surprising, with many respondents coming from a rural or suburban background. Respondent 8 makes the comparison between rural and urban life: "I never really minded it there because I didn't know any better. But now, compared to Groningen, see you can't just cycle everywhere, and you really have to plan things" (own translation). Respondent 6 makes the same observation on a more personal note: "But when you enter studenthood it's just not enough, in my opinion. Then I did appreciate going more urban." (own translation).

These insights tell us that even though there are strong variations between the levels of safety, comfort, and convenience between student homes and parental homes, but also between various student homes, most respondents are satisfied with the amenity level they have to their disposal. While for a select few it is a very important element to residential preference, for most respondents the levels of safety, comfort, and convenience are something they just accept in order to be able to live where they want to live.

4.8 Other factors

In this section, the factors that were brought up by respondents in the middle of the interviews or when asked for extra factors at the end are considered. A first element that is mentioned multiple times is either having or not having a relationship, which following the responses can imply various effects. First of all, it can both increase or decrease the likelihood of wanting to spend time at the parental home (depending on where their partner lives). Furthermore, the way in which students interact with their living environment could be altered as a result of having a relationship. Two respondents specifically mentioned having more need for food facilities as a result of being in a relationship: "now that I have a relationship I might think 'let's go out and have dinner together' [...] now I notice that I could surely get more satisfaction from that than I thought I could." (respondent 9, own translation). While there is not one way to observe in which having a relationship is of influence, and it is a highly variable factor between individuals, it does provide an extra insight into the interplay between social contacts and the use and appreciation of a living environment.

Another element that entered several of the interviews is that of the interaction with nature, through either the effects of the seasons or the presence of green spaces. Respondent 1 describes the influence of the seasons: "I think that when it was summer I actually spent much more time here because it was lovely weather and you could spend a lot of time outside. And when the weather is worse I think I'm more likely to go to my parents because you'd spend more time inside." (own translation). Other respondents also express their appreciation for green spaces or the pedestrian friendliness of an area. Appreciation of green spaces included both parks and green space at street level. What is particularly interesting about these insights regarding nature, is that they are accentuated by the coronavirus pandemic. Various respondents note having had much more space to operate in during the summer, both due to the possibilities that the weather provides as well as the relatively lenient measures on the virus as the numbers were low during the summer.

A third element that arises multiple times throughout the interviews is that of the character of a place, in particular the city of Groningen. Several respondents note feeling at home in the city of Groningen rather than specifically in their student home. Respondent 7 explains his appreciation for Groningen: "My residential preference is determined by the character of a city. There is a reason I chose to study in Groningen and not in Amsterdam or Rotterdam." (own translation). Respondent 8 illustrates a specific aspect to the city that might be of influence: "Yes the city itself indeed, and the whole atmosphere around it. [...] the 'terrace culture', when that disappears you lose a large part of that." (own translation). Apparent from these examples is that the image or character that a place can develop as a whole might also be of influence, rather than specific elements comprising this character.

A final element that very frequently comes up during the interviews is one that has already been mentioned various times throughout the analysis. This is the element of variation. As previously noted, it often does not necessarily matter which activities or groups students engage in or with, as long as they offer a change from the normality of daily life. Respondent 4 illustrates this: "It's mainly about bringing variation to your life. And this might sound strange, that you have variation in your life if you visit the same bar every time. But for example to boost creativity it's important to find solutions [...] that's when it's advisory to just go somewhere." (own translation).

Another insight into the element of variation is provided by respondent 8, who explains the result of the closure of cultural facilities: "And that's then out of the picture, and those are the moments to squeeze out of it all. And going for a walk can solve a lot, but you're not walking the same stretch three times a week every week. There might be people who do, but for me it's just not the same feeling." (own translation). What this element clearly implies, is that the level of satisfaction in a place is not necessarily determined by any one or other specific element, rather a certain threshold of variety is necessary to compose a satisfactory living environment.

5 Discussion and conclusion

5.1 Hypothesis review

Following the hypothesis (section 2.8), the factors of most influence on the residential preference of students would be social networks, cultural and recreational facilities, and family (combined with social networks). It was expected that because the first two of these three factors were heavily disrupted, and this decreased the attractivity of daily student life, these factors would be most dearly missed by the respondents. The factor of family was expected to have become of increased importance, combining with the disruption caused concerning social networks.

Evaluating the result the conclusion can be drawn that this hypothesis was right for about two thirds. As Dazkir (2018) also concluded, social networks turned out to be a pivotal factor within student life. The social networks also informed a range of decisions and preferences, as the various factors often showed interlinkages. This includes the decision to leave the student city on a temporary basis. This decision relates to the second part of the hypothesis that can be (at least partly) confirmed, namely the increased importance relative to the decreased access to social networks.

Apart from social networks, the second factor that stuck out as one of the most influential on residential preference was feeling at home. Again, this finding is similar to that of Dazkir (2018). While the element of family does, based on the responses, play a large role in feeling at home, another element was underestimated by the hypothesis. This element is that of having housemates within the student home. For various respondents, housemates formed a crucial part of their social networks as well as the extent to which they felt at home. Housemates were even referred to as feeling like brothers and sisters. Playing a role in both of the most influential elements of residential preference, it is clear that housemates, as well as family, inform the residential choices of students. However, in various cases the importance of housemates was particularly accentuated by the coronavirus pandemic. It could well be that the importance of having housemates is somewhat slighter in a 'normal' situation.

The hypothesis also overestimated a specific element, that of cultural and recreational facilities. While some of these facilities play an important role in the lives of students, they are often not considered to be the most important element by the respondents. Many respondents do claim to miss cultural and recreational facilities, and to have come to value them more as a result of the coronavirus pandemic. However, the presence of cultural and recreational facilities does not come up as one of the essential determinants of residential preference.

The hypothesis concludes by emphasising the possibility of other factors arising from the empirical research. Looking at the results section, the conclusion can be made that other factors did indeed arise from the research. The element that most frequently entered the discussion was that of variation. To the respondents, it does not necessarily matter which activities they are able to engage with, as long as there are places, people, and activities

available to them. The variation within daily life turns out to be an important determinant of residential preference, and indeed, the mental health of students.

5.2 Interpretation of the results

As lined out previously in this research, it is in the interests of policy makers within a host city to (a) higher education institution(s) to concern themselves with the needs and preferences of the student community (Russo et al., 2003). If the student community is well provided in their preferences, students are more likely to stay in the host city after graduation and add to the intellectual and economic progress of the city. The coronavirus pandemic has added to this necessity, disrupting most daily practices of both higher education institutions and the student community. No point in time has been more eligible for a new approach to planning for students within a student city.

Research aim
To achieve the research aim, it is necessary to answer the main research question: "Which factors, apart from the presence of education facilities, influence the preferred place of residence of students of higher education institutions of Groningen?". Two elements influencing residential preference clearly stuck out: social networks and feeling at home. However, to gain a deeper understanding it is important to look at the dynamics behind these factors.

Social networks turned out to be an important factor considering residential preference, which is sometimes closely interlinked with other factors. As Dazkir (2018) pointed out, for students it is of vital importance to have friends, broader social networks, and even unfamiliar others around them. The results of this research can reassure these claims, as the presence of social networks was often mentioned as a main reason to live in the student city, and as a main determinant of mental health. As many respondents made direct links between being able to meet their friends, preferring to stay at their parental house, and mental health issues.

Feeling at home turned out to be the most frequently chosen determinant of residential preference. However, the reasons for feeling at home were very discrepant, confirming the statement by Scannell and Gifford (2010) of the highly individual nature of sense of place. Most frequently mentioned aspects of feeling at home were personalisation, freedom of expression, and other people within the house. The latter applies both to family and housemates.

A third element that turned out to be an important determinant of residential preference, laid bare by the coronavirus pandemic, is that of variation. While this element does not grasp a specific place, social group, or activity, it provides an interesting perspective to look at the other results and their interlinkages. Rather than pointing out a specific (set of) factors, this element describes how respondents need a certain threshold of activities or possibilities to enjoy living in their student city. As the coronavirus pandemic has provided the student community with challenges such as decreased residential satisfaction and mental health problems, the element of variation might be a first step towards solutions to these challenges. This could be achieved by offering tailored solutions for the student community, entailing their needs, and guaranteeing the measures on the coronavirus pandemic. Until

now the measures seem to incorporate little consideration of the specific spatial situations of students. As the ISO (Interstedelijk Studenten Overleg), an organisation advocating student rights points out, the measures are often unapplicable on large student homes and they do not provide students with sufficient workspaces (Van Gaalen, 2021).

Sub-questions

As to the question which factors caused students to leave Groningen during, the answers show a diverse as well as an individual nature. While the sample size for this question is only half of the sample size of this research, as not all respondents left the city of Groningen, there are some elements that received most attention. These include the absence of social networks, the comforts of the parental home, and the presence of family at the parental home. While feeling at home is not explicitly mentioned within these elements, some of these elements reinforce the factor of feeling at home, and thereby influence the residential preference decisions.

Those who remained, as well as those who returned, inform the answer to the question which factors caused students to stay in or return to their student city. As for remaining, the main elements observed within the empirical data are that those who remained often feel more at home in their student home and they still had some limited social contacts or housemates. Those who returned to their student city often mention having returned because there were more possibilities opening up in the student city, including access to social networks and cultural and recreational facilities. As the measures were incrementally uplifted in the early summer months, it was once more possible to meet in bars, restaurants, and sports facilities, and there were more legal possibilities for meeting in groups.

The final sub-question that can be answered drawing from the results is that of the implications for local government. As previously indicated, Russo et al. (2003) stress the importance of planning for students by combining their high influence on local economies and limited influence in policy making. The results of this research imply that he access to social networks, feeling at home, and the variety within possible activities are the most important elements comprising the residential preference of students. While arising from a research during a situation of crisis, these results provide an interesting insight into the core values of the student community. The results express a clear need for a tailored approach to policy making for students. As the ISO and parts of this research point out, the measures on the coronavirus emphasise existing inequalities in living space, the strength of voices of various societal groups in policy making, and (social) capital. The coronavirus pandemic has had very different outcomes for different entities of the society. Concluding from this research and its various sources, it is safe to say that the student community has been heavily disrupted in their daily practices. In order to account for these disruptions, and in order to guarantee an even more student-friendly future for student cities, the results of this research can provide some guidance.

5.3 Final remarks

As the coronavirus pandemic disrupted the often taken for granted structures of daily life, a situation arose in which the importance of specific elements of these structures could be revealed. As Russo et al. (2003) listed, in order to create a student-friendly community a city has to attract students, empower them, and keep them linked to the city. This research has,

through interviews, shed light on some of the key factors determining the residential preference of students in Groningen. The results show that the most dearly valued factors are social networks and feeling at home, confirming parts of the hypothesis (section 2.8) and the elements highlighted by Dazkir (2018). A third factor that arose is that of variation in possible activities. These answers provide a basis for adaptations to a crisis situation, as well as implications for future policies affecting the student community.

In a time when higher education as well as the student community have been challenged and had to show the ability to adapt to new situations, this research provides some insight into potential solutions to these challenges and the focus points in planning for students. The coronavirus pandemic has (at least temporarily) put emphasis on the local area, while temporarily holding up globalisation processes. While the lasting effects of the coronavirus pandemic on higher education and the student community remain uncertain, it is clear that challenges for policy makers will endure, in an attempt to create the competitive and student-friendly city. Recommendations for further research include more research into the spatial preferences of students, more research on the spatial and societal outcomes of the coronavirus pandemic, and research into the residential preference of the student community outside of the coronavirus pandemic.

6 Reflection

6.1 Research process

Elements of the research process that would usually be in physical form at the university facilities had to be approached alternatively because of the coronavirus pandemic. For a large part of the research period university buildings were not or hardly accessible. This had the following three major outcomes. Meetings with the thesis supervisor were for the largest part held in an online environment. While this might bring about some minor difficulties, the meetings were generally very fruitful and pleasant. Rather than bringing pieces of work to the classroom, these were emailed in advance to the meetings in order to be discussed during the meetings. While the situation might have negatively influenced some spontaneity or creativity, the most important topics were generally thoroughly discussed.

The second outcome of the limited accessibility was that a lot of the literature research and thesis writing had to be done from home. This has been the most challenging outcome, as a home environment is not best suited for a research process. The third and final major outcome of the limited access to university facilities has already been covered shortly, it considers the interview meetings. While in a regular situation the interviews would preferably be held at the University, as a neutral environment, the coronavirus pandemic meant that alternative locations were needed. However, as previously mentioned, both the homes of the respondent and an online environment were provided as a choice to the respondents. While it is complicated to assess the effects of these locations on the results, this has provided a useful solution given the circumstances.

6.2 Empirical research

The empirical part of this research concerned semi-structured interviews. These were held with twelve respondents within the research population. The most important point to reflect on is the positionality of the researcher. As previously mentioned, being part of the research population has some specific advantages. On the one hand, respondents might be more likely to be willing to share information, and on the other hand, the researcher might be able to extract deeper understandings from the empirical findings. Also the level of detail of the information shared by the respondent can be enhanced due to the familiarity of the researcher with the researched population. However, being part of the research population also bears risks. Rather than being able to extract sensitive information it might increase the likeliness of socially accepted responses. Given the emotional depth of the responses, the risk of socially accepted responses seems to have had marginal influence.

Furthermore, as previously mentioned, the interviews were held in the homes of the respondents. While this decision was made based on the suggestion that data quality might be enhanced by interviewing in an environment in which the respondent feels comfortable, there is an important note to be made here. The role of interviewer goes along with the role of guest to a house. And as a respondent might feel protective of the comfort they feel in their home, this might make them less likely to share sensitive information. So while their home might make the respondents feel more comfortable, it could also make them feel more vulnerable.

6.3 Research outcomes

While the outcomes of this research provide some interesting insights into the interactions between students and their living environments, as well as into the dynamics of the coronavirus pandemic and its associated effects, there are some nuances to be made. First of all, the sample size of twelve is not large enough to be able to confidently claim the representivity of this research. While it has still been possible to extract processes and dynamics from the empirical data, there is a limited extent to which claims can be made regarding the results.

Furthermore, the data is bound to a very specific time and place. While it has been argued within this research that the coronavirus pandemic has provided a situation within which some values might have surfaced, it could be that a regular situation fuels fully different preferences and needs. However, in general the respondents were very reflexive of both pre-pandemic and pandemic times, which implies awareness of the effects of the coronavirus pandemic on their personal preferences. And after all, it is undeniably a unique time for empirical research. Further research might include similar research outside of the coronavirus pandemic situation. Also, further research into the spatial impacts of the coronavirus pandemic measures is needed to gain more understanding of the societal effects of the pandemic. And finally, more research on spatial preferences of the student community could provide policy makers with a more profound understanding of the needs of this group in order to be able to create a more student-friendly city.

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